MAURITIUS RESEARCH COUNCIL

INNOVATION FOR TECHNOLOGY

DEVELOPING SUCCESSFUL ENTRY STRATEGIES FOR BPO OPERATIONS IN MAURITIUS

Final Report

*October **2006***

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  - Leadership and Team Management, etc

- Customer Care & service
  - Customer Relationship Building
  - Grooming & Personality Development, etc

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  - Retail Merchandising and Management
  - E-Commerce Strategy and Solutions, etc.

- Financial Management and Accounting
  - Finance for Non-Financial Managers
  - Budgeting & Costing
  - Credit Management & Control, etc

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  - Human Resources Management for Small Businesses
  - SME Development & Business Growth
  - Entrepreneurs Training Workshop, etc

- Quality Management System
  - TQM Continuous Improvement in the Manufacturing and Service sector
  - ISO 9001:2000 Quality Management System Documentation
  - HACCP Food Safety Program, etc.

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TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 8

2.0 PROJECT SCOPE 11

2.1 Introduction 11
2.2 BPO Context 11
2.3 BPO Specifically in Mauritius 12
2.4 Internationalization of BPO 13
2.5 Information Technology-based BPO 14
2.6 Challenges facing Mauritius 15
2.7 Objective 16
2.8 Scope of Project 17

3.0 REVIEW OF BUSINESS PROCESS OUTSOURCING (BPO) 19

3.1 Background 19
3.2 BPO Definition 19
3.3 Evolution of BPO 20
3.4 Difference between BPO and IT/ICT 21
3.5 Products and services of BPO providers 22
3.5.1 Typical BPO services in selected industries 24
3.6 Horizontal and Vertical BPO 25
3.7 Assessing an Outsourcing Option 25
3.8 Approach to outsourcing 28
3.9 Decision to outsource 29
3.9.1 Identification of Core and Non-Core Services 29
3.9.2 5-Element Model for Outsourcing 31
3.10 Drivers and Inhibitors Associated with BPO 32
3.11 Satisfaction Survey with offshore outsourcers 32
3.12 Perceived Risks in Outsourcing 33
3.13 Obstacles to Outsourcing 34
3.14 Developing an offshore outsourcing strategy 34
3.15 Approach to location selection for IT Enabled Services (ITES) 35
3.16 Popularity of HR Outsourcing 37

4.0 MARKET EVOLUTION & INDUSTRY TRENDS 38

4.1 Global Market Size of BPO 38
4.2 Market Forecasts from Diversity of Sources 38
4.3 BPO-ITES Market by Region 39
4.4 Market by Sectors 39
4.5 Structure of the Job Market 40
4.6 Overview of Major BPO Players 41
4.7 Kearney Global Services Location Index 43
4.8 BPO Usage 44
4.9 BPO Initiatives 44
4.10 Competitor Map 45
4.11 Risk Assessment 46
4.12 The Emergence of Mauritius 46

5.0 BPO IN INDIA 47

5.1 India: A dominant force 47
5.2 SWOT Analysis of India's BPO Industry 47
5.2.1 Strengths 47
5.2.2 Weaknesses 48
5.2.3 Opportunities 48
5.2.4 Threats 49
5.3 Indian BPO Market 49
5.4 Time Zone 51
5.5 Logistics & Infrastructure 51
5.5.1 Case Study of Karnataka 52
5.6 Telecommunications 53
5.7 Security Issues 54
5.7.1 The Regulatory Environment 54
5.7.2 Role of Indian Government 55
5.8 Human Resources 56
5.8.1 Labour Availability 56
5.8.2 Cost of labour 56
5.8.3 Languages 57
5.8.4 Educational level 58
5.8.5 Training 59
5.8.6 Socio-cultural factors 60
5.8.7 IT & BPO experience 60
5.8.8 Attrition rate in the ITES sector 60
5.9 Government policy & supports 61
5.9.1 Incentives 61
5.9.2 Fiscal Incentives 62
5.9.3 Marketing 62
5.9.4 Waiver of conversion fee 62
5.9.5 Transportation 62
5.9.6 Relaxations 63
5.9.7 Labour laws 63
5.9.8 BPO Infrastructure Companies 63
5.9.9 Technology Up-gradation 63
5.9.10 Anchor Companies 64
5.9.11 Special Economic Zone (SEZ) 64

6.0 BPO ELSEWHERE 65

6.1 Potential Offshore Destinations 65
6.2 China 65
6.3 Malaysia 67
6.4 The Czech Republic, Poland and Hungary 67
6.5 Singapore 68
6.6 Philippines 69
6.7 Brazil and Chile 70
6.8 Canada 71
6.9 Guatemala 74
6.10 Ireland 76

7.0 MAURITIUS: SITUATION OF BPO 77

7.1 Overview of Mauritian Competitive Assets 77
7.2 The ICT and BPO Sector 78
7.3 IT Companies operating in Mauritius 79
7.4 Government Measures to Boost the Economy 79
7.5 Information and Communications Infrastructure 80
7.6 Institutional Facilitation 81
7.6.1 Attributes 81
7.6.2 International Networks 82

7.6.3 Legal Framework 82
7.7 The Amended ICT Scheme 83
7.8 Other Schemes 84
7.8.1 The Pre Operational Training Incentives 84
7.8.2 Scheme to Attract Professionals for Emerging Sectors (SAPES) 84
7.8.3 The Regional Headquarters Scheme 85
7.9 Other advantages of Mauritius 85
7.9.1 Political stability 85
7.9.2 Liberal Investment policy 86
7.9.3 State of the Art Infrastructure 86
7.9.4 Harmonious Industrial Relations 86
7.9.5 Dynamic private sector 86
7.9.6 Pro-business environment 86
7.9.7 Double taxation avoidance treaties & other agreements 86
7.9.8 Convenient Time Zone 87
7.9.9 Pleasant living environment 87

8.0 FACTS & FIGURES ABOUT THE MAURITIUS BPO SECTOR 88

8.1 Snapshot of the BPO sector in Mauritius 88
8.2 Main Trends 89
8.3 Investment 90
8.4 Predominance in the BPO sector 91
8.5 Employment in the BPO sector 92

9.0 SWOC ANALYSIS OF MAURITIAN BPO SECTOR 93

9.1 Strengths 93
9.2 Weaknesses 94
9.3 Opportunities 95
9.4 Challenges 96

10.0 POLICY DETERMINATION CRITERIA FOR MAURITIUS 98

10.1 Industrial Architecture 98
10.2 Establishing Operating Context 98
10.2.1 Outsourcing 98
10.2.2 Differentiating Onshore and Offshore 98
10.2.3 Two Ways to Outsource 99
10.2.4 Mauritius as an Offshore Outsourcing centre 99
10.2.5 Differentiating offshore outsourcing from IT 99
10.2.6 Offshore BPO for IT-oriented Products 100
10.3 Selecting Mauritius as an offshore location 100
10.3.1 Criteria for the Selection of an Offshore Base 101
10.3.2 Gartner Selection Criteria 101
10.3.3 Jones Lang Lasalle Selection Criteria 102
10.3.4 NeoIT Selection Criteria 104
10.3.5 Kearney Selection Criteria 105
10.4 EMS-Generated Criteria for Mauritius 105
10.4.1 Profile of Mauritius 106
10.4.2 Specific Key Strengths 106
10.4.3 Specific Opportunities and Challenges 107
10.5 Other Key Requirements 107
10.5.1 Direction 107
10.5.2 Reputation 107
10.5.3 Quality 108
10.5.4 Types of Products 108
10.6 EMS-Specific Criteria for Mauritius 109
10.7 Model Policies towards Entry into BPO Industry 110

11.0 EMS ENABLING POLICY MODEL FOR MAURITIUS 112

11.1 Seven-Policy Action Framework (SPAF) 112
11.2 Turn into Technology Producer 112
11.3 Types of Product 115
11.4 Quality and Reliability 119
11.5 Institutional Responsibility 122
11.6 Business Environment 129
11.7 People and Skills Availability 132
11.8 Financial Structure 139

12.0 CONCLUSIONS 143

12.1 Issues 143
12.2 Observations 144
12.3 Proposition 147
12.3.1 Turn into Technology Producer 147
12.3.2 Types of Product 147
12.3.3 Quality and Reliability 148
12.3.4 Institutional Responsibility 148
12.3.5 Business Environment 148
12.3.6 People and Skills Availability 148
12.3.7 Financial Structure 149
12.4 The way forward 149

13.0 REFERENCES 150

LIST OF TABLES

Table 1: Key milestones in the evolution of BPO 20
Table 2: Strategic importance of functions outsourced 28
Table 3: Approach to location selection decisions 36
Table 4: Global Market for ITES 40
Table 5: Number of US jobs moving offshore 40
Table 6: Global ranking of top locations 41
Table 7: Global ranking of top locations 43
Table 8: Category ranking 44
Table 9: Competitor Map 45
Table 10: Relative strengths & weaknesses of major BPO players 45
Table 11: Comparative analysis of IT/ITES-BPO contribution 50
Table 12: Indian market size estimates 50
Table 13: Comparison of the operating costs 57
Table 14: Make up of Guatemala labour's force 75
Table 15: Guatemala's cost structures 75
Table 16: Snapshot of the Mauritian BPO sector 88
Table 17: Major criteria (drivers) for selecting offshore location 103
Table 18: neoIT Selection Criteria 104
Table 19: Object of attraction 110
Table 20: Role of Government in developing competitiveness 124
Table 21: Required skill for the BPO Industry 125
Table 22: Steps to adapt training strategy to the needs of BPO 135
Table 23: Typical skills required for specific BPO segment 137
Table 24: Key skills required for the ITES/BPO sector 138

LIST OF FIGURES

Fig 1: List of typical BPO services 24
Fig 2: Horizontal & Vertical BPO 25
Fig 3: Reasons for outsourcing 27
Fig 4: Impact of outsourcing on organizations 27
Fig 5: Approach to outsourcing 28
Fig 6: Selection refinements 30
Fig 7: Core and non-Core functions 30
Fig 8: Top obstacles for outsourcing 34
Fig 9: Worldwide BPO Market Size 38
Fig 10: Indian ITES-BPO exports by key service lines 50
Fig 11: Growth of domestic market for ITES-BPO 51
Fig 12: Offshore location attractiveness index 72
Fig 13: Offshore location attractiveness - People skills & availability 73
Fig 14: Offshore location attractiveness – Business Environment 73
Fig 15: Countries with offshore operations 74
Fig 16: Quarterly evolution of the BPO sector since July 2004 89
Fig 17: Yearly evolution of the BPO sector since Year 2000 89
Fig 18: Proposed investment by segment of activity 90
Fig 19: BPO sector in Mauritius as at January 2006 91
Fig 20: Employment in the BPO companies as at January 2006 92
Fig 21: Onshore / Outsource Grid 99
Fig 22: Jones Lang Lasalle Selection Criteria 102
Fig 23: Steps towards competitiveness 111
Fig 24: Technology-Application Matrix 114
Fig 25: Content-market matrix 116
Fig 26: Mapping of responsibilities 128
Fig 27: Production-labour grid 133

1.0 EXECUTIVE SUMMARY

The central objective of "Developing Successful Entry Strategies for BPO Operations in Mauritius" is to lead global offshore providers to select Mauritius as their offshore BPO based simply because it is the natural choice. In spite of high publicity around the achievements of the BPO sector, it is visible that the performance is quite below par. There are many reasons that would explain this problem. Elaborating them without solution is not serious. To come to that stage, it was necessary to pursue a detailed examination of the BPO both as a business function and an industry. This has allowed the identification of the challenges and policy proposals. SPAF is indeed a propriety model that EMS has come up in the course of its examination to address the issue and make precise propositions. Seven Policy Action Framework or SPAF can be described in summary as follows: -

Turn into Technology Producer

- **Challenge I:** The knowledge of Mauritius in the field of technology of telecommunications and IT is limited to integration, operation and troubleshooting. This is a major handicap. To acquire a reputation within the global BPO industry, Mauritius has to turn from being an importer of information technology to a producer of technology on a significantly important scale in areas where it has the capacity.

- **Policy option I:** BPO is often generically understood as outsourcing in all fields. Its relatively new dimension is the use of information technology and telecommunications to find new ways to improve a process, cut cost or change the course of business direction. The first step for Mauritius, therefore, is to determine the technology segment that will drive its BPO industry so as to project 'what it wants to be known for and what is its core competence'. Using a technology-application matrix provides an overview of strategic directions available to Mauritius to undertake its development.

Types of Product

- **Challenge II:** The Mauritius offshore BPO industry must acquire an identity, a personality and a reputation that differentiate it significantly from other jurisdictions in the global market. The types and quality of its products should yield comparative advantage, compensate for its small scale and cost disadvantage, and strengthen its attractiveness towards global providers and customers in search of a risk free BPO centre.

- **Policy option II:** Taking account of the exiguity of its scale, it cannot compete on the basis of cost leadership. It has to compete on other quality-led attributes, such as contents effectively blended into high tech applications, and be recognized internationally for it.

Quality and Reliability

- **Challenge III:** The relationship between government and the BPO industry has to be re-engineered. The government and the industry association have to jointly determine the product profile of the Mauritius offshore BPO industry, the quality standards and compliance processes with a view to further its development.

- **Policy option III:** Government authorities have to develop a collaborative relationship with the BPO industry association where government focuses on its policy role and work in partnership with the industry to achieve the policy goals.

Institutional Responsibility

- **Challenge IV:** The Mauritian society has to undertake a cultural transformation to succeed in the consolidation and operation of an offshore BPO industry, distinct from the standard ICT services sector. This cannot be achieved without political direction and institutional adaptation to bring about attitudinal change, emancipation and alignment of social groups to common goal.

- **Policy option IV:** It is necessary for government to chart the responsibility of the leading institution, responsible for ensuring the development and growth of the offshore BPO industry, and to map out its connection with the subsidiary institutions.

Business Environment

- **Challenge V:** The offshore BPO centre has to be secured against illegal practices that are common in the intellectual property / knowledge / software / cyber industry, such as piracy and such other odds, to promote knowledge workers and protect its reputation as a risk free centre

- **Policy Option V:** Adequate laws have to be introduced that fit an evolutionary cyber and electronic environment such as to establish a secured business framework adapted to the demand of high tech industry

People and Skills Availability

- **Challenge VI:** Offshore BPO industry can only be sustained in the long term with ample supply of cost effective knowledgeable and creative local labour adapted to a high tech industry

- **Policy Option VI:** Develop labour force with the basic skills that can be moulded flexibly to meet the short and long term requirements of the offshore BPO industry

Financial Structure

- **Challenge VII:** Taking the view that international leased circuit is one of the key inputs for the BPO industry, in whole or in part, its price must be an element of attraction for new entrants and a reason for maintaining their operation in Mauritius over time. Today, the cost of entry into the Mauritian BPO entry is very high as a result of the exorbitant price of private leased circuits, both domestic and international

- **Policy option VII:** The MIIT, as the responsible institution for the development of the BPO industry, should undertake the necessary measures to remove the price impediment that erects barriers to entry into the Mauritian BPO industry and affects the financial sustainability of operators and constrains the development of the industry

These policies are expected to infuse six qualities to the Mauritius offshore BPO industry, defined by the following dimensions:

- Reputation
- Types of product
- Quality of products and service, including delivery on promise and after sale service
- Financial structure
- Business environment
- People and skills availability

In conclusion, it is confident that the expeditious application of the various measures in a coherent manner should establish Mauritius as a viable offshore BPO centre in the short to medium term.

“Developing Successful Entry Strategies for BPO Operations in Mauritius” provides the backstay to the conclusion. It is examined in 12 chapters and the conclusion is at chapter 13, the executive summary being provided in chapter 1.

- Chapter 2: Project scope
- Chapter 3: Review of Business Process Outsourcing (BPO)
- Chapter 4: Market Evolution and Industry trends
- Chapter 5: BPO in India
- Chapter 6: BPO elsewhere
- Chapter 7: Mauritius: Situation of BPO
- Chapter 8: Facts and figures about the Mauritius BPO sector
- Chapter 9: SWOC analysis of the Mauritius BPO sector
- Chapter 10: Policy determination criteria for Mauritius
- Chapter 11: EMS Enabling Policy Model for Mauritius
- Chapter 12: Conclusions

2.0 PROJECT SCOPE

2.1 Introduction

'Developing successful strategies for BPO in Mauritius' is designed to facilitate the setting up of BPO operations in Mauritius. BPO remains unclear for many and the activity is confused with IT or ICT. In general, BPO introduces another dimension to industrial activities. Often, industrial activities are interpreted as being manufacturing activities that yield a physical product, big or small, at the extreme end of the manufacturing chain. But, in the modern era, industrial activities have evolved to non-manufacturing activities and are categorized generally under services, more particularly IT services/IT Enabled Services (IT/ITES). Under that category of services, knowledge-based enterprises are engaged as contractors by other enterprises to execute their non-core 'soft' activities.

With a view to reduce their costs or to complement their expertise, enterprises choose to limit their scope of work to their 'core' activities, independently of the nature of these activities. They contract out or outsource their non-core activities to specialist BPO firms in the area of architecture, engineering, finance, human resources and law. BPO has come in the limelight with the emergence of world-class players based in various parts of the world and, most notably, in Asia. Discovering the opportunity, many countries have found it sensible to turn into BPO service providers. However, BPO have its own specificities that must be satisfied before any successful performance can be expected. 'Developing successful strategies for BPO in Mauritius' demystifies BPO. Moreover, taking advantage of the experience of a number of countries and studies on the subject, it probes into BPO in Mauritius aimed at understanding the issues involved and developing an appropriate operational model.

2.2 BPO Context

The world is today entering the age of BPO enlightenment. BPO or Business Process Outsourcing is a phenomenon that has considerably grown in importance. Determining the exact size of today's global BPO market is a difficult science. According to Gartner, a market research firm, the size of the global BPO market by 2007 would be $173bn, of which $24.23bn would be outsourced to offshore contractors. Outsourcing is being done in a variety of areas within the supply chain including human resources, Customer Relation Management, Payment Services, Supply Chain Management, etc. This is partly explained by the need to cut down costs.

The global economy is becoming more competitive as international borders are disappearing with expansion of telecommunications and transportation systems. Multinationals move freely from one country location to the other. They operate as contractor in one country and outsource processes to another country. While contracting or outsourcing is common practice to reduce costs and focus internal resources on key targets and core activities, it has grown in importance as companies

discover offshore providers with the competence to execute some of their activities under strict guidelines. A growing number of organizations worldwide are resorting to outsourcing to slenderize budgets, minimize expenses, streamline business processes, enhance productivity through concentration on core services, fully utilize technology investments and maximize profits. At an early stage, they pursued outsourcing of business processes for cost cutting reasons, but some of them are going even further by outsourcing in the areas where they have low skills, such as development of new applications that can reinforce their core operations.

Offshore outsourcing is an area of significant business opportunities. India is actually the largest recipient of outsourcing contracts. Several other countries among China, Malaysia, Philippines, Brazil, Chili, Thailand, etc have made significant inroads in the same field. Morocco, Tunisia and Algeria are benefiting a good share of the French speaking market.

2.3 BPO Specifically in Mauritius

Mauritius is also aiming at a share of the world BPO market. After sustained economic growth averaging 5.7% during the last two decades, the new requirements of the global economy led particularly by new global trade rules, shift in the direction of trade and advancement of information and communications technologies (ICT) caused Mauritius to adjust the direction of its economic development. It chose to build on its existing performing industrial, services and professional sectors to diversify in new sectors, BPO among the key ones. It declared an unambiguous policy on BPO, encompassing ICT and knowledge driven sectors.

In particular, the Government has declared its vision and ambition to develop Mauritius into a cyber island. This vision was embodied by the construction of a couple of cyber parks on the Indian model, the first being at the Ebène Cybercity, with an investment of some US $ 100 million. In the economic agenda of the government, business in BPO combined with IT has to achieve the scale of an industry and provides a fifth pillar to the economy of Mauritius. Starting in the year 2000 as a concept and fuelled by particularly government-led promotions, it gradually matured into a tangible sector with the entry of a few major global BPO providers.

For instance, Hinduja TMT (HTMT), as part of its hybrid growth strategy, and in keeping with its global delivery model, decided to “set up a BPO center in Mauritius for IT and IT Enabled Services. The company declared that: “The new center will act as a disaster recovery center, allowing for business continuity of the company’s Indian operations. This center will also provide claim processing for HTMT’s most referenced US-based Fortune 200 Healthcare insurance clients. With large French lingual skills available in Mauritius, this center will offer European clients the advantage of French services. The setting up of this new center at Mauritius fits within the hybrid organic and inorganic growth strategy of HTMT to take the company further up in the league of global players. This new center at Mauritius will execute contracts as part of the offshore units located in Canada, India, Philippines and USA”.

Initially, Mauritius was able to capitalize on the strength of its robust broadband telecommunications infrastructure and its flexible professional services sector to attract a certain volume of offshore BPO activities, particularly in the area of call centre and

general accountant-based services. It is now picking up in size with over 100 registered enterprises doing a variety of IT, IT-supported services and purely professional services.

Four types of ownership can be identified in the Mauritius offshore BPO centre:

- 100% foreign-owned companies with multi-country offshore operations
- 100% foreign-owned companies, located only in Mauritius
- Foreign-Mauritius joint ownership, located only in Mauritius
- 100% Mauritius ownership, located in Mauritius

Although some major BPO providers such as TNT, Infosys and Accenture have a base in Mauritius, relatively speaking, the Mauritius offshore BPO centre is still at an infancy stage and is not sufficiently known.

2.4 Internationalization of BPO

Many offshore BPO providers do not have a fixed base and they migrate from one place to another or choose to operate at multiple bases at any point in time. They choose to follow technology availability, least cost and market access.

The general principle governing the production of innovative goods is that the initial place of production is necessarily the country where research and development is pursued. The new creations are at high costs, but the market is responsive. With maturity, the technology is diffused progressively to other countries where routines and low cost production take place. The speed of diffusion, however, is impeded as technology increases in complexity. In this case, the producing country retains some sort of technological monopoly and the high-tech product is sold at a high price. BPO providers follow the technology route as well as the market route. These two combine to form their entry strategic core. Obviously, costs are present in any scenario. Many large providers are based in India or China because of the confidence of the global business community on their high capabilities as designers and producers of IT-based products, both mass and customized. It is also well documented that quite a few offshore BPO providers chose Mauritius because of its vicinity with the African continent and its French speaking population.

Established suppliers carry their portfolio of customers as they migrate from their current to a host base or as they expand their bases. They will move to a new place if the base meets the expectations and preferences of their current and future their customers. It is clear, for instance, that if customers in the United States of America continuously receive good reviews on democratic practices or certain specific social indices in a country, their positive opinion weighs significantly on the strategic scenario of the BPO providers whose market is predominantly the USA. Therefore, while technology and markets are the core strategic issues of a provider, offshore BPO providers associate other subsidiary dimensions with them to form their strategic map or framework in order to assist them in their choice of centres. The key ones include the political and legal framework, business risk, economic conditions, culture, skills, and infrastructure facilities, all of which have an impact on their costs of operations and sustainability.

International business is not new to Mauritius and it can claim to have long years of experience at establishing and operating industrial, service and business orientated sectors directed with a reasonable degree of success towards the international markets. Over the years, it has built a dynamic import - export commodity trading and merchandising centre in agriculture, tourism, commodity processing and financial services. In retrospective, its inward industrial looking policy of the 1970s, industrial outward looking policy of the 1980s and offshore financial service provider-based policy of the 1990s, coupled with the acknowledged world class tourist resort can reinforce its capacity to chart a new road map to BPO for Mauritius in the 2000s.

2.5 Information Technology-based BPO

BPO outputs are closer to services than tangible commodities. More and more, led by the demand for software in the developed economies to modernize manufacturing systems or re-engineer customer and other databases, BPO is becoming increasingly an information technology affair focused on software development and data treatment. India, and now China, are in a position to capitalize on these opportunities because both are technology producers. The processes leading to the relevant outputs are dependent on a blending of IT hardware and software, human creativity and telecommunications networking, which are all production inputs. More complex outputs need inputs possessing greater technological depth and power. The execution of BPO, as a consequence, needs fundamentally a new kind of business mindset, non-traditional mechanized skills and legal protection against informatics piracy. However, although BPO has its own features and characteristics, it has to meet the conditions proper to industrial development and commercialization in which Mauritius has substantial experience.

Mauritius has learnt to be adaptive to global business environmental changes. Its past experience coupled with new creative knowledge can provide the necessary impulsion to blend the offshore BPO activities effectively to its industrial and business set-up. Obviously, this has to be accompanied with necessary adaptation, driven purely on the real expectations of offshore BPO providers, independently of Mauritian or foreign ownership. These providers look for specific attributes in the centre/centres where they project to establish their base. These attributes vary from the attractiveness of the centre for their clients to the conditions that the hosting base offers. The basic assumption is that, ideally speaking, if the demand of the BPO providers were known with a good degree of certainty and it is fulfilled almost in totality, they would opt to establish their base in Mauritius and the BPO industry will flourish in a significant manner.

This is where the challenge starts for Mauritius as a BPO jurisdiction. Mauritius is hardly reputed as an offshore BPO centre contrary to its reputation in other industrial areas, such as tourist, sugar or offshore finance. To emerge as a renowned centre of a substantive caliber, it needs in all logic to fulfill the expectations of the BPO providers, themselves. In other words, it has to supply an offshore BPO architecture that appeals to both providers and their clients, thereby effectively creating a route between the BPO production centre and the overseas markets. In the first instance, it needs to have a product foundation at origin and a direction for growth. However, the definition of its business, which is its starting point, lacks precision and its direction and focus have yet to reach a high degree of clarity.

Mauritius associates BPO almost entirely with ITES, which is IT-enabled service. This limits the use of IT instrument to pursue a single dimensional BPO activity, such as call centre, data rehabilitation and pre-press. But, IT is pervasive. It can be either an instrument for development and operation or a product in itself. In actual fact, an offshore centre can have more than one dimension and its current three products are IT products, ITES and professional services. This is natural as BPO businesses are a hybrid of telecommunications, information technology and specific business process. Telecommunications is a communications support for the transport of data either between offshore centres or between the client and the provider. Ukraine, just like many centres including Singapore, has full clarity about their product. It is pursuing software development.

For instance, the Ukrainian Hi-Tech Initiative has defined its objectives to be the following:

- Setting up and development of international connections in the sphere of software development
- Creation of a positive image of Ukrainian software development on the foreign markets
- Search and selection of partners supplying IT services outsourcing and BPO in Ukraine
- Organization of B2B meeting between Ukrainian and foreign companies
- Finding investors into Ukrainian software development industry

2.6 Challenges facing Mauritius

Because of high competition for the delivery of BPO services at a global level, the immediate question that comes to many stakeholders' attention is to what extent is Mauritius prepared as a player in the BPO sector and what has to be done to encourage potential providers to establish their base in Mauritius and increase their appeal to their existing and new clients. Mauritius is at a crossroad. To take advantage of the opportunities for a sensible scale of BPO works that the fast development of telecommunications and IT could unfold, it has to adopt a fitting outsourcing model. Undoubtedly, the model is in all likelihood fuelled by the technologies of information and communications, but they have to be associated with such factors that build a successful and sustainable business volume. In this respect, to implement the model, Mauritius has to meet a few fundamental challenges that constrain its evolution as follows:

a) Its knowledge of technology in the telecommunications and IT fields of activity is limited to integration, operation and troubleshooting. This is a major handicap.
To acquire a reputation within the global BPO industry, Mauritius has to turn from being an importer of information technology to a producer of technology on a significantly important scale in areas where it has the capacity.

b) The Mauritius offshore BPO industry must acquire an identity, a personality and a reputation that differentiate it significantly from other jurisdictions in the global market. The types and quality of its products should bring

comparative advantage, compensate for its small scale and cost disadvantage, and strengthen its attractiveness towards global providers and customers in search of a risk free BPO centre.

c) The relationship between government and the BPO industry has to be re-engineered. The government and the industry association have to jointly determine the product profile of the Mauritius offshore BPO industry, the quality standards and compliance processes with a view to further its development.

d) The Mauritian society has to undertake a cultural transformation to succeed in the consolidation and operation of an offshore BPO industry, distinct from the standard ICT services sector. This cannot be achieved without political direction and institutional adaptation to bring about attitudinal change, emancipation and alignment of social groups to common goal.

e) The offshore BPO centre has to be secured against illegal practices that are common in the intellectual property/knowledge/software/cyber industry, such as piracy and such other odds, to promote knowledge workers and protect its reputation as a risk free centre

f) Offshore BPO industry can only be sustained in the long term with ample supply of cost effective knowledgeable and creative local labour adapted to a high tech industry, a drastic reduction in the cost of telecommunications private circuits for the carriage of information and communications for the BPO industry and by consolidating acquired industrial knowledge and clientele

g) Taking the view that international leased circuit is one of the key inputs for the BPO industry, in whole or in part, its price must be an element of attraction for new entrants and a reason for maintaining their operation in Mauritius over time. Today, the cost of entry into the Mauritian BPO entry is very high as a result of the exorbitant price of private leased circuits, both domestic and international

2.7 Objective

These challenges have to be addressed in a timely manner when civil society in developed economies, which constitute the bulk of the market, is resisting strongly outsourcing to more cost effective offshore centres in the emerging economies for fear of retrenchment. This document examines these challenges using EMS Consulting (Mauritius) proprietary analytical platform to create a route with a good forward visibility and chart the path of the global BPO providers to Mauritius. In the face of a set of scenarios, the global providers will follow a definitive set of strategies to select an offshore BPO location among many. EMS Consulting assumes that global providers will select a particular location if that location possesses the profile and configuration that are facilitative to its entry.

The principal objective of 'Developing Successful Entry Strategies for BPO Operations in Mauritius' is to lead global offshore providers to select Mauritius as their offshore BPO based simply because it is the natural choice.

2.8 Scope of Project

Taking Mauritius as the object of focus, the framework is informative, analytical and policy oriented to facilitate the bridging of gap between its current capacity state and its targeted position. This is what 'Developing Successful Entry Strategies (DSES) for the pursuit of BPO operations in Mauritius' is all about.

The scope of the document is the following:

- Understanding BPO and its business scope
- Information on global BPO industry
- Generic BPO centre selection criteria
- Review and analysis of Mauritius offshore BPO centre
- Proposition of effective enabling policies for Mauritius
- Recommendations

The project has necessitated a considerable amount of research and studies with the following in particular:

- Study of Business Process Outsourcing to better understand the various aspects associated to it. This was done through literature review and research with emphasis laid on:
  - Evolution of BPO
  - Definition of outsourcing & its implications
  - Typical BPO services
  - Core and non-core services
  - Outsourcing process
  - Approach to outsourcing
  - Reasons for outsourcing
  - Obstacles in outsourcing

- Study the BPO market evolutions and industry trends allowing the determination of the size of the BPO market and the existing opportunities that Mauritius could tap on taking into consideration major BPO players. Emphasis was placed on:
  - Global market size of BPO
  - Market evolutions
  - Major BPO players
  - Competitor analysis

- Study of India as major BPO player. Indian case study was considered as it has been successful and is a recognised leader in BPO. Various strengths & assets of Indian BPO sector were considered as reference which could be used for Mauritius in developing successful entry strategies for BPO operations

- Country analysis and study of their competitive assets. This competitor analysis allowed identifying major BPO players and studying their strengths

as well as existing weaknesses. The major incentives provided by these countries were looked which could be useful for Mauritius in developing its BPO sector.

- Study of BPO in Mauritius in relation with other major BPO players. The main objective was to perform a Gap analysis to facilitate the development of fitting strategies. Focus was placed on:
  - The Mauritian current BPO market & trends
  - What Mauritius is currently offering to promote BPO and attracting investors?

- Analysis of the Mauritian BPO sector through examining its strengths, weaknesses, opportunities and challenges (SWOC). This was pursued through brainstorming sessions with major stakeholders in the BPO sector & consultants, publications & surveys, as well as research work by interviewing Executives of such local institutions as Board of Investment, National Computer Board and National Human Resources Development and Business Parks of Mauritius. These various stakeholders from the Mauritian BPO sector assisted by consultants also facilitated the generation of the strategies

The information within 'Developing Successful Entry Strategies for BPO Operations in Mauritius' brings one or more answers to the durable establishment of BPO operations in Mauritius. They can possibly be key parameters to assist BPO providers to establish their operations in Mauritius. They can also provide stakeholders with materials for pursuing actions towards establishing Mauritius as a major BPO provider at a regional level, if not global.

3.0 REVIEW OF BUSINESS PROCESS OUTSOURCING (BPO)

3.1 Background

Management models and techniques have evolved from the stone age of strength domination to piece meal production techniques and division of labour proved by Taylor. During the past years, new management models have emerged to gear businesses towards higher efficiency and profitability. In the 1970's companies attempted to create a structure to allow them to exploit market opportunities in a number of different international markets. However, in the 1990's, global companies move to a core competence business model focussing on areas of strength and outsourcing non-core activities. In pursuing process outsourcing, the aim of a client company is to achieve cost-effectiveness, flexibility and competitiveness to occupy a larger share of the markets where it operates. This process of concentrating internal resources in areas of core competency and contracting out non-core activities to third party specialists as a means to achieve cost reduction and raise quality of service level is termed as '**Business Process Outsourcing**' (BPO).

3.2 BPO Definition

BPO has been defined in a number of ways. In general and simply stated, BPO is the act of giving a third-party the responsibility of running what would otherwise be an internal system or service. For PricewaterhouseCoopers, BPO "is the long-term contracting out of non-core business processes to an outside provider to help achieve increased profitability or shareholder value". Gartner defines it as "the delegation of one or more IT-intensive business processes to an external provider that, in turn, owns, administrates and manages the selected processes based on defined and measurable performance metrics" (2003).

BPO providing firms are in two categories: back office functions and front office functions. Back office functions include billing and research whereas front office functions include customer-related services, such as marketing and technical support. BPO services that are contracted outside a company's own country is often called offshore outsourcing and the BPO services that are contracted within the same country, as onshore outsourcing.

Typically, companies that are looking at business process outsourcing are hoping to achieve cost savings by handing the work to a third-party that can take advantage of economies of scale by doing the same work for many companies. Or perhaps the cost savings can be achieved because labour costs are lower due to different costs of living in different countries. According to GK Management Services, India, statistics reveal that cost savings from outsourcing amount to an average of 39% although many firms estimate this figure to be 60%.

To ensure effective cost reduction without compromising quality, the client company imposes clear guidelines that the chosen BPO provider has to follow in executing the work. In this manner, the client company keeps total control on the outsourced process. Generally, businesses choose to use their staff on their core activities that are connected directly to their products and markets, explaining why business process outsourcing is often reserved for non-critical and non-core type of work. For instance,

an insurance company might outsource their claims processing program or a bank might outsource their loan processing system. Other common examples of BPO are call centres and payroll outsourcing [1].

BPO has been around for a fair number of years now and has also evolved in sophistication. Insurance companies, in particular, have been incredibly astute in outsourcing responsibility for operating processes, e.g. running closed books of business. Retail and investment banks have also outsourced activities such as loan processing, inbound and outbound call centres, and custody operations [2]. Informed executives recognise Business Process Outsourcing (BPO) as a strategy to direct the focus of their companies to their core capabilities to enhance their bottom-line benefits. As a result, BPO is becoming the way for leading companies to compete globally and increase their profitability in the new millennium [3].

The subsequent demand for BPO services has accelerated the formation and concentration of BPO providing firms in different countries giving birth to a global BPO industry, as a structured and formalised group of BPO providing firms. According to Gartner [Gartner's Outsourcing Summit, April 4-6, 2005, Los Angeles], demand for the services of the BPO industry increased from US $ 123.8 billion in 2004 to US $ 133.7 billion in 2005, an 8 % growth. Based on the contracts that are being signed, they predict further growth and expect the buyers' market to be worth US $ 173 billion in 2007. Besides, Forester research predicts transaction processing to be a large segment within the BPO industry soon, with a market size of USD 58 billion in 2008. Some vertical processes such as mortgage, loans and insurance claims processing are already being outsourced.

3.3 Evolution of BPO

The idea of outsourcing is not new as the shifting of manufacturing to, or sourcing inputs from, lower cost countries has been a normal business practice. Some form of outsourcing existed in the area of information technology. In particular, outsourcing was sought initially when companies suffering from a shortage of IT skills sought outside contractors to perform jobs such as software development, applications management and housing data centres. According to EBS, a technology research and consulting firm, BPO has evolved over the years, beginning with time-sharing data processing in the 1960s. Over these years, like outsourcing, BPO has moved from being transactional (task oriented) to being strategic (process oriented).

Table 1 provides the key milestones in the evolution of BPO.

Years	Process
1960s	Time sharing
1970s	Data processing
1980s	Entire IT operations
1990s	Shared business services
2000s	B2B partnerships via Internet
2000s	Process outsourcing via Internet
2000s	IT-enabled offshore services

Table 1: Key milestones in the evolution of BPO

These pioneers in the process outsourcing area discovered a wealth of IT talent in addition to the phenomenon of salary cost arbitrage, which enhanced profit margins. These have prompted companies to increasingly focus on consolidation and standardisation of the whole business processes to make more efficient use of available technology and human capital.

The nature of outsourcing changed with advancement in telecommunications and information technologies coupled with globalisation. Client enterprises started using telecommunications and IT infrastructure to transfer a whole lot of business processes under strict guidelines to competent BPO providing firms. In India, for instance, one of the first outsourced services was medical transcription around mid 1990s and outsourcing of business processes like data processing, billing and customer support around late 1990s. The mushrooming of call centres and data processing centres ushered the association between IT enabled services (ITES) and BPO and shaped the ITES-BPO industry.

In the beginning, BPO was used to achieve cost savings in transaction. In the current age, IT has become pervasive and is employed in a wide range of processes, including BPO. The possibility to use IT tools for delivering BPO performance has added a further dimension to it as client enterprises find in it a flexible and powerful instrument to achieve a wide range of strategic and tactical aims, such as forging new partnerships and development of new technologies and products, including software. In this context, BPO has become another way for large, generally American firms to exercise local presence. For example, Dell, Intel, Microsoft etc are all present in India and China, the two emerging super powers. At the same time, this cross-link with IT has created an overlap between BPO and IT to the extent of creating confusion between BPO and IT. The emergence of ICT has magnified this confusion. ICT or information and communications technologies describe the convergence between IT, telecommunications, audio-visuals and multimedia, which is exhibited in certain products like 3G telephone sets.

3.4 Difference between BPO and IT/ICT

BPO and IT/ICT are two different worlds, although related. IT/ICT are technologies or technical resources whereas BPO is simply a business or industrial process that embraces a set of techniques for the production of a variety of services in diverse sectors of activity. Due to its pervasiveness, IT would fuel localized BPO. In the same manner, the combined use of IT and telecommunications systems are key requirements for offshore BPO. The difference between the two is highlighted in their respective legal frameworks. A legal framework for BPO operation would address issues of an industrial nature whereas a legal framework for IT/ICT would focus on technological enhancement, security and copyrights in the IT or ICT sector. In the same thrust, it can be expected that an exclusive government policy exists for each of the two.

3.5 Products and services of BPO providers

In general, BPO providers offer the following services [4]:

Administration and documentation:

- **Administrative support:** Data entry, document conversion, forms processing, document scanning, indexing, secretarial tasks support, etc.
- **Document processes:** Document process outsourcing includes outsourcing of documents in variety of areas, including customer facing, technical, marketing and communications, financial accounting, and regulatory compliance.
- **Publishing:** It involves outsourcing of publishing functions such as book design, book digitization, e-publishing, drawings and graphics, indexing, journal administration, etc.

Customers and markets:

- **Customer relationship management (CRM):** Customer support, order taking, customer service, product support, technical help desk, collections and market research.
- **Product development:** India is one of the countries, which is emerging as a hub in the area R&D outsourcing to attract numerous Multi National Companies (MNCs).
- **Research and analysis:** Typical research and analysis work such data analysis, financial analysis, market research, primary research, secondary research, industry overview, competitive intelligence, etc.
- **Sales and marketing (including telemarketing):** It involves delegating functions such as cold calling, email pitches, telephone surveys, lead generation, lead qualifying, appointment setting, sales team management, etc.

Finance:

- **Finance and accounting:** Services such as internal auditing, time and expense management, travel expenses, credit and debt analysis, collections, invoicing, accounts payable, accounts receivable and billing-dispute resolution.
- **Payroll maintenance and other transaction processing:** This segment includes payroll, payment, check, credit card and stock trade processing.

Procurement and supplies:

- **Supply chain management:** Outsourcing in supply chain management involves logistics, procurement, warehouse management, contract management, supply chain relationship management, etc.

Human resource management:

- **Employment:** Recruitment, selection and contract-worker management
- **Education:** Training and skills development
- **Wages:** Payroll, pension contribution etc
- **HR management:** KPI, attrition/retention, database management, etc.

Legal:

- **Intellectual property research and documentation:** Filing and drafting of patent applications, prior art research, licensing support, and patent portfolio analysis.
- **Legal services:** Legal process outsourcing (LPO) involves consulting, research, transcription, documents management, billing, translation and other administrative and secretarial support services required for various legal functions such as commercial litigation, arbitration and mediation, appeals, government contracts, legal risk evaluation, etc.

Medical:

- **Medical transcription:** Medical transcription consists in writing down medical records dictated by physicians and other healthcare professionals. These records include patient history and physical reports, clinic notes, therapeutic procedures, clinical course, diagnosis, prognosis, discharge summaries, etc.

Security:

- **Security:** Security outsourcing involves management of investigative services, physical security, electronic security systems, computer and network security, etc to keep their data secure from theft.

Knowledge process outsourcing:

- **Expert input required:** expertise required in specific areas such as scientific, legal, medical, engineering, etc
  (Often a mixture of an extension of above mentioned services)

3.5.1 Typical BPO services in selected industries

List of typical BPO services

Banking Services

Account opening services
Account information capture
Customer queries
Check clearing
Check payment reconciliation
Statement processing
ATM reconciliation
Investment account management
Management reporting
Loan administration
Credit debits card services
Check processing
Collections
Customer Account Management

Mortgage Services

Application verification and processing
Disbursals and collections
Payment reconciliation
Account information updates
Mortgage Loan Servicing

Finance Services

Document management
Billing
Shareholder services
Claims processing
Accounts Receivable
Accounts Payable
General ledger
Accounting services
Treasury Operations Management

Credit Card Services

Applications screening and card issuance
Customer account management
Collections and customer follow-up
Account queries and limit enhancements
Accounting and payment reconciliation

Insurance Services

Policy Owner services
Claims processing
Transaction & Re-insurance Accounting
Statutory reporting
Annuities Processing
Benefit Administration
Customer information capture
Risk assessment and premium computation
Policy processing and account monitoring
Claims management
Payment reconciliation

Asset management Services

Account creation
Account maintenance
Transfers and additions
Dividend payments
Brokerage payment
MIS reporting
Customer service

Health Care

Medical Transcription Services

Customer Care

Customer service
Customer analysis
Call centers
Consumer information services
Customer Relationship Mgt

Human Resources Services

Payroll and benefits processing
Training and development
Retirement investment and benefits management
Hiring and staffing
Recruitment screening,
Administration and relocation services
Payroll processing
Compensation administration
Benefits planning
Administration and regulating compliance

Sales and Marketing Services

Telemarketing Services
Direct Marketing and Sales campaigns

Web-related Services

Website designing
Website management
Site personalization
Site marketing
Search Engine, Directory Optimization and Positioning Services
Catalog / content management
Web analytics
Database Design
Web security services and integration with CRM
Back-office systems for inventory management
Web enablement of legacy applications
Electronic bill presentment and payment services
Graphics/Animation
Web-based Email Processing
Web-based Help Desk
Web-based Chat Support
e-Learning :Web based online education services [4]
e-publishing

Fig 1: List of typical BPO services

3.6 Horizontal and Vertical BPO

BPO services can be categorized as horizontal and vertical. Figure 2 outlines the difference between these types of Business Process Outsourcing:

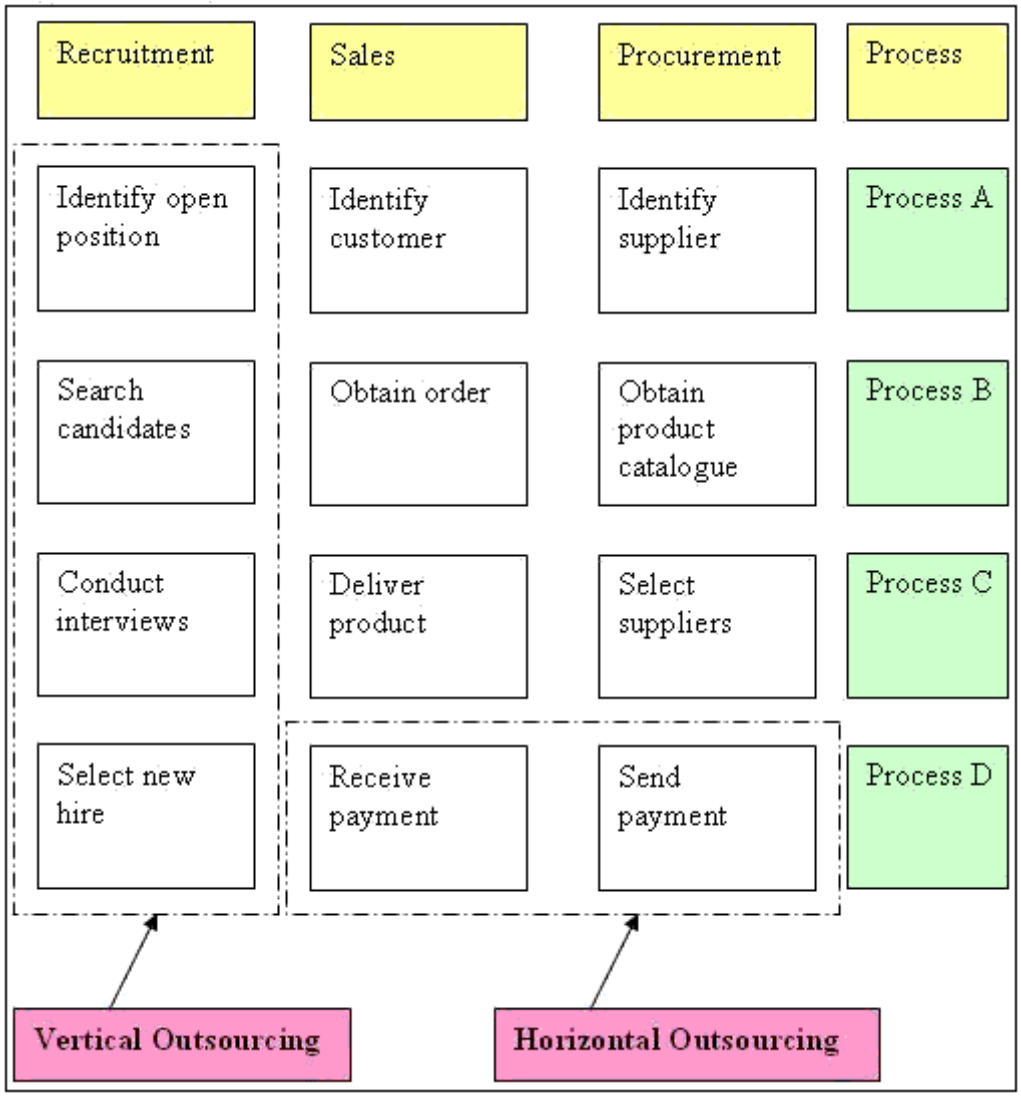


Fig 2: Horizontal & Vertical BPO

3.7 Assessing an Outsourcing Option

Every private, public and government enterprise regardless of its size or revenue is bogged down with various processes that, while critical, are clearly outside an entity's core activities. While these processes are required, the enterprise may not have the human or financial capital or expertise to efficiently conduct them internally. Companies may also opt to outsource these operations even if they could be conducted internally. This allows a better utilisation of assets by re-allocating them to core business activities.

In the current economic environment, companies are increasing profits by improving internal services rather than increasing revenues. Return on investment, the needs for

real time data and economic pressures to cut costs have contributed to the practice of BPO. It allows advancing the corporate mission, refining company focus, aligning business goals with available resources, leveraging business process expertise and efficiencies, promoting productivity and maximizing profitability.

Improving the bottom line and increasing shareholder value is the primary goal of any company and, in the light of the slowing global economy, improved efficiencies and increased productivity are viable means to achieve this goal. Companies are focussing on the consolidation and standardisation of internal business processes in an effort to maximise the use of available technology and human capital.

In summary, BPO is an instantaneous approach to achieve the following objectives [8]:

- Improve competitiveness
  - Focus on core competencies
  - Improve response time
  - Increase flexibility to adapt to the changing environment
  - Improve customer satisfaction
  - High value adding opportunities
  - Improve credibility and image through outsourcing association
  - Serve larger markets
  - Have local presence in lucrative markets

- Increase control
  - Bring operational efficiency
  - Improve process performance
  - Monitor organisational activities
  - Transform or restructure organisation
  - Reduce responsibility and liability
  - Better management of risk

- Reduce cost
  - Acquire innovative concepts and products
  - Take advantage of lower communications costs and overheads
  - Capitalise on lower cost structure of the service provider
  - Take advantage of lower communication costs & cheaper overheads
  - Release capital and reduce financial costs
  - Reduce headcounts directly in payroll

- Improved labour access
  - Access relevant skills and expertise
  - Access higher level human resources at lower costs

According to a study (including world's largest multinationals ranging in size from US $ 1 billion to US $ 50 billion) conducted by Price Waterhouse Coopers (PWC), the major reasons to outsource are outlined in the graph below:

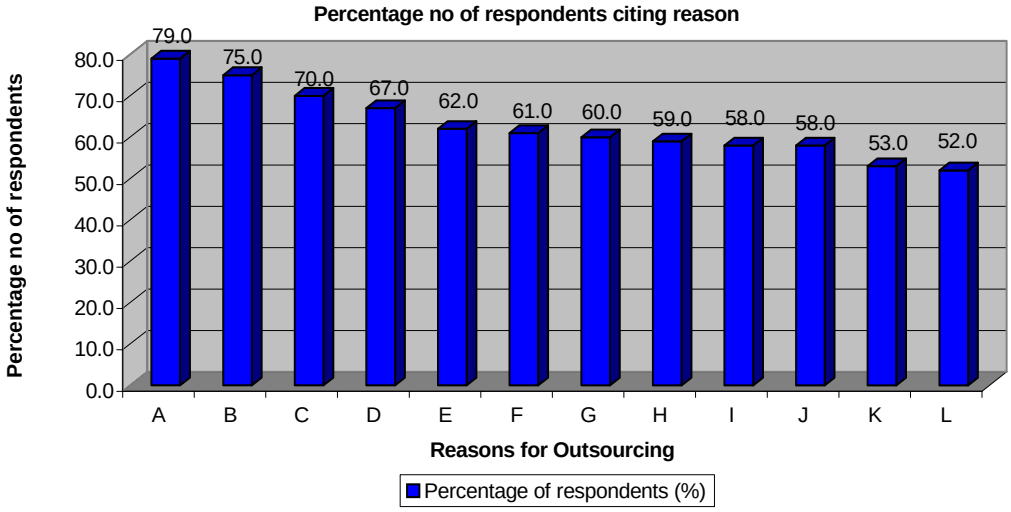


Fig 3: Reasons for outsourcing

A	Achievement of cost savings	G	Meet changing customer demands
B	Focus on core competences	H	Access to advance technologies
C	Improved level of service	I	Achieve revenue enhancements
D	Maintain competitive edge	J	Make continuous process improvement
E	Increase shareholder value	K	Achieve world class standards
F	Gain expertise from outside organisation	L	Greater internal flexibility

Outsourcing can also help in downsizing and making an organization leaner and more efficient. This is illustrated through figure 7.

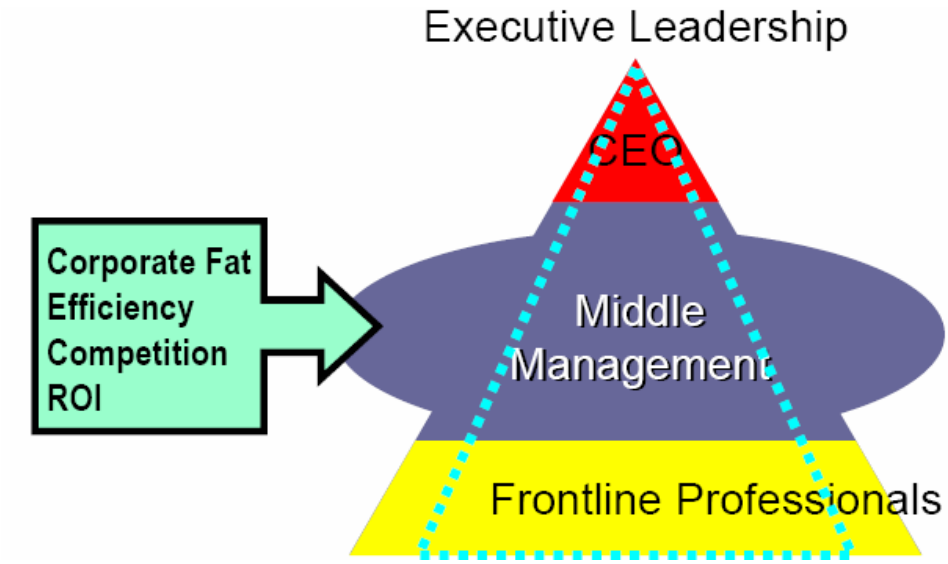


Fig 4: Impact of outsourcing on organizations

3.8 Approach to outsourcing

A **strategic approach** takes a longer-term view of outsourcing and applies outsourcing capabilities to achieve corporate business vision and objectives. It addresses the fundamental needs of running effective business operations. It relies on process optimisation, business-oriented measurements, and enhanced control over strategic assets (e.g. database, patent rights) and activities to drive higher levels of value-directed performance, thereby delivering sustainable business advantage.

A **tactical approach** draws its advantage primarily from cost reductions obtained through labour rate arbitrage. This approach works best opportunistically, seeking projects with characteristics well suited for easy offshore outsourcing and sufficient resource levels to capitalize on labour rate differentials and delivery.

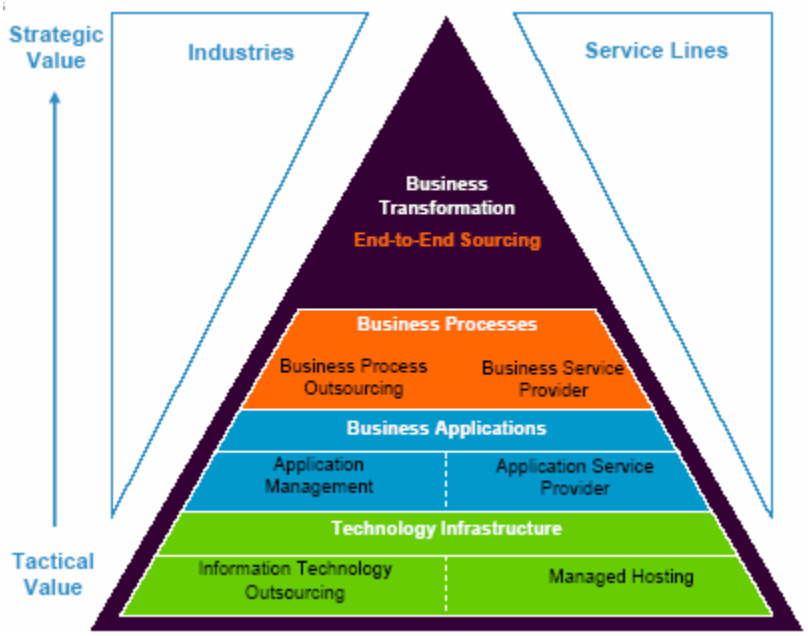


Fig 5: Approach to outsourcing

Table 3 illustrates activities of less strategic to more strategic importance which are outsourced

More strategic ↑ **Less Strategic**	Policy & Strategy	Policy & Strategy	Policy & Strategy	Policy & Strategy
	Resource planning	Needs Analysis	Decision support analysis	Decision support & data analysis
	Policy interpretation/ grievances	Content Development	Call centre – inbound & outbound	Financial reporting
	Call centre, benefits, administration, payroll	Learning administration (enrolment, test score, tracking)	General customer service	Finance operations (accounts receivable/payable, billing, etc)
	Human Resources	**Learning & training**	**CRM**	**Finance & Accounting**

Table 2: Strategic importance of functions outsourced

3.9 Decision to outsource

Outsourcing decisions are critical in the process of determining the most effective strategy to improve product roll out to the market and profitability. But what to outsource is even more critical and these decisions often demand an overall re-engineering of the business concern, a re-definition of internal processes into core and non-core and their re-alignment internally to create a greater commercial impact externally. Once identified, the core activities are kept within the company to maintain competitive edge and non-core activities are outsourced to support the core activities at the least possible cost.

3.9.1 Identification of Core and Non-Core Services

The most important factor behind the growth in the BPO market worldwide today is an increase in the number of enterprises that are reviewing their internal operations in an attempt to fully understand their true core competencies. In the process they are able to focus more on their core competencies. BPO enables companies to concentrate on the core areas of their business. It gives more freedom to the management of these companies to focus more time, energy, and resources on building the company's core businesses and delegate the non-core aspects of the business to BPO providers.

Once outsourcing of certain processes take place, it becomes easier for the company to compare and evaluate the efficiency and effectiveness of services that are being delivered from outside and inside. This decision-making process often includes an evaluation of the cost of owning technology - with its associated support costs, that are not core to the enterprise. This trend is leading to an increased keenness to outsource processes that are considered non-core, yet critical activities. Human resource management is one among multiple examples.

As an expression of a core function, no one expects an oil company to outsource its exploration and refining functions. Pharmaceutical companies will not outsource their late-stage research and development because R&D is a critical adjunct to business development. These activities are core to their businesses and often the means for differentiation and competitive advantage in the marketplace.

However, companies are better off by outsourcing non-core functions to specialist firms with economies of scale. By outsourcing, most organizations cut costs, improve service and increase their focus on what is core. Figure 6 outlines the selection refinements. These refinements make it easier to decide on the type of business functions to be outsourced or not.

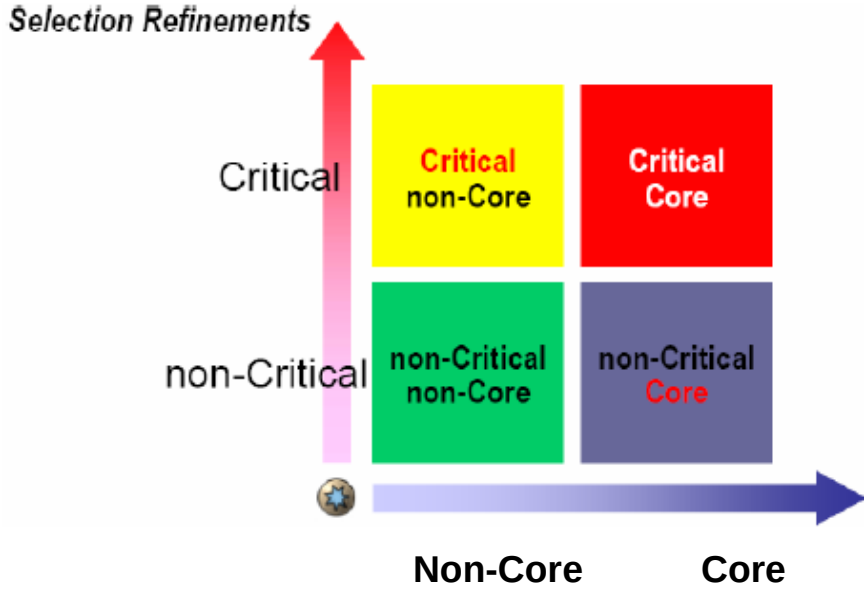


Fig 6: Selection refinements

For many companies, functions such as information technology, wage processing, procurement, etc are non-core and are outsourced. In many cases, although companies recognize that IT is critical, it is not a core competence and would outsource IT services from an external specialist provider.

Core functions are also identified as:

- Products/Services that CUSTOMERS see as exceptionally different from competition.
- Products/Services, which are responsible for the ultimate success of the company.

Figure 7 indicates core activities that stay in-house and the non-core functions that are outsourced.

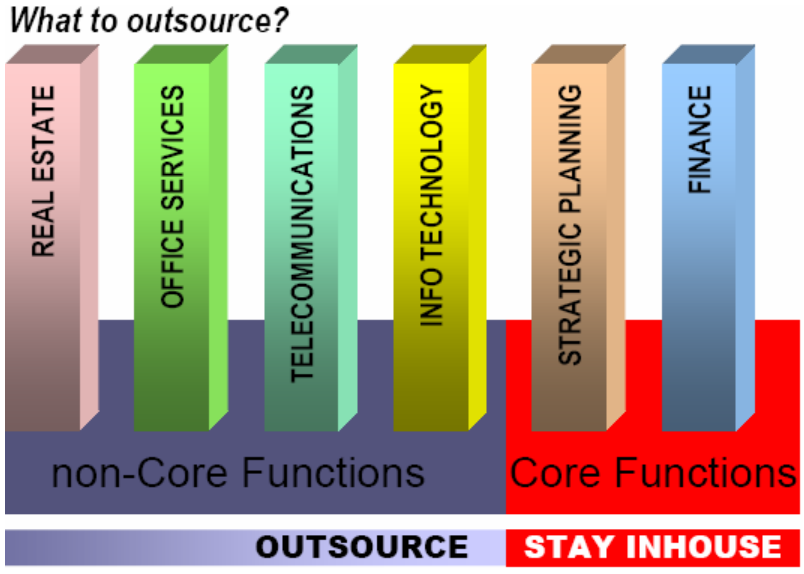


Fig 7: Core and non-Core functions

In addition to core functions, activities that companies prefer not to outsource include management decision support services qualified as:

- Mission critical
- High value added
- Low volume
- Hard to measure
- Varying customer requirements
- Examples include: treasury, investor relations, forecasting, SEC reporting, risk management

Activities that companies would normally outsource have the following attributes:

- High volume
- Efficiency focused
- Routine and repetitive activities
- Easily measured performance
- Consistent customer requirements
- Transaction/service-oriented skill set
- Examples of above mentioned activities are payroll, accounts payable, invoicing, cash application, general ledger, account reconciliation, internal reporting etc

BPO providers are now supporting firms on entire end-to-end process, instead of only specific tasks, like in logistics, banking and insurance. Increasingly, companies are getting bolder and are taking advantage of the offshore BPO centres in developing countries to pursue content and technology development in the area of such as publishing, microelectronics, software and biotechnology.

3.9.2 5-Element Model for Outsourcing

The following 5-element model can be adopted for outsourcing one or more processes [5]:

- Strategic Analysis – identifying what to outsource, how, why and where?
- Transition/Planning – developing plan to change a given state
- Implementation - executing the plan
- Communicate and Consult – building team spirit and consensus
- Monitor and review - ensuring that goals are met and risks mitigated

Outsourcing successfully a process [6] involves:

- Planning initiatives
- Exploring strategic implications
- Analyzing cost and performance
- Selecting providers
- Negotiating terms
- Levelling resources during the transition state
- Managing relationships

3.10 Drivers and Inhibitors Associated with BPO

Internal drivers are mostly responsible for selection specific BPO activities. In addition to internal drivers, companies select the option of BPO based on the following external drivers [9]:

- **Robust IT and telecommunications infrastructure**: The developments in IT and telecommunications infrastructure enable companies to transfer data globally and instantaneously at very little cost. This infrastructure also allows them to increase their return on investment (ROI) and shareholder value.
- **Pressure to lower costs**: Companies are facing huge competition from their competitors to provide better services while, at the same time, having to lower their costs. Companies are constantly innovating the way they are conducting businesses and BPO allows them to partner with external specialized providers for efficient operations. Many companies are now using offshore BPO providers based in specialized cyber parks to achieve further cost reduction.
- **Little infrastructure for automation**: In addition to advanced IT infrastructure, most of the business processes still need human labour to support their automated productive delivery. Resorting to offshore BPO at lower labour costs is a way for companies to maximize ROI.

Some of the perceived risks outlined below, that are associated with outsourcing are considered major inhibitors affecting BPO [9].

- **Loss of control**: Outsourcer companies fear a lost of control on their processes. Besides, the BPO provider firm may not be in a position to retain its employees.
- **Financial instability:** The BPO provider's financial position may not remain stable with time.
- **Loss of expertise**: Outsourcer companies may lose the knowledge and expertise of the outsourced processes with time.
- **Data security**: The BPO provider may not preserve data confidentiality.

3.11 Satisfaction Survey with offshore outsourcers

A joint study of offshore outsourcing, by the *Weissman Centre for International Business at Baruch College* and *the Paaras Group*, was conducted in 2003 through surveys and interviews of 38 global companies, mostly based in North America. The study produced some key findings outlined below:

- **Satisfaction Levels of a vast majority are high:** 89% companies using offshore centre for IT, business processes and contact work reported that they are satisfied with their offshoring initiatives.
- **It's not easy:** 76% identified knowledge transfer and internal commitment as the major challenges for launching offshore initiatives, which companies said need to be addressed early on to ensure success. Many of the survey participants recommended the hiring of outside services providers to help build

consensus and bring 'best practice' experience. This process also ensures an objective view of the outsourcing process and critical strategies and steps to be undertaken

- **Cost Isn't the Only Driver:** 94% of companies cited cost savings as the main goal of offshoring in 2003, 63% of them cited access to skilled resources as the second goal and 51%, improving quality as the other goal.
- **Program and Change Management are Keys to Success:** 85% of the companies surveyed believe that the establishment of a Program Management Office (PMO) provides the foundation for offshoring success, with two-thirds (67%) stressing the importance of proactive communications programs.
- **'Best Practice' Companies Prefer Global Sourcing to Offshoring** Companies with significant outsourcing experience have moved or are moving toward a strategy of multiple locations, multiple BPO providers and a judicious blend of both in-sourced and outsourced models to minimize risks and maximize flexibility.

3.12 Perceived Risks in Outsourcing

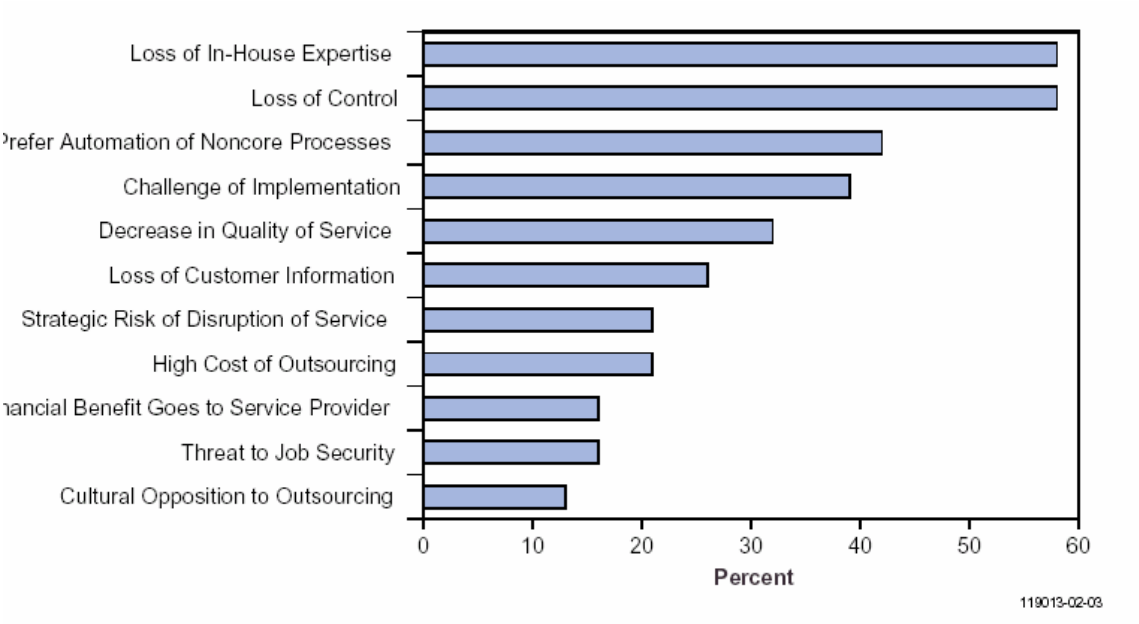
Although the above-cited benefits build a strong case for outsourcing, however, there are certain risks involved in outsourcing:

- European countries wasted 6 billion Euros due to poor deal structures and poorly managed relationships with IT outsourcing companies in 2002.
- Satisfaction with the business benefits from outsourcing contracts fell from 86 percent in 2001 to 50 percent in 2002 among board-level executives in Western Europe, according to Gartner.
- The skills and training required to implement and manage ongoing outsourcing projects are not yet mature, and the industry is still going through irreversible changes and development. As an outsourced industry, IT is maturing fast, but is still a long way from real stability.
- Data insecurity
- Absence of long-term commitments, essentially due to:
  - Change in strategy of BPO provider (new sector, activities, process, etc)
  - Price issues
  - Improved technological issues
  - Changing country environment, largely associated with Government policies and strategies

Like marriage, outsourcing has been found as much easier to consummate (improperly) than it is to terminate, and recover from, if done poorly [6]

3.13 Obstacles to Outsourcing

Not all companies are prompt to outsource their business functions. The figure below outlines the most significant obstacles to outsourcing [6].



Source: Gartner Dataquest (December 2003)

Fig 8: Top obstacles for outsourcing

3.14 Developing an offshore outsourcing strategy

The approach to develop an offshore outsourcing strategy should be based on a systematic methodology that includes the following steps:

a) Selection of the country first: Understand the profile, risks and benefits of the country including:
   - geographical situation and climatic conditions
   - political stability and collaterals
   - government support to BPO projects
   - Monetary and fiscal regime
   - cost of living
   - language, cultural and security issues
   - size, composition and quality of the labour pool
   - skilled resources and labour cost
   - adequate and cost-effective accommodation and facility
   - transport, water, sanitation, electricity and telecommunications etc
   - Impacting legal and regulatory regime

   For IT-specific projects:
   - Cyber laws including intellectual property protection, software piracy laws and data security.

b) Scan the provider landscape in the country. Shortlist the providers based on specific screening criteria, for example track record, experience, domain expertise, cost, quality, and financial stability

c) Determine the best-fit delivery model for the business: pure offshore, onsite/offshore, or onsite/onshore/offshore

d) Narrow down the providers according to years in business, scale of operation, range of services, geographic span, delivery model options, industry focus, and cultural fit

e) Negotiate and attempt to build a long-term relationship with the provider. It should be remembered that this is a strategic relationship, so taking the time to find the right provider is very important

3.15 Approach to location selection for IT Enabled Services (ITES)

Most locations swing between a focus on infrastructure development (for example, providing facilities for ITES, providing telecom and power supply, improving the quality of life) and a focus on HR development (for example, providing specialized skills training, generating a pool of educated resources).

A mix of quantitative and qualitative factors and the importance that a client company attributes to the different criteria based on its specific demand characteristics determine the attractiveness of a location under scrutiny.

A typical approach to the choice of location by companies for ITES involves multiple stages of information gathering, analyses and negotiations [7].

The framework adopted for the location choice is based on the platform of five input factors:

- human resource costs and availability (for example, number of graduates, starting salaries, attrition rates)
- infrastructure availability (ITES facilities, telecom and power supply, quality of life)
- the dependence of the location on ITES
- the presence of support groups (for example: industry expertise, venture capital, education, industry associations)
- the physical features (for example: trade facilitation, geographic location, climate)

Usually, companies that have an established base, either in terms of facilities (own or parent company's), a brand (to attract talent) or top management teams, tend to choose to operate and expand their ITES operations in the same location.

The approach to location selection decisions [7]

	Awareness →	Consideration →	Discussion / Evaluation →	Negotiation →	Decision →
Key Considerations related to location choice	▪ key developments/events/ visits ▪ Awareness through direct marketing efforts of government and / or industry ▪ Experience of other companies in that location	▪ Presence of other BPO service providers in that location ▪ Presence of support industries and third - party service providers ▪ Geographic proximity to existing operations, transport/telecom hubs, etc	▪ Understanding of key drivers behind off-shoring ▪ Understanding of impact of location of location on overall benefits case ▪ Assessment of key risks associated with location choice	▪ Government efforts at facilitating potential investors ▪ Incentives offered by government/investment task forces to specific parties	▪ Overall expectation of benefits and feeling of comfort
Average number of locations included for this stage	8-10	5-7	3-5	1-3	1-2

Table 3: Approach to location selection decisions

3.16 Popularity of HR Outsourcing

Accenture recently conducted a survey to determine the satisfaction level of 150 US senior executives on their in-house HR department's performance.

It found that nearly half of senior executives are either dissatisfied with or ambivalent about the performance of their HR departments. Specifically **47%** said they were dissatisfied or neutral with the overall performance of their HR departments, while **53%** said they were satisfied or extremely satisfied.

The reason executives stated most often for their dissatisfaction was response time, while personal attention and access to information were given as reasons for satisfaction with their HR departments.

As a result, it is not surprising that **85%** of executives say they outsource one or more of their HR functions.

Whatever be the case, Accenture says that the HR functions most often outsourced are:

- Administration (88 %)
- Pension administration (57 %)
- Recruitment (40 %)
- Training and professional development (29 %)
- Payroll (23 %)
- Health and safety (10 %)
- Performance evaluation (1 %)

The most popular reasons companies gave for outsourcing HR are lower costs (**88 %**) and access to greater expertise (**82 %**).

In addition, **66 %** of respondents said they outsource to direct the focus of their HR departments on broader company issues; **64 %** said they outsource to get access to more information; and **58 %** said they outsource to receive quicker responses.

Accenture also pointed out that the survey found little difference in satisfaction levels between HR services being provided in-house and those being outsourced.

4.0 MARKET EVOLUTION & INDUSTRY TRENDS

4.1 Global Market Size of BPO

Rapid transformation is taking place in the global BPO market. Most of the leading business companies of the world are adopting BPO as a strategic business solution, accompanied by increased spending in BPO services. The size of the outsourcing market has grown significantly over the past years and determining its exact size is a difficult task. However, there are some educated estimates and all of them point towards an exponential growth in the BPO sector.

4.2 Market Forecasts from Diversity of Sources

Market research firm, Gartner Inc., estimates that the current BPO market is worth US $ 127 billion with growth expected to reach US $ 173 billion by 2007, of which US $24.23bn would be outsourced to offshore contractors. They further expect that offshore BPO services will grow from US$1.3 billion in 2002 to US$ 24.3 billion in 2007, and will represent 14 percent of the total BPO market by 2007 [13]. Of this, as a major provider, India has an earning potential of US $13.8 billion in revenue. The projection includes revenues of pure play Indian BPO service providers, captives operations of Multi National Companies operating in India, third party service providers and BPO subsidiaries of IT services firms.

Figure 9 indicates the Gartner's worldwide BPO market size and forecast for 2002 to 2007

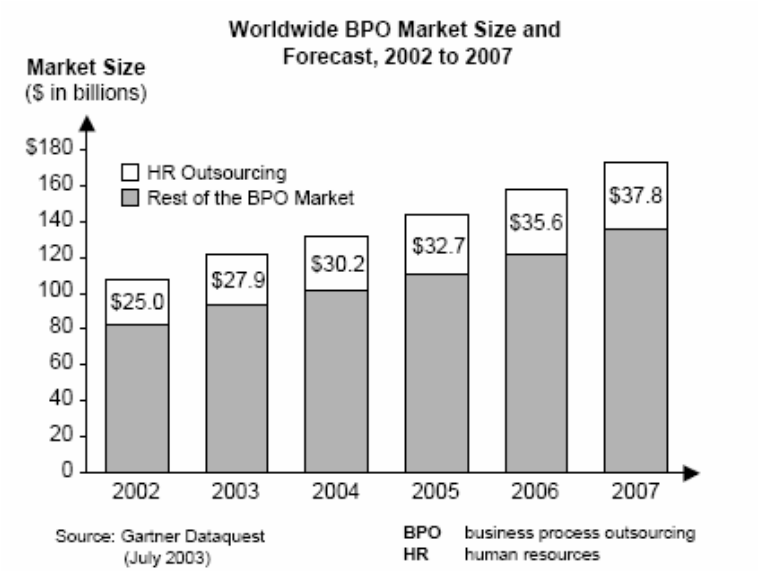


Fig 9: Worldwide BPO Market Size

Other estimates indicate that the market is already worth US $ 250 billion. According to Goldman Sachs, rapid growth will propel revenues to US $ 680 billion in 2006.The National Association of Software and Service Companies (NASSCOM) in India estimates worldwide BPO-ITES spending at US$712 billion.

According to market intelligence firm IDC, the global market size for BPO was estimated to be around US $ 382.5 billion in 2004 [11]. The research firm expects robust growth in the BPO industry with more and more companies reaping the benefits of BPO all over the world. The BPO market size is expected to reach USD 641.2 billion by 2009 with a Cumulative Annual Growth Rate (CAGR) of 10.9 percent from 2005 to 2009.

Other Global Market size estimates of BPO [10] are given below:

1. Gartner/Dataquest: US$ 544 billion in 2004
2. IDC: US $382 billion in 2004 and US$1.2 trillion in 2006

4.3 BPO-ITES Market by Region

North America will remain the dominant market for ITES-BPO services, accounting for nearly 63 percent of the total ITES-BPO market in 2006. The main verticals in the North American ITES-BPO market are telecommunications, financial services, health care and energy. Commonly outsourced processes include internal auditing, payroll, human resources, benefits management, contact centres/customer care, payments/ claims processing, real estate management, and supply chain management.

A report by Forrester shows that the UK leads the European outsourcing market on the back of a strong activity involving the public sector, financial services and organizations. BT Global Services headed the vendor chart with Euro 2.2 billion deal from the Ministry of Defence. The Western Europe ITES-BPO market is expected to account for 22 percent of the market by 2006. The financial services sector is the largest consumer of BPO-ITES services in Europe, followed by utilities and telecommunications. Human resources, finance and accounting are expected to be the fastest growing service lines.

The Asia Pacific ITES-BPO market is expected to account for 18 percent of the total ITES-BPO market in 2006. Companies in the Asia-Pacific region have traditionally outsourced only manufacturing activities. Given the relative infancy of the ITES-BPO market, this region is expected to experience rapid growth over the next few years. Growth will primarily be driven by cost-reduction and the need to focus on core competencies. HR, finance and accounting are expected to be the key growth areas in the Asia-Pacific region in the years ahead. However NASSCOM estimates that by 2006, Asia-Pacific will be the largest growth market, with growth of 14.7% (compound annual growth rate).

4.4 Market by Sectors

The BPO industry is very diverse, with several sub-segments, each displaying its own unique profiles [10] and it is forecasted that several BPO sectors will achieve growth.

For example, McKinsey & Co. predicts global market for IT-enabled services to be over $141.2 billion by 2008[10]. The breakdown is given in table 4

IT Enabled Services	Amount (US $ billion)
Customer Interaction Services	33.0
Finance & Accounting Services	15.0
Translation, Transcription & Localization	2.0
Engineering & Design	1.2
HR Services	5.0
Data Search, Integration & Management	44.0
Remote Education	18.0
Networking Consulting & Management	15.0
Website Services	5.0
Market Research	3.0
Total	**141.2**

Source: NASSCOM McKinsey Study - India IT Strategies

Table 4: Global Market for ITES

NASSCOM and McKinsey project the ITES-BPO segment in India to grow by 60 per cent to reach US$ 2.4 billion in 2006. This is expected to increase nearly tenfold to US $ 20 billion by 2008, only a fraction of the worldwide ITES-BPO spending which is projected to be over US $ 800 billion by the year 2006 [12].

IDC expects worldwide spending on HR BPO services to reach US $ 56 billion by 2007, up from US $ 31 billion in 2002. Procurement BPO spending will climb from US $ 6 billion in 2002 to US $12 billion in 2007. Similarly, logistics BPO will expand from US $ 156 billion in 2002 to US $ 276 billion in 2007.

4.5 Structure of the Job Market

BPO is also giving rise to significant changes in the world economy specifically in the job market [14]. The number of jobs that are moving offshore from USA is illustrated in table 5.

No	Job Category	2000	2005	2010	2015
1	Management	0	37,477	117,835	88,281
2	Business	10,787	61,252	161,722	48,028
3	Computer	27,171	108,991	276,954	72,632
4	Architecture	3,498	32,302	83,237	84,347
5	Life Sciences	0	3,677	14,478	36,770
6	Legal	1,793	14,220	34,673	74,642
7	Art, Design	818	5,576	13,846	29,639
8	Sales	4,619	29,064	97,321	26,564
9	Office	53,987	295,034	791,034	1,659,310
Total		**102,674**	**587,592**	**1,591,101**	**3,320,213**

Source: U.S Department of Labour and Forrester Research, Inc.

Table 5: Number of US jobs moving offshore

4.6 Overview of Major BPO Players

India and China will be the main winners from an increase in offshoring but Eastern Europe is also set to benefit, according to CEO Briefing, a report published by the Economist Intelligence Unit [14].

The report, which includes a new ranking of 60 global offshoring environments and a survey of 500 senior executives, concludes that companies will redistribute more service functions to Asia and Eastern Europe over the next three years. Only a few markets in the developed economies emerge as attractive offshoring locations, with Canada leading the way among Organisation for Economic Cooperation & Development (OECD) countries.

The impact of offshoring, which is the relocation of a company's service functions abroad, continues to grow, with 57 percent of executives in the survey citing outsourcing and offshoring as critical forces reshaping the global marketplace (up from 51 percent last year).

The Economist Intelligence Unit's ranking model measures the attractiveness of 60 countries as destinations for offshoring, scoring each country on nine criteria commonly used by companies when deciding where to offshore[14].

Countries were scored on labour costs, labour skills, labour regulation, proximity to major sources of investment, political and security risk, macroeconomic stability, regulatory environment, tax regime, and infrastructure.

The ranking of top 17 locations for offshoring is given table 6:

S/N	Score	Country
1	7.76	India
2	7.34	China
3	7.26	Czech Republic
4	7.25	Singapore
5	7.24	Poland
6	7.23	Canada
7	7.19	Hong Kong
8	7.17	Hungary
9	7.17	Philippines
10	7.16	Thailand
11	7.13	Malaysia
12	7.12	Slovakia
13	7.09	Bulgaria
14	7.08	Romania
15	7.08	Chile
16	6.91	USA
17	6.60	UK

Source: Economist Intelligence Unit, 2005

Table 6: Global ranking of top locations

The key findings were as follows:

- Asia increases its offshoring dominance. The ranking shows India to be by far the most attractive offshoring destination, owing to a large number of English-speaking graduates, very low labour costs and its developed legal system. China comes second owing to its cheap and plentiful labour supply and fast-improving infrastructure, but lags behind India because of its relative lack of English skills, cultural barriers and a weak legal system. Overall, Asian companies dominate the rankings, occupying 6 of the top 10 locations.
- Eastern Europe will also benefit. Although Eastern Europe currently attracts only a small number of offshoring projects, the ranking indicates that the region will become a major offshoring centre in the future. The Czech Republic leads the way, taking third place behind India and China because of its relatively low-cost skilled labor force, an attractive regulatory environment, as well as close proximity and cultural ties to Western Europe.
- Canada is the most attractive developed country. Canada comes 6th in the rankings, making it the only OECD country in the top 15. Canada features a highly attractive business environment, but also has relatively low labour costs for a developed country. Canada benefits from close proximity to the US, while its highly skilled work force and excellent infrastructure make it particularly attractive for knowledge-intensive activities.

According to Daniel Franklin, Editorial Director of the Economist Intelligence Unit, India and China are already the leading destinations for offshoring, and have the potential to win an even bigger share of offshoring projects if they address remaining weaknesses in their business environments.

4.7 Kearney Global Services Location Index

Another survey by A.T Kearney Global Services Location Index 2005 indicates the following countries considered as major BPO locations [15]:

Rank	Country	Total score
1	India	6.87
2	China	6.14
3	Malaysia	6.07
4	Philippines	5.78
5	Singapore	5.73
6	Thailand	5.72
7	Czech Republic	5.58
8	Chile	5.58
9	Canada	5.52
10	Brazil	5.50
11	United States	5.49
12	Egypt	5.47
13	Indonesia	5.47
14	Jordan	5.35
15	Bulgaria	5.27
16	Slovakia	5.24
17	Mexico	5.22
18	Poland	5.16
19	Hungary	5.13
20	United Arab Emirates	5.12
21	Costa Rica	5.09
22	**Ghana**	**5.08**
23	Argentina	5.05
24	Romania	5.03
25	Jamaica	5.03
26	Vietnam	5.00
27	Russia	4.99
28	United Kingdom	4.99
29	Australia	4.91
30	Tunisia	4.86
31	Germany	4.84
32	**South Africa**	**4.81**
33	Israel	4.75
34	New Zealand	4.74
35	France	4.69
36	Panama	4.65
37	Portugal	4.28
38	Spain	4.12
39	Ireland	4.07
40	Turkey	3.97

Source: A.T Kearney

Table 7: Global ranking of top locations

4.8 BPO Usage

BPO usage is most prevalent in Canada (73%), Australia (72%), and United States (72%) where about three-quarters of the executives reported Business Process Outsourcing programs in place. The bulk of BPO in the US is still conducted by U.S providers for U.S clients, but the trend is rapidly changing. India is firmly set to be the largest recipient of both outsourcing contracts as well as Foreign Direct Investment (FDI) inflows into BPO activities from industry outsourcers. However, Australia, Ireland, Singapore, Philippines, China, Malaysia, Morocco and Tunisia are positioning as major contenders.

The ranking of the 40 major BPO players **(refer to table 7)** were chosen according to:

1. financial structure
2. business environment and
3. people & skills availability

The 3 most dominating countries in each category are indicated in table 8 [15].

Category	Sub-category	Ranking
Financial structure	▪ Compensation cost ▪ Infrastructure cost ▪ Tax & regulatory cost	1. Philippines 2. Ghana 3. Vietnam
Business Environment	▪ Country risk ▪ Country infrastructure ▪ Cultural adaptability ▪ Security of Intellectual Property	1. Singapore 2. United Kingdom 3. Canada
People & Skills availability	▪ Relevant experience ▪ Size & availability of labour force ▪ Education ▪ Language ▪ Attrition rate	1. United States 2. France 3. India

Source: A.T Kearney

Table 8: Category ranking

4.9 BPO Initiatives

BPO initiatives [16] report that several other countries are fast improving their investment climate to successfully enter the BPO industry namely South Africa, Brazil, Hungary, etc. More than half of the companies in Japan (60%) and Europe (55%) have BPO programs, but less than half of the companies in South America (40%).

4.10 Competitor Map

Various reports indicate that India still dominates the BPO industry although there are serious contenders that are emerging. All of them have their set of strengths and weaknesses and the combination of these two factors restrict their scope to a limited share of the overall BPO market and earnings.

Country	Strengths	Limitations
India	High reputation, large pool of cost-effective labour talent	Physical infrastructure and narrow set of foreign language besides English
China	Low costs and technology	Administrative complexity and foreign language
Philippines	Close to the US market; voice work; low attrition	More expensive than India; small talent pool
South Africa	Time zone similar to Europe; 25% cost saving, good for niche work	Skill shortage and security
Canada, Ireland, Australia	Understands the US market; high-end skills	High costs
Czech Republic, Hungary	European language skills	Small talent pool; high costs
Russia	Technology skills	Infrastructure; language
Mexico	Immediate neighbor of US, 30% cheaper than US; Spanish skills	Specializes in low-end jobs

Table 9: Competitor Map

A further comparison of the strengths and weaknesses of six (6) of the major BPO centres provide further information on their capacity:

BPO	India	China	Philippines	Canada	Ireland	Russia
Government Support	High	Low	Medium	Medium	High	Low
Labour Pool	High	Low	Medium	Medium	Low	Low
Infrastructure	Medium	Medium	High	High	High	Low
Educational System	High	High	Medium	High	High	High
Cost Advantage	High	High	High	Medium	Low	High
Quality	High	Low	High	High	High	Low
Cultural Compatibility	Medium	Low	High	High	High	Low
Time/distance Advantage	High	High	High	Low	Low	Medium
English Proficiency	High	Low	High	High	High	Low

Source: neoIT

Table 10: Relative strengths & weaknesses of major BPO players

4.11 Risk Assessment

Organizations considering BPO offshoring must get the balance right between the importance of cost reduction and risk involved taking account both the enterprise employed and the geo-political environment.

Ian Marriott, Vice President at Gartner warned that, while the cost of labour will remain a major factor in the choice of offshore location, organizations have to carry out a detailed cost versus risk analysis. Organizations must understand the various types of risk when using global software teams or offshore outsourcing, and assess each through a more rigorous due-diligence of the short-listed offshore firms. Some of the emerging offshore countries highlighted by Gartner with potentials, although limited by insufficient resources and infrastructure to deliver services on a profitable level, include Belarus, Estonia, Latvia, Lithuania, Mauritius, New Zealand, Slovakia and the Ukraine.

4.12 The Emergence of Mauritius

Language barrier, limited infrastructure capacity, rigid labour laws, inadequate utilities and chronic administrative inefficiencies are opportunities that emerging BPO centers could tap on to attract BPO outsourcers.

According to press report [Express, February 2, 2005], a recent Gartner's report indicates that countries like China, Ghana, South Africa, Fiji, Malaysia, the Philippines, Australia, New Zealand and Mauritius were likely to capture 45% of the global offshore BPO market, which is worth US $ 27 billion, by year 2007. The fact that Gartner chooses to recognize and lists Mauritius alongside reputable BPO centres, although this could partly be due to the promotional campaign undertaken by Mauritius, indicates the arrival of Mauritius on the international BPO Arena. Most importantly, it is the first time that Mauritius has figured in a Research and Advisory report at the International level as a credible outsourcing location. This does suggest that the next time large global corporations draw a list of locations for evaluating offshore centres, the name of Mauritius will start coming up.

Mauritius is a platform with a full of array of distributional channels to a variety of markets, being a location with strong historical, ethnic and cultural ties with Africa, Asia and Europe. As a result, it connects with 90% of the world's population and 80% of the developed countries. In the process of building up into a viable offshore BPO location, Mauritius has used in a natural manner its strong cultural ties with France, India and China. Besides, Mauritius is taking full advantage of the bi-lingual ability of its flexible workforce and the experience as a major Export Processing Zone (EPZ) center and tourist resort. Irrespective of the nationality of the BPO provider firm in Mauritius, a significant amount of work is destined to French-speaking countries. Major Indian firm, Infosys is pursuing this strategy, whereas Chinese giant Huawei is active in both the English and French segments. What is already happening has the potential to be further harnessed. The shape of things to come will nevertheless very much depend on the ability of stakeholders to define a clear strategy with respect to positioning and branding of Mauritius as a centre worth considering.

5.0 BPO IN INDIA

5.1 India: A dominant force

India has cost leadership and a very rich pool of labour supported by:

1. deep experience in BPO
2. large labour force

India's educational system generates two million proficient English speakers with strong technical and quantitative skills. The country benefits from more than one decade experience as large scale offshore destination. Services have evolved from software coding to business process management and high level analytics and consulting. The labour force is familiar with work ethic, quality and productivity expectations of clients. NASSCOM predicts that India's IT software and services export market will reach US$60 billion by 2008.

India's vulnerability lies in terms of its business environment. Infrastructure weakness and concerns over economic stability pulls India down. Cultural adaptation becomes a challenge as general population is not widely exposed to other cultures.

Another weak point is in meeting expectations. In 2003, media reports both Dell and Lehman Brothers brought offshore call centre jobs back to the US due to the difficulty to understand accent and long waits to attend calls.

The reaction of India's service providers was quick. Major BPO service providers e.g. Tata Consultancy Services, Infosys and Satyam Computer services are diversifying their locations especially to Canada to facilitate near shore services to US clients. Other countries such as Singapore and China are being targeted [17].

5.2 SWOT Analysis of India's BPO Industry

India dominates the BPO sector due to its various strengths [18].

The SWOT analysis exercise pictures the country's strengths, weaknesses, opportunities and threats.

5.2.1 Strengths

- Solid history in software development
- English proficiency
- Government Support & policies
- Cost advantage - Cheaper workforce than their Western counterparts. The wage difference is as high as 70-80 percent when compared to their Western counterparts.
- Strong tertiary education
- Process quality focus
- Lower response time with efficient and effective service
- Operational excellence

- Skilled workforce
- Abundant manpower
- Lower attrition rates than in the West
- Dedicated workforce aiming at making a long-term career in the field
- Expertise in new technologies
- Entrepreneurship
- Reasonable technical innovations
- Reverse brain drain
- Existing long term relationships
- Round-the-clock advantage for Western companies due to the huge time difference
- Conducive business environment
- Strong links with emigrated diasporas

5.2.2 Weaknesses

- Recent months have seen a rise in the level of attrition rates among ITES workers who are quitting their jobs to pursue other careers or higher studies or other careers. Of late workers have shown a tendency not to pursue ITES as a full-time career.
- The cost of telecom and network infrastructure is much higher in India than in the US
- Positioning & Brand management
- Major competitors having better Infrastructure
- Cultural differences
- Sales & marketing
- Leverage expertise for higher-value education
- Distance from US
- Fears and uncertainties arising from political disturbances
- Legal system should be further consolidated
- Poor globalization skills
- Political opposition from developed countries

5.2.3 Opportunities

- Creation of global brands as an offshoring BPO leader
- BPO & Call center offerings
- Expansion of existing relationships
- Chinese domestic & export market
- Leverage relationships in West to access APAC/Middle East markets
- Indian domestic-market growth
- To work closely with associations like NASSCOM to portray India as the most favored ITES destination in the world.
- Indian ITES companies should work closely with Western governments and assuage their concerns and issues.

- India can be branded as a quality ITES destination rather than a low-cost destination.
- $69 billion ITES business expected by 2010
- $97.5 billion IT (consulting, software solutions) market expected by 2010

5.2.4 Threats

- The anti-outsourcing legislation in the US state of New Jersey. Three more states in the United States are planning legislation against outsourcing Connecticut, Missouri and Wisconsin.
- Workers in British Telecom have protested against outsourcing of work to Indian BPO companies
- Slowdown of demand
- Internal competition for resources
- Over-promise / Under-deliver
- Regional geopolitical uncertainties
- Fraudulent use of personal information and company data
- Rising labor costs
- Competition from other countries - Other ITES destinations such as China, Philippines and South Africa could have an edge on the cost factor
- Sometime blinding nationalism
- Government blocking reforms and deals
- Corruption, piracy and mistrust
- Political & religious instability - war

5.3 Indian BPO Market

A survey conducted by NASSCOM-McKinsey indicates that the Indian/ITES is expected to undergo significant growth in the coming years

- India's share of the global IT services market is expected to grow from 2.3% in 2003 to 4.7% by 2009
- IT services for the domestic and export market are expected to grow in excess of 25% per annum over the medium term
- This is expected to contribute to approximately 7% of the country's gross output
- IT/ITES industry will contribute approximately 20% of incremental GDP growth up to 2009
- IT/ITES industry will employ around 2 million people by 2009 with another 2 million people indirectly involved

Table 11 below gives a comparative analysis of the IT/ITES-BPO industry contribution in 2002 and 2009:

	IT/ITES-BPO industry contribution to overall economy	
	2002	2009
Employment	0.8	4
Percent of GDP	1.4	7
Percent of foreign exchange inflows	8	33

Source: NASSCOM-McKinsey. CMIE 2003

Table 11: Comparative analysis of IT/ITES-BPO contribution

The Indian BPO market size will experience further growth despite increasing competition [14]. This statement is confirmed through the Gartner Dataquest survey illustrated below:

Revenue ($ million)	2002	2003	2004	2005	2006	2007	CAGR
Offshore BPO Revenue	1,322	1,825	3,017	6,439	12,563	24,230	78.9%
Indian BPO Revenue	912	1,205	1,961	3,928	7,412	13,811	69.4%
Total BPO Market	110,167	121,687	131,171	143,090	157,033	173,070	9.5%

Source: Gartner Dataquest (May 2003) **CAGR - Cumulative Annual Growth Rate**

Table 12: Indian market size estimates

In 2004-05 alone, the industry created 95,000 new jobs, taking the total employee base to 348,000 during the year. More details are provided in figure 10

INDIAN ITES-BPO EXPORTS BY KEY SERVICE LINES - FY 2003-2005

Service Line USD Million	FY 2002-03		FY 2003-04		FY 2004-05E	
	EMP*	REV**	EMP*	REV**	EMP*	REV**
Customer care	66,400	830.0	96,000	1,200.0	122,000	1,500.0
Payment Services	12,000	230.0	21,000	430.0	30,000	620.0
Finance	25,500	540.0	41,000	835.0	64,000	1,300.0
Administration	26,000	325.0	40,000	540.0	57,000	840.0
HR	2,100	45.0	4,500	75.0	10,000	165.0
Content development	48,000	510.0	51,000	555.0	65,000	670.0
Total	180,000	2,480	253,000	3,630	348,000	5,095

*No. of Employee, **Export Revenue Source: NASSCOM

Fig 10: Indian ITES-BPO exports by key service lines

According to NASSCOM-McKinsey estimates, the industry will create jobs for over one million professionals by 2008-09

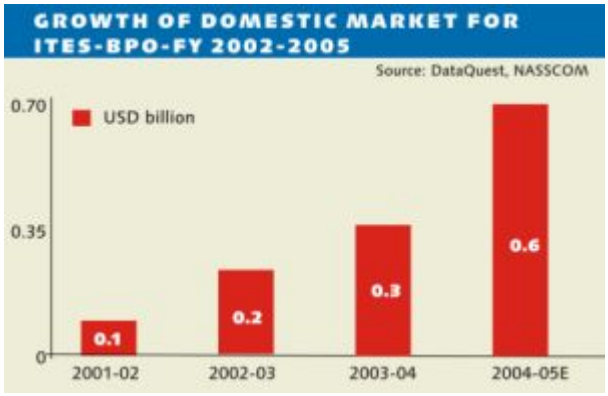


Fig 11: Growth of domestic market for ITES-BPO

5.4 Time Zone

India has an **8-12 hour time zone difference** with respect to the US and other developed markets [10]. It is of great advantage in BPO operations, which offers reduced turnaround times, since processing services are performed at night hours in the developed countries. India is able to offer a 24x7 services and reduction in turnaround times by leveraging time zone differences. This difference in time zone is because of India's unique geographic location. This time difference has been intelligently brought to Indian advantage by the call centres/BPOs.

Most of the Indian call centers servicing American customers have timings between 5:30 p.m. to 9:30 a.m. This time zone difference benefits not only the Americans but also the Indians. Not only does the time difference allow Indian companies/BPOs/Call centres to service American clients by working in the nights, it also helps in better utilization of their resources. The companies can utilize the same resources to serve other clients in India and abroad during the day. Thus the time zone difference also helps in levelling of resources that, in turn, saves costs and also earns call centres better revenues.

5.5 Logistics & Infrastructure

Improved infrastructure is one among various factors that has helped India to achieve tremendous success in the field of IT/BPO. There has been tremendous growth and improvement in telecom, power and roads infrastructure in the last few years in India [10].

Relevant telecom facilities are an important precondition for the success of the software and BPO industry. The Indian government has taken numerous steps to improve the telecom infrastructure in the country. The international bandwidth situation has improved dramatically over the last 3 years. The privatization of the telecom Industry has resulted not only in significant drop in rates but also better services. The telecom costs have dropped by about 85% in 3 years.

Similar changes have been observed in the power sector infrastructure as well. Power availability has improved dramatically over the last few years. This has gone a long way in ensuring uninterrupted power supply to the IT/BPO destinations like Bangalore, Delhi, Chennai, Bombay, Pune and Calcutta. In addition to this state governments in India have undertaken reforms in the power sector to improve power supply to ITES companies. A good and continuous power supply is a critical element for BPO companies to operate at an optimum rate.

The overall roads and highways infrastructure scenario in India has also witnessed major improvements over the last few years. We have now entered the arena of multi lane highways. Most of the cities and towns are connected and interlinked to each other. Major investments have gone into the development of highways, both on the side of the central and state Governments.

5.5.1 Case Study of Karnataka

Karnataka has been identified as a successful state with regard to measures and implementations made to promote its BPO sector. An outline of measures taken to promote its logistics and infrastructure is given below:

- Karnataka is one of the most progressive states in India. It has decentralised maximum decision-making powers to cities all over the State. The Cities have used these powers to create suitable infrastructure for BPO Companies.
- The State is also in the forefront of reforms. The State Transportation Network is divided into four divisions, resulting in higher profitably.
- The state is committed to power sector reforms. The privatisation of distribution of power to private companies is envisaged. In this respect, the Electricity Board has been split into four independent companies for enhancing efficiency in operations.
- The state has a professional Financial Monitoring System in which the transactions in 225 treasuries are computed and monitored in real time.
- Karnataka also has a large number of agencies for the development of infrastructure. Every major city has a Development Authority. The Bangalore Development Authority [BDA] is the most profitable entity in the entire country with bonds listed on the National Stock Exchange.
- The Karnataka Road Development Corporation Ltd [KRDCL] oversees the intensive development of major roads. The Infrastructure Development Corporation of Karnataka (IDECK) is a unique joint venture of Government of Karnataka and Infrastructure Development Finance Corporation [IDFC] that is empowered and committed to the continuous improvement of the infrastructure in urban areas
- The State has a large number of private sector players who can provide the IT companies with cutting edge facilities developed by major Indian players like RMZ Corporation, Embassy, Prestige, IBS, Brigade, Larsen & Toubro [L&T] etc. They have excellent quality control and project planning skills. For instance, HSBC's 180,000 square feet facility was conceptualised, designed

and executed only in 135 days. This HSBC centre is the largest in India and also the best in terms of World Standard Technology.

- Karnataka has been the birthplace of a large number of financial institutions in the country. Many nationalised Banks of the country have originated from Karnataka. The State has an excellent banking network that covers even towns and villages. The companies could benefit from this extensive banking system.
- This BPO policy is aimed at attracting players in all categories viz., Captives, Pure-play Third Party providers and IT Services Companies and has a provision to offer customised incentives and concessions for large investors.

5.6 Telecommunications

No country can aspire to become a major BPO player without an effective and competitive telecommunication infrastructure. The case study of Karnataka illustrates proactive measures that have been taken in the area of telecommunication to promote its BPO market.

Case Study of Karnataka - Reforms and Measures

- Karnataka has many Telecom Companies in the sectors of Telecommunication Network, Basic Telephony Services (both wire line & wireless), and Networking Services for telecommunication equipments
- Bangalore offers a truly wide choice of players in telecom. The entire state is networked via Optic Fibre Cables (OFC) by the State - run BSNL (formerly DOT) as well as the private companies like Bharthi, Reliance, VSNL and TATA Tele Services
- BSNL as well as TATA Tele Services provide the Last Mile Access in parts of the State. The new private companies, Bharthi and Reliance, provide the Last Mile Access directly to the customer, in all major cities in Karnataka
- VSNL has substantial redundancy in International Bandwidth circuits. For example, the International Bandwidth circuit can be accessed from Bangalore to Bombay via 3 different routes viz., Bangalore - Pune - Mumbai; Bangalore - Sholapur - Mumbai and Bangalore - Karwar - Mumbai
- Bangalore is also connected to the major submarine cables viz., India-UAE; SEA-ME-WE-2; FLAG; SEA-ME-WE-3 through Mumbai; SAFE and SEA-ME-WE-3 through Cochin and i2i SINGTEL through Chennai, which is a joint Tele-venture of Bharati Telecom. The i2i submarine cable has **8.6 terra byte** capacity
- In addition to the Fibre connectivity, Bangalore offers excellent International Bandwidth via Satellite. The STPI at Bangalore presently has more than 1050 IT companies as its customers providing them Individual Satellite Connectivity. Bangalore STPI accounts for 45% of the total STPI revenues in India.

5.7 Security Issues

India is a member country of the Berne Convention and Universal Copyright Convention, the Paris Convention, Patent Cooperation Treaty ("PCT") and World Trade Organization ("WTO"). The Berne Convention and UCC provide for national treatment of an author of a member state. The Indian copyright law provides moral rights to an author of a work. The Indian Government is aware that a strong regulatory environment is essential to succeed in the world of BPO [19].

5.7.1 The Regulatory Environment

Laws exist in most countries to ensure the protection of data privacy of individuals, even though the regulatory environment is complex. Some of the well known global regulations that impact Indian IT and ITES-BPO service providers include the Health Insurance Portability and Accountability Act Privacy Rule (HIPAA) and the Safe Harbour agreement [20].

The issue of information security has gradually moved from the backburner to occupy centre stage in the Indian market. Even leading industry associations such as NASSCOM have placed the issue of information security at the top of its agenda.

As part of its recent Trusted Sourcing initiative, NASSCOM recently undertook a study on the Indian Information Security (regulatory environment and security practices) in India. Conducted jointly with Evalueserve, the study benchmarked Indian IT and ITES-BPO companies with their counterparts in the US and UK with regards to practices followed in the areas of data security, confidentiality and privacy laws.

The study revealed the following about the information security scenario in the country:

- Information security was a key concern while offshoring work but most companies did not face any issues while offshoring to India
- Global customers offshoring work consider network security, personnel security, physical security and customer privacy and information protection to be critical
- Indian companies have robust security practices comparable and at times better than those followed by western companies. Indian IT and ITES-BPO players comply with BS 7799, a global standard that covers all domains of security. They also have an established Information Security Management System (ISMS) policy for ensuring information security on various aspects such as acceptable usage policy, information classification policy, mobile computing policy, risk management policy, third party access policy, etc.
- Indian IT and ITES-BPO service providers are also aware of implementing other international security standards such as ISO 17799, COBIT, and ITSM
- Indian companies follow security practices according to the specifications of clients from USA and European on aspects such as security awareness, protection of information, non-disclosure agreements, screening of employees, etc. Clients also conduct periodic audits to ensure compliance.

- Indian players sign Service Level Agreements with customers with very strict confidentiality and security clauses built into them at the network and data level. Such SLAs also cover all relevant laws that the companies want its offshore provider to comply with and actions that can be taken in case of breaches
- A number of Indian companies have implemented Business Continuity Management (BCM) strategies that enable them to recover from a disaster, restore operations and minimize losses. According to a NASSCOM-KPMG study on BCM preparedness, some proactive Indian organizations have put in place best practices related to security and data privacy in offshoring including risk assessment, audits, plan for movement of key resources, data recovery, data backups, among others
- Spending on security among Indian IT and ITES-BPO companies ranges from 5 to 15 percent of the IT budget
- The Indian legal system and proxy laws provide adequate safeguards to companies offshoring work despite no explicit data protection laws. Laws such as the IT Act 2000 and the Indian Penal Code Act and the Indian Contract Act, 1972 provide adequate safeguards to companies offshoring work to India
- India is in the process of reviewing the clauses of the IT Act 2000 to address the issue of misuse of personal information/data. The idea is to meet the adequacy norms specified by EU, as well as those given in the US-EU Safe Harbor Agreement including breach of contractual arrangements between the contracting parties
- The country has a strong Copyright Act, one of the most modern copyright protection laws in the world, which is fully compatible with the provisions of the TRIPS Agreement and extends the provisions of the Copyright Act to nationals of all World Trade Organization (WTO) member countries
- The Indian government is proactively strengthening the Indian legal system to provide appropriate data protection cover [20]

5.7.2 Role of Indian Government

The Ministry of Information Technology in India has undertaken and implemented various initiatives to place the nation at par with other countries in the area of Information Security [20].

Some of the key steps that have been taken are:

- The Standardization, Testing and Quality Certification (STQC) Directorate, set up by the Government of India has launched an independent third-party certification scheme for Information Security Management Systems
- The Indian Computer Emergency Response Team (CERT) has been set up to protect India's assets against viruses and other security threats.
- The Indian Government has recently set up the Information Security Technology Development Council (ISTDC), with experts drawn from the user, industry and R&D agencies to facilitate, coordinate and promote technological

advancements, and to respond to information security incidents, threats and attacks at the national level

- Several R&D projects that have been initiated by the Indian Government to address current and future security needs in areas such as information security and management training and certification, futuristic technologies in secure computer infrastructure, core network security technologies, development of validated security process, protocols and standards for e-cheque clearing, among others
- The Karnataka State is committed to provide the highest level of security for the operations of BPO companies. The state has already launched an Anti-piracy programme and created a high level committee under the chairmanship of the Home Minister to combat Piracy. The department takes very serious note of the employees violating the data security, confidentiality of documents, non-disclosure of agreements etc. To further strengthen the position of the state a comprehensive legislation will be formulated to combat such cyber crimes.

5.8 Human Resources

No country can emerge as a successful BPO destination without a strong mix of low costs and significant depths in human resources.

5.8.1 Labour Availability

Availability of suitable human resources is one, of those factors, that has made India one of the hotspots of BPO/IT industry. India is home to a vast pool of human resources consisting of educated, English speaking, tech-savvy personnel. Every year, approximately **19 million** students are enrolled in high schools and **10 million** students in pre-graduate degree courses across India. Moreover, India's non-engineering colleges **produce some 2.1 million** graduates and **0.3 million** post-graduates [21].

This great pool of human resources holds the key to IT/BPO destination i.e. India. If the flow from high schools to graduate courses increases even marginally, there will be a massive increase in the number of skilled workers available to the IT/BPO industry. At current rates, it can be said that there will be approximately **17 million** people available to the IT industry by the year 2008 in India, when the estimated contribution of IT / BPO to GDP will be 7%.

5.8.2 Cost of labour

Cost effective man power is hence another important factor which makes India a hot spot of IT/BPO industry. With a vast pool of skilled human resources ready to work at lower wages in comparison to the European or American countries India is attracting business process outsourcing. In a call interaction center operation, manpower typically accounts for 55 to 60 percent of the total cost. Besides being cost effective, Indians are also skilled and fulfill all the requirements of the IT/BPO industry [21].

In India, the manpower cost is approximately one-tenth of what it is overseas. For example, per agent cost in USA is approximately $40,000 while in India it is only $5,000. It is but natural that companies contract out their work to cost effective destinations like India. India produces about 100,000 engineers every year. These can be used in call centers for troubleshooting/tech support, as the salaries are dramatically lower than in Europe or the US. In such situations MNCs choose to outsource

Some of the current salaries in the BPO in India (all Indian Rupees) are outlined below [21]:

- Customer Care Representatives: Rs 96,000 - Rs 180,000 per annum
- Team Leaders: Rs 204,000 - Rs 312,000 per annum
- Managers: Rs 300,000 - Rs 550, 000 per annum
- Training Heads: Rs 800,000 - Rs 1,200,000 per annum
- Training Managers: Rs 500,000 - Rs 800,000 per annum
- Trainers: Rs 200,000 - Rs 500,000 per annum

An analysis between the BPO operating costs of India Vs US BPO clearly demarcates India as a cheaper destination

US$ Cost per FTE (Full Time Employee)	United States	India	India as % of US costs
Personnel	42,927	6,179	14%
G&A Expense	8,571	1,000	12%
Telecom	1,500	2,328	155%
Property Rentals	2,600	847	33%
Depreciation	3,000	1,500	50%
Total expenses	58,598	11,854	20%

Source: Industry Sources, Merill Lynch 2003 (From the Nasscom Strategic Review 2003)

Table 13: Comparison of the operating costs

Datamonitor, a leading UK-based business information company, research indicates that 67-72% of costs to call centers operating in the US/UK is directly linked to man power costs. India, on the other hand spends only 33-40% of costs on man power. This includes training, benefits and other incentives for labor.

5.8.3 Languages

Good language skill is yet another key requirement to attract BPO activities to a specific country.

India definitely enjoys the benefits of a vast pool of skilled workers who are proficient in English language [21]. India produces the largest number of graduates every year and most of these graduates have the knowledge of English language. Thus,

language is, one of those factors that attract Multi National Companies (MNCs) to contract out their business operations to Indian BPOs and IT companies. However, competitors like China that also has a large pool of skilled workers do not have enough graduates who have command over English language.

In addition to this the Indian education system also places strong emphasis on Mathematics and Science. This has resulted into a large number of science and engineering graduates. Mastery over quantitative concepts coupled with English proficiency makes India one of the hot spots of the IT/BPO word. It has enabled India to take advantage of the current international demand for IT.

5.8.4 Educational level

Many countries are putting emphasis on the quality of their education as they recognise its growing importance as a competitive edge. Joint collaborations have been developed with advanced countries to offer a high calibre education.

India educational system graduates **2 million** proficient English speakers with strong technical and quantitative skills. The country have renowned worldwide top engineering schools lead by Indian Institute of Technology (IIT). Emphasis is laid in software development & applications and other technical skills at under-graduate, post graduate and adult education levels, universities and training institute.

Case Study of Karnataka - Education reforms and measures

- Karnataka's major edge is its Human Resource Bank. The State has begun to actively address and remove bottleneck in this area to sustain and improve its competitive advantage
- Karnataka has multitude of Arts, Science, Commerce, Engineering, Law, Medical and Nursing colleges as well as high quality training institutions
- The State's Education Policy initiated almost 50 years ago is one of the best in the country. For instance, Karnataka has actively encouraged the private sector in education - of 124 Engineering colleges only 2 colleges are Government run; of 62 Medical and Dental colleges only 5 are in government sector and of 58 law institution only 12 are in Government sector. Because of this early initiative the State has seen extraordinary investment in field of education ensuring its comparative superiority
- There are a large number of Primary and Secondary Schools with excellent infrastructure. Bangalore also has many world-standard International Schools with international curricula that can cater to expatriates' needs
- The State has a considerable talent pool of well-qualified graduates who can be employed by the BPO companies. There are over one million educated housewives in the State of Karnataka who are an important source of manpower for BPO companies

5.8.5 Training

Continuous skills development and upgrading is another crucial factor to maintain a competitive edge in the BPO sector. The dynamism of this industry looks for people who are continuously trained so that they perform at the top level. Changing products and technology also make training a key requirement for BPO.

Case Study of Karnataka - Reforms and Measures

- By the year 2010 the employment potential in Karnataka's BPO sector is expected to be 360,000 across the State, with non metro cities offering substantial portion of the manpower. Non Metro cities offer low operational costs due to less expensive real estate cost and abundant availability of local talent. The estimate in fact indicates that the rate of growth of employment opportunities will be eight times more in these smaller towns than in Bangalore.
- To make quality manpower for the BPO companies, the Human Resource Development and Training action plan is in place. This aimed actively at improving quality at all levels-schools, colleges and schools, colleges and unemployed graduates
- Schools - The State already has a large number of private and public schools. Many of these schools have comprehensive IT laboratories. The Mahiti Sindhu program of the Government of Karnataka has established 1000 state-of- art computer lab facilities all over the state. The policy aims to leverage infrastructure to enhance the verbal, written and communication skills of the students. This program will be implemented in coordination with the Education department. The selection of trainers, course materials, method of delivery will be decided by BITES (Board for IT Education Standards)
- Colleges - While a large number of Karnataka colleges already have IT labs, the policy not only also aims to encourage the existing IT labs but also setting up 500 more labs in the State. This infrastructure will be used to improve the listening, comprehension, verbal and written communication skills of the students. For this purpose once again, the selection of vendors, syllabi, trainees will be done by BITES
- There are numerous unemployed graduates, as well as working professionals, who are technically proficient, but who need to improve certain soft skills. For this purpose the IT Department plans to set up training facilities not only in Bangalore, but also at major cities of Karnataka. This program will be run on similar lines as Yuva.com, one of the most innovative programmes of the Millennium IT Policy. The program will be conceptualised and implemented by BITES.
- In addition to soft skills it is important to train the graduates for a large number of BPO companies that could require proficiency in Medical Transcription, Back Office Processing, Human Resource processing Modules, Financial Accounting Modules, GAAP (Generally Accepted Accounting Principles) etc. For this purpose selected centres will offer domain specific skills that would be relevant for establishing BPO companies.

- BITES has been primarily established to enhance the education standards in IT as well as BPO sectors. This autonomous body plays a pivotal role in meeting the most critical objective of this policy, which is to enhance the quality of manpower.
- Participation of companies: It is envisaged that the entire selection of vendors and training companies will be entrusted to BITES, which shall undertake this task in active collaboration with the existing BPO companies in the State of Karnataka.
- Certification and Accreditation: It is necessary to rapidly identify the graduates who have superior written & verbal communication skills. For this purpose a Certification Agency will be setup that shall prescribe certain tests to ascertain candidate's skills in different areas. BITES will administer the test through qualified HR companies. This certification will be voluntary certificate which is designed to help the private companies to qualify & identify the quality of manpower. It will also advice the candidates on appropriate training, they would require reaching levels prescribed by the BPO companies. This certification will be undertaken by a sub committee of BITES which shall have representatives from the BPO companies.

5.8.6 Socio-cultural factors

Socio-cultural factors are demarcating elements that can help any country to maintain a competitive edge in BPO. Indians are familiar not only with the job content but also with the work ethics and quality and productivity expectations of major global clients. The more exposure to other cultures, the easier it is for cultural adaptability.

5.8.7 IT & BPO experience

India is cited among the top countries with extensive IT & BPO experience. There are several factors which have helped India in building this experience e.g. the country has been a large scale offshore destination for more than a decade. Besides, the country has learnt extensively and positively over the years. There has been an evolution from software coding to business process management and high level analytics and consulting.

5.8.8 Attrition rate in the ITES sector

BPOs in India are expected to employ around one million people by 2008, but the challenge is to find quality human resources given the current attrition rate of around 35-40%. Currently it is about 35% in non-voice and 45% in voice call centers. It is alarming to note that more than 60% of those who leave a particular BPO do not leave for a competitor, but leave the industry as a whole [14].

Agents want to become team leaders. Team leaders want to become supervisors. Supervisors want the job of the CEO.

At an attrition rate of 40%, the cost of attrition in the industry is 1.5 times the annual salary.

To fix this problem of high attrition rate, Indian BPO firms are trying to:

- Hire mature talent [i.e. people over 35 years in age].
- Propose better job conditions through secure career, benefits, perks and communication cannot be overlooked at any level. HR must realise that fatter pay cheques can never be a sure-shot way to retain employees.
- Retain employee through talent recognition and appropriate reward
- Hire outstation candidates (from small towns) and provide them with shared accommodation
- Offer career development possibility and continuous educational support for management diplomas and MBA courses to employees
- Keep employees happy through cash incentives as only 5 out of 150 employees become team leaders in a year
- Use psychometric tests to get people who can work at night and handle the monotony
- Provide a congenial work environment to employees
- Continually show the long term career potentials to candidates joining even at operative / agent level

5.9 Government policy & supports

Indian Government recognises the significant contribution of BPO to its economy. Hence every effort are being made to make the business environment more conducive

5.9.1 Incentives

The Government of Karnataka is strongly committed to catalyse the growth of IT industry in the state. Several attractive incentives and concessions offered have resulted in Bangalore being ranked as the 4th best technological hub in the world as per the UNDP. Some incentives provided are outlined below:

- The BPO companies are exempted from the payment of 50% Stamp Duty & Registration charges on execution of Lease, lease-cum-sale or Sale deeds for the establishment of their venture. This rebate on Stamp Duty / Registration charges is also applicable to existing BPO companies expanding or modernizing their activities with additional investment and employment generation
- The tiny & small scale industries that establish outside the city limits of Bangalore or those taking up expansion, modernization & diversification with additional employment generation for BPO activities will be eligible for 100% exemption from payment of stamp duty & registration charges on all types of deeds executed in connection with the venture

- The Department of IT has set up Karnataka Biotechnology & Information Technology Services. This organisation assists companies in selecting a location & in obtaining Government incentives and concessions. It helps to identify quality man power resources, as well as resolves the problems, if any, of BPO companies with any other Government Departments
- A High-powered Cell has been constituted in KBITS to promote investment of BPO companies in the state. This cell provides all the information regarding the investor climate, incentives and concessions, availability of man power, advice on location etc. in the State. It will provide specific information to companies based on their specific needs. This Market friendly cell will participate in various National & International conferences to provide such information

5.9.2 Fiscal Incentives

This includes:

- Exemption of the BPO industry from payment of Entry Tax on all capital goods required for implementation of the projects for a period of three years from the date of commencement of implementation.

5.9.3 Marketing

- The state of Karnataka accords the highest priority to the servicing of BPO companies to promote the investor friendly environment within the knowledge based industry. The state has a Single Window clearance mechanism headed by the Chief Minister.

5.9.4 Waiver of conversion fee

- The BPO units employing 100 persons and above outside the Bangalore Metropolitan Region Development Authority (BMRDA) limits are exempted from payment of conversion fee in respect of converting agricultural land for non-agricultural purposes up to a limit of 0.30 acres for every 100 personnel employed.

5.9.5 Transportation

- The Government facilitate the large BPO companies to enter into a contract with the State owned Road Transport Corporations to provide suitable dedicated transport services for the commuting of their employees.

5.9.6 Relaxations

- Karnataka has business friendly regulation & has recently adopted the Karnataka industries Facilitation Bill 2002. This Bill simplifies the regulatory framework by reducing the procedural requirements and rationalising documents like combined application forms, self certification by entrepreneurs, deemed approvals, rationalisation of inspections etc., with the objective of providing an efficient, responsive and transparent administrative frame work to the industry.

5.9.7 Labour laws

- The State is committed to simplify all the relevant enactments for the BPO sector. The barriers including employment of women at night, flexi working hours, mandatory weekly off have all been removed by necessary amendments to the relevant Acts to create an optimal environment for the growth of the BPO sector in the state. It is proposed to exempt the BPO companies from furnishing returns and maintain certain registers. Submission of returns through electronic media is encouraged.

5.9.8 BPO Infrastructure Companies

- BPO companies are provided with excellent telecom infrastructure, abundance of human resources with verbal & written communication skills, low cost of operations, good civic infrastructure & supportive regulations
- Telecommunication projects are recognised as key projects in core areas. The telecom companies set up in specific zones are exempted from payment of stamp duty & registration charges on execution of lease, lease-cum-sale and absolute sale deeds by the companies in respect of industrial plots, sheds, flats allotted by the state infrastructural development agencies. These companies are also eligible for incentives & concessions.

5.9.9 Technology Up-gradation

- The New Industrial Policy 2001-06 lays emphasis on rapid Technological up-gradation of the SMEs in Karnataka. To catalyse the efforts of Technology up-gradation, the Government of Karnataka has established a corpus in the Industries & Commerce Department called the Technology Up-gradation Fund with sum of Rs.500 million (Indian Rupees) over a period of 5 years.
- The Government encourages the SMEs in BPO sector to obtain ISO 9000, ISO 14000 and similar international certification with a view to promote total quality management and best practices. Government assistance is in the form of; meeting 50% of the cost of obtaining such certification, subject to a ceiling of Rs.75, 000 per industry.

5.9.10 Anchor Companies

- Anchor companies in the BPO sector support cluster development. They do so by acting as magnet for other companies in this sector to produce numerous spin-off companies to strengthen key elements of the cluster. A set of incentives to encourage Anchor companies to establish their activities in non-metro cities is currently being promoted to increase synergy within the cluster

5.9.11 Special Economic Zone (SEZ)

- BPO units set up in SEZs are specifically delineated duty-free enclaves treated as a foreign territory for the purpose of industrial, service and trade operations, with exemption from customs duties and a more liberal regime in respect of other levies. To promote foreign investment and other transactions, attempts are made to eliminate domestic regulations, restrictions and infrastructure inadequacies in the SEZs and create a hassle-free environment.

6.0 BPO ELSEWHERE

6.1 Potential Offshore Destinations

A.T Kearney's conducted a study in 2004 to measure the viability of countries as offshore destinations. This was based on their financial structure, people skills and availability and business environment. The main reasons identified to move offshore are:

- Greater productivity
- Improved service
- Superior technical skills

India, China, Russia, Brazil and Philippines are potential offshore destinations that owe their success to the depth of skill base. Singapore, New Zealand, Canada and Ireland boast excellent infrastructures and education systems, high degrees of global integration and business friendly low risk environments.

The 2004 index identified India as the star performer followed by China. Malaysia, Czech Republic, Singapore, Philippines, Brazil, Canada, Chile and Poland complete the list of top 10 countries providing BPO services [17].

The Indian case study has been looked at in details in **section 5.0** of this report

6.2 China

China's BPO experience lags behind India despite having major cost advantages and a large labour pool. It is ranked behind India in terms of IT and Management training and contact centre operations. China scores poorly for political and economic risk and weak infrastructures. Other weak areas include IP piracy and bureaucratic red tape and relatively poor workforce's English language skills. However, China is predicted a bright future. IBM continues its expansion in China. India's service firms like Satyam, TCS, and Infosys are already present in China [17].

Western companies have established more than 130 R&D facilities in China, and the government has established five special economic zones and 15 national software industrial parks to facilitate more investment in the country.

China is also becoming a destination for companies targeting the Japanese and Korean markets. Dell Computer and CSK Corp have opened Japanese Language Call Centres in China. South Korea's Kookmin Bank is moving its customer service centre to China. Japan's top IT companies are planning to double their software development staffs. Accenture attracted by the mix of languages opened a 1,000-person software development unit.

The Chinese government is committed towards creating a first class high tech labour force. Multinational and Indian firms are provided training in partnership with the Chinese government. Emphasis is being given to training in software development and applications. The English Language proficiency gap is also being catered for.

China remains an impressive competitor due its rich supply of bilingual, IT skilled labour.

Since China joined the World Trade Organization in November 2001, Western companies have established more than 130 R&D facilities there.

In the outsourcing field, China is the biggest challenge in the future and the largest threat to India. With the largest population and fastest economic growth, China has at least two strengths in the global outsourcing market: manufacturing and IT.

The main advantages of China are as follows:

- Lower Manpower costs: The Chinese workers cost about 15 percent less than equally qualified Indians.
- Japan Advantage: China is likely to grow through the Japanese outsourcing route. The advantages that China has are Japan's proximity to China, similarity of the languages. India currently offers almost no BPO services in Japan.
- Extremely low cost real estate and power: These costs are lower than in India. This can be a very attractive to the US companies, which are looking for cost cutting due to the downturn.
- Proactive government: The government is very friendly to this sector and has taken the following steps:
    1. English teaching and other skill sets: Over $5.4 billion has been invested in nine universities in China to promote English language and other skill sets.
    2. Increasing telecom density and PC penetration: China scores over India in these aspects and intends to further increase the gap.
    3. Government promises on infrastructure and other developments are fulfilled on promise as compared to other countries, in particular India.
- Leveraging on the manufacturing image: Western manufacturing companies have found that outsourcing their manufacturing function to China for their companies' global operation can be profitable and also of good quality

However the main disadvantages of China are as follows:

- Lack of a good Quality record in Software as compared to India
- Low English speaking population: This is the biggest drawback of China. It has a very small proportion of the population speaking fluent English.
- Less mature BPO sector as compared to the India. Despite lower billing rates, total project costs in China would turn out be higher because of the higher overheads incurred

China IT/ITES industry in figures

- Achieved high growth in tech exports (including hardwares) to US$ 58 billion in 2001 from US$ 25 billion in 1999, contributing to 23% of industrial exports
- Software products and services account for 20% (US$ 12 billion) of total high-tech exports
- Had app. 250,000 professionally trained programmers in 2002 with app. 40,000 IT graduates being added per annum
- Now focussing on English Language skills by importing 60,000 teachers and imparting English skills as part of IT education
- Investing US$ 5.4 billion across 9 universities to revive domestic IT industry
- Focus on ICT and infrastructure development in terms of PC, Internet and telephone availability
- Software products and services industry expected to grow at 30% over the next few years

6.3 Malaysia

Malaysia is a natural choice for offshore services for various reasons. The country emerges as a potential market due to its low cost infrastructure and stable business environment. Government fully supports the ICT sector. The Malaysian workforce has a strong global exposure [17].

Datamonitor states that Malaysia is among the countries which will challenge India's supremacy in five years time. The relatively small population of 22 million people and the piracy issue are some drawbacks.

Government is investing heavily in infrastructure and developing intelligent cities e.g. Cyberjaya and Putrajaya. Motorola, Ericsson, IBM, Shell, DHL, HSBC and BMW have their regional offshore service centres in Cyberjaya.

High level of global integration has also helped Malaysia reach the number three spot in this year's index. Malaysia's government is also promoting the IT and services sector.

6.4 The Czech Republic, Poland and Hungary

The above countries are considered as Emerging Europeans in the field of BPO. They are gaining the interest as a near shore location for European countries particularly Germany. Their major strengths are that they offer cultural similarities, attractive costs, good language skills, solid technical capabilities and minimal regulatory problems for European countries [17].

The Czech Republic offers competitive infrastructure costs, stable business environment and a strong education system. Accenture, IBM, Sun Microsystems and Symbol Technologies have established IT and business support centres. DHL is building its European IT service centre in Prague. Dell is planning to open more

multilingual centres. The rise in the offshore investment in Czech Republic and other East European countries will continue.

Poland and Hungary both offer cost advantages and education levels similar to Czech Republic. However they have slightly inferior business environments, infrastructure and IP security. Governments are deploying their efforts to improve their foreign investment climates. The Polish Agency for Information and Foreign Investment is focussing on hi-tech and export-oriented industries. Poland already boasts large offshore centres such as IBM, General Electric and Motorola.

Poland IT/ITES industry in figures

Key facts and figures relating to Poland as a near-shore BPO centre are:

- The domestic IT market in Poland was worth US$ 32 billion in 2002, with hardware accounting for nearly half of the market
- Poland is better placed as part of the EU to offer off-shored services to other Western European countries
- Government is looking at BPO and IT to create at least 200,000 new jobs over next few years
- Large IT services companies like Accenture, IBM, HP, EDS have already set up support centres in Poland
- IT and BPO services are expected to grow at app. 20% over the next few years

6.5 Singapore

Singapore is a reference for its top environment quality. Despite its high per capita income, the country is an important offshore destination. The major strengths of Singapore include excellent education & infrastructure, high ratings for economic and political stability. The country can also rely on the full back up of the government. Singapore is a favourite location for regional service functions [17].

Singapore has a strong legal framework which reassures foreign investors. The country has made IP security a key weapon in its competition with lower cost locations. In February 2003, the U.S-Singapore free trade agreement sets out the highest standards of protection and enforcement for IP. Singapore has also signed a Memorandum of Understanding with the European Union to collaborate on the awareness and protection of intellectual property. It also has an Intellectual Property Office to formulate and enforce laws as well as stimulate Intellectual property.

Tata, Infosys, vMoksha and other outsourcers are major players in Singapore. European giant ABB is using Singapore as its Asia-Pacific hub for IT and infrastructure services. Singapore is perceived as providing a high quality front end to a lower cost Indian or Chinese back end. Remote robotics management, healthcare and genetic diagnostics are areas targeted.

Given its small size, Singapore will likely remain a high end niche player and an important candidate for companies considering offshore hubs.

Singapore's main strengths include [22]:

- Strong infrastructure
- Favorable business environment
- More competitive than India or Malaysia when it comes to high-end requirements
- Superior telecommunications and IT infrastructure
- Transparent financial markets
- Clean legal regime
- Availability of a strong pool of middle and senior management personnel
- Tremendous risk mitigation management
- Excellent education
- High ratings for economic and political stability
- Intellectual property protection
- Aggressive government promotion of the IT and services sectors.
- Can emerge as a regional managerial hub for regulatory and accounting compliance, geo-strategic risk, auditing and business continuity practices

6.6 Philippines

Philippines is highly rated as an offshore destination due to its favourable cost structure and promising human resource capabilities. The country has more students enrolled in universities than most European countries and graduates about 15,000 technology students annually. The U.S military presence has been also advantageous in terms of American English accent [17].

Global providers like Sykes, Convergys and ICT Group operate their call centres in Philippines. BPO players include Accenture, SPI Technologies, American Data Exchange and Innodata. Chevron-Texaco and Time Warner are multinationals that have captive call centres and BPO units.

The Philippine government has designated special economic zones suitable for IT, Call Centre and BPO businesses. Offshore companies receive income tax holidays and duty free imports. The country facilitates IT and BPO related investments by providing tax benefits and reducing bureaucracy.

The Philippine government has designated special economic zones suitable for IT, Call Centre and BPO businesses. Offshore companies receive income tax holidays and duty free imports. The country facilitates IT and BPO related investments by providing tax benefits and reducing bureaucracy.

In the Philippines the manpower costs are 60 to 80 percent lower as compared to UK and US. The average salary cost is around $700-800 per month in the BPO sector. However the country has a shortage of manpower mainly due to the small population as compared to India. The manpower base for BPO is only 300,000. Right now the

country is getting business from nearly 70 companies employing more than 12,000 people with revenues of US$ 250 million.

The main advantages of Philippines [22] are as follows:

- Large-scale technical training program: The government has initiated a number of policies by which the skills can be provided to a larger population.
- Improved telecom and office infrastructure: Philippines scores over India in this respect.
- 3rd largest English-speaking nation in the world: This is a very important advantage.
- Well developed IT skill set: It is considered 2nd only to India due to performance in software.
- Costs of technology workers accounts for around 16% to 25% in the Philippines to that of comparable workers from the United States.
- As a former American colony, American culture and language is widely emulated here. These cultural and communications skills are so appealing to American firms that they can outweigh slightly higher labor costs in the Philippines.

The main disadvantages [22] of Philippines are as follows:

- Philippines have a low graduate turnout (only 400,000 per annum). This compares very unfavorably with India
- It does not have a record of high quality supplier. India has consistently delivered very high quality in Software and has built a very high reputation in it
- The country has frequent elections that make it difficult for companies to outsource, as there is lack of uniformity of policies with changes in the Government. Its political stability is often put into question
- No disaster recovery facilities or multi-location facilities are available. After the disaster affecting the World Trade Centre, terrorism has become a very important issue for the US companies in particular and they want that the BPO providers should have multi location facilities which can be used in case of any terrorist attack
- Philippines face the important issues of scaling up. Issues like scaling up have stunted the growth of BPO activities being outsourced to Philippines. The largest call Centre in Philippines of AOL has only 800 people. The size of the Philippines BPO industry was only $100 million, whereas India's BPO industry was at $1.5 billion (2001-02)

6.7 Brazil and Chile

Brazil and Chile form part of the top 10 BPO service providers according to A.T Kearney. Brazil's strong points include cost advantages and a large workforce with relatively good BPO experience. The country is moving beyond providing basic services. The growing sophistication of the local software industry and IT service is expected to attract new businesses. Brazilian IT companies are promoting their

capabilities to potential clients in United States. TCS Brazil, a joint venture between TBA of Brazil and India's Tata Group is expected to receive CMM level 5 soon. Unless Brazil improves its overall education levels and language skills, it cannot further improve its BPO market [17].

Chile's success is due to its growing interest Spanish speaking offshore services. The country offers the best business environment and infrastructure in the region with a robust digital network and good quality satellite service. The government is aggressively pursuing offshore opportunities. Chile is aiming to produce more bilingual technicians. Apart from promoting language skills, the government is working on ways to protect intellectual property. Free trade agreements have been established with the United States and the European Union. These include penalties for infringing intellectual property. Chile ranks among the top Latin American countries in the World Economic Forum Global Competitiveness Report and the Economist Intelligence Unit.

Due to above attributes, Chile is a desirable offshore destination. Santiago is ranked among the least expensive cities according to Economist Intelligent Unit. About 35 multinational companies are already operating call centres mainly in Spanish. Ventures like the one between Tata Consulting Services and Chilean partner Comicron is favouring investment in the country.

6.8 Canada

Canada is an example of those developed countries that is a successful and profitable offshore destination. Its major strengths are an excellent business environment and high quality workers for BPO tasks. A robust infrastructure, cultural and language similarities with the United States are other advantages of the country. The British Columbia's Premier Technology Council aims to build the province into one of the world's top 10 technology centres attracting hi-tech investment, growth and job creation from around the globe. Columbia Science Council promotes job creation through the China Science and Technology portal which provides information for doing business with or in China. Atlantic Canada Opportunities Agency (ACOA) promotes the Atlantic Provinces to US sites selection consultants and advertises and hosts local tours. The Atlantic Canada Opportunities Agencies promotes the Atlantic Provinces to US site selection consultants [17].

Canada has attracted Indian companies setting up near shore operations. Several outsourcers select Canada as a location to carry out high value mission critical tasks close to major North American clients. CGI one of the largest operators in Canada reports 6% attrition as compared to attrition levels range from 25% to 50% in the United States.

Offshoring is expected to gain momentum. A.T Kearney's Offshore Attractiveness Index shows that offshoring should not be based on a one- size-fits-all strategy. Opportunities exist from Vietnam to Canada, from Mexico to the Philippines.

Figure 12 illustrates Canada's positioning with respect to Singapore, New Zealand, Australia and Ireland [18]

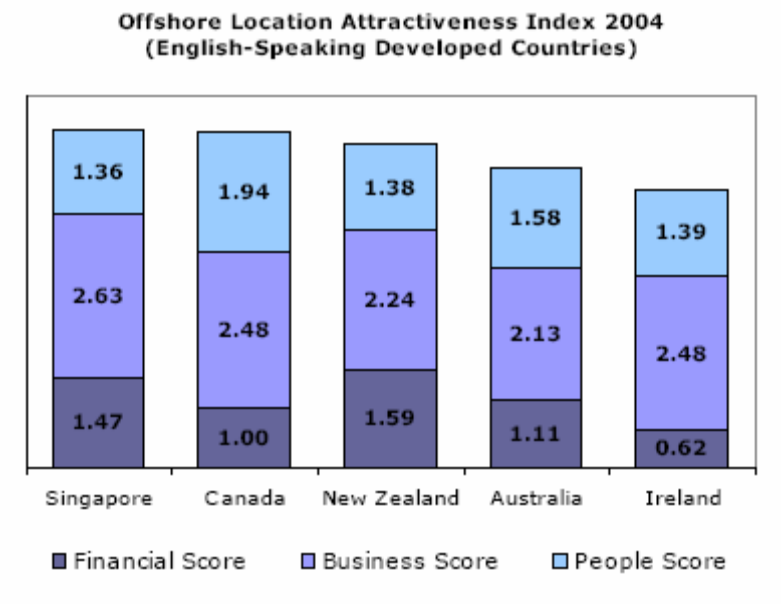


Fig 12: Offshore location attractiveness index

A survey by AT Kearney in year 2004 on offshore location attractiveness index reveals the following [18]:

- Canada is the only G-7 country ranking in the Top 25 BPO players. It ranks high on the Index despite its higher cost structure
- An excellent business environment and high quality workers for business process outsourcing are keys to Canada's attractiveness
- Provincial initiatives, such as the British Columbia Premier's Technology Council (TPC) have contributed to Canada's success
- Canada ranks 2nd after India as the most attractive offshoring location in the world in terms of people skills and availability
- Canadian Business Process Outsourcing (BPO) experience is highest among English speaking developed country workers as illustrated by figure 13

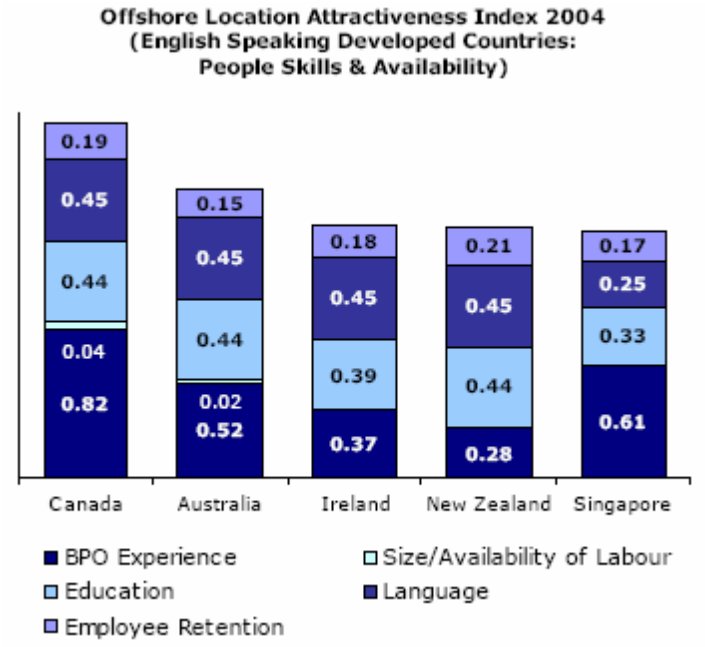


Fig 13: Offshore location attractiveness - People skills & availability

- Canada is a leader in IP Protection and Country Infrastructure.
- Canada ranks 2nd after Singapore as the most attractive offshoring location in the world in terms of business environment. This is illustrated in figure 14
- Canadian intellectual property protection and country infrastructure is highest among all offshoring destinations worldwide

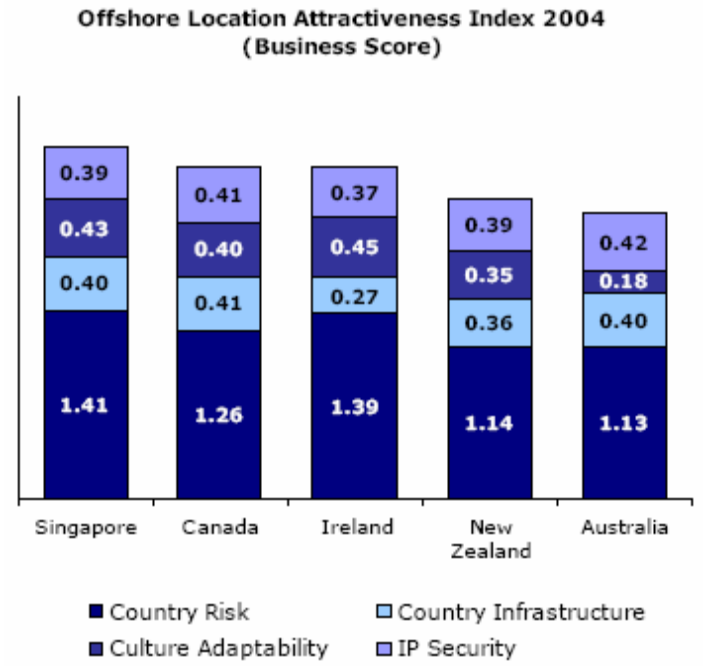


Fig 14: Offshore location attractiveness – Business Environment

- Canada has proven highly attractive to near shore operations of Indian companies
- US domestic outsourcers use Canadian operations to balance near-shore and offshore operations
- Canada is often selected as a location to carry out mission-critical tasks close to major North American clients as indicated in figure 15

Fig 15: Countries with offshore operations

6.9 Guatemala

Guatemala's geographic location is strategically advantageous for organizations located in Mexico, the United States and Canada, since Guatemala shares the USA's Central Time Zone, which means that there is no more than a 2-hour difference with the rest of North America. Because there is no need for working overtime, the operating costs are lower and more efficient. This impacts positively on stakeholders willing to outsource their activities to regions with favourable time zone [23]

Unlike the rest of the Central American market, Guatemala is interconnected to the world by three of the most advanced telecommunication networks in the region:

- Energia
- Maya 1
- Arcos

This guarantees redundancy of **99.9875%** or essentially **zero down-time**, positioning Guatemala at the front of the line in terms of:

- Efficiency
- Speed and
- Continued availability of communications; allowing for lower connectivity time as well as more competitive costs

Guatemala's is the least-regulated telecommunications market in Latin America, with telephone density reaching 28%.

At the moment there are several companies in Guatemala willing to provide investors with all the advanced connectivity services needed at very competitive prices. This is motivating factor in attracting BPO in the country.

The make up of Guatemala labour's force is a good example of a population apt for Business Process Outsourcing as illustrated by table 14:

Characteristics	
Population Younger than 34 years of age	77%
Labour force	4.1 million
Hourly salary rate for none-bilingual call centre operators	US$1.52 – 2.03
Hourly salary rate for bilingual call centre operators	US$2.33 - 3.04

*** Including all fringe benefits**

Table 14: Make up of Guatemala labour's force

Guatemala's costs structures for call centers are among the most competitive in Latin America as indicated below:

Level	**Monthly ($)**	**Annual ($)**
General Manager	2,500-2,900	30,000-34,800
Project Manager	800-900	9,600-10,800
Supervisor	600-750	7,200-9,000
Technician/Programmer	300-750	3,600-9,000
Operator	360-430	4,300-5,200
Bilingual Operator	500-600	6,000-7,200
Secretary	380-500	4,560-6,000
Staff Manager	886-1,000	10,632-12,000
Receptionist	316-370	3,792 - 4,400

Table 15: Guatemala's cost structures

As a result of its geographical location, its qualified workforce and the most advanced telecommunications networks, Guatemala offers the conditions that make it a strategic focal point for investors interested in beginning or expanding their call centers or data processing operations.

Guatemala has numerous bilingual schools (English and Spanish) and ten regionally-known colleges/universities that are part of the formal sector of the country's educational system. In order to graduate from college, many students are required to take the TOEFL test ("Test of English as a Foreign Language").

For these reasons Guatemala offers a bright and prosperous future for operators of call centers, with the capability to provide differentiated services with entirely bilingual operators, who offer the additional advantages of a neutral accent.

Guatemala has a labor force with great data entry dexterity and ability. In Guatemala, typing courses are mandatory for students between the ages of 12 to 16. This has allowed Guatemalans to extensively develop the required skills for quick and efficient data entry, helping position Guatemala as one of the main destinations for setting up call centers, back-offices and data processing operations.

6.10 Ireland

It was one of the front runners in the BPO and started much earlier than India. Thus it has built good brand equity in US. It has a very conducive regulatory framework and is known for excellent quality standards. The country that has strategically pursued developing outsourcing services market and is planning to invest heavily in telecom infrastructure ($5 billion over 10 years) [17]

But Ireland suffers from a very big disadvantage of a lack of a large human resource pool. It has nearly 500 companies employing more than 40,000 people. Also it is not so competitive with respect to India and China in terms of manpower costs. Ireland is actually one of the biggest exporters of software services in the world today. But there is currently a shortage of programmers in Ireland and companies are forced to outsource work to India.

7.0 MAURITIUS: SITUATION OF BPO

7.1 Overview of Mauritian Competitive Assets

Knowledge at Wharton, Wharton School, University of Pennsylvania (October, 2003) has the following to say on BPO in Mauritius:

Infosys was looking for a place with good infrastructure, lower costs and availability of advance work permits to set up a disaster recovery centre, and Mauritius fits the bill. Mauritius is an ideal location for Infosys also because of its close ties with India and good flight connectivity with many Indian cities. The small population size of Mauritius, 1.2 million, is believed to be its major weakness as it limits the number of skilled workers appropriate for the business at hand.

However, Neonit, a US-based offshore advisory firm, believes that the lack of potential workers in Mauritius means that the country's BPO operations are likely to be regional in scale, rather than worldwide. Mauritius can be seen as an extended business environment and a gateway to the Indian Ocean countries. As the volume of business outsourced to India accelerates, so will the need of a dedicated centre that can provide business continuity and controlled redundancy. Processes that demand greater skill and expertise in execution require fewer workers to provide business continuity and act as a back up.

One could well see a centre with 80 to 100 highly skilled information analysts backing up four different captive centres of a large financial services firm. Such a 100-person centre could back up 8000 workers in five centres in India, performing such functions as cash flow analysis, retail financial service support and equity research. Mauritius does have its competitive advantages. One is the solid telecommunications infrastructure offered by the fibre-optic cable running through the country. Another is the same thing that lures tourists to Mauritius: it is a tropical island. As a result, Mauritius has become a strong option for both BPO outsourcers and international BPO providers.

Networkworld (IDG News service, 2004) examined the K-economy strategy of the Mauritius Government to shape Mauritius into a knowledge-based, high-tech Cyber island in some details. The basis for this ambition resides in three dimensions: bilingual work force (French and English), political stability and risk-free (far from terrorist attack) and robust telecommunications networks (Mauritius is linked to fibre-optic cable SAFE with connection to North America, Europe, India, Malaysia and South Africa). French firm, Batch Image Processing Ltd, found the time zone with Europe, easy access to affordable skilled labour, highly developed telecommunications infrastructure, favourable government fiscal regulations and costs as the key decision criteria for opting to establish its centre in Mauritius. For Astek Ltd, another offshore BPO provider the flexibility of the young pool of professionals and quality of work delivery, along with the factors enumerated by Batch, were the decisive factors.

7.2 The ICT and BPO Sector

The New Economy is believed to be a generator of new opportunities and a creator of new avenues for sustainable economic development, additional wealth creation and employment. One of its key drivers is ICT, which is an engine with two dimensions. It has an industrial dimension where it is produced as any product-hardware or software. It has a service dimension to facilitate the conduct of new business processes (traffic carriage system, call centres, disaster recovery centre etc). Its industrial dimension can be harnessed to establish particular BPO production activity whereas its service dimension can be used to support any BPO activity.

For instance, the Board of Investment (BOI), a government institution set up to promote and stimulate foreign direct investment in Mauritius, invites foreign investors to operate in the following four key areas:

- Software development
- Digital media and entertainment
- Niche Business Process Outsourcing/Knowledge Process Outsourcing
- Call centres

Mauritius has adopted BPO, more particular in association with IT, to deliver ITES-BPO services as an avenue for economic development to complement its other industrial sectors, including financial services, bio-medical industry and knowledge industry. In this regard, BPO has acquired the status of the fifth pillar of the economy to share the load of economic development with four other pillars: sugar, textile, tourism and offshore financial services sector. Mauritius is positioning itself as a dot.com hub to offer world standard facilities for the development of software and multimedia, IT training, Data encrypting, Electronic archiving, Back-up centres and Website development. The ambition of making Mauritius a Cyber Island is further illustrated by the high-tech working facilities on offer.

The Business Parks of Mauritius Limited (BPML) was already managing available office facilities to fit IT-based offshore activities at La Tour Koenig Informatics Park and the Trade and Marketing Centre in the Port area. As an expression of its commitment, the Government of Mauritius has embarked on the construction of two knowledge and high-tech business parks, the most recent Ebène Cyber City in a prime uphill area and Rose Bell Business Park in the airport vicinity and spread over 60 acres of land. The Cyber City at Ebène offers 30000 square metres of space of international standard comparable with the IT parks in Europe and India, but at a more competitive rate. These intelligent buildings are equipped with reliable broadband telecommunications facilities offer the most sophisticated audio, text and video communications facilities with global reach.

These various parks are strong steps that Mauritius has taken towards emerging as an outsourcing hub to pursue IT-based services, such as software, and IT-enabled services, like call centres and back-office operation. Because of its cultural, trade and political ties, and geographical location, Mauritius has been standing as a bridge between India, China, Africa and Europe. In the new world trade logic, foreign BPO providers in the offshore Mauritius centre can benefit from these attributes and a few others to thrive in the African and European markets. 60 Indian IT firms or more,

including Satyam, Hinduja and Infosys, have already established operations in Mauritius. Its strategy is to attract more major overseas BPO providers to increase the use of Mauritius as an offshore centre.

For the emergence of the BPO as a key industrial sector and an employment generator, ICT is being geared from a technological angle to support the BPO industry with IT resources, IT skills and telecommunications long-distance infrastructure. It has gone even to the extent of breaking the monopoly of Mauritius Telecom (MT) on services, but has not been successful at breaking the dominant position of MT on national and international infrastructure. Furthermore, the triple role of government as an investor (it holds a majority in MT), as regulator and policy maker reinforced by the influencing role of conservative State-owned France Telecom, as a share holder of MT, has simply impeded any action towards bringing down the price of telecommunications infrastructure to a level that would attract a critical mass of BPO investors to its shores. As a consequence, the majority of BPO operators in the sector are Mauritian enterprises representing some 40% of total investments and, in spite of pompous promotional efforts of government bodies, large multi-national corporations continue to shy away from the shores of Mauritius. At today, Telecommunications infrastructure is the key factor disabling irreversibly the rapid rise of the BPO sector. To reverse the trend, it will be necessary for government to embark on a review of the operation of MT and, if necessary, it has to go even going to the extent of offloading France Telecom to adapt MT to the actual needs of the economy of Mauritius.

7.3 IT Companies operating in Mauritius

Although the scale is modest, an increasing number of IT companies from the United States, India, and Europe are setting up businesses dealing in:

- Software development and pre-press activities
- High value-added data processing
- CD-ROM and Internet publishing
- e-commerce transactions
- Development of multimedia applications

Mauritius now houses the Regional Headquarters of Microsoft, IBM and HP, comforted by legislation on the protection of intellectual property rights and their enforcement [27].

7.4 Government Measures to Boost the Economy

The Government has already implemented several measures to boost the Mauritian economy particularly in the ICT sector. An outline of measures already implemented or in the process of application is given below [25]:

- Setting up of a Fast Track Committee to speed up project implementation. It allows the ironing out of all impediments that delay the implementation of innovative and broad-scoped investment projects

- Setting up of Investment Climate Improvement Committee that will base itself on the findings of the World Bank's Investment Climate Assessment. This Committee will provide practical solutions to the difficulties that entrepreneurs face in starting and running their business and direct its focus to governance, infrastructure, innovation & skills, and finance

- Application of the Silent Agreement principle for the approval of projects. Investors will proceed with the implementation of their projects by default if the authorities do not respect the agreed time-limit for the processing of their projects

- Review and harmonisation of all current schemes of incentives applying to various economic sectors. This will result in the creation of a homogeneous and coherent framework that will be a better tool for investment promotion

- Review of the whole process of duty exemption and putting in place of clear procedures. A general approval approach will be adopted so as to expedite internal procedures within the Ministry of Finance, while joint Ministry/Board of Investment/Customs Committee on duty exemption will be given greater decision-taking powers within set parameters. Same-day approval will be delivered in the case of fully documented and clear-cut applications.

- Creation of unique brand identity for Mauritius to sell, in the simplest but strongest possible manner, a single, standard and coherent image of the country as an investment centre offering up-market tourism. The country will be seen as an investment and business location

- Shift from an incentive-driven to a targeted approach for the promotion of projects. This will require a portfolio of viable projects ready for implementation. Well-defined projects will be marketed abroad

- Policy shift to establish Mauritius in the top ten investor-friendly countries as one of the 2006-07 budget measures. This is indeed very much dependent on the actual policy implementation ability of the government vis a vis established conservative force, including locally-based foreign enterprises.

7.5 Information and Communications Infrastructure

The construction of the Ebène Cyber City and other Parks is another step taken to transform Mauritius into a diversified, high-tech, high-income services and knowledge-based economy. Competitive rates are being offered to ITES-BPO companies for plug and play operations in the Cyber Tower. Various facilities, including video conferencing, conference halls and banks are provided.

Mauritius has a well-developed digital and broadband telecommunication network infrastructure with excellent facilities, namely ADSL, ISDN, high bandwidth

international leased lines and high speed Internet access [27]. TV on ADSL has recently been introduced. 3G cellular mobile is also available and vendors provide video remote monitoring systems between countries. Digital television via ADSL lines is also available

The telecommunications sector has been liberalised and many Internet Service Providers (ISPs) are currently providing dial up and ADSL access services. Mahanagar Telephone (Mauritius) Ltd. (MTML), a leading player in the Indian telecommunication sector, is providing its services in Mauritius. MT is the leading operator and still retains its dominant position as the major provider of principal telecommunications infrastructure like private leased circuits.

The SAT3-WASC/SAFE submarine fibre optic cable provides broadband connection to the Mauritius BPO offshore sector and is under the exclusive management of MT. It links Mauritius to Europe and USA via South Africa and to Asia via India and Malaysia. The SAT3-WASC/SAFE cable is divided into two sub-systems, SAT3-WASC in the Atlantic Ocean and SAFE in the Indian Ocean. It has 16 landing points on three continents. This cable has a large transmission capacity of 120 Gbps, enabling it to carry a total of 5.8 million simultaneous telephone calls.

MT enjoys a Point of Presence (PoP) at 'Telehouse' in Paris, where major international bandwidth providers and key telecommunication operators interconnect, facilitates the provision of international end-to-end connectivity services to BPO providers from Mauritius to any destination.

Mauritius has favourably considered of being part of a consortium investing in the East African Submarine System (EASSY), a cable system running along the East Coast of Africa to Jeddah.

7.6 Institutional Facilitation

7.6.1 Attributes

The natural attributes that describe Mauritius include [27]:

- A stable political democracy and a harmonious multi-racial society
- Risk free and highly secure
- Good governance and high ethical and professional standards
- A high degree of global integration as major tourist destination, open skies policy and a stable financial jurisdiction
- Attractive package of fiscal and non-fiscal incentives
- Effective banking system and a well organized and innovative private sector
- Appropriate legal framework in terms of data security and the protection of intellectual property rights
- State of the art telecommunications infrastructure connecting Mauritius to the global information superhighway through the SAT3-WASC/SAFE submarine cable, backed by satellite diversity

- Reliable and cost effective infrastructure in terms of cyber parks, road networks, modern port and airport, efficient customs and supply of regular and clean electricity
- Competitive costs in terms of wage rates, utilities and controlled inflation
- University graduates from Mauritius and a variety of places in the world, including Australia, Canada, France, India, Malaysia, Singapore, South Africa, UK and USA.
- High quality, adaptive and bilingual human resources with a low level of attrition
- Strategic alliance of Mauritius with a number of technologically advanced nations, including China, France and India. This enables Mauritius to draw on their vast and internationally recognised experience in the ICT field, in particular software development and other related BPO services.

7.6.2 International Networks

Mauritius is an outward looking country and its good international stature is another plus to promote its ICT sector. Mauritius enjoys impeccable credentials with its traditional OECD partners and this comforts the country's position with respect to entry into foreign markets from Mauritius. It is a signatory of multiple international conventions and Agreement, including the World Trade Organisation. It is also a founding member of the Indian Ocean Rim Association for Regional Cooperation (IOR-ARC) and of the Indian Ocean Commission (IOC). Besides, it is a member of the African Union, Commonwealth and Francophone Community, South Africa Development Community (SADC), the Common Market for Eastern and Southern Africa (COMESA). It belongs to the African community and it shares good neighbourhood relation with surrounding countries to which it is linked by good international transport systems. Being located in Mauritius allows offshore BPO providers to tap business opportunities in those markets.

7.6.3 Legal Framework

Mauritius has an effective judicial system in place and operates according to the rule of law. To fully address the problems that emerge from the possibilities of IT, the government has enacted a broad host of legal instruments. In this context, appropriate legislations on data security, protection of intellectual property rights and cyber crimes have been enacted [27]. These various legislations in the ICT sector are as follows:

Copyright Act (1997)
This has been enacted to ensure the protection of intellectual property rights, including software and electronic databases

Electronic Transactions Act (2000)
The Electronic Transactions Act (2000) provides the legal framework for the establishment of a public key infrastructure (PKI) to facilitate the use of digital signatures in Mauritius. This legislation also facilitates electronic transactions and boosts e-business activities

ICT Act (2002)
The ICT Act (2002) provides for a renewed regulatory framework in Mauritius to introduce further competition in the ICT sector, including the provision of telecommunications infrastructure.

Computer Misuse and Cybercrime Act (2003)
This legislation was enforced for the repression of criminal activities perpetrated through computer systems

Data Protection Act (2004)
This act provides the framework to govern the use of customer data and prevent any misuse. This legislation covers areas like financial transactions, unsolicited bulk e-mails, hacking and unauthorised access to personal information such as health information, credit card transactions and other personal details

Mauritius is a Signatory of the **WTO Information Technology Agreement (ITA)** that entails the elimination of customs duties (other duties & charges) on information technology products.

7.7 The Amended ICT Scheme

Mauritius pursues a very liberal policy with regard to FDI and the Government endeavours to attract higher levels of investment in the country by offering specially designed incentives to investors [25].

The Government of Mauritius has introduced an ICT Scheme to strengthen the development of the ICT sector in Mauritius. This scheme enables foreign and local investors in the ICT sector to benefit from an attractive package of fiscal and non-fiscal incentives as outlined below:

- Tax holiday up to the year 2012 and a 15% corporate tax thereafter
- Duty free import of equipment
- Accelerated depreciation allowances for ICT equipment in the form of investment allowance of 50% plus annual allowance of the total investment over 3 years
- 50% relief on personal income tax for a specified number of foreign IT specialists per company
- Duty free import of personal belongings of expatriates excluding vehicles
- Fast track processing of visa, work and residence permits for expatriates
- Concessionary electricity rates
- 4.4% registration duty on the purchase of land and building
- Duty free import of two cars provided that the initial investment exceeds Rs. 50 million (about US $ 1.7 million) or the project creates at least 200 jobs
- Approval of ICT projects within 24 hours under the ‘Declared Project System’

For entitlement to the above incentives, the activity should be qualified under the following categories and at least 80% of the annual turnover should be geared towards export markets [27]

- Software Development and value-added software customization
- 3D animation and multimedia content development
- Business process outsourcing/Back office operations
- Call centres or contact centres
- Data digitalization
- Data disaster recovery services and centres
- Electronic data processing, warehousing and management
- Engineering design services
- Online education
- Technical documentation
- Website development services
- Data centres
- ICT training and any other ICT-related activity as may be approved by the Board of Investment

7.8 Other Schemes

7.8.1 The Pre Operational Training Incentives

The Mauritian Government has introduced the 'Pre Operational Training Incentives Scheme' to alleviate the cash flow problems of ITES-BPO companies in their pre-operational phase. These training incentives are offered to the ITES-BPO companies and provide them with training refund of up to 50% of the qualified costs [27]

7.8.2 Scheme to Attract Professionals for Emerging Sectors (SAPES)

This scheme enhances the development of key sectors of the economy namely ICT and financial services [27]. The SAPES aims at attracting non-citizen professionals with talent, expertise and skills in emerging sectors to work and live in Mauritius. Other incentives of SAPES include:

- The grant of work and resident status for a three year period to the professional, the spouse and dependents
- Right to one immovable property or a flat / apartment for personal residence
- Spouse of professional is entitled to a work permit of 3 years
- The professional may apply for a permanent resident status
- Duty free import of household & personal effects of the professional

7.8.3 The Regional Headquarters Scheme

A company may be eligible for the Regional Headquarters Certificate if it provides headquarters services to a related enterprise located in any member country of a regional organization of which Mauritius is a member [27]. The company shall have as its main activities the provision of at least two headquarters services among the qualifying activities mentioned below:

- Administration and general management
- Business planning & co-ordination
- Procurement of raw materials and components
- Corporate finance advisory services
- Marketing control & sales promotion planning
- Regional training and personnel management
- Treasury and fund management
- Logistics services
- R&D services & product development
- Regional technical support and maintenance
- Electronic data processing and communication hub
- Business Development

With a Regional Headquarters Certificate, the following incentives can be attained:

- 10-year tax holiday on that portion of gross income of a company holding an investment certificate
- Tax-free dividends
- Duty free import of office furniture, equipment and personal belongings of expatriate employees excluding vehicles
- Duty remission on import of a maximum of 2 cars
- Concessionary personal income tax for 2 expatriates for the first 4 years of employment

7.9 Other advantages of Mauritius

Mauritius is considered as a business friendly, profitable and safe location for both local and foreign investor community. Over the years, the island has meticulously assembled the prerequisites that make it attractive for investment [27]

7.9.1 Political stability

Mauritius has enjoyed uninterrupted political stability since independence with smooth transfer of political power after general election. The strong social contract bonding the government, the private sector and civil society guarantees continual political and economical stability

7.9.2 Liberal Investment policy

Foreign investors are provided equivalent treatment to nationals through its liberal approach in respect of foreign direct investment. Foreigners are allowed to invest in any sector of the economy and own 100% equity of a local company

7.9.3 State of the Art Infrastructure

The government is undertaking significant efforts so that the island is equipped with state of the art infrastructure. Massive investment is being allocated to upgrade overall infrastructure. Mauritius has an extensive network of roads that facilitate easy access to major points. The airport and harbour are endowed with necessary facilities. Mauritius has regular air and sea connections with the rest of the world

7.9.4 Harmonious Industrial Relations

The country has stable and harmonious industrial relations in the different sectors of economy. A tripartite framework exists, which enable employers, employees and the Government to review relevant issues so as to ensure continuity in effective industrial relations. Labour laws are adapted to the demand of the market. This promotes the island as a sound and secure investment and business destination

7.9.5 Dynamic private sector

The private sector is dynamic and well organized with a variety of industry, trade and professional associations. It has extensively participated in the development of the agricultural sector, manufacturing sector, the tourism industry and the financial & business services sector. The private sector is geared to participate in the development of the ICT sector.

7.9.6 Pro-business environment

Government promotes market friendly policies and acts as a facilitator in attracting foreign investors. It promotes the development of local entrepreneurship and close partnership with the private sector. It supports foreign direct investment and endeavours to maintain high security, good governance, fiscal discipline, and sound monetary policies. Governmental agencies have been put in place to bring appropriate assistance and solve problems promptly

7.9.7 Double taxation avoidance treaties & other agreements

Mauritius has a broad network of Double Taxation Avoidance treaties with a number of developed and emerging economies in Europe, Africa and Asia. The treaty, which contains either full or partial tax sparing clauses, is favourable to foreign investors

Major multilateral conventions and agreements signed include:

- The Multilateral Investment Guarantee Agency (MIGA)
- The International Court of Justice for settlement of disputes
- The International Centre for settlement of Investment Dispute
- The 1958 New York convention on Foreign Arbitration Award

Mauritius is also a signatory of bilateral Investment Promotion and Protection Agreements (IPPAs) with countries such as Germany, France, U.K, Northern Ireland, Switzerland, Portugal, Romania, Czech Republic, China, Indonesia, Indonesia, India, Singapore, Nepal, Pakistan, South Africa, Sweden, Mozambique and Zimbabwe. This allows for enhanced investment between Mauritius and partner country

Long established international relations that enhance the credibility of Mauritius exist with the following:

- The United Nations and its agencies
- The World Bank
- The International Monetary Fund
- The African Development Bank
- The World Trade Organisation
- The African Union
- The Global Organisation of Peoples of Indian Origin

7.9.8 Convenient Time Zone

Mauritius due to it convenient time zone (GMT+4) that makes its an ideal destination for call centre, Business Process Outsourcing, software development & related activities

7.9.9 Pleasant living environment

Another asset of Mauritius is its rich and diverse culture. The island provides a friendly and hospitable place where foreigners easily adapt. The country can be considered a safe and pleasant living environment with modern facilities in terms of accommodation, communications educational institutions, health care and medical facilities

8.0 FACTS & FIGURES ABOUT THE MAURITIUS BPO SECTOR

The Mauritius BPO location has evolved progressively since the year 2000 and a significant improvement has been noted in 2004 in terms of growth rate. Table 16 is a snapshot highlighting the realized growth between the period June - September 2005 and October 2005 - January 2006 [24].

8.1 Snapshot of the BPO sector in Mauritius

Indicators	June 05 - September 05	October 05 - January 06
Number of companies operational 2005 Growth Rate	90	107 19%
Employment Proposed based on approved projects - operational companies only Current level of employment based on survey with operational companies	 4129 3801	 4549 4332
Investment (Rs) Total proposed investment – based on approved projects – (1996-2006 inclusive) Proposed Investment –operational companies only Actual Investment (based on survey) - operational companies only	 3,029,266,924 1,445,162,274 726,445,492	 3,246,260,808 1,611,448,303 917,989,339
Number of new projects approved *including* 100% export oriented (declared framework) Level of proposed investment Level of proposed employment	+24 18 788,377,304 +1287	+26 21 306,197,260 +645
Forecasts for 2006 Based on total number of companies to be operational Total Level of employment		 32 *+1,000*

Source: Board of Investment (BOI)

Table 16: Snapshot of the Mauritian BPO sector

Main Findings

- A growth rate of 19% was achieved during the period with the coming in operation of 17 additional BPO companies
- A rise of 10.2% in employment was noted
- Significant investment has been made in the BPO sector. Total proposed investment based on approved projects as at January 2006 was Rs 3,246,260,808. Growth rate of actual investment compared to proposed investment has increased from 50.3% to 57.0%.

8.2 Main Trends

- The Mauritian BPO sector has continued to show a steady growth both in terms of investment and employment. Along with the increased presence of BPO companies, the industry has reached a next level of sophistication by the variety of value added service offered [24].
- Growth rate continued to increase from October 2005 to January 2006. 17 new companies started operations representing a growth rate of 19%. Further information about the evolution of the BPO sector since July 2004 is given in figure 16.

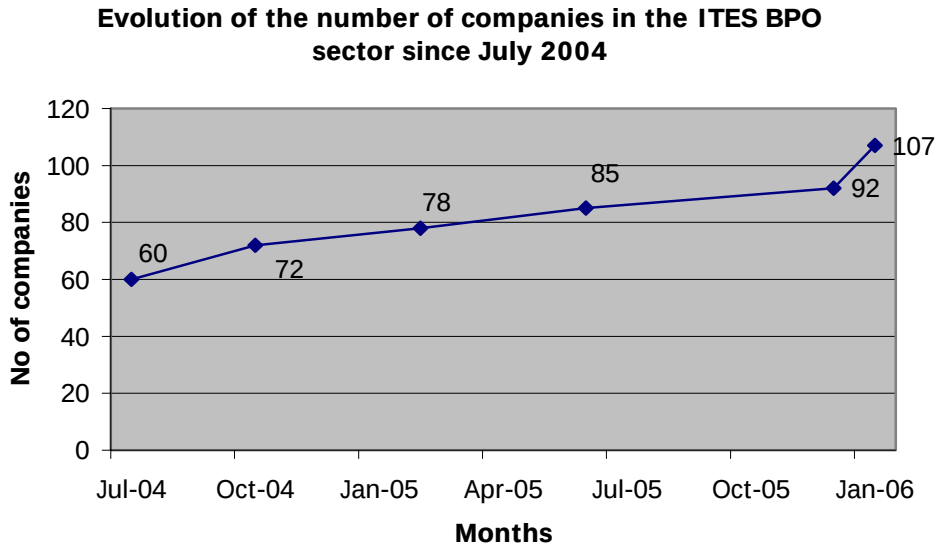


Fig 16: Quarterly evolution of the BPO sector since July 2004

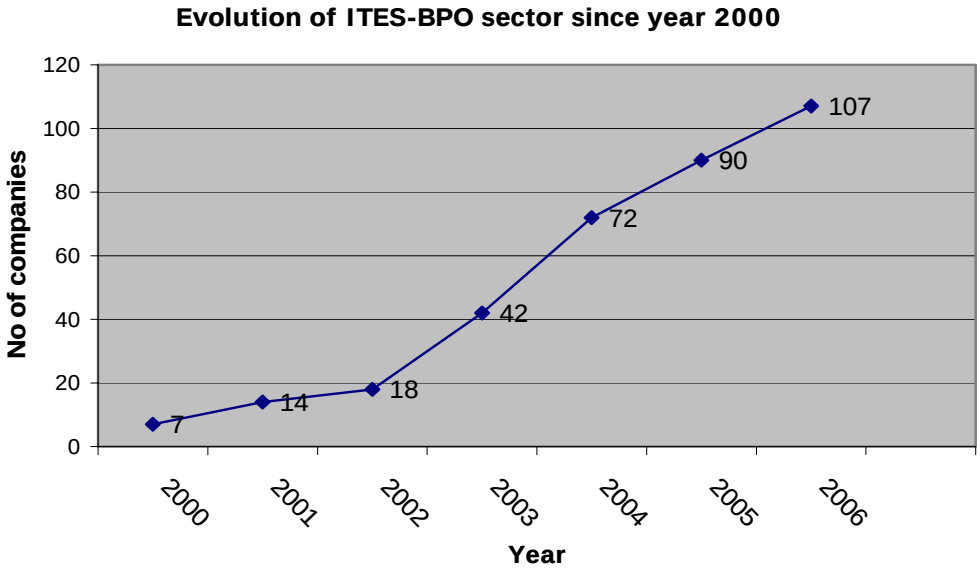


Fig 17: Yearly evolution of the BPO sector since Year 2000

- 26 new projects were approved, including 21 approved under the Declared Project Framework from October 2005 to January 2006. This quasi exclusively export oriented industry offers interesting macro economic impact in terms of FDI and foreign revenues.

8.3 Investment

The proposed investment for the operational companies by segment of activity is illustrated in figure 18

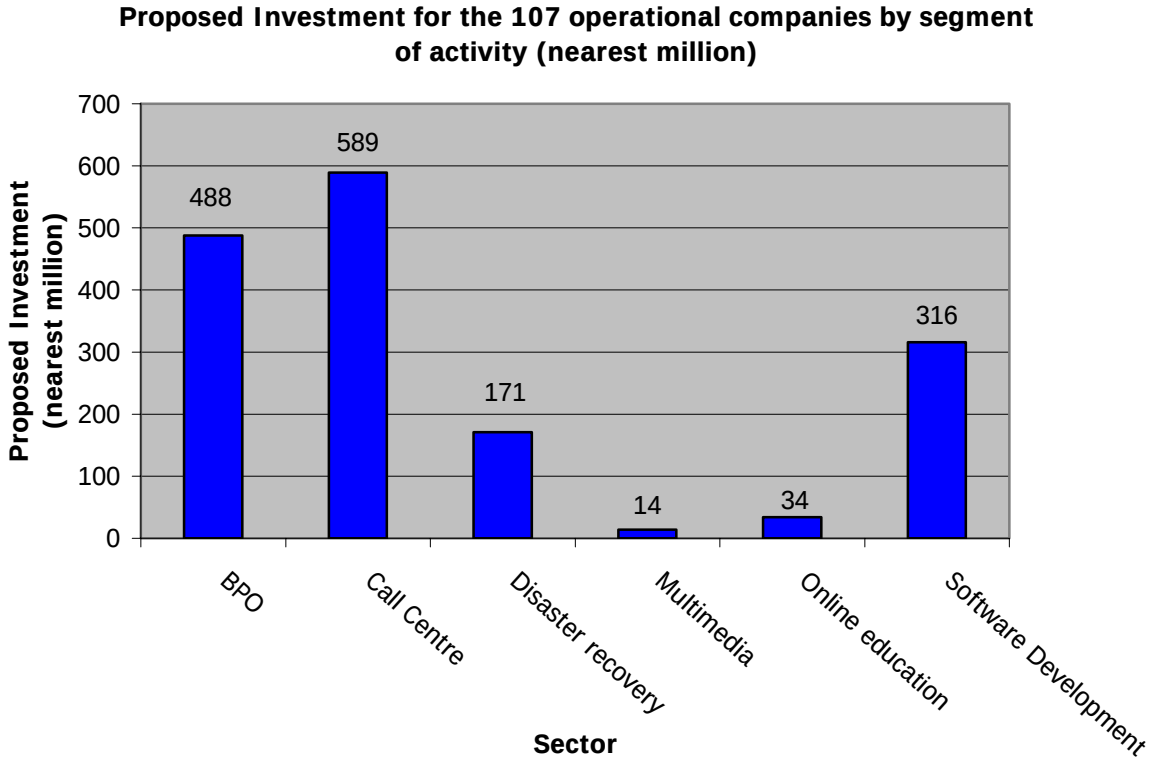


Fig 18: Proposed investment by segment of activity

- During the period October 2005 to January 2006, the Board of Investment approved 26 new projects, half of them related to BPO and software development activities. Based on the number of projects approved, the total level of investment has reached Rs 3,246,260,808 with call centers and BPO companies representing the highest levels of investment. Following a survey carried out by the BOI on operational companies, it appears that about half of the proposed investment has already been realized (Rs 917,989,339).
- With reference to the last quarterly period (June 2005 - September 2005), the 26 new projects approved have lower economic impact both in terms of investment and employment. Call centres, however remains the highest generator of investment [24].

8.4 Predominance in the BPO sector

Companies providing BPO and Call Centre services constitute the BPO sector. The BPO remains the largest segment accounting for 47% of the industry's share [24].

As at January 2006, the BPO comprised of:

- 50 BPO companies
- 24 Call Centres
- 21 Software Developments
- 9 Multimedia companies
- 2 Disaster Recovery Centre
- 1 Online Education Centre

Figure 19 is a breakdown of the ITES BPO sector as at January 2006:

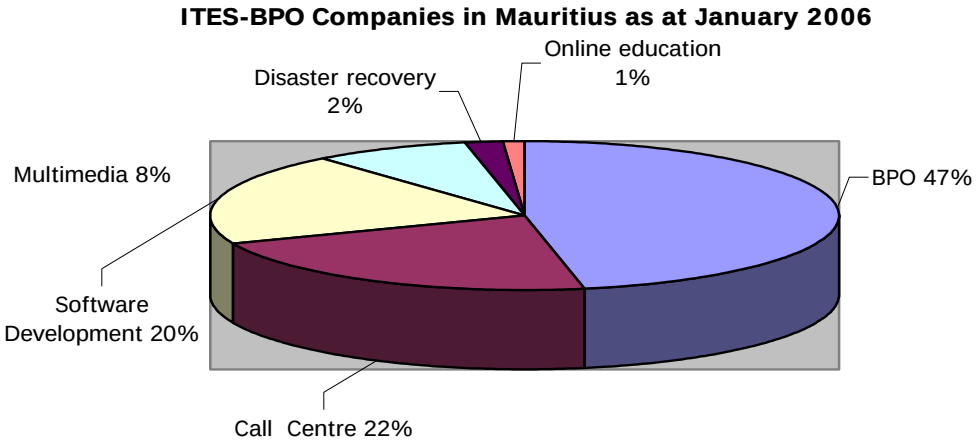


Fig 19: BPO sector in Mauritius as at January 2006

- The software development segment has shown the most significant growth during the period October 2005 to January 2006 with 7 new operational companies (representing 50% growth as compared to the last quarterly).

8.5 Employment in the BPO sector

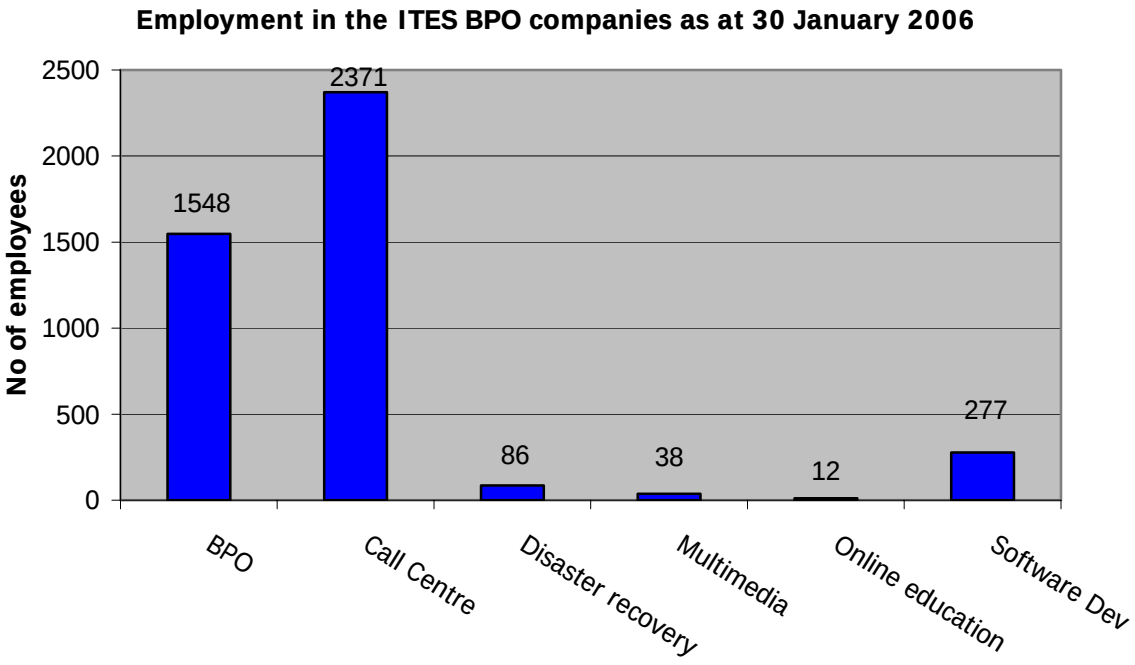


Fig 20: Employment in the BPO companies as at January 2006

- During the quarterly period (October 2005 to January 2006), the employment level has increased by 14% to reach a total number of 4,332 people. The call centre industry still remains the highest generator of employment (accounting for 50% of the labour market).
- It is also important to note the shift in the profile required for the BPO sector. The focus is today placed either on technical IT expertise (graduate IT level) or specialised functional skills (Financial, accounting, legal or graphic design)
- With the increased presence of the software development entities in Mauritius, job employment level in the IT development has reached 277 people - a 10% growth compared to the last quarterly period (June 2005 to September 2005)
- The variety of skills required by the industry enhances the importance of devising a comprehensive skills assessment, building greater awareness on the job opportunities in Mauritius and working closely both with academia, training institutions and the industry to implement an integrated HR development program [24].

9.0 SWOC ANALYSIS OF MAURITIAN BPO SECTOR

The analysis identifies the areas of strengths (S) and weaknesses (W) of Mauritius as well as the observable opportunities (O) and challenges (C), which compose SWOC. Opportunities exist in the market environment and are ever changing. But, challenges are on the way obstructed by structural weaknesses. Tapping these opportunities effectively would require Mauritius to successfully rise to these challenges.

9.1 Strengths

- Risk free from war, terrorist attack and disastrous natural calamity enhancing security of business operation
- Good reputation as a tourist resort
- Excellent commercial relationship with Europe (for sugar & textile products) and United States
- Cultural and ethnic diversity, opened to expatriates
- Outward business focus
- Government commitment and well defined national vision and strategy for the ICT sector are the primary drivers for successful offshore ITES-BPO operation
- Government flexibility to adapt to industry and market demands and trends
- Efficient administrative system and favourable business climate framed by political, economic and social stability
- Appropriate legal framework e.g. Computer Misuse and Cybercrime Act, ICT Act, Electronic Transactions Act, conducive for the ICT sector
- Advanced industry and commercial structure and efficient banking system
- Low-cost trade facilitation system including good communication services, including local transportation, telecommunications and courier services.
- Availability of special incentive packages exist such as fiscal and non-fiscal incentives, ICT scheme, etc
- Convenient and easy international passengers and goods transportation system
- State-of-the art health, schooling, university, leisure, entertainment and other infrastructure for public service at internationally competitive rates
- Availability of adequate intelligent parks for IT-based BPO services
- Long years of experience of reliable and modern international telecommunications and IT coupled with experience in the pursuit of offshore operation, including BPO, financial services and export of goods and services
- Backed by efficient operation of its international telecommunications infrastructure and adequate operational scale, Mauritius has proved to be a niche for secure disaster recovery centres and business continuity.
- Geographically well positioned at the door step of, and well connected to, Asia, Africa and Indian Ocean countries, within a convenient time-zone, to

operate as both a strategic business centre and a back up processing centre

- Well structured and fast growing, the local BPO Industry continues to attract major international providers such as Infosys, Hinduja, Accenture, Cendris, Chesteroc, etc.
- Owing to effective policies, IT literacy and penetration rate are increasing at fast rate
- English and French-conversant quality IT- trained labour with low turnover rate
- Open to foreign labour force to compensate for skill shortages and small population size.
- Positive externalities for law firms, offshore finance and IT-based firms
- Availability of two public universities and several private tertiary educational providers
- Reputation of other successful economic sectors, like tourism, finance and production of textile goods offer a platform to extend to technology-intensive BPO sector
- Convenient time zone for some specific activities

9.2 Weaknesses

- BPO is a still an evasive concept for government institutions and national policy making bodies
- Confusion between ICT as a resource and BPO as an industrial process with the result that the development direction is blurred
- Fragmented BPO industry
- The real needs of the industry are not correctly identified and addressed
- No brand image to support the sale of Mauritius BPO centre to foreign investors and BPO providers
- Absence of a strategic plan and a structure to undertake the development of the sector
- Actions do not follow Ministerial intentions and a clearly perceivable lack of 'savoir faire' is apparent
- No expertise at the Ministry of IT and Telecoms to design and implement any pertinent and concrete action plan
- Lack of coherence between government institutions, disjointed policy framework and inexistence of institutional leadership
- There is no specific labour law to govern the specificities of the BPO industry, such as employment of workers on a contractual basis and working hours
- Unsuccessful at pulling a critical mass of world class multi-national corporations within its BPO frontiers and absence of industrial concentration to create an impact on international market
- Exorbitant use of government funds, and inability to use private sector, for international promotion to raise its profile

- Small country with limited worker population size often used as an excuse for non-achievement
- Inability to take advantage of excellent business relations with the European, North American and Asian markets
- Opaque government procurement system particularly in the 'soft' industry and a bias for foreign enterprises, discouraging local talents
- Large scale brain drain arising from inequity at employment and promotion and continuous replacement of professionals by politicians prevailing primarily in government enterprises
- Inadequacy of existing government institutions for connecting the industry with the global markets discouraging domestic and foreign investments to the required scale
- Unavailability of training centres dedicated to BPO and need to adapt workers to activity requirements
- Lack of information and visibility on career path of employees in the BPO sector, thus discouraging young graduates
- Existing incentives for training needs to be remodelled to adapt labour force to the demand of the BPO industry
- There is a shortage of specialised recruitment agencies
- BPO is a 24 hours/7 days industry and BPO providers must provide adequate motivation to that effect
- Myopic government protection of highly profitable, but market-dominant, MT to the detriment of wider national industrial and economic interest
- Questionable excessive price of telecommunications leased circuits, both domestic and international, that erects a high barrier to entry into BPO
- Price uniformity of external telecommunications services, including price of private leased lines, non-adapted to the specificity of the BPO industry, is irreversibly damaging to the development of the industry
- Prime high-tech industrial facilities occupied by Mauritian-owned firms to supply domestic services to foreign-owned orientated BPO firms

9.3 Opportunities

- Structuring BPO according to its three sectors: IT, ITES-BPO and professional BPO services (e.g. finance and accounting, legal, medical, human resource, architecture and engineering) to educate both the industry and the market
- Increasing demand for high end BPO work in Information Technology and other professional areas, including human resources
- Overall trend in the BPO industry is positive with sustainable growth, increasing the possibility for Mauritius to capture a share in the global market
- Though cost is an important criterion, it is not the determining factor. Global outsourcers are not necessarily led by low-cost considerations. Such factors as class of products, quality of delivery and low risk are key determinants.

- A few internationally reputed companies are using Mauritius as their base for a variety of business activities, including BPO, thus enhancing the international profile of Mauritius.
- International presence offers a platform for the development of a Mauritius brand for up-market BPO products and services
- Positioning Mauritius as a niche BPO provider for certain categories of technology products, including value-added products, in a selected areas of competence, such as software applications, biological research, telecommunications and multimedia
- Formation of joint government-private sector backed BPO industry association, distinct from the Telecommunications Industry Association to operate as a promotional arm based on the Indian NASSCOM model
- Improved marketing effort in existing foreign markets, but also in untapped markets
- Clustering of BPO with local and overseas universities, in association with hi-tech research centres in Mauritius and overseas to raise technology stocks
- Collaborative and joint promotional campaigns with large outsourcing providers operating in other countries
- Promoting Mauritius offshore BPO as a back up centre to enhancing the security of data centre and providing continuity service
- The labour attrition rate is as low as 5% in Mauritius in the area of data processing and software development as compared to India where it accounts for 22%

9.4 Challenges

- Existing strong competition from established nations
- Emergence and consolidation of new potential competitors. South Africa is gradually displacing Mauritius as the gateway to Africa. The Czech Republic and Hungary are potential competitors for the European market whereas Tunisia, Morocco and Turkey are potential alternatives for France. Even Madagascar represents a threat for non-voice, low value added data capture process.
- Legislation in developed economies against offshore outsourcing
- Corruption Index and other sources of bad international publicity
- More pronounced use of local universities and research institutes as a source of product creation and innovation
- Mauritius is reputed more for tourism and less for offshore BPO centre
- Most local entrepreneurs direct their efforts and resources at low-end call centres than at the development of complex, up-market software
- Mauritius must pursue a cultural adaptation to turn into a developer, a designer from a mere system integrator and a producer of technology from being a net importer

- The relevant government technology institutions (e.g. National Computer Board) must focus on IT-product development, and leave training to more relevant human resource development institution
- The convergence and aggregation of BPO enterprises into a consolidated offshore industry to strengthen capacity and attract customers' attention
- Need to re-engineer the relationship between the government and the BPO providers for the development and growth of BPO industry
- Impede the accelerated brain drain arising from general perception of inequitable access to employments and resources, job dissatisfaction and de-motivation and promise of better future overseas
- Establishment of strict norms (e.g. Equal Opportunity Act/Ombudsman) to discourage the abusive misuse of local talents, both in the private and public sectors, that cannot be justified by professional reasons
- More focused university and industrial training
- Lower productivity level compared to countries such as Hong Kong, Malaysia, Philippines and Singapore
- Differentiated servicing and/or pricing policy on infrastructure, including telecommunications, for the requirements of the BPO industry
- Flexible pricing policy in the provision of inbound/outbound broadband telecommunications access to align domestic prices to world market prices

10.0 POLICY DETERMINATION CRITERIA FOR MAURITIUS

10.1 Industrial Architecture

The SWOC analysis provides a snapshot of the potential context. It shows the needs for architecture to provide a blue print for charting the development of BPO as an industrial activity. The architecture must present a comprehensive and coherent plan that draws the configuration and maps the contours of an industry with the BPO activities embodied into its product, market and resource base dimensions. The plan must describe the actions that must be undertaken by identified institutions to give a shape to the BPO industry with a clear set of goals to achieve. Above all, it must be an instrument that inspires confidence to mobilize the support of the community at large, including international community, towards implementation. As all plans, an architecture for streamlining BPO activities is dependent on a number of conditions, identified within the operating context.

10.2 Establishing Operating Context

10.2.1 Outsourcing

An enterprise has a choice of pursuing an activity either on its own or entrusting it to another enterprise. On its own is internalizing, where the activity is in-house. Entrusting the activity to another enterprise is externalizing where the activity is outsourced. Outsourcing and Offshoring are not synonymous.

10.2.2 Differentiating Onshore and Offshore

Onshore and offshore are two different contexts situating the location of a BPO provider to which an activity is outsourced. Onshore and offshore are clearly distinct terms. The comparison between onshore and offshore is based on a definition of Jones Lang Lasalle (2004). Offshoring is a term used to describe the location or relocation of certain processing activities to overseas countries.

10.2.3 Two Ways to Outsource

Outsourcing can be performed through onshore and offshore centres.

Execution /Location	**In-house**	**Outsource**
Onshore centre	Activities undertaken by a host company in the **same country** as service is sold/provided	Activities undertaken by an external service provider in the **same country** in which the service is sold/provided
Offshore centre	Activities undertaken by a host company in a country **outside that** where the service is sold/provided	Activities undertaken by an external service provider in a **country outside** that where service is sold/provided

Fig 21: Onshore / Outsource Grid

10.2.4 Mauritius as an Offshore Outsourcing centre

Notwithstanding the fact that onshore outsourcing offers a business potential that cannot be neglected, this cannot represent the core business for Mauritius given the size of the internal market. Mauritius is known for its outward looking development strategy and its approach to BPO should not be different. Therefore, Mauritius fits best in the offshore-outsource quadrant above. It is a potential base for global offshore providers that execute outsourcing contracts for companies outside their frontiers and based in foreign capitals. These companies, in search of competitiveness, employ offshore facilities to tap cost-effective knowledge, reduce their cost value and increase business value.

According to Deloitte, 75% of the world's major financial services firms are likely to use offshore BPO services by 2006. There are three reasons to explain why this is happening:

- Globalization phenomenon increasing inter-country trade and mobility of resources
- The expansion and progress of broadband long distance telecommunications
- The benefits of BPO allowing enterprises to concentrate on their core activities

10.2.5 Differentiating offshore outsourcing from IT

Offshore outsourcing or offshore business process outsourcing is a generic concept. It should not be assumed as being IT or ICT. But, it can be applied to IT and to a variety of areas depending on needs. It can be focused on:

- The development of IT/ICT (e.g. software, multimedia applications)
- A non-IT activity, but requiring some higher skills for the use of IT instruments (e.g. translation)
- A non-IT activity, but requiring largely the use of IT instruments (e.g. call centres)

For the purpose of emphasis, particularly with regards to target market, some analysts [neoIT, Offshore Insights Market Report Series, 2005] go even to the event of differentiating between business process outsourcing (BPO) and information technology outsourcing (ITO). This definition helps in branching out to specialization.

10.2.6 Offshore BPO for IT-oriented Products

Outsourcing has the potential of transforming the way companies work, particularly with the use of IT. In general, Duncan Aitchison [Accountancy Age, vnunet.com, 2004] commented that although cost reduction and operational efficiency remain high priorities, with the deployment of sophisticated IT systems, organizations are harnessing the utility of BPO to help increase competitive capabilities, achieve greater flexibility and respond more quickly to global market conditions. The focus has shifted from outsourcing for cost reasons to focus on business outcome, including cost reduction. As a potentially powerful business instrument, IT is being used to support BPO in the growth and development of businesses, by accelerating speed to market, for instance.
Notwithstanding the reality that client corporations tend to delegate a portion of their internal supply chain to BPO providers primarily for cost reduction purposes, offshore BPO centres can offer a complementary dimension. They can be used to create value added products and services outside, although complementary to, the mainstream products of those client corporations. This approach does not cause any disruption of the business routine and does not add to fixed costs. It is however particularly applicable in evolutionary technology fields, such as software and multimedia, where specialists are not available in-house.

According to IDC [IDG News Service, 2004], fuelling the demand for BPO services are companies desire to reduce costs, focus on their core business, obtain new expertise, and increase productivity and efficiency through IT-enabled business process integration. As a consequence, clients require BPO providers to have global capabilities and IT and business consulting skills. Providers need also to understand that BPO market is made of a number of different segments and that each segment requires a significant level of expertise and specialization in order for the provider to provide high-quality services.

10.3 Selecting Mauritius as an offshore location

Mauritius perpetually faces two categories of overseas enterprises in the area of BPO:

- BPO providers that are evaluating various offshore business centres with a view to select the most appropriate offshore jurisdiction; and
- BPO outsourcers that are assessing the reliability of various jurisdictions for outsourcing their processes

Simply, Mauritius has to be successful at both. It must qualify as a reliable centre and fit within the criteria and mindset of the providers.

10.3.1 Criteria for the Selection of an Offshore Base

Demand for offshore outsourcing locations is exhibited by both global providers of outsourcing services (providers), which are constantly searching locations to optimize their operations, and by buyers of outsourcing services (outsourcers) looking for reliable provider firms to offload some of their activities, particular non-core. The scope of this particular analysis is limited to the choice of providers. In general, providers adapt their configuration and context according to the preference of their customers (outsourcers). As a consequence, it is obvious at any BPO provider will choose to operate at a location that is popular among their global current and potential customers. The generic criteria that they would adopt for selecting a location are the following:

- Attractiveness for their customers in terms of reputation and cultural identity
- Interfacing with global industries and international markets
- Political facilitation, regulatory regimes, business maturity and transactional costs
- Social and cultural atmosphere, schooling systems and business risk
- Economic fundamentals and stability
- Availability of technology and infrastructure to produce their types of goods
- Accessibility and connectivity of domestic and global telecommunications systems
- Quality and adaptive skills and cost-effective labour force

Selection criteria, describing certain contextual features of a country, are well documented.

10.3.2 Gartner Selection Criteria

In a press release in 2005 [www.gartner.com/press_releases/asset_135899_11.html], Gartner identified the following country selection factors:

- Government support
- English language skills
- Infrastructure
- Educational system
- Cost
- Political and economic stability
- Globalization maturity (including legal system)
- Labour pool
- Security and privacy
- Cultural compatibility

Gartner further insists that, although some countries look promising on paper, careful evaluation of their historical track records is necessary and more particularly, the following:

- Low socio-political turbulence
- Physical and cyber security
- Enforcement of intellectual property (IP) and patent law

Gartner notes that: “not all countries are able to offer all types of services or the scale of international experience to meet the needs of a buyer organization”.

Gartner concludes that the countries “best known for their IT-related activities, such as software development, IT-enabled services and outsourcing, possess the availability and the scale of skilled IT talent, workforce, investment funds and revenue”.

10.3.3 Jones Lang Lasalle Selection Criteria

Jones Lang Lasalle [Deciding where to offshore, 2004] suggests that the drivers for offshoring and the optimal location are determined by the nature of activities to be outsourced (i.e. products) and the circumstances of individual firms (e.g. quality-price relation).

No offshore centre can be good at everything and most offshore centres would be expected to have their area of product specialization. That is, the types of product in which they excel, because of either greater experience or adaptability to markets, and that give a comparative advantage to them. This arises out of such country factors as natural skills or experience in specific technology and industrial work. For instance, whereas the software products of India could be more suitable for the USA, those from China could be more suitable for the Australian or South East Asian market.

As such, no single location can claim to be the global winner as an outsourcing centre for all business processes. Three scenarios demonstrate their reasoning.

Scenario 1 Cost driven	Likely to favour most cost competitive cities, especially those with lowest labour costs	This scenario will apply to most contact centre and routine back office functions
Scenario 2 Quality driven	More even weighing between cost, quality of human capital and the business environment	Applies to activities that require significant value added in the form high-level technical or financial skills. Would include software development and R&D activities
Scenario 3 Market driven	While not underestimating the importance of cost, the major driver of such activities will be the size of the local market	Would include the tailoring of global products to local markets (e.g. producing ERM software) as well as services being provided for the local market

Fig 22: Jones Lang Lasalle Selection Criteria

Nonetheless, Jones Lang Lasalle (2004) identifies the major criteria (drivers) for selecting offshore location presented in the following table:

Drivers	Sub-factor	Indicators
Cost	Labour costs	Average wages
	Business (corporate tax)	Corporate tax on profits/tax burden
	Real Estate	Prime rents
	Telecoms and utilities	Telephone/electricity costs
Human capital	Labour supply	Number of unemployed and employed
	Labour quantity	Availability of information skills, education expenditure as a % of GDP, education index, higher education achievement
Business environment	Innovation	R & D expenditure, high-tech exports, e-readiness
		Business operating environment, growth competitiveness, political stability, connectivity and security of intellectual property
Market	Market	Forecast GDP growth, share of world GDP, inward direct investment
	Population	City and total population, forecast working age population
Infrastructure	Physical	Quality, energy infrastructure, electricity, capacity and air connectivity
	Telecommunications	Investment, fixed phone lines, Internet users, cellular phones
Real Estate	Structure	Liquidity, transparency, lease terms
	Availability	Stock, vacancy

Table 17: Major criteria (drivers) for selecting offshore location

10.3.4 NeoIT Selection Criteria

NeoIT offshore advisory and management services (2005) has identified **four factors** and determined their impact on location competitiveness:

Factors	Weight	Sub-factors	Impact on location competitiveness
1. People	25%	▪ Size of labour pool ▪ Number of tertiary schools ▪ English language proficiency ▪ Labour quality	▪ Easier scalability ▪ High capability to handle voice-based interactions with US clients
2. Infrastructure	25%	▪ Telecommunications (availability and reliability of digital network connection) ▪ Power ▪ Airports ▪ Transportation (physical road)	▪ Provision of uninterrupted work environment ▪ Remote management capability ▪ Lower cost of communications ▪ Easy physical accessibility for client personnel
3. Financial	30%	▪ Cost of living ▪ Availability and cost of real estate ▪	▪ Lower employee cost-salaries, benefits-higher savings from offshore outsourcing operations ▪ Lower cost of operations ▪ Investment savings while scaling up operations
4. Catalyst	20%	▪ Catalyst ▪ Government support and initiatives ▪ Presence of similar companies ▪ Social and political stability ▪ Climate (weather) ▪ Key developments catering to the ICT industry	▪ Aggressive business solicitation by the government ▪ Openness to invest in developing required business environment ▪ Stabilized work environment ▪ Comfort factor for companies

Table 18: neoIT Selection Criteria

10.3.5 Kearney Selection Criteria

A.T. Kearney has structured the criteria for ranking offshore BPO centres according to three main categories:

- Financial structure,
- Business environment and people
- Skills availability

These criteria are mostly quantitative and they are assessed using a system of weights where the selection of a location is made on the basis of the highest score. Quantitative criteria are however not sufficient and qualitative criteria are also important and, in certain instances, qualitative criteria could outweigh quantitative criteria as often choice is made on perception, information and value judgment as opposed to measurements.

For instance:

- Type of product is a key quality criterion in selecting a centre for outsourcing. Some locations could excel in a certain type of product, but not in another (e.g. Good at call centre but poor at data processing).
- Quality and reliability are the other key qualitative determinants, associated with the products of any centre, in particular.
- Although price is an important quantitative consideration, quality is key qualitative criterion. In particular, a low cost jurisdiction, but with an unreliable telecommunications network, is a high-risk centre and is not advisable.

10.4 EMS-Generated Criteria for Mauritius

Criteria specify certain qualities that locations should possess. Some of the qualities are generic that all offshore locations should possess, such as risk free, cost effective skills, etc. Others have to be specific and ought to be a set of attributes that differentiates a jurisdiction from others, thereby providing to it a unique space and positioning in the global market. These specific qualities have to be infused within the structure and components of the Mauritius offshore locations from its experience, circumstances or strengths and in the face of opportunities and challenges.

A BPO enterprise does not differ from any enterprise in the sense that it has a product to offer at a cost, but it has its specificity that can be reflected with its personal touch, adaptive technologies and skills. So far, there is no claim that Mauritius can make on the successful realization of BPO. However, there is no reason why, if the attributes of Mauritius were to be enhanced, it would not be in a position to achieve a critical mass of offshore BPO providers. With this ambition, it has to acquire certain key world recognized qualities.

One of the key challenges facing Mauritius is how to differentiate itself from other offshore jurisdiction to be singled out and chosen by BPO clients and global outsourcers. Price and cost are always crucial in any business, but they are not the only determinants. Some businesses use cost leadership approach, others adopt

product differentiation and market focus in the mould of niches to operate. In technology-orientated businesses, product differentiation often proves to be highly profitable, but there are other considerations governed by chosen criteria. This entails that Mauritius has to configure an offshore BPO architecture with certain specific qualities that it can use to acquire a unique identity in the global industry. This identity will build-in a set of strengths that will enable the Mauritius offshore BPO centre to successfully face external challenges.

The following proprietary model of EMS is designed to identify these qualities and formulate the policy actions towards their realization.

10.4.1 Profile of Mauritius

It is logical to assume that quite a few foreign-owned offshore BPO operators have chosen Mauritius as their base because its profile complies with their requirements and presumably with those of their clients. The contour of this profile is as follows:

- Relatively risk free
- Reputed as a friendly population
- Conducive working environment
- Bilingual and adaptive young talents
- Trained from a large variety of universities in the world
- Reduced administrative burden and costs
- Investor-friendly administrative framework
- Easy banking and unrestricted international capital flow
- World standard domestic and international telecommunications systems
- A fair host of legal instruments
- Committed government to BPO
- Easily reachable from any foreign centre by electronic communications and transport
- Effectively linked with far-end large international market places

10.4.2 Specific Key Strengths

- Telecommunications: A key aspect of BPO goods is that physical distance is not a critical factor as the delivery of the BPO products involves less physical transportation and more international broadband communications facilities. Mauritius has excelled in this particular area for more than a decade and, as a new entrant, it can claim to possess considerable relative strengths compared to many. This very communications element can be a steppingstone to stand up to the competitive challenge and contest the regional, if not the global market.
- Traditional markets: It can claim its vast experience on a large part of European markets, including English and French speaking markets, within the OECD (G-8 community) given that they have been the traditional market of Mauritius for agriculture, EPZ and tourism. Besides, Southern and Eastern Africa and the Middle East, to a lesser degree, can be regarded as known markets.

10.4.3 Specific Opportunities and Challenges

- Market demand: The high demand in USA and Europe for the software goods from Indian BPO and, more recently, the Chinese BPO are indicative that opportunities are present in the worldwide markets at some communications distance from Mauritius. The fact that India, China and a number of other countries have been active in these markets implies that if a new entrant deploys equal capacity, if not better, than the established providers, it has a chance to succeed.
- Legal restriction: Any location, wishing to establish itself as an offshore BPO centre, needs to confront various obstructions on its way to markets and these difficulties reduce its ability to attract businesses to its shores. Among those difficulties, political opponents to offshore BPO exist at an international level. For instance, the US Senate has imposed a ban on Federal contractors from outsourcing overseas (Analyst, 2004). The same attitude towards BPO was demonstrated in the UK.

10.5 Other Key Requirements

10.5.1 Direction

Roll out of capacity is in itself a major challenge that a country would face internally. Yet, Mauritius has to acquire further institutional capacity and cultural dimensions to be successful at facing the external challenges posed by markets and resolving associated issues.

To successfully implant itself in the global BPO industry and market, Mauritius would first and foremost has to determine a clear direction. The government has set a target of 20,000 employees in 2008, equivalent to some 25% of the employment in the EPZ sector. This is a clear direction. For comparison, Karnataka has a target of 360,000 employees in 2010 (See country analysis and competitive requirements for BPO). What is left is to register the instruments in terms of type, number and size of BPO enterprises to generate demand for employees in the period 2006-08. Based on the current trend of 40 employees per enterprise on average, some 500 enterprises would have to be set up.

10.5.2 Reputation

Both India and China were able to establish themselves as prime BPO providers after meeting a wide array of internal challenges, including the acquisition of knowledge, skills and advanced technologies. These three dimensions have become their key strengths and are the platform on which their reputation is built. This is the path that Mauritius needs to follow.

Reputation is a long-term asset and it is more related to the general opinion on a centre that the media project. A country's reputation becomes a world-recognized brand-the Mauritius Brand for example. But, it is acquired out of achievements. Countries like India, China, Malaysia and Singapore have built a strong reputation as high-tech destinations where software and other high-tech goods can readily be obtained. Malaysia set up Cyberjaya and Multimedia Corridor to pursue the

production of high-tech goods. All these centres have now acquired enough good reputation for the production of high-tech goods to pull interest of both providers and outsourcers. Whenever buyers look for outsourcing, China and India come first in their mind. The ability of India at producing multimedia and software is extensively publicized. Besides, India has acquired a reputation as good as the USA in the production of moving pictures on the basis of consistent worldwide industry-led promotion. Within India, Karnataka has established Special Economic Zone (SEZ) to establish itself as an upper-grade offshore BPO centre.

Reputation is a source of externalities. Good reputation creates a snowball effect and increasingly pulls clients. Poor reputation creates the opposite effect. Many BPO operators choose to operate at particular locations because of their reputation and their attraction on clients. Mauritius has a minimal record on BPO that it can proudly exhibit to the world in the same league as successful jurisdictions, such as India, China, Malaysia and Singapore. Compared to many, observers tend to show indifference towards Mauritius as a viable BPO offshore centre. Mauritius suffers from a reputation deficiency or, in other words, it does not have a brand image to influence the world market. The essential reason is that, contrary to other sectors for which it is particularly known, such as tourism and offshore finances, it has hardly any reputation in the field of technology in general and in information technology or multimedia, in particular. Its small scale, associated with shortage of skills and high average cost, does not help. It therefore necessarily has to acquire a certain reputation to attract attention and have a pull effect.

10.5.3 Quality

A country acquires a reputation out of successful achievement and signals to the market what it is good at or can do best. This reputation is built on natural skills or experience in specific technology or industrial work that enable some providers to be better than others for some products. Otherwise, there is no reason why Indian firms like Satyam, TCS and Infosys would operate in China and companies from the developed economies would establish research and development facilities in China or India.

Quality enhances reputation. The success of Mauritius in the areas like financial services, tourism and textile is a result of its quality products and services. Quality is a key requirement in BPO as well. For instance, The Analyst (2004) pinpointed poor quality as one of the challenges that India had to face after its emergence as the ‘back office of the world’. The operation of high profile BPO operators, like Accenture, Infosys and Huawei, in Mauritius who are synonymous with quality can be used as a leverage to show otherwise.

10.5.4 Types of Products

India, China and some other BPO locations offer volume and economies of scale. Their size tends to cloud the ability of others. The beauty of certain aspects of BPO, including software development and professional services, is that scale is a less significant factor. In any case, Mauritius does not have the means to compete on their ground and should avoid doing so. The limited production scale of Mauritius did not constrain its ability to attract sufficient world market attention in a few manufacturing, processing and offshore financial services industries. Based on its

experience in industrial processes, it has the ability to pursue economies of scope, particularly where it can complement the capacity for economies of scale of large operators that need business continuity. Many global operators have chosen Mauritius as an offshore location to use the natural multi-skills quality of the labour force in Mauritius to widen their scope and produce multiple products in smaller batches around their core product. In addition, the standard of products required in some African or European markets are more effectively met with skills available in Mauritius than those available elsewhere.

Learning from tourism and textile (EPZ) sector, Mauritius has over time been able to successfully develop a specific 'Mauritius' product adapted to both its internal resources and the target market. Notwithstanding its experience and capacity, it is now confronted to the challenge of developing further and at more rapid pace. Mauritius is already operating an offshore BPO centre and could extend its experience to the development of a Mauritius BPO product, using the support of its technological and academic institutions as well as the business knowledge of its entrepreneurs. Possibly, it needs more multinational entrepreneurs, foreign capital, technology, skills and markets in a globally competitive environment perpetually in a state of flux. The Government of Mauritius has gone a long way towards implanting both a culture and an environment for the pursuit of offshore BPO activities in Mauritius. But, its ambition to turn Mauritius into a major centre demands more efforts and further actions constrained by internal challenges.

10.6 EMS-Specific Criteria for Mauritius

It is on this thrust that EMS has drawn up a list of six criteria for Mauritius, both qualitative and quantitative, where reputation is the leading criterion.

- Reputation
- Types of product
- Quality of products and service, including delivery on promise and after sale service
- Financial structure
- Business environment
- People and skills availability

Highly demanded centres would be expected to fulfill all or most of the criteria. To be successful, Mauritius has to embody these criteria into its policy architecture to shape up its offshore BPO centre.

10.7 Model Policies towards Entry into BPO Industry

To have a clear visibility on its action forward, any offshore centre requires a precise set of policies built up from its own specific set of criteria that would address its innumerable challenges. The adoption of these policies will gear the offshore BPO centre towards realizing its goals.

Enabling policies are the policies designed to provide a model framework to facilitate the entry of BPO providers, and retain them, in Mauritius. These providers will be attracted by Mauritius because of what it has to offer in terms of its unambiguous specific qualities. Their expected good performance will be the reason that global providers will use for adopting Mauritius as their base and their continued good performance will be their justification for retaining Mauritius as their base. NeoIT model provides a framework that can be adopted towards formulating the Enabling Policies.

The goal of the model is for any country to achieve competitiveness. It rests on the assumption that, while development will build on its own momentum over time as one development factor leads into the next, it is important for government and suppliers (BPO providers) to work together to ensure the continued development of the industry. It presumes that if a location develops its resources according to certain relevant factors, it will develop and attract a base of suppliers with increasingly mature, competent service capabilities. In the pursuit of development:

Their first step is the development of a catalyst, which is an activating factor
Their last step is the development of financial factors

Countries need a catalyst as an object of attraction. Catalysts are activators that accelerate the entry process through producing stronger pull or attraction on BPO providers involved in a location selection process. It is synonymous with reputation. Countries possess both natural and man-made resources.

Natural or manmade resources of higher value, catalyst or reputation for high quality goods are strong pulling factors. For those countries possessing natural resources, the exploitation of these resources is a challenge. For those that have to build resources of a kind that can exert an attraction or pull on external buyers, it is a different challenge.

Countries need to identify the object of attraction (catalyst) and thereafter pursue with the development of their labour skills, infrastructure and finance.

Factor	Determinant	Policy instruments
Catalyst	Reputation	Technology producer Product types
Infrastructure	Business facilitation	Quality and reliability Institutional responsibility Secured business environment
People	Manpower availability	Skills development and knowledge base
Financial	Cost of operations	Infrastructure

Table 19: Object of attraction

The pursuit of development of manmade resources is according to the following steps:

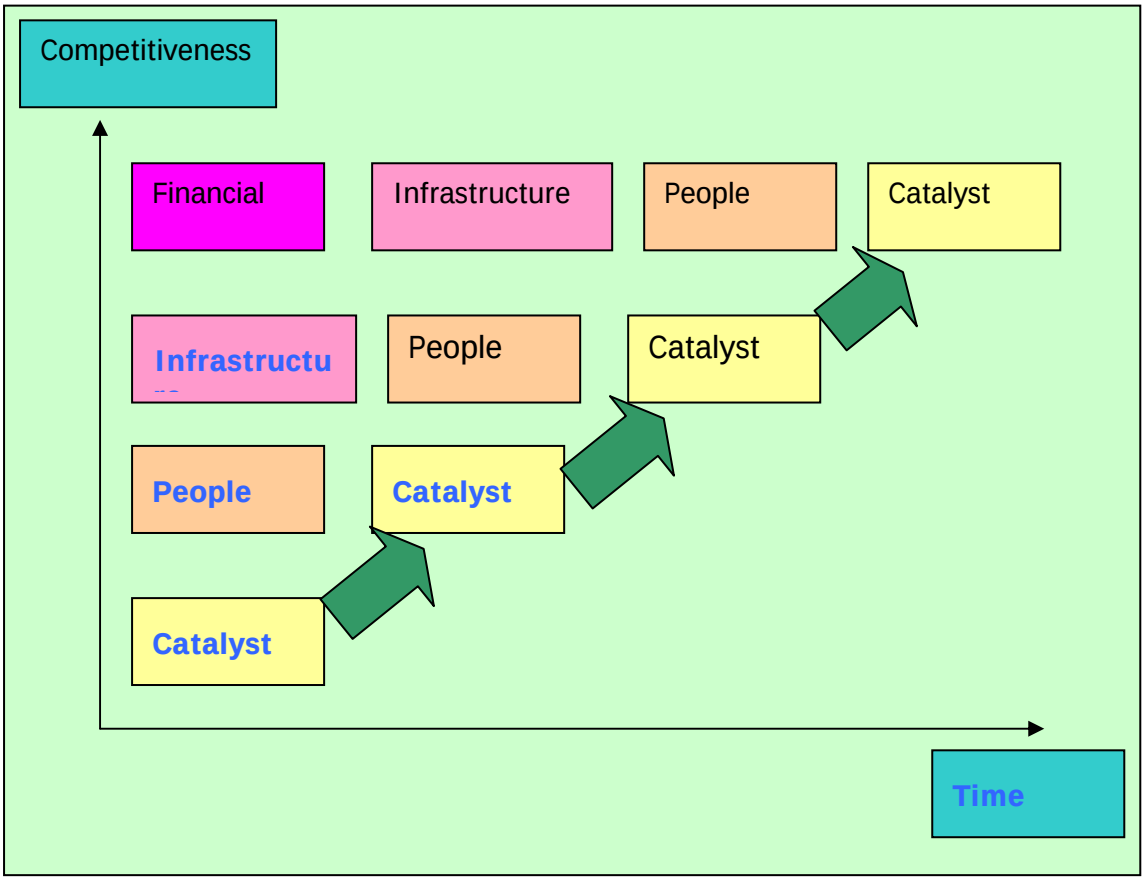


Fig 23: Steps towards competitiveness

11.0 EMS ENABLING POLICY MODEL FOR MAURITIUS

11.1 Seven-Policy Action Framework (SPAF)

EMS has determined a **Seven-Policy Action Framework (SPAF)** for Mauritius to acquire specific qualities that would infuse a 'catalyst' and project its offshore BPO centre to the world market.

SPAF is designed to deal with specific challenges that constrain its ability to acquire the EMS-identified qualities hereunder.

- Reputation
- Types of product
- Quality of products and service, including delivery on promise and after sale service
- Financial structure
- Business environment
- People and skills availability

The components of SPAF are:

- Turn into Technology Producer
- Types of product
- Quality and Reliability
- Institutional Responsibility
- Business environment
- People and Skills Availability
- Financial Structure

11.2 Turn into Technology Producer

Challenge I: The knowledge of Mauritius in the field of technology of telecommunications and IT is limited to integration, operation and troubleshooting. This is a major handicap. To acquire a reputation within the global BPO industry, Mauritius has to turn from being an importer of information technology to a producer of technology on a significantly important scale in areas where it has the capacity.

Policy option I: BPO is often generically understood as outsourcing in all fields. Its relatively new dimension is the use of information technology and telecommunications to find new ways to improve a process, cut cost or change the course of business direction. The first step for Mauritius, therefore, is to determine the technology segment that will drive its BPO industry so as to project 'what it wants to be known for and what is its core competence'. Using a technology-application matrix provides an overview of strategic directions available to Mauritius to undertake its development.

Policy Proposition: Based on the technology-applications matrix, offshore BPO centres would be persisting in routinization if they were to continue to produce existing applications through the use of existing technologies.

Routinization:

An example of routinization is the use of high quality domestic and international telecommunications services to pursue BPO activities in two areas:

- Call centre
- Basic data processing

Routinization entails large-scale production and mass market where small countries like Mauritius are clearly at a disadvantage. Mauritius cannot compete on the basis of scale. This implies that it cannot compete on the basis of routinization and mass market.

IT-driven applications:

The key success factor of an IT-based BPO centre resides first and foremost in competence in technology rather than in the size of the labour force. The offshore BPO providers that are implanting their activities in Mauritius recognize this fact and are already pursuing an IT-driven new applications strategy:

- IT-associated pre-press activities
- High value-added data processing
- Telecommunications and E-commerce applications
- Multimedia applications

Other examples abound. For instance, India is recognized first as a powerhouse in the field of software development. China is gradually building a reputation as a high-tech destination. Their scale of operation and resulting average low cost come second. India and China describe their products on the basis of high-tech and large-scale as key attributes, whereas Singapore promotes global connectivity and high-end complex BPO activities as the key dimension of its BPO products on the global market.

With direction and some effort, Mauritius could have the opportunity to specialize in innovative and newly created products using technologies. According to the technology-application matrix, the following possibilities are available to Mauritius:

- Take an existing application and modify it using a new technology
- Create a new application using an existing technology
- Create a new application using a new technology

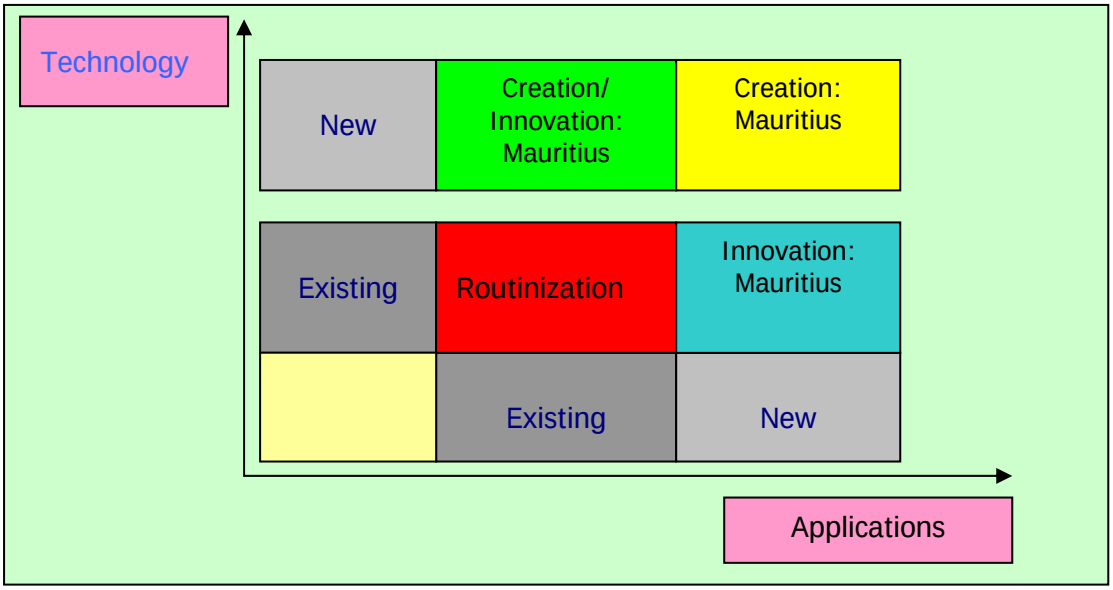


Fig 24: Technology-Application Matrix

Strategic market posture:

The resulting product departs from the operational routines and generates a string of tangible high end products, including software products.

As an example, the InfoComm Development Authority of Singapore (IDA) promotes Singapore in the following manner: “Backed by its trusted and reliable hub status, excellent global connectivity and access and Business Process Outsourcing competencies, Singapore is well positioned to tap into the market for high-end, complex BPO activities. IDA’s two-pronged approach to drive this looks at increasing demand for BPO and enhancing BPO capabilities” [IDA, Singapore, 17 February 2006].

Mauritius has excellent global connectivity facilities. By associating IT-driven products with the global connectivity, Mauritius comes close to Singapore, a country of equivalent scale. In this respect, the above technology-application matrix can be used to describe the core competence of Mauritius generically as “an offshore provider of high-tech applications for BPO complex activity supported by secured global broadband connectivity”. Adopting new applications, technologies and business continuity as its strategic market posture relative to its closest competitors and implementing effectively the chosen high-tech strategy will allow Mauritius to do the following:

- Advantageously use both its global connectivity and its small scale to provide business continuity services. A couple of international firms, including Infosys, are currently using Mauritius as a Disaster Recovery Centre, which is a facility to ensure business continuity. Infosys actually chose to set its centre in Mauritius ahead of Singapore although the basis then was only access to global connectivity. The business continuity principle can also be applied to a business system where large scale has to be complemented by small scale to perform certain specialized jobs to avoid time out or take advantage of new

opportunities without disrupting routines. This reinforces the application of economies of scope as a strategy coupled with new applications.

- Pursue such activities that can build up its reputation as a high-tech BPO destination in equal term as Singapore and Malaysia, and complementary to China or India. The operation of Infosys, Hinduja, Huawei and other similar firms in Mauritius, with their large global network of contacts and development capability, reinforces this strategy, but in the short term. Raising its high-tech profile on a more sustainable basis means that Mauritius has to participate in development works and acquire a solid technological foundation in certain specific areas, no doubt with the assistance of local and foreign universities and other parties.

In this manner, large BPO outsourcers and international BPO providers will themselves find Mauritius attractive enough to single it out as their choice.

11.3 Types of Product

Challenge II: The Mauritius offshore BPO industry must acquire an identity, a personality and a reputation that differentiate it significantly from other jurisdictions in the global market. The types and quality of its products should yield comparative advantage, compensate for its small scale and cost disadvantage, and strengthen its attractiveness towards global providers and customers in search of a risk free BPO centre.

Policy option II: Taking account of the exiguity of its scale, Mauritius cannot compete on the basis of cost leadership. It has to compete on other quality-led attributes, such as contents effectively blended into high tech applications, and be recognized internationally for it.

Policy Proposition: Mauritius cannot pretend to have the capacity to generate all the contents that it could possibly need because of its small scale. Content refers to the mass of applications molded as products and services flowing out of a business process. Countries build their reputation from specific product types. Products therefore provide a means for any country to occupy a specific position in the global market sensibly different from other 'competing' BPO centre.

Product specialization:

The small scale of Mauritius imposes a limit on its product scope to a narrow market stripe-which is product specialization. The offshore BPO of Mauritius is already adopting this principle and it is focusing of a limited range of products:

- IT-orientated: Software development for diverse industries and applications, including multimedia
- IT- enabled services: e.g. website development, call centre, pre-press, back office support

- Generic BPO services: Professional services (e.g. architectural, engineering, business plans, financial, legal, insurance, medical etc)

The content-market matrix can be used to demonstrate that Mauritius has to focus on product specialization in any market.

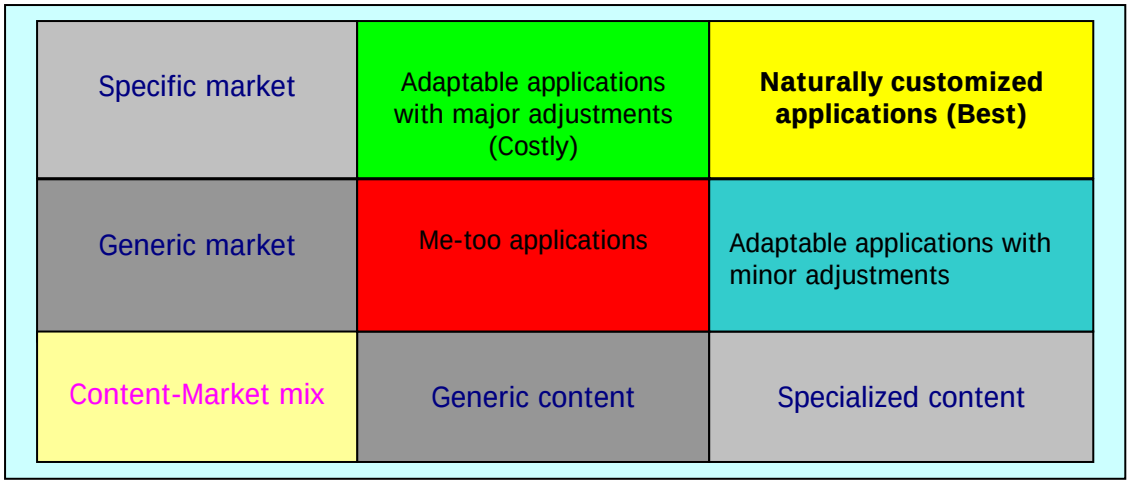


Fig 25: Content-market matrix

The matrix generates four kinds of applications from two kinds of content for two different markets, generic and specific.

- Content is generic:
  - Me-too applications: Mass market requiring economies of scale
  - Adaptable applications with major adjustments: Specific market, but content adaptation to fit within the specificity of the market is complex and costly

When content is generic, a producer has to compete on price that can be fulfilled only through economies of scale. Mauritius does not have the competitive advantage in the mass market and where it has to undertake costly product adaptation. It does not fit in when content is generic.

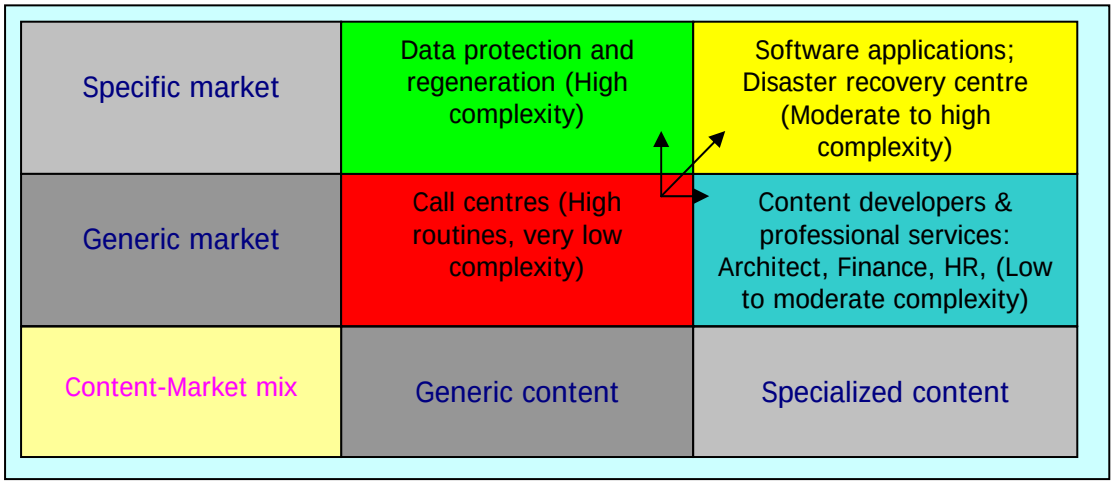
- Content is specialized:
  - Adaptable applications with minor adjustments: Generic, but segmented, market
  - Naturally customized applications: Specifically segmented markets

Product types:

On the contrary, Mauritius can aim at specialized content, such as specific software for multimedia or 3G phones, where it does not have to compete on price factors.

- Adopting specialized contents in which it has a marked competence, and focusing on some specific products-which is product specialization, “naturally customized applications” (in above map) emerges as the most suitable segment for Mauritius

- This is a niche strategy. Small countries have a tendency to follow this strategy. For instance, Philippine has adopted medical transcription as its specialized product (source: BOI, Mauritius)
- However, even among technology-complex products, there is a grading: lower complexity, moderate complexity and upper complexity
- While projecting itself as a producer of high tech products, Mauritius can follow a precise evolutionary path moving from where skills are available and upward



- Generic content:
  - Me-too applications: Call centres
  - Adaptable applications with major adjustments: Data protection and regeneration

- Specialized content:
  - Content developers and professional services: Architect, Finance, HR etc
  - Software applications; Disaster recovery centre

The focus is narrower for specialized content. It imposes deeper knowledge and higher skills. If it succeeds, it will be in a position to compare itself favorably with other centres. This will entail producing and selling specialized or complex types of product and value-added services in high-end markets that will generate a reasonable level of earnings.

The problem with high-tech or knowledge-oriented BPO is that labour has to be available locally. Foreign-imported labour is not financially sustainable in the long term.

Concentration:

Small scale also discourages fragmentation and scattering and encourages concentration, which brings enhanced organization and better exploitation of the resources. It yields the convergence of different, but related, resources and reduces the spread of effort and energy. In addition, it improves information flow, reinforces

attraction or pull, facilitates policy application, encourages clustering or cooperation, reduces transactional costs, improves cohesion and enhances quality.
Concentration does not mean only industrial concentration as it goes beyond the concept of industrial zone and industrial buildings, like cyber city in Mauritius. It is closer to an industrial park with a special status, such as Special Economic Zone (SEZ) in Bangalore, Karnataka (India). SEZ operates under tailor-made laws and specific facilities. They are specifically delineated duty-free enclaves treated as a foreign territory for the purpose of industrial, service and trade operations.

They seek to promote foreign investments and other transactions, and eliminate domestic regulations, restrictions and infrastructure inadequacies. It is a model closer to the Mauritius Export Processing Zone (EPZ) and Mauritius Freeport Development (MFD) but with its specific features.

Development model:

With the clarity of choice about the product option, comes the need to determine the model that will spearhead the development of the offshore BPO industry. Two possible approaches are available: 'development by design' as opposed to 'laissez faire development'.

- Development by design model follows a crisp approach where development is planned. There is a vision, a target product, a target goal, a precise development model and a definitive course of action to deal with the country's structural weaknesses, including human resource skills and cost level, in support of production.

- Laissez-faire design is a fuzzy, 'garbage can' approach where the BPO providers are basically investors and it is assumed that they know the market best. The authorities are fundamentally environmentalists and their role is to provide simply the business environment (legal, quality of life, etc) and the producers will do the rest.

In a state of limited resources, but goal is ambitious, the pursuit of 'development by design' model is the most fitting. This model enables productive efficiency and market access, but its execution necessitates institutional leadership. It requires the delineation of the sectoral borders institutionally, if not physically, of an offshore BPO industry with all its sub-sectors within the wider national industrial set-up.

Offshore BPO industry:

Placed within the context of industrial development, BPO entails the application of labour to specific facilities for the production or processing of specific types of product designed for distribution in certain markets. A collection of BPO enterprises grouped within a site (e.g. cyber city) or scattered around, but within an institutionally delineated boundary, gives birth to a producer group or an industry on the look out for markets. A homogeneous industry particularly directs its products to a homogeneous market, at one geographical place or several places.

In particular, the mapping of the offshore BPO industry within Mauritius will generate the emergence of an organized Mauritius offshore BPO industry as a tangible enough outcome to attract targeted and institutional direction.

The existing BPO providers in Mauritius can be classified according to their scale in two groups:

- The large providers are usually in a position to manage on their own as they operate within financially powerful global networks with access to global markets (e.g. Satyam, Huawei, Accenture etc). The financially robust enterprises have taken accommodation at one of the cyber parks, the most visible being the cyber city.

- The small ones may or may not combine the normal professional activities with BPO activities, particularly in the knowledge-based areas such as transcription and technical design. They are scattered around. They need to be supported to develop and acquire scale and quality.

An organized industry facilitates the framing of specific regulations, registration of enterprises, assessment of needs and targeted delivery of assistance, particularly in regards to technology, skill upgrading and financial incentives. Furthermore, it generates positive externalities, one of which is the identification of common policy ground between offshore BPO, offshore financial services and Mauritius Freeport Development (MFD) Authority.

Besides, it brings providers of various origins, but sharing a common objective, closer and together. This facilitates the formation of homogeneous grouping in the form of focused industry association that can act as instruments of development and promotion.

11.4 Quality and Reliability

Challenge III: The relationship between government and the BPO industry has to be re-engineered. The government and the industry association have to jointly determine the product profile of the Mauritius offshore BPO industry, the quality standards and compliance processes with a view to further its development.

Policy option III: Government authorities have to develop a collaborative relationship with the BPO industry association where government focuses on its policy role and work in partnership with the industry to achieve the policy goals.

Policy Proposition: Products for niche markets, as ought to be the strategy of Mauritius, have to pass the test of quality and reliability. This is totally in the hands of the producers of the BPO products and 'quality-deficient' enterprises run the risk of being rejected by the markets. However, although quality and reliability appear to rest outside the control of government institutions, the negative implication of poor quality on the growth of industry as a whole cannot be ignored. For instance, it is obvious that potential BPO providers will doubt the reliability of Mauritius as a call

centre hosting facility with the break down of international telecommunications system even if it is occasional.

Quality is strongly correlated with reputation and poor quality tarnishes reputation. On the global market, poor quality is expected to be associated more with the industry of a country than with a constituent enterprise. The safeguard of the reputation of the industry is a collective matter and resides in the hand of an association or government or jointly. To enhance the reputation of the industry and its location, it looks obvious that government cannot minimize its role in matters of quality and service reliability. It needs to get involved to an extent probably by imposing norms in a collaborative industry-government partnership, unlike the financial services sector, where there are laws.

Implementation:

Quality and reliability should not be limited to a policy goal, but implemented. Rules are necessary and compliance to quality rules is mandatory, but the question is what are the instruments that are available to embrace and nurture quality and reliability and enforce it. Government has the possibility to act upstream in:

- Screening of new entrants into the industry
- Encouraging and facilitating quality certification
- Promoting quality as a culture
- Education and training

But, the fact remains that downstream policing is difficult, if not impossible. The government ought to limit its area of intervention to policy and work in cooperation with the industry, though its association, to implement the policy. The scope of the government-industry association extends to:

- Product definition
- Quality and reliability standards
- Diffusion
- Enforcement

Industry Association:

The grouping of producers into an association provides a means for a collaborative relationship between the government and the industry association to help propagate a culture of quality and reliability. The National Association of Software and Service Companies (NASSCOM) is a good example to emulate. One of its foundation stones is “to work proactively to encourage its members to adopt world class management practices, build and uphold highest quality standards and become globally competitive”.

The industry association in Mauritius, through the interaction and networking of the members, create the opportunity for clustering and cooperation. Besides becoming a focal market place for the industry, it can take over the following responsibilities:

- Assist the government in the domain of technological expertise, particularly where it applies to compliance to international quality norms, such as ISO recommendations and certifications
- Formulate special schemes to improve technology skills through technology up-gradation schemes and international certification
- Jointly elaborate with government bodies the specifications on quality standards for the industry and placed under government authority for ensuring compliance and diffusion
- Create linkages with educational nodes such as universities, technology centres and research institutes in other BPO jurisdictions and global markets
- Contribute, through its experience and linkages with international standard bodies, towards ensuring that the Mauritius products stand the test of quality and reliability, and project an image of superior competency on the world market
- Act as a watchdog on global connectivity and price band

Impact of Global connectivity on Quality:

Outsourcing is pursued for a variety of reasons, including cost advantage, superior competency, capacity utilization improvement and business risk mitigation. Quality of products and services can be a good reason why a buyer would want to outsource and, more particularly, outsource to a particular location or enterprise. Global connectivity impacts positively and in a significant manner on the demand for the offshore BPO centre. To a large extent, cost-effective and secured global connectivity can be a powerful instrument for Mauritius to market its BPO industry overseas. It is another area where government-industry collaboration can be developed to ensure that the industry is effectively serviced according to its requirements.

The reliability of connectivity is an essential requirement for BPO providers, particularly those enterprises, like call centres and secondary databases, which depend on international communications traffic. As a consequence, international connectivity can make or break the reputation of an offshore BPO centre. It has to ensure service continuity, which entails almost negligible failure rate as a test for reliability of service. Secured connectivity, which signals quality service, provides leverage to offshore BPO activities in a competitive environment. Disaster Recovery Centre, which is simply a secondary database at a different location to secure critical business data, becomes relevant only if international connectivity is reliable.

The architecture of the international telecommunications network infrastructure in Mauritius provides for both bandwidth capacity and diversity through under-sea cables and satellite systems.

- Submarine optical cable SAFE provides global connectivity, with direct termination to India, Malaysia and South Africa. The SAT3 leg from South Africa extends a further direct connection to Western African countries, Spain and France. The under-sea East African Submarine System (EASSY) project proposes to unfold a direct route from Mauritius to East African countries and Jeddah, Saudi Arabia via South Africa. When implemented in a near future, the EASSY cable will provide cable facility diversity and enhance reliability.

- In the meantime, satellite systems, over the Indian Ocean and Africa, can be used to complement cables for connectivity and service continuity. Satellite systems, with digital broadband capacity, can be good alternatives to cables in particular cases. For instance, Bangalore (Karnataka) provides satellite system, in addition to fibre connectivity, to offer international bandwidth to some 1050 IT customers. In Mauritius, the cable-satellite diversity is not being exploited sufficiently and the cable system is used to carry most of the traffic load. As a consequence, quite a few BPO providers, which depend on the public telecommunications providers, are affected whenever there is a cable failure.

11.5 Institutional Responsibility

Challenge IV: The Mauritian society has to undertake a cultural transformation to succeed in the consolidation and operation of an offshore BPO industry, distinct from the standard ICT services sector. This cannot be achieved without political direction and institutional adaptation to bring about attitudinal change, emancipation and alignment of social groups to common goal.

Policy option IV: It is necessary for government to chart the responsibility of the leading institution, responsible for ensuring the development and growth of the offshore BPO industry, and to map out its connection with the subsidiary institutions.

Policy Proposition: No doubt, the attainment of technological excellence can be an effective objective to lead cultural and attitudinal transformation of the Mauritian society and its institutions. High reputation as an excellent technological centre is designed to build up supply capacity and galvanize demand for the BPO products on the global market. A number of development enablers can be used in that transformation process, including:

- Focus on management of demand for offshore BPO products
- Greater importance to technology development as opposed to routinization
- Government foreign policy incorporating a hi-tech learning and knowledge transfer dimension with extended market reach and cultural heritage
- Further internationalization of the country with focus on more intensive foreign language learning and outward looking radio and television broadcasting
- Limited participation of government bodies in profit-orientated businesses and promotions in favour of industry-led initiatives
- Joint use of international promotional platforms with industry-led bodies, sharing common goals
- Educational and cultural policy with focus on creativity and productivity
- Cultural policy towards replacing cultural diversity by cultural unity for creating a unified Mauritius work force to face external challenges competently
- Strict equity and equality policy to favour larger participation and wider accessibility to resources and opportunities

- Break down of oligopolies and leveling the capacity and wealth of enterprises, particularly in the technology areas
- Transparency in the business processes of public and private sectors

It is the role of government to institute change through appropriate policy mix and in partnership with the competent organizations.

"The Philippines' IT-Enabled Services Industry" by Ted Chang (neoIT, 2005) identifies many of those enablers together with some of the key responsibilities of government for developing competitiveness.

The table below outlines the key role of Government in developing competitiveness

Objective	Action Item	Policies/Mechanism
Developing firm capabilities	▪ Upgrading internal capabilities (e.g. software engineering, R&D) through certification, training, development of resources and organizational development	▪ Promoting awareness of process needs ▪ Government promotion of awareness of process ▪ Partnership across different stakeholders (i.e. government, firms, universities)
Management of companies	▪ Improving entrepreneurship and management in sectors ▪ Linking entrepreneurs with technical people	▪ Government assistance to SMEs ▪ Trigger reverse brain drain
Enabling financing	▪ Improving availability of financing for start up and growth of enterprises ▪ Improving the environment for foreign investments	▪ Government and industry efforts to encourage financial sector and cross sector investments and joint venture ▪ Government subsidies and assistance ▪ Government action to stabilize the macro-economy, reduce corruption and provide signaling mechanism of commitment (e.g. co-investments)
Enabling access to international markets and clients	▪ Developing contacts with clients ▪ Increasing international visibility of the industry	▪ Government assistance for attending trade fairs & study tours ▪ Visibility through industry associations ▪ Activities of expatriates, foreign partners and investors
Enable domestic company collaboration	▪ Building of strong complementary firms to give industry a more comprehensive base of competencies ▪ Sharing of information/coordination of efforts across firms ▪ Cross-sector externalities (economic benefits, knowledge etc)	▪ Government to provide a catalyst ▪ Seeking lead firm's assistance ▪ Local MNCs acting as clients ▪ Formation of a more powerful industry association to coordinate responses and share information ▪ Strengthening of other related sectors ▪ Formation of partnerships and collaborations between BPO and other sectors

Enhance availability and quality of resources	▪ Improvement of human capital through educational sector curricula and other reforms to increase relevance to industry	▪ Government focus on education ▪ Industry partnerships with education sector ▪ Linkages with foreign universities

Table 20: Role of Government in developing competitiveness

Institutional Authority:

First among the transformation to lead change is the identification of an institutional authority for all matters concerning the development of the offshore BPO industry. The Government of Mauritius has the general responsibility to facilitate the consolidation of existing markets and developing new markets through inter-governmental relation channels. It has to organize investment promotional campaigns to attract new BPO operators into the industry. The Board of Investment (BOI) is the institution entrusted with that responsibility, usually a marketing function. Besides, it is usual for a unique ministerial authority to be entrusted with the technical responsibility for directing the development of the BPO and ensuring coordination of its operation.

For example:

- In India, "promotion of standardization, research and development in telecommunications" is one among the key objectives of the Department of Telecommunications within the Ministry of Communications and Information Technology at federal level. It acts as a precursor for electronic- and IT-based development in India.

- The Department of IT in the State of Karnataka pursues some key activities as follows:

  - The Department of IT has set up Karnataka Biotechnology & Information Technology Services (KBITS). This organization assists companies in selecting a location and in obtaining Government incentives and concessions. It helps to identify manpower resources as well as resolve the problems, if any, of BPO companies with any other government departments.
  - A High-powered Cell has been constituted in KBITS to promote investment of BPO companies in the state. This cell provides all the information regarding the investor climate, incentives and concessions, availability of manpower, advice on location etc. in the state. It will provide specific information to companies based on their specific needs. This market-friendly cell will participate in various national and international conferences to provide such information.

BPO Compared to ICT:

Offshore BPO activity tends to be an activity with either a significant component of IT or a significant requirement for both IT and telecommunications. However, it is necessary to compartmentalize BPO and IT or ICT to avoid any confusion at the government level. As described elsewhere in this document:

- ICT is a blending of telecommunications, IT and audio-visuals and often understood as multimedia

- BPO is a different discipline. It is multi-disciplinary built on the pervasiveness of telecommunications and IT in all the industrial sectors. While telecommunications and IT are among its key inputs, the market scope may or may not be related to telecommunications or IT. In a sense, BPO is a process that, in certain cases, makes use of IT for accomplishing certain non-IT tasks

- The required skill for the BPO industry is specific to the relevant industry, but combined with the use of IT tools. Hence, the demand for knowledge workers with IT skills as opposed to IT workers per se

Product	Main skills	Market scope	Sector
Data treatment	IT	Database	IT
Accounting	Accountants	Finance	Finance
Airline billing	Aviation	Airline	Transportation
Legal transcription	Attorney and Crown Counsel	Legal	Judiciary
Call centre	Communication	Marketing	Commercial

Table 21: Required skill for the BPO Industry

Ministry of IT and Telecommunications (MITT):

The Ministry of Telecommunications in any country usually assumes a technology-focused role to improve the technology foundation and stocks in the field of information and communications, including telecommunications. In Mauritius, this responsibility is entrusted to the Ministry of IT and Telecommunications (MITT). Because of the heavy dependence of BPO on IT or ICT, the technical responsibility for developing and consolidating the BPO activities falls under the same Ministry, MITT. The onus is on the Ministry to combine policy making and enforcement with competency in the relevant technology.

The need to enhance the technology content of BPO for reputation and global competitiveness reasons entails a greater involvement of ministerial institutions with technological expertise. MITT would be required to set up a specialized technology unit to pursue research and development in new technologies, products and services in coordination with the industry and the BOI. As an alternative, the National Computer Board (NCB) and Information and Communications Technologies Authority (ICTA) can be used as the two technology arms of MITT. This compact unit forms a specialist core that can be used to support the BPO industry.

In a pro-development architecture of BPO, the MITT, supported by its technology arms, has the opportunity to pursue the following responsibilities:

- Provide strategic orientation on effective technology stocks and on the availability of adapted resource capacity

- Research on technological evolution of global BPO industry
- Work in association with universities within and outside Mauritius on technology development
- Encourage the formation of industry association focused on IT and ITES and work closely with them to implement national policy goals, including development of the demand side

Some other key responsibilities of MITT:

- Besides, to get into the mould of technology in telecommunications, IT and multimedia (ICT), one of the routes to acquire technological competence is technology transfer. Among its first steps, government, through MITT, should ensure that contracts between public institutions and technology suppliers, independently of the type of business association, including equipment supply, joint venture or capitalization, contain a strict technology transfer clause. Many of the foreign firms come to Mauritius for its markets. In return, they should associate Mauritius with technology development in an active and participative manner. India and China pursued this policy with the large telecommunications and IT groups from the developed economies and they have achieved tangible results.

- MITT will also need to pursue coordination with other key institutions involved in the BPO industry. Key among those is the Business Park Mauritius Limited (BPML), which is the provider of office infrastructure at the cyber parks. BPML would have been expected to provide a total infrastructure solution to the BPO providers within the cyber parks, including international telecommunications, with a view to offer a least cost solution. Unfortunately, BPML implements only an internal housekeeping kind of function taking care simply of internal accommodation and facilities within the parks. At most, they have a coordination function. This does not help the BPO providers that have to bear the high costs of telecommunications service provision. In this area too, a national view will be needed to bring about a change in support of the BPO industry.

Review the role of NCB and ICTA:

Both the NCB and ICTA possess the expertise in technologies of information and communications that are required for the development of the BPO. Unfortunately, these institutions limit their competence to certain particular areas without an in depth inference with the BPO. This is limiting their scope and service potential to the nation. Both can add value to the building up of an offshore BPO industry.

In its current configuration, the NCB limits its activities to the promotion of the use of IT tools, training, information dissemination and sensitization of the public to informatics. This role no doubt important can be complemented by technology information and coordination in the area of BPO for the purpose of development of product specialization.

In a similar manner, the ICTA is the licensing and enforcement authority in the traditional telecommunications and Internet operation set up. A more active role will

incite the market further and have a participative role in the development of a BPO industry, including working in association or joint venture with technology universities.

BPO Industry Association:

There is a need to consolidate the variety of associations within the BPO industry into a BPO industry association that aggregates the members into a fairly representative group. NASSCOM (India) is a model that Mauritius can adopt for its industry association.

NASSCOM:

NASSCOM was set up to facilitate business and trade in software and services and to encourage advancement of research in software technology. It is the premier trade body and the chamber of commerce of the IT software and services industry in India. In addition, it partners with the Government of India as an advisor, consultant and coordinating body for the software and services industry in India. It describes its primary objective as follows: "to act as a catalyst for the growth of the software driven industry in India. Its other goals include facilitation of trade and business in software and services, encouragement and advancement of research, propagation of education and employment, enabling the growth of the Indian economy and provide compelling business benefits to global economies for global sourcing". NASSCOM follows a seven-fold strategy to achieving the objectives:

- Partner the Government of India and State Governments in formulating IT policies and legislation. Partner with global stakeholders for promoting the industry in global markets
- Strive for a thought leadership position and deliver world-class research and strategic inputs for the industry and stakeholders
- Encourage members to uphold world-class quality standards
- Strengthen the brand equity of India as a premier global sourcing destination
- Expand the quantity and quality of the talent pool in India
- Continuous engagement with all member companies and stakeholders to achieve strategies to achieve shared aspirations for the industry and the country

Association in Mauritius:

The association can be an effective showcase to facilitate the marketing and sales of the industry products to the overseas markets. This is in addition to its interfacing function with government and overseas associations. In this way, the association has the possibility to shoulder a greater share of responsibility to relate the industry to the global market in various ways, including local fairs and overseas road shows. It will take over the leadership from government institutions in matter of promotion of the industry products in the global market. It nevertheless has to work in cooperation with the appropriate government institutions, such as the MIIT, Board of Investment (BOI) and other relevant institutions. This will bring about a change in

business practices and leave it more to the producers themselves to take a responsibility to market industry's products.

At an initial stage, there could be a transitional period during which the assistance of government will be needed, but with a clear vision to make them independent bodies with the capacity to link up with international markets and pursue production on a sustainable basis. This is the only option to developing an effective, renowned and sustainable offshore BPO industry. They can collaborate on other precise actions particularly in regards to resources, innovative technology and new markets.

Mapping of responsibilities:

The architecture maps the MITT other institutions towards the global BPO market:

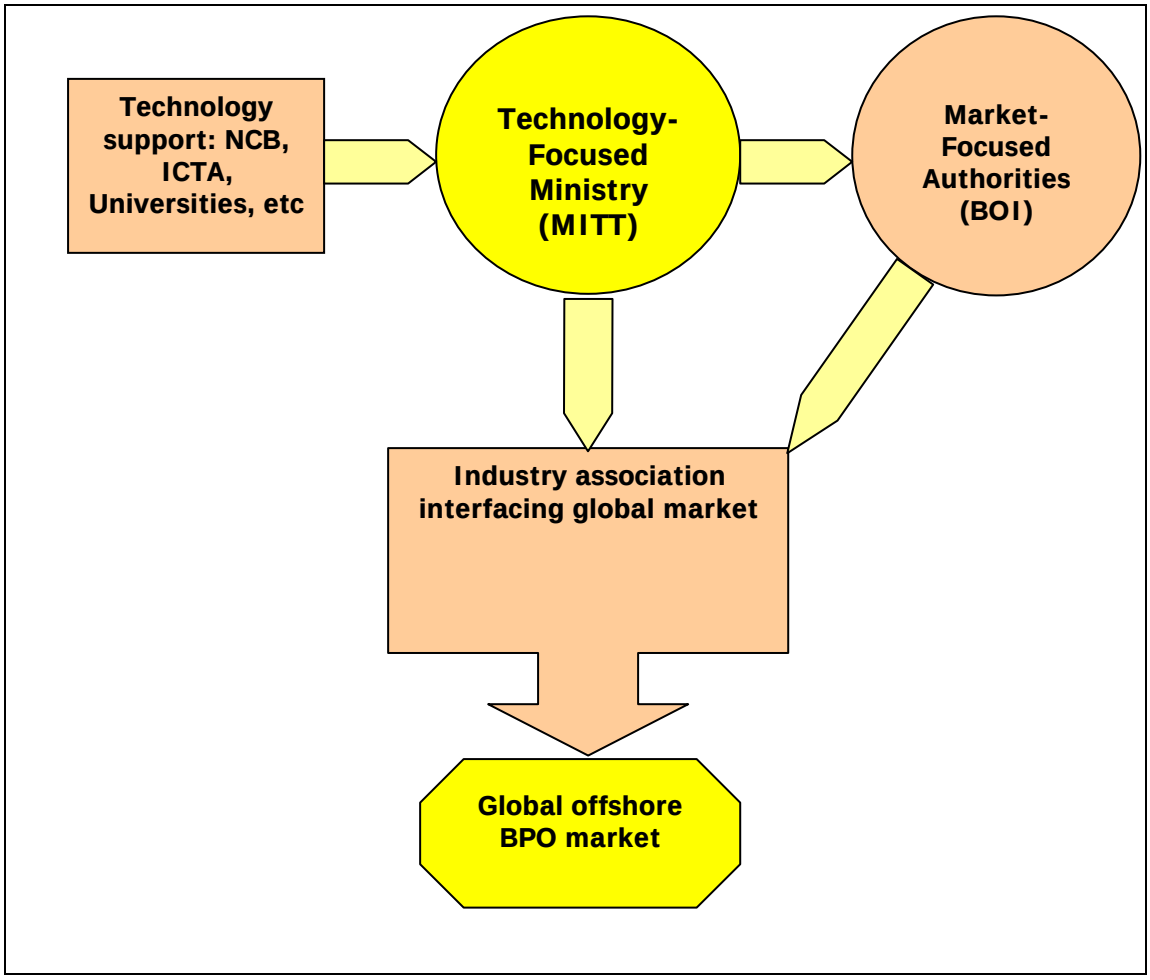


Fig 26: Mapping of responsibilities

The technology-focussed MIIT:

- Is supported by its technology competent arms
- Works with both market-focused authorities like BOI and BPO industry association
- Assists them to be competitive in the global market

Other Policies:

High cost of international telecommunications is one more challenge in the pursuit of development. But, they are more common ones that all jurisdictions have to face, such as need for higher productivity and adaptation to new global market requirements in terms of security and skills. They are addressed under business environment, skills availability and financial structure.

11.6 Business Environment

Challenge V: The offshore BPO centre has to be secured against illegal practices that are common in the intellectual property/knowledge/software/cyber industry, such as piracy and such other odds, to promote knowledge workers and protect its reputation as a risk free centre

Policy Option V: Adequate laws have to be introduced that fit an evolutionary cyber and electronic environment such as to establish a secured business framework adapted to the demand of high tech industry

Policy Proposition: Business environment is assessed by country risk, country infrastructure, cultural adaptability and security of Intellectual property. Mauritius is a relatively risk free country with a good physical infrastructure and a diversified culture. In fact, they account among its key strengths. As regards security of Intellectual property, Mauritius has gone a long way towards establishing an arsenal of relevant laws, but requires full enactment. They include laws against cyber crimes to promote content development, software development and e-commerce. The demarcation of the frontiers of the BPO industry generates the need for more focused laws adapted to its specific needs. Some of the issues for which laws have to be enacted include the following:

I. Security and Data Privacy

The issue of information security and data privacy is assuming tremendous importance among global organizations, particularly in an environment marked by computer virus and terrorist attacks, hackings and destruction of vital data owing to natural disasters.

Global customers are virtually demanding that their outsourcing service providers adopt stringent information security measures, as the consequences of an information security breach could lead to business harm and legal liability. A number of organizations are outsourcing their non-core processes today to faraway destinations and are building robust provisions for information security into their contracts with service providers.

In order to further enhance Mauritius' security management practices[20], the following is recommended:

- The Mauritian Government should reach an agreement with other countries and ensure that compliance on data protection is equivalent to complying with other international laws
- Companies need to hire certified security professionals to take care of security issues and leverage their knowledge and expertise
- Spending on security should not be on an ad hoc basis and companies need to make adequate investments for security purposes
- The Government should draft simple compliance guidelines so that laws can act as an accelerator for conducting business and do not prove to be a hindrance
- Laws should be enforced so that suppliers who disclose licensed software within the software license agreement are liable under such laws as trade secret laws and copyright laws. A supplier that discloses information about, for example, a person's financial status, health condition or employment could be liable under privacy laws.

II. Data Protection

Data protection refers to national laws drafted to protect the confidentiality of personal data of a country's citizen or citizens. With the exponential growth of the power and use of IT, it has become increasingly easy to save, access, process and transfer large volumes of data. However, this has its downside for access to data and has also opened the door to data misuse.

There is a growing concern amongst countries about unidentified persons having access to sensitive information such as credit card numbers, social security numbers, and medical histories. Incidents of misusing data in the past have prompted countries to draft strict laws to secure data being sent to other countries. Nations in the EU, United States, Hungary and Switzerland have adopted stringent data protection laws[20]. Mauritius should adopt the same approach to secure the BPO environment.

Regarding European Union (EU), for instance, the European Commission has issued directives to all member Countries to implement a concordant set of laws to regulate the storage, use and transfer of data, thus ensuring a higher level of protection within the Union [20]. The latest EU Data Protection Laws are designed to ensure that personal data of citizens in EU countries is not sent to a country that has less stringent legal protection. This means, sending any storage media containing the personal data of EU citizens to countries outside the EU is prohibited. Hungary and Switzerland are exceptions since they are considered to have equivalent or stronger data protection legislation [20].

An EU entity will find it easier, safer and quicker to offshore to another EU country than to a non-EU country as it abides by the EU Directive. This partly explains the increasing attractiveness of the new Eastern European EU members like Poland, Hungary, Slovakia, Estonia, etc. Mauritius can expect to gain some market share if it complies with the European Union Directive. Given the limited number of recognised countries to date, and the absence of major BPO players like India, Philippines, South Africa, Morocco and Tunisia from the list, there is an obvious window of opportunity

for Mauritius to be part of the leading pack. Mauritius has adopted the Data Protection Act (DPA) that is compliant with EU norms and is undertaking necessary steps to adopt them.

The Mauritius Data Protection Act (DPA) is based on the UK legislation and it ensures that data confidentiality is maintained (through physical security, technological initiatives, policies, ethical guidelines) and that data is used only for the purposes authorized by its owner or supplier. Once enacted and fully enforced, it will send a clear signal on the ambitions of Mauritius to European outsourcers and providers. It will be a strong argument for marketing Mauritius as a secured BPO destination [25].

Offshore BPO companies in Mauritius will be required to providing adequate protection to all kinds of information, including papers, databases, films, view foils, tapes, diskettes, CD-ROMs, conversations (including telephonic conversations), and any other methods and media used to convey data, knowledge and ideas. They will need to create awareness about their adherence to the prevailing international security and privacy standards. By adopting world-class privacy norms and complying with security and privacy regulations, Mauritius companies can ensure that they remain the preferred option for worldwide customers when it comes to offshore outsourcing.

III. Security requirements of customers

Organizations outsourcing their processes to overseas countries do not look just for a robust regulatory/policy framework governing data protection and privacy in a host country, but also expect the service providers to have several security processes in place [20].

Typical customer requirements include:

- The existence of a strong legal personnel to deal with data protection and intellectual property rights issues
- Deployment of international security standards such as ISO 17799 and BS 7799, etc. by vendors
- The availability of a verification and auditing process to track processes such as the development of a software code and authenticity of a telephone call
- Implementation of ethical practices related to client confidentiality, etc., especially in areas such as research
- Deployment of firewalls and data encryption features at the level of the service provider to ensure reliable communication and network security
- Controlled access to all production sites through electronic ID-card
- Vigilance over employee dissemination of critical information via emails, discussion groups, etc.
- Strong security policies within ITES-BPO organizations in order to address the issue of client confidentiality related to addresses, phone numbers, credit card information etc

IV. Building an Information Security strategy

In line with these requirements, IT and ITES-BPO players in Mauritius need to put in place strong information security and business continuity planning strategies in order to minimize the risk that customers take by outsourcing.

A typical information security policy framework should encompass the following components [20]:

- A written and realistic security policy
- Commitment of top management to the information security initiative
- Evidence that security risks have been assessed, legal requirements understood and steps implemented to address the security risks
- A strong operational team that shows understanding of security issues and demonstrates satisfactorily how the service providers deals with those issues
- The adoption of well-accepted security standards, such as ISO/IEC 17799 Code of Practice for Information Security Management, the US Department of Commerce's NIST Special Publication 800 Series, and the ISO/IEC TR 13355 Guidelines for Management of IT Security
- A disaster recovery arrangement in place, backing up data regularly, requiring key-card to access key facilities, protecting all databases with passwords, and making a background check as a condition for hiring employees
- Services conducted under legal controls that affect the customer. For example, health care institutions in the US are affected by the HIPAA (Health Insurance Privacy and Portability Act) privacy regulations. These are dense and difficult to comply with. Where applicable, service providers in Mauritius should therefore comply with the HIPAA privacy regulations

11.7 People and Skills Availability

Challenge VI: Offshore BPO industry can only be sustained in the long term with ample supply of cost effective knowledgeable and creative local labour adapted to a high tech industry

Policy Option VI: Develop labour force with the basic skills that can be moulded flexibly to meet the short and long term requirements of the offshore BPO industry

Policy Proposition: Availability of specialist skills and quality of workforce are the two critical issues in the area of supply of human resources. Offshore locations with a large supply of labour provide a flexibility of choice as well as a cost advantage to offshore BPO providers. Often, the small scale of Mauritius is identified as a factor to discourage the implantation of BPO in Mauritius, assuming a correlation between the size of the country and the availability of skills. This is a strong argument. Scarcity of

labour can be met by specialization blended with either product scope limitation or economies of scope (a variety of small lots of differentiated products) depending on the scale of production. That is, choose to produce in an area where either competence is available, can readily be made available or is being targeted (e.g. creative applications, knowledge works)

Scenarios:

According to the production-labour grid, both small scale and large-scale production can be undertaken even when expertise is scarce.

- Small scale production: Specialization and limitation of the production scope
- Large-scale production: Specialization and economies of scope

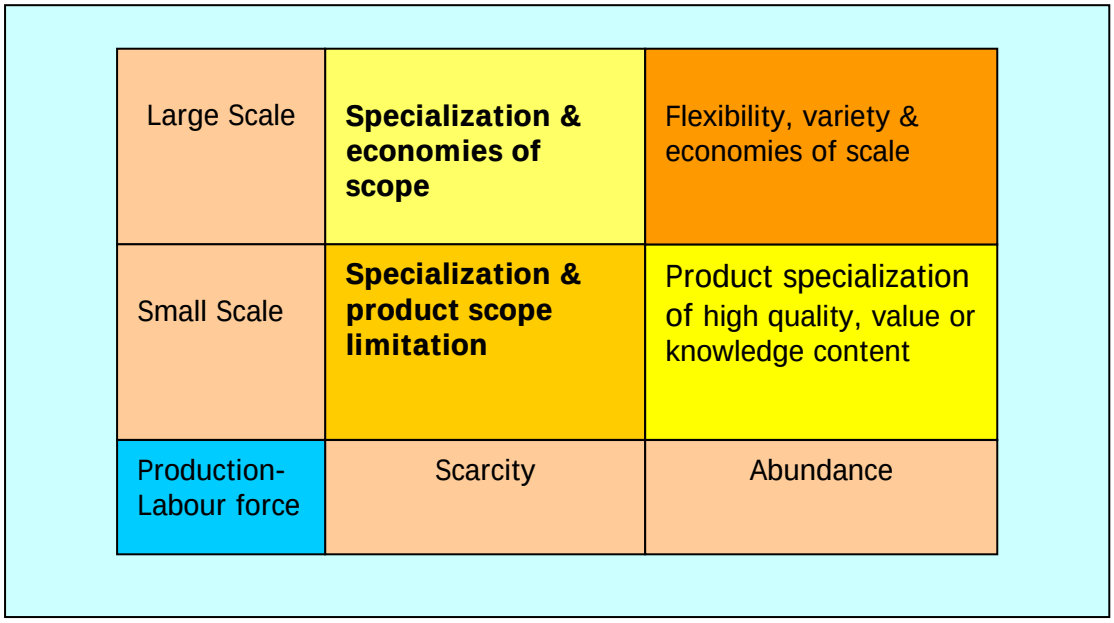


Fig 27: Production-labour grid

Fit-for-purpose labour force:

It implies a fit-for-purpose labour force streamlined towards products requiring higher knowledge or competence. For instance, Philippines pursues quality human resource driven activities with speciality in:

- Specialist legal services
- Dispute resolution
- Corporate finance
- Software development
- Contact centres dealing with technical enquiries

It entails directing surplus and unused labour (e.g. professionals) towards products in which they have distinctive competence. It would also entail the production of quality

labour with higher knowledge, distinctive competence and creative thinking in specialist areas to work on a narrow scope of specialist products to generate high-yield sale value.

Taking the view that Mauritius needs to exhibit core competence in a narrow set of complex technologies and the resources with that competence have to operate within the offshore BPO industry, there are a few clear strategic actions that are called for:

- Produce an area of competence-driven database and identify unemployed or lowly employed competence that can be redeployed with minor skill adaptation to reduce demand gap
- Categorize and adapt competencies according to economic sectors to facilitate supply to offshore BPO sectors
- Adopt adequate government policy to deliver training at all levels towards meeting the competency target
- Adopt national labour and employment policy driven by skills and performance
- Derail brain drain trend
- Authorize the entry of labour force possessing the targeted skills to make up for the shortage of local labour

In parallel, adapt training strategy to the requirement of the industry as shown below.

Training strategy:

The education sector can play a key role in building the human resource capacity to meet the requirements of offshore BPO industry. The education system Mauritius would gain by the strategy as outlined below:

Attract	Educate	Certify	Deploy	Re-train
▪ Awareness creation programs ▪ Systematic counselling to project the true image ▪ Define career paths under employment in ITS industry ▪ Offer cross sectoral career opportunities ▪ Provide specific incentives for 'out-of-industry' hiring	▪ Changes in the educational curriculum from the primary to graduate level as well as new vocational courses ▪ Increase co-operation between non-formal and formal systems through sharing of infrastructure, faculty, testing systems, etc. ▪ Creation of institutional capacity for specialised training	▪ Creation of a national testing institution framework and infrastructure ▪ Develop and norm a test for basic ITS skills	▪ Encourage placement cells within the education system ▪ Establish platforms for industry – academia interface to assess employability of resources	▪ Popularise re-skilling at all ages ▪ Provide incentives for re-skilling to the institutions and students ▪ Institutional focus required

Table 22: Steps to adapt training strategy to the needs of BPO

Key initiatives:

Government should undertake key initiatives that should be undertaken include:

- Revise the educational curriculum to meet generic competency enhancement objectives
- Make higher-education in specialised IT skills an attractive career option
- Develop a standard core curriculum around IT with a national aptitude test
- Involve private sector to meet special faculty and infrastructure gaps

Education must be revised to reflect competency-based education according to the following:

- Focus on skills, knowledge and attitudes that will bring about the behavioural changes and performance required in the work place with the goal to produce students that can find and hold jobs as they are valued in their respective workplace
- Formal sector should have a 20 year focus to cover the entire education life-cycle
- Non-formal sector should have a five year focus, designed for re-skilling in the short term

Higher education with specialised IT skills needs to be made more attractive with consideration of the following aspects:

- Positioning IT as an attractive career option
  - IT should be perceived as a life-time career option with possibilities of continuous learning and skill enhancement
  - Vocational counselling set up of the Government needs to be aligned with current situation and market demands

- Imparting the specialised skills
  - IT should be married to other sciences/arts/business practices (e.g. embedded systems, bio-informatics, risk management)
  - Industry practitioners and private educators should be sought as a source of infrastructure as well as experienced faculty

Common IT training and certification approach should be adopted to ensure quality at lower costs. This includes:

- Source of commonality
  - Common infrastructure and facilities can be shared such as computers, applications, networks
  - Standard curriculum with defined focus on developments of technical and non-technical capabilities should be developed
  - Part-time faculty with industry experience and feedback avenues should be shared

- Nature of common training and certification
  - Industry-academia partnership on national curriculum development and integration with formal education systems must be encouraged

- National aptitude test should be conducted by an independent agency for skills certification
- Industry feedback channels should be set in place to keep updated on students' capabilities and workplace performance

Long-term development possibilities:

The private sector can leverage their specific strengths to support Government of Mauritius in furthering BPO. This can be achieved through:

- Development of IT Infrastructure:
  - Training infrastructure must incorporate IT systems and networking

- Promotion of industry relations
  - Industry relations should be actively managed for placements, curriculum design and through government-industry forum

The objectives of training programs should be reviewed so that they are skill development oriented as indicated in table 18.

Segments	Skills to be generated
Call center	▪ Good communication and language skills ▪ Accent understanding ▪ Team leadership ▪ Basic computing skills
Remote customer interaction	▪ Language and accent understanding
Data search, Integration	▪ Computing ▪ Language and analytical skills
Human Resource Services	▪ Country specific HR policies, rules and regulations
Remote education	▪ Subject knowledge ▪ Computing and language skills
Engineering and design	▪ Technical ▪ Engineering design ▪ Computing skills
Translation, medical transcription and Localization	▪ Language understanding ▪ Basic computing (word processing knowledge) ▪ Understanding of various medical terminologies
Animation	▪ Drawing and creative skills ▪ Computer graphic skills
Finance and accounting	▪ International/ country specific accounting rules
Market Research	▪ Understanding statistical sales and marketing concepts
Network Consultancy and management	▪ Understanding different network configurations and support equipment, technical/ computing skills

Table 23: Typical skills required for specific BPO segment

The Mauritian ITES BPO sector should work towards developing the following skills required to support needs of the IT Industry [26]

	Development	Outsourcing & Maintenance	Implementation & Integration	Solution development
	Increasing complexity of task and skill requirements			
Language Spoken and written English Business English	✓	✓	✓✓ ✓✓	✓✓ ✓✓
Strategic Thinking Conceptual/analytical skills Environmental scanning Systems Thinking	✓ ✓ ✓	✓ ✓ ✓	✓✓ ✓ ✓✓	✓✓ ✓✓ ✓✓
Technical skills Application understanding Programming skills Project Management and quality	✓✓ ✓✓	✓✓	✓✓ ✓ ✓✓	✓ ✓
Work orientation Listening / empathy Initiative / Enthusiasm Team working Multitasking / Time Management	✓ ✓ ✓	✓ ✓	✓✓ ✓ ✓✓ ✓✓	✓✓ ✓✓ ✓ ✓✓
Behavioural traits Assertiveness and confidence Integrity/Values Motivation and drive Sociability/Reliability	 ✓ ✓	 ✓ ✓ ✓	✓ ✓✓ ✓ ✓	✓✓ ✓✓ ✓✓ ✓✓

Note **✓✓: Necessary Skills** **✓: Desired skills**

Table 24: Key skills required for the ITES/BPO sector

11.8 Financial Structure

Challenge VII: Taking the view that international leased circuit is one of the key inputs for the BPO industry, in whole or in part, its price must be an element of attraction for new entrants and a reason for maintaining their operation in Mauritius over time. Today, the cost of entry into the Mauritian BPO entry is very high as a result of the exorbitant price of private leased circuits, both domestic and international

Policy option VII: The MIIT, as the responsible institution for the development of the BPO industry, should undertake the necessary measures to remove the price impediment that erects barriers to entry into the Mauritian BPO industry and affects the financial sustainability of operators and constrains the development and expansion of the industry

Policy Proposition: The cost of infrastructure in general impacts on the fixed costs of the BPO providers and affects their operation. These costs are the costs of entry into the BPO industry. These costs being excessively high, unless their margin is high enough to be above those costs, their viability is threatened and the chances of their implantation in the BPO industry are reduced. Government policy provides for a full suite of financial incentives to BPO enterprises to facilitate their establishment. The two key facilities, among those that they need, are accommodation and telecommunications infrastructure. BPML rents the 'intelligent' buildings at industrial locations, such as cyber city, at globally competitive price. But, even if these are found to be high, BPO operators have the possibility to source from the open market. Unfortunately, there is limited alternative for telecommunications infrastructure. As a matter of fact, the high costs of telecommunications affect the occupancy rate of the accommodation infrastructure under BPML.

Telecommunications services

Telecommunications service is among the key inputs of the offshore BPO industry. BPO providers would require two types of services: Calling service and leased circuit service on both domestic and international scales. Calling service is mostly of a voice nature and the rates are very competitive by international standards arising from active competition coming from a number of licensed fixed, cellular and International Long Distance (ILD) operators.

Leased circuits mean that the telecommunications provider dedicates a transmission link, which is part of its physical network, to a third party for its exclusive use in establishing global connectivity from its point of operation within Mauritius. The rates are very high due to constrained competition.

For operations that depend to a large extent on telecommunications, like call centres and data processing centres, global connectivity is the key input. Global connectivity depends on both long distance calling service and the availability of private leased circuits within the domestic network and the international network.

For any offshore BPO centre, global connectivity can be a source of:

- Cost advantage, if their prices are set according to the business framework of BPO providers
- Superior competency, subject to high quality of electronic transmission in terms of delivery rates, audibility, data integrity and authenticity, and image resolution independently of medium
- High utilization level of far end BPO centre, given the availability of telecommunications service continuity and regularity of in/out data flow
- Mitigation of business risk, provided by a diversity of locations for the databases and associated operations-Disaster Recovery Centre is a good example

Mauritius Telecom (MT)

As a consequence, operators are very sensitive to the price of services. However, both domestic and international leased circuits are very expensive as a result of the monopoly or quasi-monopoly position of MT. It is possible that MT could be cross subsidizing some of its less profitable services, such as TV on ADSL or Internet, by a hike in price of such essential services as private lease circuits. MT practices expertly what is technically termed as 'vertical price squeezing' to nullify any possibility of competition, taking full advantage of the exiguous scale of operation of Mauritius. In the absence of appropriate legislations and legal operations frameworks, any major telecommunication services provider will be tempted to strengthen its grips on profitable and / or emerging niches within the industry, through monopolistic dominance or cross subsidizations; thereby preventing any potential investors to dare venture by putting money into domestic or even international infrastructure as an alternative. It is obvious that as the traditional provider, MT has continually enjoyed a free hand. However, with the coming of another giant, such as the MTML and alternative high bandwidth cable connectivity (EASSAY), such dominance will be less likely to prevail, due to competition and alternative sources of availability.

However, a strategic formulation is required, whereby the authorities have a grip on leased lines and bandwidth connectivity as these are essential facilities (EF) that represent the lifeblood of existing, emerging and potential enterprises. Allowing one company to achieve, at the end of the day, a super-normal profit, a significant amount of which is expatriated, is a debate irrelevant to the emergence of the country as a BPO service provider and true democratization of the economy. At the moment, for Mauritius, this issue is strategic, not an economic one.

Costs of entry:

Established BPO enterprises would open an operation in Mauritius if their incremental revenue exceeds incremental cost. If it is expected that the only reason for their presence in Mauritius would be to offer them easier access to Africa, the profit opportunity is still too narrow to justify their installation in Mauritius unless their costs in general and the cost of cable circuits, in particular, are low enough to make Mauritius relatively economically attractive. The slow development of the offshore BPO, as the low presence of foreign-owned firms tends to show, is due largely to the high cost of leased circuits,

which contributes significantly to the high cost of entry into the BPO sector. For BPO to grow to a critical industrial size, according to the expectation of the government, the issue of pricing of domestic and international leased circuits will have to be dealt with quickly and comprehensively using profit regulation, in regards to MT in particular, as the driver. This is necessary in order to reduce the costs of entry to a level that fulfils the economic ambition of Mauritius.
According to some sources, while the cost of one (1) Mbit/s is US $ 5 200 per month in Mauritius, it is US $ 1800 per month in India. It is understood that competition, arising from many cable operators in large metropolitan cities, and economies of scale exert a downward pressure on price. ICTA authorizes those BPO operators that wish to operate their private international telecommunications network, linking them to the home network, to do so. Those, without a private network, have to bear the exorbitant price of the local providers. It is believed that the future EASSY cable will provide an alternative solution and could bring the price down to about half of its current rate. There is however no publicly available document to prove this assertion. In any event, EASSY is a medium-to long-term solution and the development of BPO cannot wait for its implementation.
In the short term, the government has to consider an alternative approach in the form of targeted or strategic pricing, differentiating the BPO industry from other commercial sectors. The specificity of the BPO industry would support this strategy and facilitate a tailor-made treatment, global connectivity being the principal input for BPO providers whereas it is one of the inputs for the other economic sectors. For instance, Karnataka, in India, has adopted a precise policy for the sector:

“Telecommunications projects are recognized as key projects in core areas. The companies set up in specific zones are exempted from payment of stamp duty and registration charges on execution of lease, lease-cum-sale and absolute sale deeds by the companies in respect of industrial plots, sheds, flats allotted by state infrastructural development agencies. These companies are also eligible for incentives and concessions”.

Policy review:

The high price of connectivity could have a negative effect on the potential profitability of BPO entrepreneurs and the other positive qualities may not be enough to convince them to set their operation in Mauritius. The cost of circuits and connectivity is of utmost importance in the strategic BPO positioning of Mauritius. Instead of a cost calculation issue, with the narrow interest of wealth creation for one company, it must be more of a national economic development issue. A serious and non-partisan study would show that a drastic reduction to the tune of 50% or more will not affect profitability seriously, as volumes and company spectrum will be enlarged significantly, even allowing SMEs to be full fledge service providers. Exponential growth in the textiles sector in the late 80’s showed how SMEs can become engine of growth and national prosperity. As a matter of fact, it may turn out to be a good thing for the service provider(s), as they will benefit from larger disposable income of consumers in general arising from a prosperous BPO industry and, through positive externalities, on the economy in general. There is room to bring down the price of leased circuits by a significant amount. If this is done, the cost of entry into the BPO industry will be attractive to global providers. The low cost of connectivity will be the catalyst that will accelerate the growth of the industry and establish it as the fifth pillar of the Mauritian economy.

The current paradigm for the supply of international telecommunications services in the wake of the BPO industry demands a complete policy overhauling and MITT has to

spearhead the change through an innovative policy for the BPO industry, taking account of its specificity. Both technical and economic solutions exist and the current authoritative rigidity has no place in the offshore domain. The reasonable price of international leased circuits will impact positively on other sectors of the economy and, more particularly, the offshore financial services sector, which is closely associated with offshore BPO arising from of international financial flux within the global network of multi-national corporations.

Being intrinsically linked, the financial services sector and BPO are mutually reinforcing. Mauritius has developed a reputation as a well-regulated international finance centre that provides a gateway to business in Asia, Africa and Europe. As a result, quite a few highly reputed foreign banks and global companies operate in the financial services industry and offer world class products to global customers. The BPO could in some way become another gateway to the further development of the offshore financial sector. Reversing, the financial services sector could assist in clearing the doubts of outsourcers on the financial credibility of Mauritius-based firms. Subject to the low-cost of entry into the BPO sector, both the fourth and fifth pillars of the Mauritius have an opportunity to progress along a clear growth trajectory. This lies in the hands of the government and the MIIT, in particular.

12.0 CONCLUSIONS

12.1 Issues

Organized bodies designed, structured and established for the purpose of executing pre-defined business processes on behalf of Principals offer the potentials for attracting both entrepreneurs willing to invest in outsourcing and corporate customers opting to outsource a portion of the 'soft' activities to more able firms. This succinctly describes the contours of BPO. It is an industrial activity but dependent on soft skills, such as knowledge workers competent in design, writing and communication using computers, intelligent client-server systems and telecommunications.

It is a service industry and its most tangible product would be some software delivered over a CD. It holds the stature of a service sector alongside tourism and finance. However, because of its technology or marketing nature, it remains a blurred area in the mind of many and they find it convenient to assume it as ICT or IT services. For instance, in some statistical reporting, it is placed in a cluster of activities most exposed to global competition consisting of IT services, electronics (including semi-conductors and telecommunications equipment), as well as automobiles and garments.

In reality, BPO is not ICT. But, in many ways, ICT is a key engine that propels the process. In effect, it combines ICT with other disciplines. It offers the option for creating products falling within the scope of ICT, but it definitely depends on ICT tools. The Mauritius BPO sector, for instance, pursues such activities as call centres, software development, multimedia design, disaster recovery, online education, IT training, data-related works and transcription.

In the traditional outsourcing industry, for setting up physical infrastructure (road, water and so on) and hardware manufacturing, physical presence is required at the place where the installation is required. Contrary to the traditional industry, process outsourcing does neither require the physical relocation of manpower and machinery nor the physical transportation of finished goods. Telecommunications network can be used as a conveyor to transfer inflows to the processing place and outflows from the processing place, both in relation to an ordering place. It has the opportunity, therefore, of being singled out as a separate industry with its typical structure.

Expansion of international telecommunications infrastructure, with large capacity of kilometers of optical fiber cable running between continents and countries, has established 'Networked Economies' where the economies are within the reach of one another. Global transportation too has experienced phenomenal expansion with the 'opening of the skies' facilitating more frequent business contacts. Coupled with the removal of government-established tariffs and other regulatory barriers, the technological evolution provides the fertile ground for offshore outsourcing to prosper. However, they require a different institutional configuration, legal framework, management system and breed of workers. In essence, they require societies and governments to adapt. Those, who, like India, China or Singapore, have for years been following a policy of self-reliance based on human resource and technology developments, are leading the way in BPO.

Those that have been dependent on others and follow a more opportunistic-type, hit and run policies are struggling to find their ground. They are still confused between traditional

business set-up and emerging business norms, and between ICT infrastructure and the use of ICT with a particular business aim. Unfortunately, these countries find it hard to adopt such national policies that would propel them to world recognition. The excuse would be a lack of manpower, small size etc. However, the reality is different and it is associated with the ills of certain nations. It is just a matter of clearly envisioned self-reliance and ethno-centric national policies coupled with the strict application of equity in matters of: human resource development and employment, distinction between politicians and experts for jobs, maximum use of local skills, distribution of national resources and access to government contracts. It is also a matter of understanding reality of costs and the costs of entry into the BPO industry.

12.2 Observations

India has succeeded greatly as a result of its technological foundation laid down over years by successive governments with emphasis on skill development and of the entrepreneurial drive and vigour of its private sector. China and Singapore too have achieved success as a result of their planned development. This group of countries has the willingness for self-determination, attitude towards growth, a vision of their future, and geographical vicinity in common, and they are in a position to thrive on the demand of 'soft' skills. The confidence of foreign investors in them illustrates to a large extent their effectiveness. According to World Investment Report 2006 (UNCTAD, p 11-13), during 2005, South, East and South-East Asia attracted 18% of FDI, with China leading the way, Hong Kong and Singapore being the two next. Africa received only 3% of the total with South Africa at the top followed by Egypt and Nigeria. Within the African nations, Mauritius received barely 1.8% [Le Mauricien, I8 October 2006].

BPO offers the potential for attracting a significant amount of private investments and sale orders, both from domestic and foreign sources. Currently, the most popular offshore outsourcing centre is India and the main reason attributed for this state of affair is the abundant availability of English-read knowledge workers, as a new bred of workers. Mauritius has unfortunately not reached that far. However, it has the ambition to succeed and has set itself the objective to be successful in the BPO area. In spite of the fact that Asia accommodates the largest suppliers of BPO services, it is encouraging to observe that that the total investments in the Mauritius BPO sector amounted to Rs 1010 million (US$ 32 million) representing 40% of total investments, followed by French and Indian investments [Le Mauricien, 18 October 2006]. At the same time, however, this sounds like a negative note. It entails clearly that foreign investors do not have confidence in the BPO sector. There are several reasons for that and all of them are contributive. It is worthy to spell out the fact that one of these reasons is the excessively high costs of entry into the industry due to the high price of private leased circuits.

This single observation suggests simply that Mauritius has room for progress subject to establishing an environment that allows BPO activities to flourish. The BPO market is primarily global and thus, an offshore BPO industry is intended to supply the international market. Mauritius, being insular, cannot be expected to succeed in BPO within a massive presence of overseas enterprises that guarantee access to overseas markets. A buyer of BPO services from any country faces a-two dimensional issue: one of location where to outsource and another of provider from whom to outsource. These two dimensions influence the kind of resources deployed by government to structure their industry and on the attitude of holders of capital in the choice of location where to invest. For instance,

governments have a tendency to attract highly reputed multinational names (e.g. WiPro) within their jurisdiction to raise their profile and catch the eyes of buyers.

Abundant models have been devised to usefully explain and shape different facets of BPO activities. For instance, the “Successful models for BPO” [Aggrawal and Arora] provides a model for ensuring and preserving the buyer-seller relationship in the long term. It is particularly based on a three-stage procedure for a provider to determine and execute any BPO contract.

I. Pre-contract phases

The overall objective is to understand the client requirements and assessing the capabilities to meet them. Critical issues are:

- Establishing well defined contracts even with strategic partners
- Differentiating service offerings to enable clients to understand the relative capabilities of competing organizations
- Ensuring compliance with statutory requirements, especially in global outsourcing
- Implementing practices to translate implicit and explicit requirements in to deliverables of defined and desired quality
- Innovating, building flexibility and increasing responsiveness to manage shortening service life cycles

II. Contract execution phase

The overall objective is to translate the client requirements into deliverables of desired quality through service design, deployment, delivery and enhancement. Critical issues are:

- Improving the understanding of the service design and deployment activities and their relationship to the quality of the end service
- Managing rapid technological shifts and maintaining technology availability, reliability, accessibility and security
- Reviewing and controlling the service design and deployment stages for the purpose of controlling, managing and reporting

III. Post contract phase

The objective is to assess the experience and learning from the contractual experience and ensuring a positive client experience, even in instances where an engagement is canceled because of irreconcilable issues. The critical issues during this phase are:

- Implementing management practices during transition of services back to the client that ensures a positive client experience
- Collecting, analyzing and transferring to the client lessons learnt from the engagement
- Maintaining continuity in outsourcing management

Where an engagement is cancelled, assess the issues as follows:

- Measuring and analyzing reasons for occurrence of a termination
- Ensuring against re-occurrence of terminations for cause

A number of issues come up within each of the phases and the ability of the service provider to address these critical issues ensures the formation of a viable and mutually beneficial outsourcing relationship with the client.

The 'Executive Forum on National Export Strategies' [ITC, Switzerland, 5-8 October 2005] provides a national development model for BPO. It proposes eleven action points to provide policy orientation: -

(i) Develop a vision;

(ii) Test the vision with key stakeholders in the public and private sector;

(iii) Engage a BPO advisor to evaluate the vision and accelerate the finalization of the vision document and to prepare an initial action plan;

(iv) Establish a BPO unit in the office of selected ministry;

(v) Appoint a local leader for the BPO unit - someone who is credible in the public and private sectors;

(vi) Appoint a team to work on the supply-side and demand-side activities;

(vii) Review and re-orient Foreign Direct Investment (FDI) strategy;

(viii) Re-train the FDI team, the diplomatic representatives and any other outward-facing national representatives; and

(ix) Develop a supply-side strategy for the development of people and infrastructure:

- People: Strategy should deal with skills development, education, labour laws, demographics, investors, business developers, BPO managers, operatives and the attraction of experienced of overseas people.
- Foreign Direct Investment: It can help to create world-class supply-side capabilities
- Infrastructure: In the areas of telecommunications and IT, the strategy should address competitiveness in the price of bandwidth, resilience and reliability, back up cable (or satellite) and reputation and financial stability of the national telecommunications provider
- Competitor awareness: The strategy should be formulated so that it responds to the offerings of other nations.
- Risk: The new entrant should acknowledge international assessments of risk associated with living and working in the country. A country with poor ranking should not attempt to seek BPO work before addressing the risk ranking. BPO is all about trust and transparency

(x) Develop a demand side strategy:

- The vision needs to be led by the Head of Government (It is to be a national priority)

- All national representatives in the public and private sectors should promote the vision and be equipped with a detailed understanding of the supply-side strategy
- Create a compelling offering to attract demand (e.g. sustainable cost bases, taxation and employment incentives and incentives to attract credible and experienced professionals from overseas)
- Attract pilot schemes
- Learn from the pilots and introduce adapted offerings to retain them
- Facilitate overseas operators by rapid responsiveness and attention to details

(xi) Work ethic. Study the work ethic of the countries/investors you wish to attract and attention to detail

12.3 Proposition

Based on the experiences of a number of countries and using the particular circumstances of Mauritius, EMS Consulting proposes its proprietary SPAF model for the development of an offshore BPO industry. **SPAF or Seven Policy Action Program** is strategy-orientated designed to meet seven challenges:

12.3.1 Turn into Technology Producer

- **Challenge I:** The knowledge of Mauritius in the field of technology of telecommunications and IT is limited to integration, operation and troubleshooting. This is a major handicap. To acquire a reputation within the global BPO industry, Mauritius has to turn from being an importer of information technology to a producer of technology on a significantly important scale in areas where it has the capacity.

- **Policy option I:** BPO is often generically understood as outsourcing in all fields. Its relatively new dimension is the use of information technology and telecommunications to find new ways to improve a process, cut cost or change the course of business direction. The first step for Mauritius, therefore, is to determine the technology segment that will drive its BPO industry so as to project 'what it wants to be known for and what is its core competence'. Using a technology-application matrix provides an overview of strategic directions available to Mauritius to undertake its development.

12.3.2 Types of Product

- **Challenge II:** The Mauritius offshore BPO industry must acquire an identity, a personality and a reputation that differentiate it significantly from other jurisdictions in the global market. The types and quality of its products should yield comparative advantage, compensate for its small scale and cost disadvantage, and strengthen its attractiveness towards global providers and customers in search of a risk free BPO centre.

- **Policy option II:** Taking account of the exiguity of its scale, it cannot compete on the basis of cost leadership. It has to compete on other quality-led attributes, such as contents effectively blended into high tech applications, and be recognized internationally for it.

12.3.3 Quality and Reliability

- **Challenge III:** The relationship between government and the BPO industry has to be re-engineered. The government and the industry association have to jointly determine the product profile of the Mauritius offshore BPO industry, the quality standards and compliance processes with a view to further its development.

- **Policy option III:** Government authorities have to develop a collaborative relationship with the BPO industry association where government focuses on its policy role and work in partnership with the industry to achieve the policy goals.

12.3.4 Institutional Responsibility

- **Challenge IV:** The Mauritian society has to undertake a cultural transformation to succeed in the consolidation and operation of an offshore BPO industry, distinct from the standard ICT services sector. This cannot be achieved without political direction and institutional adaptation to bring about attitudinal change, emancipation and alignment of social groups to common goal.

- **Policy option IV:** It is necessary for government to chart the responsibility of the leading institution, responsible for ensuring the development and growth of the offshore BPO industry, and to map out its connection with the subsidiary institutions.

12.3.5 Business Environment

- **Challenge V:** The offshore BPO centre has to be secured against illegal practices that are common in the intellectual property/knowledge/software/cyber industry, such as piracy and such other odds, to promote knowledge workers and protect its reputation as a risk free centre

- **Policy Option V:** Adequate laws have to be introduced that fit an evolutionary cyber and electronic environment such as to establish a secured business framework adapted to the demand of high tech industry

12.3.6 People and Skills Availability

- **Challenge VI:** Offshore BPO industry can only be sustained in the long term with ample supply of cost effective knowledgeable and creative local labour adapted to a high tech industry

- **Policy Option VI:** Develop labour force with the basic skills that can be moulded flexibly to meet the short and long term requirements of the offshore BPO industry

12.3.7 Financial Structure

- **Challenge VII:** Taking the view that international leased circuit is one of the key inputs for the BPO industry, in whole or in part, its price must be an element of attraction for new entrants and a reason for maintaining their operation in Mauritius over time. Today, the cost of entry into the Mauritian BPO entry is very high as a result of the exorbitant price of private leased circuits, both domestic and international

- **Policy option VII:** The MIIT, as the responsible institution for the development of the BPO industry, should undertake the necessary measures to remove the price impediment that erects barriers to entry into the Mauritian BPO industry and affects the financial sustainability of operators and constrains the development of the industry

12.4 The way forward

A full view of 'Successful Entry Strategies for BPO Operations in Mauritius' provides a backstay to the above **SPAF of EMS**. It has gone to the root of the BPO at the global level to provide an understanding of its current status and evolution at the domestic level, in particular Mauritius. It establishes in precise terms the way forward for Mauritius, although the policies are flexible enough to be adapted to other jurisdictions. Being technology dependent, it can be expected that BPO will take different dimension and shape with time. That means that constant adaptation will be necessary to maintain the fit with market demand. For now, the expeditious application of the various measures in a coherent manner should establish Mauritius as a viable offshore BPO centre in the short to medium term.

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