



**Mauritius Research Council**

**INNOVATION FOR TECHNOLOGY**

**IDENTIFYING BARRIERS  
IMPEDING THE  
DEVELOPMENT OF THE  
SME SECTOR AND  
REDEFINING THE  
ENABLING ENVIRONMENT  
FOR GROWTH**

**Final Report**

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**Mauritius Research Council**

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Development of the SME Sector and  
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Research in Collaboration with

**Mauritius Research Council**



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## **LIST OF ACRONYMS**

BDC	Business Development Bank of Canada
CAD	Computer-Aided Design
CAE	Computer-Aided Engineering
CAM	Computer-Aided Manufacturing
CEA	Census of Economic Activities
CSO	Central Statistics Office, Mauritius
GDP	Gross Domestic Product
ICT	Information and Communications Technology
MIS	Management Information System
MRC	Mauritius Research Council
NHPA	National Handicraft Promotion Agency
OECD	Organisation for Economic Co-operation and Development
PEC	Personal Entrepreneurial Competencies
R&D	Research and Development
SD	Standard deviation
SEHDA	Small Enterprises and Handicraft Development Authority
SICOM	State Insurance Company of Mauritius
SIDO	Small Industry Development Organization
SME	Small and Medium-sized Businesses
SMEDA	Small and Medium Enterprises Development Authority
SMIDO	Small & Medium Industries Development Organization

## EXECUTIVE SUMMARY

This project, approved under MRC's Unsolicited Research and Innovation Grant Scheme, shall investigate the factors impeding growth and development of Mauritian SMEs in the current ecosystem. The need for such a project stems from the fact that despite SMEs contributing 40% of the GDP, many of these SMEs are not growing substantially enough to create new jobs.

This study employed a questionnaire survey approach to find out which internal factors determine the growth intentions of Mauritian SME owner-managers, and how their motivation to start the business and to continue running it impacts on SME growth and innovation.

Key findings include:

**Demographics:** Our survey findings give the profile of the typical Mauritian SME owner-manager: male aged between 31 to 50 years having amassed previous work experience, armed with a diploma or degree, operating his business from his own home or backyard, earning less than Rs 500,000 annually and employing an average of 2 workers.

**SME Growth:** 56% have undergone employment since the beginning of their operations. The entrepreneurs who have been able to initiate growth wanted to improve the financial situation of their business or themselves or be able to bid for larger orders and/or more interesting projects.

**Growth strategies:** SME owner-managers surveyed identified three main strategies for Mauritian SMEs to adopt for growth: Understand and satisfy customer needs, Innovate, Access new markets regionally or internationally. However, only 14.7% of SME owner-managers have considered e-commerce as a growth strategy. A large percentage of the customers of SMEs are online and the Internet has penetrated a significant number of households in Mauritius and the nearby African region. It is no longer an option for most SMEs to ignore the Internet and take a 'wait and see' attitude.

**Entrepreneurial Competencies:** Mauritian SME owner-managers scored high in the Commitment and Opportunity Competencies. They strive hard to run their business and are committed to make it succeed and they believe that they are able to identify untapped market

opportunities and fulfil them for customers with their products or services. However, only 8% of them rated highly in Conceptual competency, i.e. they are not willing to take risks to start their ventures and go for bold decisions once their business has taken off.

They also lag behind in strategic planning, i.e. they do not actively plan for the future in order to be able to compete effectively and survive. They are also highly confident of their skills and abilities, even overconfident, which may explain why our Mauritian SME owner-managers do not go for training of them or their employees nor feel the need for the assistance of a business mentor.

**Entrepreneurial Attitude:** Mauritian SME owner-managers scored high in Personal Control (desire to have personal control over their business activities) and Innovation (creativity in business activities). However, they were lacking in Achievement (desire to have concrete results in their business) and Self-esteem (low sense of self-worth). Although outwardly our SME owner-managers express confidence in their skills and abilities to manage their business, internally they are hesitant and full of doubt when actually negotiating deals and contracts or when handling their business.

**Competency and attitude**-wise, it can be concluded that our SME owners function mostly as managers and are not fully entrepreneurs in the true sense of the word.

**Innovation:** Despite all initiatives in place and incentives being offered, the Ministry of Industry noted that the SMEs in Mauritius are not very innovative (Industrial and SME Strategic Plan 2010-2013). The culture of innovation is pretty non-existent amongst Mauritian SMEs owners-managers. Moran (2007) surveyed 500 SMEs on their training needs and human resource development and it was concluded that Mauritian SMEs should focus on innovation so as to be more competitive in both local and international markets. The Global Innovation Index 2016 also ranked Mauritius 53rd in the world and 1st in Sub-Saharan African, with South Africa being ranked just below. As noted above, it demands investigation whether our SME owner-managers are truly innovative, being driven by passion and motivated by new ideas and markets or they are imitative, i.e. they believe their products or services are unique but are simply replicating and rebranding products/services found elsewhere.

SME owner-managers have often stated in the survey that lack of funding is a barrier to growth and innovation. It was noted that 11.9% of the surveyed SME owner-managers are currently operating as own account workers, out of which 9.7% have always worked alone. These SME owner-managers are most probably earning much less right now than they would if they were paid employees and are probably those who will apply for loans and financial support from government schemes. Care should be taken that such SME owner-managers are not given funding while penalizing the small percentage of true innovative SMEs which drive economic growth and employment who seek financial support. The aim behind the support of government schemes to SMEs should be to encourage higher quality entrepreneurs and SMEs to grow, and not to increase the quantity of low quality SMEs or new entrants to have to cross the Valley of Death.

# 1 INTRODUCTION

## 1.1 BACKGROUND

SMEs play a catalytic role in the development process of most economies. In general SMEs constitute around 90% of business operations and create over 50% of employment and GDP. SMEs tap into domestic and global markets, engaging in activities from retail to telecommunications. They help to fill a growing demand in the goods and services sector, as consumer demand and discretionary income within countries rises. Finally, SMEs act as incubators of specialization and innovation within an economy, allowing the country to diversify and industrialize.

Entrepreneurs are the engines that will drive business growth and job creation, thus the need to undertake appropriate actions to turn innovative ideas into reality by undertakings risks for the sake of making profit. SMEs' growth and success will depend upon how skilled, innovative and passionate entrepreneurs are about their ideas and dreams. Developing entrepreneurial mind-sets with exceptional vision, creativity and determination can create entirely new industries that would help to foster economic growth.

In Mauritius, SMEs today constitute a very important segment of the Mauritian economy. In 2009, it amounted to some 100,000 enterprises and employed some 45% of the workforce compared to 36% in 2005. SMEs produce 40% of our GDP, i.e. some 120 billion rupees worth of output. There are some 125,500 establishments operating presently in Mauritius and Rodrigues, which employ an estimated 283,000 full-time and part-time workers (197,000 males and 86,000 females). Total value added generated during 2013 is estimated at Rs 82,060 million. However, it is to be noted that the number of persons engaged per unit has actually decreased from 2007 to 2013, which implies that job creation from SMEs is not substantial enough, which is a matter of national concern. It is high time that the track record and performance of SMEs are analysed so as to find out what is impeding their growth and development in Mauritius.

Literature has laid great emphasis on important internal factors that contribute to the success or failure of small businesses in the business environment in which they operate. Psychological attributes of the individual such as personal motivation and initiative, innovativeness and risk taking as well as their specific background of in the society, the culture in which their activities are embedded and their life experiences all influence their entrepreneurial activities. These attributes help to differentiate entrepreneurs from non-entrepreneurs in terms of their attitude, behaviour and the way they undertake the business activities. Not every individual who founds a small business wants to grow that business; some just want to stabilize it in order to simply earn a living. Demographic characteristics such as ethnicity, life experience, educational background as well as predisposing factors, such as the need for power or independence or desire of achievement and social recognition may impact on how business activities are carried out and the future direction of the entrepreneur (Fayolle, 2005; Anderson and Smith, 2007).

## 1.2 AIMS AND OBJECTIVES OF THE STUDY

This study aims to investigate the internal factors affecting the growth of SMEs. The research will be geared towards the following internal constraints and testing the theories/researchers having put them through.

- (1) In a first instance, Prof. David McClelland's Needs Theory will be used to probe the reasons, in terms of the Need for Achievement, Need for Power, etc., why certain people feel the need to set up their business and why some of them choose to also grow the business.
- (2) Next, Peter Drucker's theory about innovation being key to growth of entrepreneurial SMEs will be tested.
- (3) The third orientation will be to do an examination of the demographic factors affecting growth of SMEs.
- (4) The above factors (i.e. motivation, innovation, internal constraints) will be related to the fourth orientation of the research which is to assess the fundamental difference between entrepreneurs and SME owner-managers to understand their growth focus of their SMEs.

The specific objectives shall be to:

1. Profile the motivation of starting a business and study the personal entrepreneurial competencies and attitude of the entrepreneurs.
2. Investigate whether Mauritian business owners demonstrate the required innovation to expand their operations.
3. Examine whether Mauritian business owners are focused on expansion as entrepreneurs or stability of their business as owner-managers.

The novelty of this study is the consideration of factors such as motivation, innovation and perception of the small business owner towards growth, which have not been tested in a Mauritian context.

## 1.3 METHODOLOGICAL APPROACH AND DESIGN OF THE STUDY

For the present study, a total of 400 SMEs belonging to both manufacturing and services sectors from across the country will be targeted using a stratified random sampling supplemented with a quota sampling based on the relevant groups. The study will span a period of twelve months. The criterion followed in selection of SMEs was based on the major sub-sectors of manufacturing irrespective of the number of employees and turn over, but not exceeding fifty million rupees. The sampling frame will be constructed from the database of Empretec Mauritius and other stakeholders like the MEF, MCCI, OTAM, SMEDA and other stakeholders of the Mauritian economy.

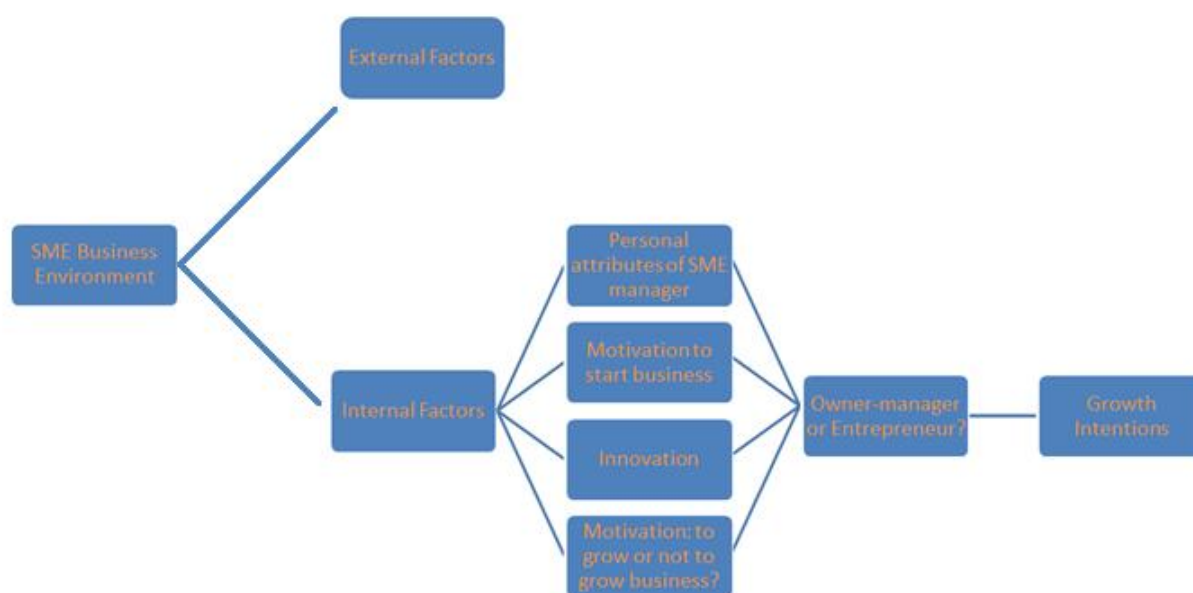
The investigation methods that will be used will be surveys to collect data and key

informant/focus group meetings to obtain qualitative information on SMEs in Mauritius in the manufacturing and services sector.

A questionnaire will be developed for the study. A team of trained investigators will be engaged to collect the data which will be on an online format allowing real time data capture.

## 1.4 CONCEPTUAL APPROACH

The following conceptual framework provides a visual overview of the relationships that are tested in this study. The framework indicates four main variables stemming from the internal environment of SMEs: personal demographics of SME manager, motivation behind creation of business, innovative practices conducted by the small business and motivation to grow or not to grow the business. All of these factors are directly affected by whether the small business owner identifies himself or herself as an owner-manager geared towards stability of the business or as an entrepreneur interested in growth, i.e. growth intentions.



**Figure 1.1: Conceptual framework**

## 1.5 OUTLINE OF THE REPORT

This report is divided into six chapters:

- Chapter One** lays down the foundations for the research. The background information about the study is given. The aims and objectives of carrying out the research project are identified. A conceptual framework about the different relationships to be investigated is proposed. The overview of the methodology is briefly described. The scope of the study was given. The research report is outlined.
- Chapter Two** presents a critical review of pertinent and relevant literature about SMEs in Mauritius, their business environment, the concept of entrepreneurship and the barriers to growth of SMEs.
- Chapter Three** discusses the methodology used in undertaking this study.
- Chapter Four** presents the general survey findings
- Chapter Five** descriptive interpretation of the findings, accompanied with tables and charts.
- Chapter Six** presents the conclusions from the study findings. Recommendations and implications for policy and practice are also listed.



## 2 LITERATURE REVIEW

### 2.1 DEFINITION OF SME

In Mauritius, SMEs were first defined by the SMIDO Act 1993, which stated that 'SMEs are enterprises engaging in manufacturing and using production equipment (directly related to production) in their manufacturing process, including transformation/conversion of raw materials, packing, repair, and assembly of semi-finished parts into finished goods whose value of production does not exceed Rs 5 million'. However, this definition was geared towards only SMEs in the manufacturing sector.

The SMEDA Act 2009 provided new definitions for SMEs on the basis of turnover; a micro enterprise has a turnover of less than Rs 2 Million and employs less than 5 persons, a small enterprise has a turnover less than Rs 10 million and a medium enterprise between Rs 10 to Rs 50 million). As per the SMEDA Act, the SME definition includes enterprises in all economic sectors.

### 2.2 HISTORICAL BACKGROUND OF THE SME SECTOR IN MAURITIUS

SMEs originate from the 1960s in Mauritius when local entrepreneurs established business to create products as a substitute to imported goods. To help those entrepreneurs, the Ministry of Industry and Commerce established the Small Scale Industry Unit (SSIU) in 1976.

In view of a more integrated policy, the SSIU became the Small Industry Development Organization (SIDO) in 1983. Through the Industrial Expansion Act of 1993, the Small & Medium Industries Development Organization (SMIDO Act) was created to further consolidate and develop SMEs. In 2005, the SMIDO Act was replaced by the Small Enterprises and Handicraft Development Authority (SEHDA) Act. The SEHDA was created following a merger of SMIDO and National Handicraft Promotion Agency (NHPA).

Finally, the SEHDA Act was replaced in 2009 by the Small and Medium Enterprises Development Authority (SMEDA) Act, which is the prevailing SME Act for Mauritius.

### 2.3 SME STATISTICS

#### 2.1.1 Contribution to Employment and GDP

SMEs are projected to become the main engine of growth in the coming years. According to the Census of Economic Activities, the contribution of SMEs is estimated to have reached 55% of the total employment and 40% of the GDP in 2013 (Tables 2.1 and 2.2).

**Table 2.1: Employment of SMEs during the period 2002-2013 (Source: CSO)**

	2002	2007	2013 <sup>1</sup>
<b>Employment in SMEs</b>	235,000	268,900	301,000
<b>Total Employment</b>	493,000	523,700	552,000
<b>% of Employment in SMEs</b>	<b>48</b>	<b>51</b>	<b>55</b>

<sup>1</sup> Provisional**Table 2.2: Employment and value added of SMEs during the period 2002-2013 (Source: CSO)**

	2002	2007	2013 <sup>1</sup>
<b>Value added of SMEs (Rs million)</b>	43,400	83,640	127,736
<b>GDP at basic prices (Rs million)</b>	125,777	215,449	322,937
<b>% Contribution of SMEs to GDP</b>	<b>35</b>	<b>39</b>	<b>40</b>

<sup>1</sup> Provisional

### 2.1.2 Number of SMEs

There are some 125,500 establishments (table 1.3) operating presently in Mauritius and Rodrigues, which employ an estimated 283,000 full-time and part-time workers (197,000 males and 86,000 females). Total value added generated during 2013 is estimated at Rs 82,060 million.

However, it is to be noted that the number of persons engaged per unit has actually decreased from 2007 to 2013, which implies that job creation from SMEs is not substantial enough.

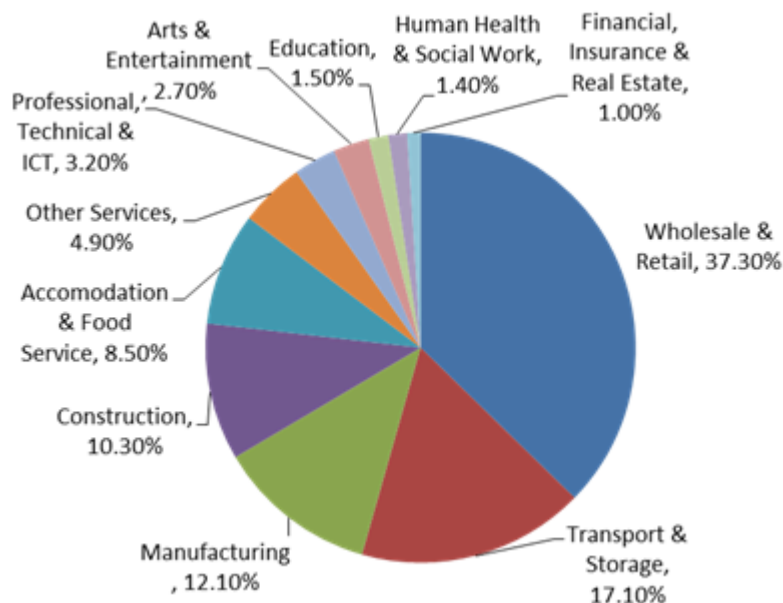
**Table 2.3: Number of SMEs (Source: CEA 2007 and 2013)**

	2002	2007	2013 <sup>1</sup>
<b>Production units</b>	74,928	92,400	125,500
<b>Persons engaged</b>	175,791	211,600	283,000
<b>Value added (Rs million)</b>	23,202	43,040	82,060
<b>Number of persons engaged per unit</b>	2.36	2.29	2.25

<sup>1</sup> Provisional

### 2.1.3 Sectors

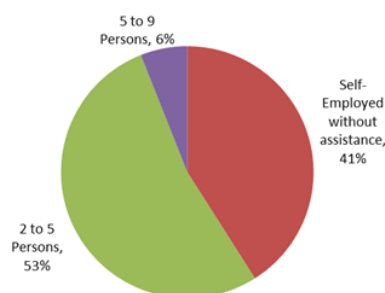
SMEs operate in a wide array of sectors as seen in the pie chart below (Figure 2.1). The majority of SMEs in Mauritius are in the Wholesale and Retail sector (37%).



**Figure 2.1: Breakdown of SMEs by sector**

### 2.1.4 SMEs registered with SMEDA

About one-fifth of total SMEs are currently registered with the SMEDA. As at December 2015, there were 25,257 registered SMEs. Out of these, only 49.6% are operational, employing 37,868 people (less than 10% of total employment). For the period 2012–2015, SMEDA has registered an average of 2,100 new SMEs every year, out of which an average of 950 were still in operation. This data indicates that the mortality rate of start-ups is very high (1 out of 2 new establishments did not survive). SMEs are characterised predominantly by self-employed owners with no employees (41%) or SMES with 2 to 5 persons involved (53%).



**Figure 2.2: Number of persons involved in SMEs (Source: SMEDA)**

**Table 2.4: Registered and operational SMES during the period 2005 – 2015 (Source: SMEDA)**

Industry group	Aug 2005 to 2011		2012		2013		2014		2015		Total	
Agriculture, forestry and fishing	836	300	97	41	93	21	117	40	171	39	1,314	441
Mining and quarrying	4	3	1	1							5	4
Manufacturing	7,105	4,150	617	336	553	250	459	230	662	261	9,396	5,227
Water supply; sewerage, waste management and remediation activities	15	5	4	3	1				2	1	22	9
Construction	603	375	138	101	153	103	146	87	234	108	1,274	774
Wholesale and retail trade; repair of motor vehicles and motorcycles	4,452	2,250	699	366	622	290	518	210	700	273	6,991	3,389
Transportation and storage	61	30	15	4	22	8	19	11	23	7	140	60
Accommodation and food service activities	1,771	610	215	90	203	66	193	60	210	70	2,592	896
Information and communication	78	20	25	19	19	12	20	11	44	22	186	84
Financial and insurance activities	1		4	2			2	2	1	1	8	5
Real estate activities	13	5	1	1	5	3	5	4	8	3	32	16
Professional, scientific and technical activities	244	150	67	38	66	34	68	37	102	52	547	311
Administrative and support service activities	379	160	77	42	92	44	93	47	174	60	815	353
Education	68	40	17	11	16	6	19	10	17	9	137	76
Human health and social work activities	68	40	16	11	13	5	8	1	17	6	122	63
Arts, entertainment and recreation	86	30	15	7	20	8	21	10	30	9	172	64
Other service activities	1,052	575	127	69	118	56	102	41	105	28	1,504	769
<b>Total</b>	<b>16,836</b>	<b>8,743</b>	<b>2,135</b>	<b>1,142</b>	<b>1,996</b>	<b>906</b>	<b>1,790</b>	<b>801</b>	<b>2,500</b>	<b>949</b>	<b>25,257</b>	<b>12,541</b>

Number of SMEs registered with SMEDA 

Number of operational registered SMEs with SMEDA 

### 2.1.5 SMEs in the informal sector

Around 30% of the small businesses operate in the informal sector (Table). Despite corporate and individual taxes in Mauritius being among the lowest in the world, many SMES choose to remain informal because of the following reasons:

- Registration and permit application procedures viewed as cumbersome;
- Absence of knowledge of the most appropriate service provider for a given type of entrepreneurial activity;
- Many governmental or non-governmental SME support agencies providing duplicated services, not necessarily all of the required standard and service quality.

**Table 2.5: Status of Small Establishments in 2013 (Source: CSO, CEA, 2013)**

Number of small production units	125,500
<i>of which : informal units</i>	<i>33,500</i>
<i>Number of persons engaged in the small production units</i>	<i>283,000</i>
<i>of which: number of persons engaged in informal units</i>	<i>56,100</i>
<i>Value added of the small production units (Rs million)</i>	<i>82,100</i>
<i>of which : value added of informal units (Rs million)</i>	<i>11,000</i>

## 2.4 DEFINING THE ENTREPRENEUR

Two major scholars have proposed popular definitions of 'entrepreneur'. They are Joseph Schumpeter and Israel Kirzner.

The Schumpeterian school of thought describes an entrepreneur as an innovator with the potential of doing things in a new way (Schumpeter, 1934). This is a demarcation from managers operating established businesses. Innovative practices may be in the form of new methods of production, new markets, new products, new process, new sources of supply of raw materials, novel organization of industry and others. These entrepreneurs distort equilibrium of markets with their innovative activities with the resulting actions ultimately leading to development (Betta *et al.*, 2010).

Kirznerian school of thought postulated that entrepreneurship is a discovery process whereby the entrepreneur becomes alert to new possibilities (Kirzner, 1973, 1996). The entrepreneur seizes the imbalances and opportunities on the market and exploits them for their own benefit (Roininen & Ylinenpää, 2009).

Essentially the entrepreneur always searches for change, responds to it and exploits it as an opportunity. The entrepreneur attempts to create value through recognition of business opportunities with a set of specific characteristics:



**Figure 2.3: Characteristics of an entrepreneur**

### **2.1.6 Types of entrepreneurs**

It is to be noted that the classical definition of the entrepreneur is challenged by those found in developing countries, which have access to fewer resources to research and develop new products and services. Taking this into account, Danhof (1949) came up with his classification of entrepreneurs, making the distinction especially between innovative and imitative ones.

- (1) Innovative: these entrepreneurs are driven with passion and aggression for new ideas, new markets, new technology and new organizations. They are willing to invest substantial amounts of money in research and development.
- (2) Imitative (or adoptive): also known as copy cats, they replicate and rebrand products/services to suit their business directions. They prove to be very useful in developing economies as they help create job opportunities and provide wider choices to customers.

- (3) Fabian: they are very doubtful and cautious in every step made in the business life, especially in adopting changes, i.e. they are lazy and shy to innovations, being laggards.
- (4) Drone: these people are rigid, conservative and unyielding when it comes to change. Another way of describing drone entrepreneurs is that they are conservative. They prefer to stick to their traditional or orthodox methods of production and systems as they fear that modern ones will tamper with what they cherish (Oko *et al.*, 2015).

Many scholars have since come up with different typologies of entrepreneurs. A few classical typologies are shown in table. More recent classifications by Walley and Taylor (2002) and Barba-Sánchez and Atienza-Sahuquillo (2012) are described below.

**Table 2.6: Types of entrepreneurs (Walley and Taylor, 2002)**

<i>Type of entrepreneur</i>	
<b>Smith (1967) and Chell <i>et al.</i> (1991):</b> <ul style="list-style-type: none"> <li>▶ Craftsperson</li> <li>▶ Opportunistic</li> </ul>	<b>Jones-Evans (1995), technical-entrepreneur categories:</b> <ul style="list-style-type: none"> <li>▶ Researcher</li> <li>▶ Producer</li> <li>▶ User</li> <li>▶ Opportunist</li> </ul>
<b>Woo <i>et al.</i> (1988):</b> <ul style="list-style-type: none"> <li>▶ Inventor</li> <li>▶ Craftsperson</li> <li>▶ Opportunistic</li> </ul>	<b>Dana (1995):</b> <ul style="list-style-type: none"> <li>▶ Traditional self-employed</li> <li>▶ Cultural entrepreneur</li> <li>▶ Personality-determined achiever</li> <li>▶ Barthian agent</li> <li>▶ Hagenian displacee</li> <li>▶ Kirznerian identifier</li> </ul>
<b>Dunkelberg and Cooper (1982):</b> <ul style="list-style-type: none"> <li>▶ Growth-oriented</li> <li>▶ Independence-oriented</li> <li>▶ Crafts-oriented</li> </ul>	<b>Thompson (1998) style-based dimensions:</b> <ul style="list-style-type: none"> <li>▶ Hard, pragmatic, opportunistic</li> <li>▶ Softer, people-focused</li> </ul>
<b>Miller and Toulouse (1986):</b> <ul style="list-style-type: none"> <li>▶ Need for achievement (correlated to market differentiation strategy)</li> </ul>	<b>paradigm-based dimensions:</b> <ul style="list-style-type: none"> <li>▶ Creator of sea change</li> <li>▶ Innovator</li> </ul>
<b>Chell <i>et al.</i> (1991):</b> <ul style="list-style-type: none"> <li>▶ Entrepreneur</li> <li>▶ Quasi-entrepreneur</li> <li>▶ Administrator</li> <li>▶ Caretaker</li> </ul>	<b>fifth dimension:</b> <ul style="list-style-type: none"> <li>▶ Designer–inventor</li> </ul>

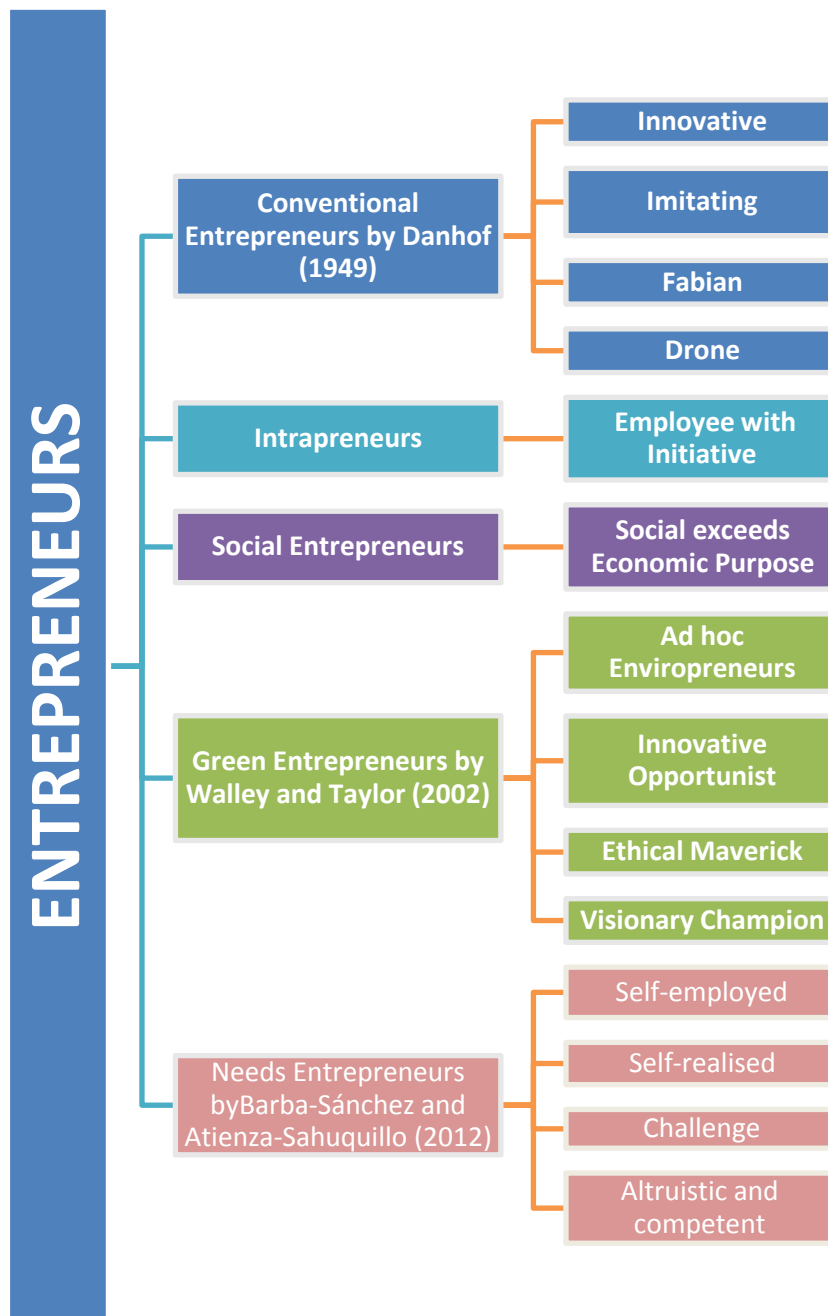
As the concept of green SMEs takes more prominence, Walley and Taylor (2002) distinguished four types of green entrepreneurs who are motivated by both business and sustainability objectives, albeit to differing degrees:

- (1) Ad hoc (or accidental) green entrepreneurs, who are driven purely by financial gain and whose contribution to sustainability is entirely unintended.
- (2) Innovative opportunists, who are financially oriented, having spotted a green niche in existing markets and setting out to exploit that niche.
- (3) Ethical mavericks whose sustainability orientation tends to be influenced by the values of their friends, networks and past experiences; these tend to set up small, niche businesses that rarely grow beyond a small scale due to a lack of financial interest on the part of the founder.
- (4) Visionary champions, who embrace a transformative, sustainability orientation and tend to be driven by a combination of their values and financial return.

Barba-Sánchez and Atienza-Sahuquillo (2012) came up with a classification of entrepreneurs after grouping several Needs together.

- (1) Self-employed entrepreneurs: They do not intend to create a company to make the most of a business opportunity nor do they enjoy risk-taking; they just want a job that allows them to survive.
- (2) Self-realized family entrepreneurs: they have a strong feeling for family tradition of entrepreneurship, are motivated by challenges and situations that test their skills and abilities to control the environment, but do not have any craving for money, independence and self-enhancement.
- (3) Challenge entrepreneurs: these have little interest in taking advantage of opportunities and they have little desire to establish personal relationships at work. They simply want to prove to themselves that they are capable of creating a company and they measure business success by the amount of money they earn.
- (4) Altruistic and competent entrepreneurs: they want to take advantage of business opportunities and reduce their routine situation. These entrepreneurs do not seek personal gain, whether in monetary terms or as personal satisfaction, but rather hope to contribute to the welfare of the community by creating a company that provides jobs and wealth.





**Figure 2.4: Classification of entrepreneurs**

### 2.1.7 Entrepreneurial competencies and skills

Scholars have come up with various definitions for competence. Gibb (1990) defined competence as “an ability to perform certain tasks for which knowledge, skills, attitudes and motivations are necessary.” The definition which is most widely cited is that of Boyatzis (1982) who stated that “a job competency is an underlying characteristic of a person in that it may be a motive, trait, skill, aspect of one’s self-image or social role, or a body of knowledge which he or she uses.”

Entrepreneurial competencies can therefore be taken as dimensions such as knowledge, attitudes and skills that a competent entrepreneur must use to be able to deal effectively with tasks, problems and contradictions (Onstenk, 2003). Entrepreneurial competencies are associated with birth, survival, performance, profitability and growth of a venture. Businesses with managers who have high levels of entrepreneurial competencies tend to scan and manage the environment in which they operate in order to find new opportunities and consolidate their competitive positions (Covin & Miles, 1999).

Prof. David McClelland believed that everyone had an inner motivation to improve. Based on researches conducted in the late 1960s, he came up with a set of 10 Personal Entrepreneurial Competencies (PECs) that entrepreneurs should develop instead of traditional business skills such as marketing, financial accounting, managerial accounting, financial management, local laws, regulations and procedures.

#### Achievement Cluster

1. Opportunity seeking and initiative

Looks for and acts on opportunities; seizes unusual opportunities to obtain financing, equipment, land, work space or assistance; does things before being asked or forced to by events; acts to extend the business into new areas, products or service.

2. Persistence

Takes repeated or different actions to overcome obstacles which get in the way of reaching goals.

3. Fulfilling commitments

Acts to do things that place the highest priority on getting a job completed; accepts full responsibility for problems in completing a job for others; expresses concern for satisfying the customer.

4. Demand for efficiency and quality

Acts to do things that meet or beat existing standards of excellence; states a desire to produce work of high quality; finds ways to do things faster or with fewer resources or at a lower cost; uses information or business tools to improve efficiency.

5. Taking calculated risks

Willing to take risks; capable of identifying and calculating risk assessments; develops alternative plans and anticipates worst-case scenarios; learns from past mistakes.

Planning Cluster

6. Goal setting

Sets specific, time bound, challenging goals; works methodically and effectively to allocate time and resources; takes necessary steps to get projects back on-track if goals are not met.

7. Information Seeking

Takes action to get information to help reach objectives or clarify problems; does personal research on how to provide a product or service; consults experts for business or technical advice.

8. Systematic planning and monitoring

Plans by breaking a large task into sub-tasks; develops plans that anticipate obstacles and uses logical, step-by-step plans to reach goals; develops or uses procedures to ensure that work is completed or personally supervises all aspects of a project.

Power Cluster

9. Persuasion and networking

Confronts problems and issues with others directly; disciplines those failing to perform as expected; uses a variety of strategies to influence others; acts to develop business contacts; uses influential people as agents to accomplish own objectives; initiates collaborations with other entrepreneurs and negotiates with competitors to identify mutual goals.

10. Independence and self-confidence

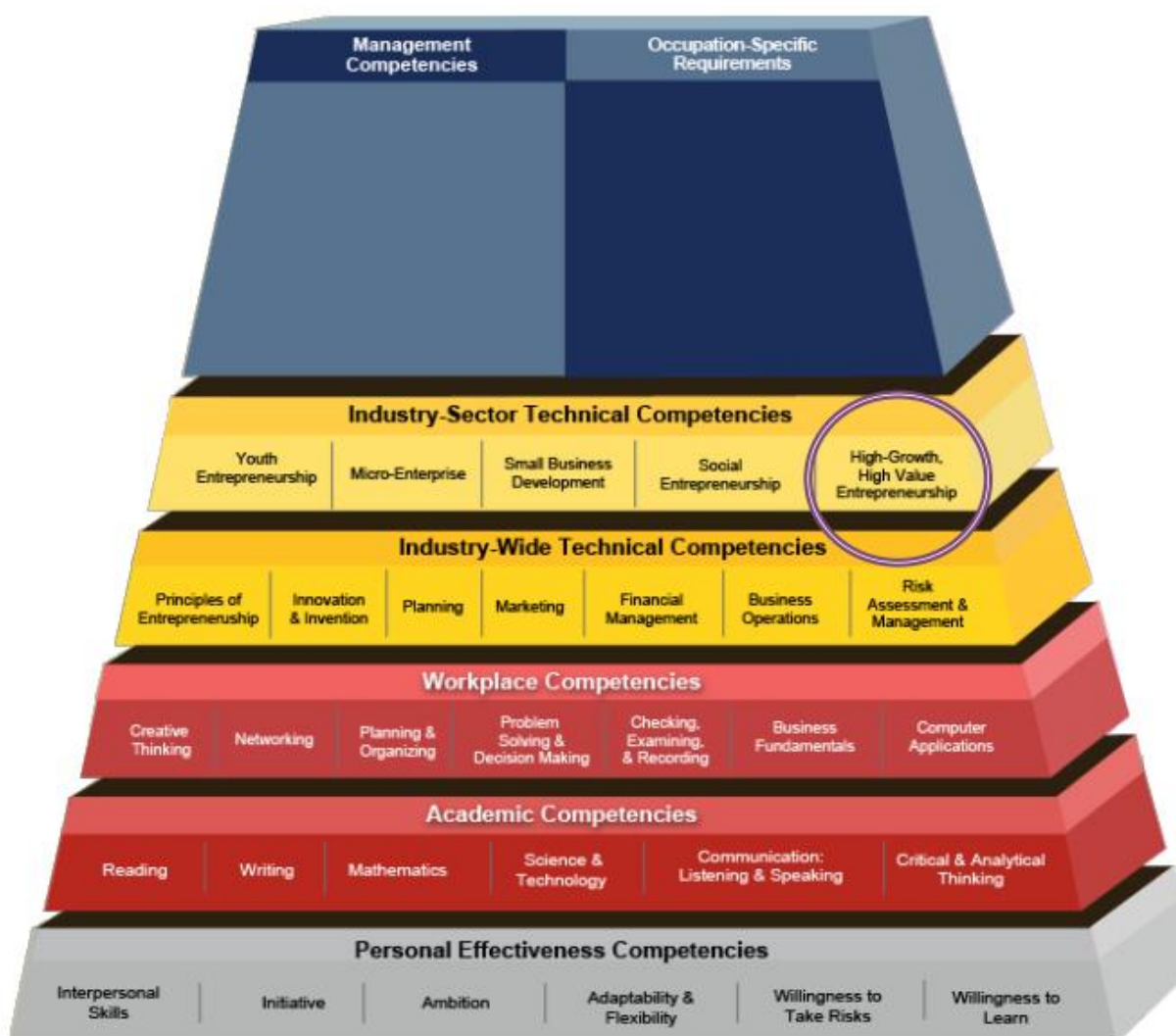
Expresses confidence in own ability to complete a task or meet a challenge; sticks to own judgment in the face of opposition.

Table 2.7: Entrepreneurial competencies and associated activities

Entrepreneurial competencies		Behavioural focus	Preliminary elements	Activities
Porter	McClelland			
Opportunity competencies	Opportunity seeking and initiative; Information seeking	Competencies related to recognising market opportunities through various means	Opportunity recognition; opportunity seeking; opportunity development	Recognising and envisioning taking advantage of opportunities; Idea generation; Formulating strategies to take advantage of opportunities; Identification of a viable market niche; Development of products and services appropriate to identified market niche
Organising competencies	Systematic Planning and Monitoring; Demand for efficiency and quality	Competencies related to the organisation of internal and external human, physical, financial and technological resources	Organising; planning; controlling; leading	Organising resources such as physical (land, building) and financial (money, deposit); Planning of daily operations of the business; Coordinating tasks among staff; Leadership skills
Relationship competencies	Persuasion and networking;	Competencies related to person-to-person or individual-to-group based	Communication; relationship building;	Hiring skills; Ability to motivate employees individually or in groups;

Entrepreneurial competencies		Behavioural focus	Preliminary elements	Activities
Porter	McClelland			
		interactions	networking	Development of organisational culture; Delegation skills
Strategic competencies	Systematic planning and monitoring; Goal setting	Competencies related to setting, evaluating and implementing the strategies of the firm	Vision; strategic thinking; goal setting	Ability to implement strategies (develop programmes, budgets, procedures and evaluate performance); Goal setting skills
Commitment competencies	Fulfilling Commitments; Persistence	Competencies that drive the entrepreneur to move ahead with the business	Committing; having the drive; taking initiative	Dedication to make business work whenever possible; Refusal to let business fail whenever appropriate; Commitment to long-term business goals.
Conceptual competencies	Taking calculated risks; Independence and self-confidence	Competencies related to different conceptual abilities which are reflected in the behaviours of the entrepreneur	Analysing; problem solving; decision making; innovation; risk taking	Mental ability to coordinate activities; Communication skills; Ability to manage customers; Analytical skills; Logical thinking skills; Deal-making skills; Decision making skills; Risk taking skills

Some have also talked about a pyramid of competencies since some competencies are applicable to all entrepreneurs while others are occupation/industry specific. Competencies which are more or less universal occupy the bottom portion of the pyramid and specific competencies located near to the top. It is not a question of giving priority to one competency over the other – the pyramid simply depicts the layers of competencies that are beneficial for entrepreneurs in different industries and occupations (Olien, 2013).



**Figure 2.5: Pyramid model for layers of competencies (Olien, 2013)**

High-growth/high-value ventures are innovation-based enterprises that have the potential for revenue, wealth and job creation. Their owner-managers are entrepreneurs possessing specific, focal competencies related especially to innovation and growth management (Olien, 2013).

- Growth Management

To manage growth, entrepreneurs need to build teams consisting of experts with diverse, complementary skills. These entrepreneurs typically offer incentive compensation, manage business operations, build a strong entrepreneurial culture around determination and high work ethic and form effective boards of directors and advisors.

- Innovation Management

Entrepreneurs have to be competent at managing intellectual property (i.e. file for patents), engaging in commercialization efforts (i.e. sale of new technologies/products) and securing funding for research and design.

### 2.1.8 Entrepreneurial attitude

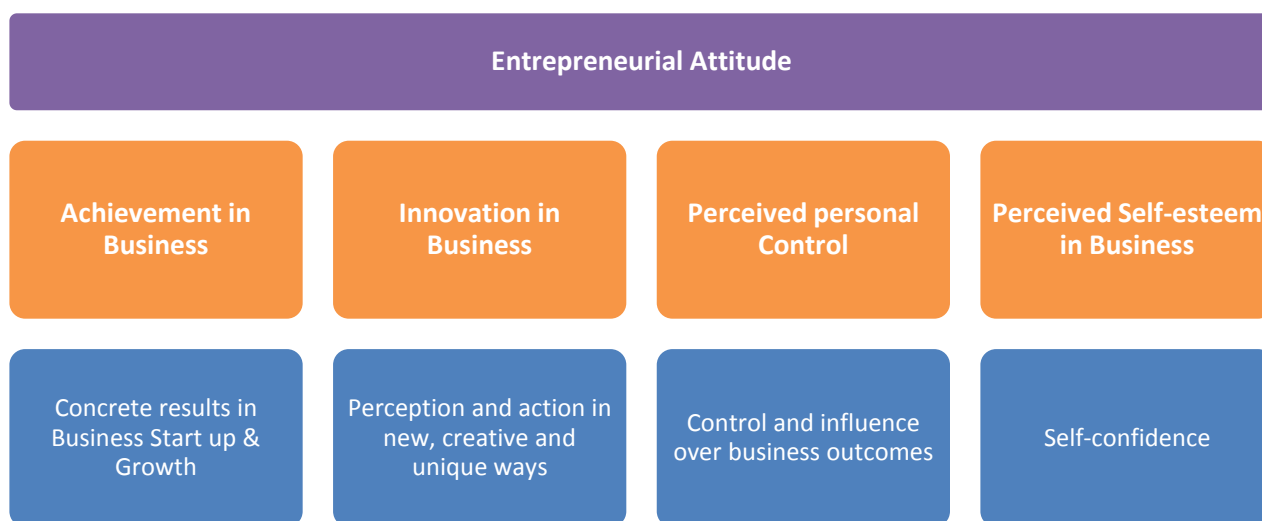
The personality approach to identifying entrepreneurial tendencies by direct measurement of personality traits or motivational tendencies possessed by entrepreneurs began in the 1950s with the work of David C. McClelland, David Atkinson and others (McClelland *et al.*, 1953; McClelland, 1961). While the pioneering work of these researchers provided a foundation upon which to build to examine characteristics of entrepreneurs, several issues have been noted. Robinson *et al.* (1991) insisted that personality traits or demographics are not appropriate approaches to describe entrepreneur characteristics. Demographics predictions assume that people with similar background possess similar underlying characteristics.

An attitude is a predetermined propensity to respond in a generally positive or negative way to the object of the attitude. Attitudes do change more easily and more often than personality traits. Entrepreneurial attitudes can be interpreted as predetermined but changeable thoughts, feelings and behavioural intentions covering organisational creation and operation (Robinson *et al.*, 1991).

Robinson *et al.* (1991) therefore argued that using attitudes to predict entrepreneurial behaviour can be a more profitable approach than using personality traits or demographics (Van Wyk *et al.*, 2003). Attitudes are less stable and changes across time and situations. Attitudes can therefore be deliberately modelled to be more favourable towards entrepreneurship by entrepreneurship courses, mentoring or training workshops by successful entrepreneurs.

Robinson *et al.* (1991) developed a scale, the Entrepreneurial Attitude Orientation, to measure entrepreneurial attitudes using 4 subscales (Achievement, Innovation, Personal Control and Self-Esteem) and 3 components (Affect, Behaviour and Cognition). This is the tripartite model, which states that attitude is a combination of affect, cognition, and conation/behaviour. The cognitive component consists of the beliefs and thoughts an individual has about an object. The affective component consists of positive or negative feelings toward the object. The conative or

behavioural component consists of behavioural intentions and predispositions to behave in a given way toward the object.



**Figure 2.6: Measurement of entrepreneurial attitude using 4 subscales (Achievement, Innovation, Personal Control and Self-Esteem) and 3 components (Affect, Behaviour and Cognition)**

## 2.5 ENTREPRENEURS VERSUS SME OWNER-MANAGERS

While both are instruments of economic growth, development and employment creation, many researchers have noted that there is an inconsistent use of the terms 'SME' and 'entrepreneurship' and 'SME owner-manager' and 'entrepreneur' in literature.

### 2.1.9 Similarities

According to Inyang and Enuoh (2009) and Lucky (2012), the similarities associated to both concepts are:

1. Both have been noted for job or employment creation, economic growth, economic development and economic transformation. They also play a significant role in socio-politico-economic transformation of the nation economies.
2. Their success or failures are determined by similar sets of factors: environment, culture, location, individual characteristics and firm characteristics.
3. They have similar characteristics or traits for business management: initiative, Perseverance (strong determination), emphasis on high standard of work, commitment,



orientation towards perseverance (patience), systematic planning and creative problem solving.

### 2.1.10 Differences

Lee-Ross and Lashley (2009) maintained that both concepts of 'SME' and 'entrepreneurship' are used interchangeably despite differing in many aspects.

#### Original idea

- SME owner-managers have a great idea to solve a problem in their community since they know their target audience and what will make their customers happy.
- Entrepreneurs come up with big ideas that have not been tested, diagnosed, or worked through. A lot of times they do not even know if their ideas are possible, which gets them even more excited.

#### Risk-taking

- SME owner-managers gamble small. They make calculated decisions where the outcome is clear. The result may not be huge, but it will typically keep them moving forward.
- Entrepreneurs love risk. They jump in with both feet knowing that if they put in their full effort, the risk will be worth it more often than not.

#### Planning

- SME owner-managers think about the things they need to finish this week. They have daily and weekly to do lists. They manage employees, work with customers, network with new customers, and keep everything rocking and rolling.
- Entrepreneurs are thinking ahead six months. Their main focus is on the future of the company.

### Relationship to their business

- Small-businesses owners are sentimental with their businesses. They never plan on selling or handing their business off to someone else unless it is family. They like making the decisions and running the day-to-day. The neighbours know the business and it is part of the community.
- Entrepreneurs view their companies as assets: something to be developed, shaped, readied for market and possibly sold for a profit so that they can move on to the next big idea to be gambled on.

### Interest

- SME owner-managers are more interested in profit margins, revenue projections and support costs.
- Entrepreneurs love inventions, science, new technologies and new ways to change the world.

### Growth intention

- SME owner-managers are often more interested in steady family income than growth of the business.
- Entrepreneurs focus on scaling. They want to grow and grow they will.

### Passion

- SME owner-managers do not necessarily love what they do, but are still happy doing it because it means they are not doing it for someone else; it is a better way of life than what they were doing before and they have more control over their time.
- Entrepreneurs are out to change the world. They love what they do and would do it for much, much less.

Table 2.8: Differences between entrepreneurs and SME owner-managers

	Small business owners	Entrepreneurs	References
<b>Differentiating factors</b>	Discover and innovate new businesses/ventures and exploit opportunities independently	Demonstrate managerial skills to effectively and properly manage their firms	Lucky, 2012
<b>Key attributes</b>	High need for: Achievement, Internal Locus of control, Creativity and innovation, Growth	Organisational skills to: Moderate need for achievement, Manage Efficiently, Moderate growth	Lucky, 2012
<b>Original idea</b>	To solve a problem in the community	Big ideas that have not been tested, diagnosed or worked through.	Spring, 2014
<b>Primary purpose of maintaining business</b>	To produce, buy and sell	To discover, innovate and establish business	Lucky, 2012
<b>Degree of risk-taking</b>	Usually small	Usually high	Spring, 2014
<b>Relationship with their company</b>	Sentimental about their businesses.	View their companies as assets.	Marks, 2012
<b>Interest</b>	Profit margins, revenue projections and support costs.	Inventions, science, new technologies and new ways to change the world.	Marks, 2012
<b>Planning ahead</b>	Weekly	Monthly to yearly	Marks, 2012
<b>Focus on growth</b>	Nil to moderate	High	Lucky, 2012

Indeed, many scholars have come up with similar observations. Wagener *et al.* (2008) probed 194 small business owners in the hospitality industry to find out whether they also possessed certain entrepreneurial attributes. Entrepreneurs were driven by innovation, growth, profit and ability to motivate other people. Small business owner-managers displayed lower levels of tolerance and propensity to create novel situations as they were conditioned towards stability.

Quaye and Acheampong (2013) questioned 300 SMEs owner-managers in a view to find if they qualified as entrepreneurs according to Covin and Slevin's entrepreneurial orientation concept which they came up with in 1989. The study found that SME owner-managers are not innovative and do not take risks although very proactive. Their findings concluded that the SME owner-managers evaluated were not entrepreneurially oriented; they were not innovative and did not take enough risks despite being very proactive.

Neneh and Vanzyl (2014) questioned 200 SME owner-managers in South Africa to determine their growth intention and the impact growth intention had on the actual SME growth. It was established that growth intentions were significantly related to actual firm growth in terms of sales growth and asset growth. It was also noted to great concern that for many of those SME owner-managers' growth intentions were not related at all with employment.

### 2.1.11 Mauritian Context

SME owner-managers are often considered as entrepreneurs in Mauritius and many even define themselves as such despite not being driven by growth of their business. Many SMEs in Mauritius consist mostly of the owner working with a spouse. As the country is highly depending on the SME sector to create much needed jobs, this is a matter of great concern.

## 2.6 GROWTH

### 2.1.12 Introduction

Many definitions of business growth and ways of measuring this growth are known, but business growth is typically defined and measured, using absolute or relative changes in sales, assets, employment, profits and number of customers.

Business owners themselves attach high importance to sales as an indicator of business performance. In addition, sales growth is also easier to measure compared with some other indices and is much more likely to be recorded. Sales are a good indicator of size and growth.

Sales may also be considered a precise indicator of how a firm is competing relative to their market (Barringer *et al.*, 2005).

Others use employment as a measure of growth as the data is easily gathered and categorized. Employment figures are not affected by inflationary adjustments and can be used as comparison in cross-cultural studies (Hoy *et al.*, 1992). The only difficulty in using employment as a measure of growth is in categorizing part-time and seasonal employees. Moreover, while a firm may increase its number of employees, it does not necessarily mean that it has expanded its market share or improved its financial status.

Nowadays if a firm is to achieve sustained expansion, it must satisfy a number of requirements for growth – rise in sales, access to additional resources, expansion of personnel and knowledge base.

### 2.1.13 SME growth

A major study was undertaken by the Business Development Bank of Canada (BDC) in 2015 about how Canada's SMEs are meeting the challenges of growth and identified winning strategies that leads them to achieve sustained growth. SMEs revenue, profit and jobs were the three determinants chosen to showcase the degree of growth of an SME. Growth was defined as a business must have seen an increase in its revenue, profit or workforce in each of the last three years without having experienced any decline in any of these areas. Annual growth was further characterized as negative (below 0%), zero (0%), weak (0-4%) sustained (5-20%) and strong growth (above 20%).

BDC (2015) wanted to know about some of the perceived benefits of growth for the owner-manager and his/her SME. Some identified benefits were: improving the financial situation of leaders and their families, providing more stimulating work to employees, ability of the business to tackle larger projects, sparking the interest of qualified prospects in its recruiting campaigns and having a bigger and positive impact on the community.



### 2.1.14 Growth and business environment

The business environment, defined as “all factors both inside and outside the organization that may influence the continued and successful existence of the organization” by Smit *et al.* (2007), has a significant impact on the growth of new SMEs (Delmar and Wiklund, 2008).

Changes in the business environment can signify either a negative or positive effect on the growth of SMEs. The desire to grow an SME is not enough; both the internal and external business environments should be strong enough to permit it. For example,

- Internally, the owner-manager needs to possess the capacity of managing more complex situations associated with growth and exercise leadership of all personnel. Employees should not only be trained to become more efficient and qualified, but cooperation between employees and owner-manager should be fostered to adapt to frequent changes associated with growth.
- Externally, the SME should be ready to provide for substantial increase in operating costs, dedicate more resources to acquiring inputs/raw materials, increased demand for its products and services, recruitment of additional employees or use of external expertise when required.

#### Internal factors

Internal factors are those which are controllable by the SME and/or the owner-manager. The internal environment consists of factors such as:

- (1) Personal attributes/skills/competencies of the SME owner-manager.

The SME owner-manager’s demographic characteristics such as age, gender, motivation, experience, educational background, risk-taking propensity, preference for innovation, mindset and personality can impact on the firm’s performance and the growth of the SME can be hugely dependent on him/her.

- (2) Internal finance of the SME.

For example, all businesses, especially SMEs, require financial resources in order to fund growth. Owner-managers often do have access to adequate and appropriate finance to grow their SMEs.

- (3) Investment in IT.

SMEs which possess technological capabilities reduce costs, improve efficiency, enable greater production, broaden market share and can prove to be a source of profit for SMEs. As noted by Lee (2001), a small business that adopts greater levels of technological sophistication can be expected to grow more rapidly than a similar firm

which does not. Romijn (2001) and Yusuf *et al.* (2003) point out that low technological capabilities hinder and discourage SMEs from fully reaching their potential.

Many SMEs have a weak managerial structure; the owner-manager is the one who takes charge of all the managerial functions of the enterprise, such as organization, production, accounting, marketing, etc. Such a heavy burden on them prevents them from devising strategies for growth of their SMEs devising proper strategic plans for their businesses as they are more concerned with the day-to-day problems of running their businesses.

### **External factors**

The performance of new SMEs can be influenced by external factors that are largely uncontrollable by the owner-managers. With experience, owner-managers learn to work within the constraints of the external environment. External factors consist of:

- (1) SMEs operating in the informal sector save on registration and licensing costs as well tax evasion, allowing them to produce and sell goods at a lower price compared to SMEs operating in the formal sector. Formal SMEs often face unfair competition from non-formal SMEs. This in turn increases the relative costs of enterprises operating in the formal sector, but also weakens worker protection and reduces workers' social benefits.
- (2) Lack of access to external finance  
Lack of access to external financing not only hinders growth of SMEs, but may also contribute to the high rate of failure of SMEs. According to Shah *et al.* (2013), financial institutions behave more cautiously when providing loans to SMEs and SMEs are usually charged comparatively high interest, high collateral and loan guarantees.
- (3) The regulatory environment.  
SMEs often have a difficult time dealing with administrative and operational procedures and getting in tune with the requirements of government regulations, such as costly and timely procedures to obtain licenses and permits, register property, and move collateral.
- (4) The macroeconomic environment,  
Economic variables such as the fiscal and monetary policies of the government, inflation, interest rates and foreign exchange rates influence the demand for goods and services in the international market.

### **2.1.15 Mauritian context**

A few researchers have published academic papers about internal factors impacting on SMEs' performance and growth in Mauritius. Lal and Peedoly (2006) surveyed 60 Mauritian SMEs to know about their ICT adoption. Recent ICT tools such as MIS, CAD/CAM, CAE and flexible manufacturing systems were hardly known, let alone used by the firms surveyed, while only a third of the SMEs made regular use of email and internet. Reasons for not using ICT were the costs involved (purchase, installation and maintenance, internet subscription fees), the lack of infrastructure for their use and their perceived little importance for the respondents' business.

Kasseeah and Tandrayen-Ragoobur (2011) used a sample size of 398 SMEs in both the manufacturing and services sectors in 2009 to investigate factors that determine firm performance of SMEs such as the effect of access to finance, firm size and manager's experience as a determinant of the performance of firms. They found that the growth of SMEs in Mauritius depends mainly on access to finance and firm size, whereas the manager's experience did not affect SME performance. SMEs with majority male ownership tended to outperform those having majority female ownership.

Kisto (2014) studied the constraints of 400 SMEs in Mauritius and concluded that internal factors such as difficulty in finding skilled labour, finding customers, and high cost of raw materials or labour. Moreover, women owner-managers faced lack of access to legal services, which prevented their SMEs from thriving and allowed them only to survive.

Kasseeah (2012) studied the correlation between owner-managers' education and firm performance using survey data on 397 SMEs in Mauritius. She concluded that the education level of the owner-manager of Mauritian SMEs significantly impacts on their performance. SMEs with more highly educated owner-managers seem to perform better irrespective of age and experience. She suggested that tertiary-educated graduates should be encouraged to set up their own SMEs and existing owner-managers without tertiary education should be persuaded to go for further education.

### **2.1.16 Conclusion**

Both internal and external constraints may affect the growth of SMEs. This study intends to add more to the papers published about internal factors impacting on SMEs' performance and growth in Mauritius.



## 2.7 MOTIVATION

### 2.7.1 Introduction

The common assumption of people is that most entrepreneurs are perceived to be motivated to start their businesses in order to make money. However, this is not always true. The reason behind starting a business varies from country to country and is dependent on economic and educational and individual differences. The majority of African entrepreneurs launch their small business due to economic reasons while entrepreneurs in developed countries do so out of free choice (Benzing and Chu, 2009). Understanding the motives behind starting a business would help government policymakers when theorizing about economic development.

Behind every small business, there's a story worth knowing. All the corner shops in our towns and cities, the restaurants, cleaners, gyms, hair salons, hardware stores - these didn't come out of nowhere.

- Paul Ryan

Paul Ryan, 54th and current Speaker of the United States House of Representatives

### 2.7.2 Link between entrepreneurship and motivation

Motivation can be defined as behaviour toward the achievement of a goal. According to Maslow (1943), motivation comes from a need to be fulfilled. Motivation is a fundamental requirement for entrepreneurship and the absence of it blocks any initiative for development.

Early entrepreneurial research concentrated on identifying traits and characteristics that distinguished entrepreneurs from the general population. The two most important theories of entrepreneurial motivation are the "push-pull" theory by Gilad and Levine (1986) and Prof. David McClelland's Manifest Needs Framework (1961).

Gilad and Levine (1986) suggested two theories of entrepreneurial motivation, the intrinsic “push theory” and the extrinsic “pull theory.” The push theory contends that negative factors such as conflicts at one’s workplace, job dissatisfaction, job loss, difficulty in finding employment, insufficient salary or inflexible work schedule push certain individuals in adopting entrepreneurship. This is also termed as “necessity entrepreneurship”. The pull theory argues that certain individuals gravitate naturally into entrepreneurship in search of independence, risk-taking, belief in one’s capacity, self-fulfillment wealth, and other desirable outcomes. This is “business or opportunity entrepreneurship” (Giacomin *et al.*, 2011; Khan *et al.*, 2009).

Prof. David McClelland’s Needs Theory (1961) mentioned three motives for entrepreneurship: need for achievement, need for power and need for affiliation. Other motives from other scholars have also been noted and are described below.

- (1) *Need for achievement*: This need indicates a strong desire to do things well, or better than others, including those with authority. People with a high need for achievement often make plans in advance and prefer quick, specific feedback about their actions.
- (2) *Need for power*: It is the need to influence the behaviour of others for moving in the chosen direction and attaining the envisioned objectives. In business, power is implied during the process of setting up a business; the SME owner-manager has to win the commitment of everyone from capital providers, suppliers of equipment and materials to that of employees and also the trust of customers (Wee *et al.*, 1994).
- (3) *Need for affiliation*: Barba-Sánchez and Atienza-Sahuquillo (2012) postulated that in certain cultures, one works for both personal gratification and for family. When the business survives through more than one generation, joining the family business may be viewed as a family tradition. Values passed from one generation to the next often include personal commitment to the long-term survival of the owned business rather than acquiring short-term profits (Robinson and Stubberud, 2012). People who have a parent or close family member who is self-employed are more likely to go into business (Hadjimanolis and Poutziouris, 2011). Family participation in the small business was found to have a positive impact on entrepreneurial growth intentions and expansion plans (Fahed-Shreih *et al.*, 2009).
- (4) *Need for continuity*: Barba-Sánchez and Atienza-Sahuquillo (2012) noted that some people spearheaded new small businesses in order to provide jobs to family members, also thriving on having warm working relationships with employees and overall as a means to contribute to the welfare of the community they live in.
- (5) *Need for independence*: this entails doing work of one’s choice and at one’s pace, defining one’s own rules of the game, taking initiative, making independent and innovative choices and being responsible and accountable to oneself rather than some external authority for performance. There is a dislike to blindly follow the assertions of

others and live off the efforts of others. This need has been found to be essential in entrepreneurial ambitions since the entrepreneur takes responsibility for pursuing an opportunity did not exist before and is responsible for results, whether achieved or not achieved in the end. For example, Hisrich (1985) noted that female firm founders in the USA were predominantly motivated by a desire for independence when starting their business. Autonomy may also mean moving from being employed to being an own account worker as one becomes dissatisfied with the present job and choosing not to seek another one.

Benzing, Chu and Kara (2009) presented comparative results of numerous researches on entrepreneurs' motivating factors in different countries.

**Table 2.9: Entrepreneurs' motivating factors in different countries**

Motivated towards	Less motivated towards	Country	References
Challenge and achievement	Necessity and security	Vietnam	Swierczek and Ha (2003)
Income and job security	Self-satisfaction and personal needs	Romania	Benzing, Chu & Szabo (2005)
Autonomy	Increase in income	India	Benzing and Chu (2005)
Job security and increase in income	-	Turkey	Ozsoy, Oksoy & Kozan (2001)
Making money	-	Uganda	Bewayo (2015)
Increase in income	-	Kenya and Ghana	Chu, Benzing & McGee (2007)
Satisfying basic psychological needs – food and shelter	-	West Africa	Roy and Wheeler (2006)

### 2.7.3 Link between entrepreneurial motivation and SME

The interest between the relationship between entrepreneurial motivation and SMEs is two-fold. First, there are certain main motives behind an entrepreneur's setting up of a small business as discussed above such as the need for achievement, need for power, need for need for independence and need for affiliation and continuity. Moreover, the link between motivation of the owner-manager and the performance of an SME is undeniable. Many scholars have found a positive relationship between growth motivation of the owner-manager and growth of the SME.

#### **2.7.4 Conclusion**

The motivation of Mauritian SME owner-managers behind starting their own business has never been investigated at length. It is important for the government and institutions to know whether push or pull factors are responsible so that proper strategies may be formulated to aid such SMEs depending on their situations. This study will also investigate the motivation behind continuing to run a business, albeit sometimes at a loss.

## 2.8 INNOVATION

### 2.7.5 Definition of innovation

Drucker (1985) defined innovation in the context of entrepreneurship with “it is the means by which the entrepreneur either creates new wealth-producing resources or endows existing resources with enhanced potential for creating wealth.” Schumpeter (1934) claimed that innovation can take shape in five ways: (1) the introduction of a new good, or a new quality of good unfamiliar to consumers; (2) the introduction of new production methods; (3) the opening of a new market; (4) the conquest of a new source of supply of raw materials; (5) the carrying out of the new organisation of any industry, such as the creation or breaking of a monopoly. A more modern definition that is commonly used is found in the Oslo manual developed by OECD/Eurostat (2005): “An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations.”

Innovation practices include all scientific, technological, organizational, financial and commercial steps which actually, or are intended to, lead to the implementation of innovations. Innovation activities also include R&D that is not directly related to the development of a specific innovation (OECD/Eurostat, 2005).

### 2.7.6 Types of innovation

#### (a) Product, process, market and organisational innovation

Innovation can be classified in four major ways: Product, process, market and organisational innovation (OECD/Eurostat, 2005).

- (1) Product innovation involves the creation of new products as well as improvements (or adaptations) to existing products. Product innovation may require new marketplaces to evolve and/or new marketing skills for the firm. Product innovation may involve shift in the state of science or technology embedded in a product, new R&D resources and/or new production processes for a firm.
- (2) Process innovation comprises of new or significantly improved production or delivery methods. This includes significant changes in techniques, equipment and/or software. Process innovations can be intended to decrease unit costs of production or delivery, to increase quality or to produce or deliver new or significantly improved products.
- (3) Marketing innovation entails new marketing methods involving significant changes in product design or packaging, product placement, product promotion or pricing.

Marketing innovations are aimed at better addressing customer needs, opening up new markets or newly positioning a firm's product on the market, with the objective of increasing the firm's sales.

- (4) Organizational innovation consists of new organizational methods in the firm's business practices, workplace organization or external relations. Organizational innovations can be intended to increase a firm's performance by reducing administrative costs or transaction costs, improving workplace satisfaction (and thus labour productivity), gaining access to non-tradable assets (such as non-codified external knowledge) or reducing costs of supplies.

### **(b) Incremental versus radical innovation**

Innovation can also be of two major types: incremental and radical innovations.

- (1) Incremental innovation involves the adaptation, refinement and enhancement of existing products/services and/or production and delivery systems in the existing market (Song and Montoya-Weiss, 1998).
- (2) Radical innovation consists of novel products/services that result in a new market. It does not address a recognized demand, but instead creates a demand previously unrecognized by the consumer. This new demand brings about new industries with new competitors, firms, distribution channels and new marketing activities (Song and Montoya-Weiss, 1998).

Researchers have observed that SMEs practise radical and incremental innovations depending on their sectors of operation. Many SMEs operating in the manufacturing, electronics, engineering and general high technology sectors are able to introduce more radical innovations owing to their nature (Stringer, 2000). Other SMEs put more emphasis on incremental innovation such as improvements to products, services and/or processes often in response to customer needs rather than radical innovation such as observed by Oke *et al.* (2007) in a survey of 784 SMEs in the UK.

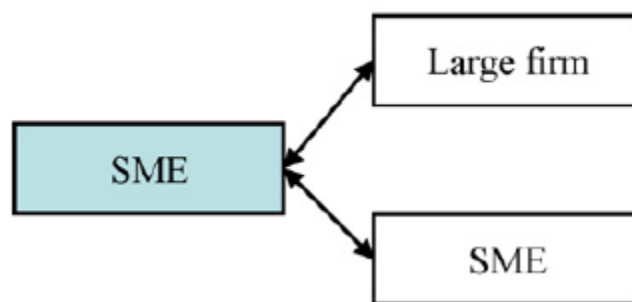
### **(c) Closed versus open innovation**

Closed innovation is the process by which firms internally discover, develop and commercialise technologies. Traditionally, large firms adopted closed innovation by relying on their internal research and development to create new products (Chesbrough, 2003).

SMEs depend on their ability to be innovative for sustaining competitiveness. However, due to increased competition and rapidly advancing technologies in many industries, SMEs are often forced to develop new products faster and more effectively. However, SMEs may have limited internal financial and human resources to engage in R&D. Nowadays, factors such as increasing availability and mobility of labour, the flourishing of the internet and venture capital markets, availability of external suppliers and widely dispersed knowledge across public and private organisations help SMEs which cannot afford to innovate on their own as they can engage with others to give rise to alternative innovation practices (Chesbrough, 2003). This is the open innovation model. SMEs can adopt the open innovation model in which they exploit both internal and external pathways to uncover technologies while at the same time acquiring knowledge from external sources (Chesbrough, 2003).

At the exploration stage, SMEs may collaborate with large firms or fellow SMEs, though they mostly would show a preference for networking with public research institutes and universities because of the fear of giving away their technology to competitors. At the exploitation stage, SMEs attempt to create value by entering into supplier–customer relations with large firms, outsourcing agreements or strategic alliances with other SMEs (Lee *et al.*, 2010).

**Figure 2.7: Technology exploration (Lee *et al.*, 2010)**



**Figure 2.8: Technology exploitation (Lee *et al.*, 2010)**

Van de Vrande *et al.* (2009) surveyed 605 innovative firms in Netherlands and came up with several observations and a theory on open innovation is summarised which is summarised in table 2.10

- The surveyed SMEs practiced open innovation activities extensively.

**Table 2.10: Open innovation practices (Van de Vrande, 2009)**

	Practice	Definition
<b>Technology exploitation</b>	Venturing	Starting up new organizations drawing on internal knowledge, and possibly also with finance, human capital and other support services from your enterprise.
	Employee involvement	Leveraging the knowledge and initiatives of employees who are not involved in R&D, e.g. by taking up suggestions, exempting them to implement ideas, or creating autonomous teams to realize innovations.
<b>Technology exploration</b>	Customer involvement	Directly involving customers in your innovation processes, e.g. by active market research to check their needs or by developing products based on customers' specifications or modifications of products
	External networking	Drawing on or collaborating with external network partners to support innovation processes, for example for external knowledge or human capital.
	External participation	Equity investments in new or established enterprises in order to gain access to their knowledge or to obtain others' synergies.
	Outsourcing R&D	Buying R&D services from other organizations, such as universities, public research organizations, commercial engineers or suppliers.



### 2.7.7 SMEs and Innovation

#### (a) Advantages

Due to their size, SMEs are flexible and have strong, personal relationships with customers, enabling rapid response to industry or economy wide shocks and changes in demand, technology, demography, regulations and business environment as they make use of their good internal communications and dynamic management style (Rothwell, 1994).

SME owner-managers may differentiate from others by having the ability to identify new markets. Small businesses can produce complementary products by identifying and exploiting market niches; they can serve as the supply base for large companies, thus avoiding direct competition with them (Porter, 1979; OECD, 2003).

SMEs are usually less bureaucratic, have a more effective organisational structure and streamlined decision-making processes, possess more specialized knowledge, have lower adaptation costs, all of which make them more inclined to take risks (Parida *et al.*, 2012).

#### (b) Survival and Growth

It is well known that companies most likely to exit and disappear from the market are small, nascent firms, which are not able to compete against larger firms and are not able to survive. However, it was observed that small, young firms which engaged in innovative activities had a 23% increase in survival rate than those which did not innovate among surveyed firms in the Netherlands (Cefis and Marsili, 2006).

Roper (1997) looked at product innovation in German, UK, and Irish SMEs and deduced that the output of innovative SMEs engaged in product innovation grew significantly faster than that of non-innovators. Similarly, based on 619 SMEs surveyed in the German traditional craft sector, Engel *et al.* (2004) noted that the sales turnover of innovative SMEs grew faster than that of non-innovative ones.

Positive correlations between innovation and export have also been noted. 1400 SMEs in Spain were assessed over a 10-year period to assess whether innovation and exporting are complementary for sales growth. Golovko and Valentini (2011) concluded that only SMEs that both innovated and exported generated significantly greater sales growth: simply doing either exporting or innovation was not enough.

#### (c) Open innovation

Van de Vrande *et al.* (2009) came up with several observations:

- The surveyed SMEs practiced open innovation activities extensively.
- In the case of technology exploitation, most SMEs relied on the initiatives and knowledge of their non-R&D workers.
- For technology exploration, most SMEs attempted to involve their customers by tracking their alternatives in products or proactively involving them in market research.
- Other practices such as outward and inward IP licensing, venturing activities and external participations were carried out very rarely since they require financial investments and formalized contracts (Table 2.10).

### 2.7.8 Barriers to Innovation

Many SMEs want to be competitive and adopt innovative practices, but they still do not do so due to a number of reasons. Examples of barriers to innovation include uncontrollable business growth, high financial risks, health and safety issues, environmental impact (Laforet, 2011). Other barriers have been classified in Table according to Internal and External Impacts.

**Table 2.11: Internal and external barriers to innovation (Madrid-Guijarro *et al.*, 2009)**

Internal variables	External Variables
<ul style="list-style-type: none"> <li>- Innovation cost difficult to control</li> <li>- Excessive risk</li> <li>- Lack of qualified personnel</li> <li>- Difficulty in accessing financial resources</li> <li>- Problems keeping qualified employees</li> <li>- Lack of internal employee training</li> <li>- Employees' resistance to change</li> <li>- Owner-manager's resistance to change</li> </ul>	<ul style="list-style-type: none"> <li>- Insufficient government support</li> <li>- Economic turbulence</li> <li>- Lack of market information</li> <li>- Lack of regional infrastructure</li> <li>- Lack of information about technologies</li> <li>- Lack of possibility of external partners</li> </ul>

### 2.7.9 Mauritian Context

#### (a) Institutional support and Incentives towards Innovation

The Mauritian government and institutions have been offering incentives to SMEs to help them come up with innovative ideas and give them the opportunity to showcase those ideas.

- The Development Bank of Mauritius (DBM) organized in collaboration with the Mauritius Broadcasting Corporation, a TV show called Le Boss to encourage local SMEs to participate and fight for their innovative ideas to win a cash prize along with aids to help their businesses grow. Many entries were received for the contest, with the winner emerging as Maubon Foods Manufacturing Co. Ltd. The firm, mostly specialising in the production of banana chips, has been able to develop different types of packaging to

serve different customer segments and different markets (DBM, 2011; Le Mauricien, 2011).

- Incentives have also been in the form of awards such as the Mauritian Business Excellence Awards (organised by the Ministry of Industry, Commerce and Consumer Protection and the Ministry of Business, Enterprise and Cooperatives), the Exporters Award (to honour local businesses which have achieved sustainable export growth through innovation and commitment through international trade), the TECOMA Award (which considers entrepreneurial achievements across Mauritius, La Reunion and Madagascar), National Woman Entrepreneurship Council Award (designed to boost women entrepreneurs' recognition while supporting their innovative ideas and determination) and SICOM Youth Excellence Award (which has included categories such as Technology/Innovation in 2014 and Entrepreneurship and Business Development Initiative in 2016).
- Mentoring programs such as the TECOMA ESPOIR for hand-picked new-generation entrepreneurs to enable them to obtain counselling services over 12 months on how to better understand their market, how to target their clientele or how to define their position and help them benefit from TECOMA's network.

#### **(b) Innovative practices by Mauritian SMEs**

Despite all initiatives in place and incentives being offered, the Ministry of Industry noted that the SMEs in Mauritius are not very innovative (Industrial and SME Strategic Plan 2010-2013). The culture of innovation is pretty non-existent amongst Mauritian SMEs owners-managers. Moran (2007) surveyed 500 SMEs on their training needs and human resource development and it was concluded that Mauritian SMEs should focus on innovation so as to be more competitive in both local and international markets.

### **2.7.10 Conclusion**

It is imperative for them to adopt strategies such as innovation, product diversification and high-up market products in order to survive. This study intends to investigate why Mauritian SMEs are so reluctant to embrace innovation, what are some of the perceived barriers to innovation and some strategies that could be adopted by owner-managers in order to develop innovative practices, resulting in growth outcomes for their SMEs.

## 3 METHODOLOGY

### 3.1 RESEARCH DESIGN

This study employed a questionnaire survey approach to find out which internal factors determine the growth intentions of Mauritian SME owner-managers, and how their motivation to start the business and to continue running it impacts on SME growth and innovation.

### 3.2 QUESTIONNAIRE DEVELOPMENT

A questionnaire was constructed based on a thorough review of literature and an analysis of previously used and tested instruments. The questions were designed by focusing on the constructs and variables that have been identified in the literature. Some of the questions were developed specifically for this study while other questions were adapted from previous academic studies, which will be referenced in related sub-sections. The questions were specifically adapted for owner-managers as they are actively involved in the business day-to-day operations and Empretec Mauritius believes that their perceptual measures could be valid in establishing the internal factors that affect growth intentions of their SMEs. The questions were designed to be precise, simple and comprehensible. Clear instructions were also provided where required. The self-administered structured questionnaire contains six main sections including SME owner-manager's profile (demographic information), SME Growth, Entrepreneurial Competencies, Entrepreneurial Attitude, Motivation and Innovation.

As discussed earlier in Chapter 2, firm growth can be measured using absolute or relative changes in sales, assets, employment, profits and number of customers. However, many researchers encounter problems in obtaining financial data, especially when dealing with private firms as many owner-managers of SMEs often do not keep proper accounting records and when they do, they are often not prepared to disclose them to third parties (Dess and Robinson, 1984). Employment growth, i.e. the difference between the number of employees currently employed and the number of employees hired at the start of the business was taken as SME growth.

### 3.3 SAMPLING STRATEGY

The population frame for this study is defined by the number of establishments involved in business activities. According to the latest census of economic activities conducted by Statistics Mauritius, there are 125,543 business units identified as being SMEs and 23,456 household agricultural holdings owned by small planters/farmers. However the timeframe and cost implications do not allow the whole population of about 125,000 businesses (Including dormant

companies and excluding informal holdings) to be surveyed and hence a survey population approach will have to be adopted and the sample size determined by statistical methods ensuring representative data.

Stratified sampling is a method of probability sampling such that sub-populations within an overall population are identified and included in the sample selected in a balanced way. A survey based on a probability sample can in theory produce statistical measurements of the target population that are:

- Unbiased, i.e. the expected value of the sample mean is equal to the population mean.
- Have a measurable sampling error, which can be expressed as a confidence interval, or margin of error.

Using the formula for calculating a sample for proportions as developed by Cochran (1963) and given the population is large and can be considered as infinite, a size of around 384 units is required as sample for a  $\pm 5\%$  precision levels with confidence level of 95%. The confidence level defines the number of times the true population value will be estimated out of n number of samples and the chance that the sample does not represent the true value.

384 SMEs were randomly selected from the databases compiled by Empretec Mauritius. They were contacted by phone, explained about the purpose of the survey and asked whether they would be willing to participate. 340 SMEs agreed to answer our questions, which gives a response rate of 88.5%.

**Table 3.1: Survey sample frame**

S/N	Economic Sector	Number of Units		Employment by Sector		Target Sample by No. Units	Target Sample by Employment	Proposed Sampling
		Total	%	Total	%			
1	Agriculture, Forestry and Fishing	23456	16%	42,100	13%	63	52	35
3	Manufacturing - Textiles and Apparel	15,241	10%	36,207	11%	41	45	25
	Manufacturing - Others							75
5	Construction	12,911	9%	36,326	11%	35	45	35
6	Wholesale & Retail Trade	46,776	31%	98,804	30%	126	122	45
7	Transportation, Storage & Communication	21,520	14%	37,838	12%	58	47	25
8	Accommodation and Food Service	10,699	7%	27,367	8%	29	34	35
9	Information and Communication	557	0%	1,788	1%	1	2	40
10	Financial & Insurance	175	0%	680	0%	0	1	25
11	Real Estate Activities	600	0%	1,200	0%	2	1	15

12	Professional, Scientific & Professional	3,978	3%	12,656	4%	11	16	25
13	Administrative and Support Services		0%	0	0%			20
14	Education	1,853	1%	5,451	2%	5	7	20
15	Human Health and Social Work	1,705	1%	3,687	1%	5	5	30
16	Arts, Entertainment & Recreation	3,408	2%	10,083	3%	9	12	25
17	Other Services	6,119	4%	10,884	3%	16	13	10
	<b>Total</b>	<b>148,998</b>	<b>100%</b>	<b>325,071</b>	<b>100%</b>	<b>400</b>	<b>400</b>	<b>450</b>

Based on data from Statistics Mauritius (Census of Economic Activities 2013 and Census of Agriculture 2014)

The devised sample includes a contingency of 10% on the overall sample size and adjustments based on sectoral heterogeneity and non-response.

### 3.4 RESEARCH INSTRUMENT DEVELOPMENT

The survey questionnaire was constructed based on a thorough review of literature and an analysis of previously used and tested instruments. The questions were designed by focusing on the constructs and variables that have been identified in the literature. Some of the questions were developed specifically for this study while other questions were adapted from previous academic studies, which will be referenced in related sub-sections. The survey questionnaire contains six main sections including SME owner-manager's profile (demographic information), Growth, Entrepreneurial Competencies, Entrepreneurial Attitude, Innovation and Motivation.

The initial number of questions was 32. It is essential to determine whether questions and instructions are clear to respondents and whether they understand what they need to do. The preliminary survey questionnaire (PSQ) was pre-tested for comprehension, clarity, ambiguity and difficulty of response and was given to selected people not affiliated neither the research project nor the research sample. A surveyor completed the questionnaire based on their answers and the selected persons were asked comment on the questions and instructions given to them. A number of changes were done to the PSQ following constructive comments and additional reviews. A few of these changes are described below:

- (1) Omissions were corrected, for example: annual sales/turnover "between 1 to 2 million rupees" missing.
- (2) Obsolete or duplicating questions were removed.

- (3) The expected duration of filling in the survey questionnaire was targeted to be less than 10 minutes. While pre-testing the PSQ, it was observed that the duration was exceeding 10 minutes and comments included the complexity of the items. The questions where respondents have to rate different items using Likert scales were refined. The phrasing of the items themselves was simplified and the number of items was reduced.

### 3.5 RESEARCH SURVEY ADMINISTRATION

The survey component was outsourced to Mr. Riad Sultan and team of surveyors to administer the survey, which includes survey design, online coding and survey administration. The online survey questionnaire was filled by the surveyors on tablets or smartphones. Many SME owner-managers have postponed their meetings of November-December to later as they preferred to allocate time to their business, marketing and sales during the festive season.

### 3.6 DATA ANALYSIS

After the data collection phase, the data analysis stage took place. Data analysis follows collection of information and precedes its interpretation or application. Data analysis provides researchers with facts and figures that allow them to interpret results in the context of the community and to make statements about the significance of the findings for the individual and society (Sarantakos, 2005).

The raw data extracted from the filled-in questionnaire was first of all cleaned by visual check manually to account for omissions and inconsistencies. The following steps relating to the survey questionnaire were taken during initial data cleaning.

- (1) The entire questionnaire was discarded if the response was "above 50 million" (Section Growth, Question 9). In this study, the definition adopted was that by the SMEDA Act 2009 which characterises companies having sales/turnovers above 50 million as 'large' and therefore did not qualify as an SME.
- (2) Reviewing numerical outliers:  $15 < \text{age of the SME owner-manager} < 120$  (Section SME owner-manager's profile, Question 2).
- (3) Generation of calculated fields: simple calculation of age of business from starting year of operation (Section SME owner-manager's profile, Question 7).

The analysis of the cleaned survey data was processed using Microsoft Excel with the add-in component Analysis ToolPak and the Real Statistics Resource Pack obtained from <http://www.real-statistics.com/>. In the case of questions with Likert scales ranging from 1 to 5, factor analysis was undertaken to obtain clusters.

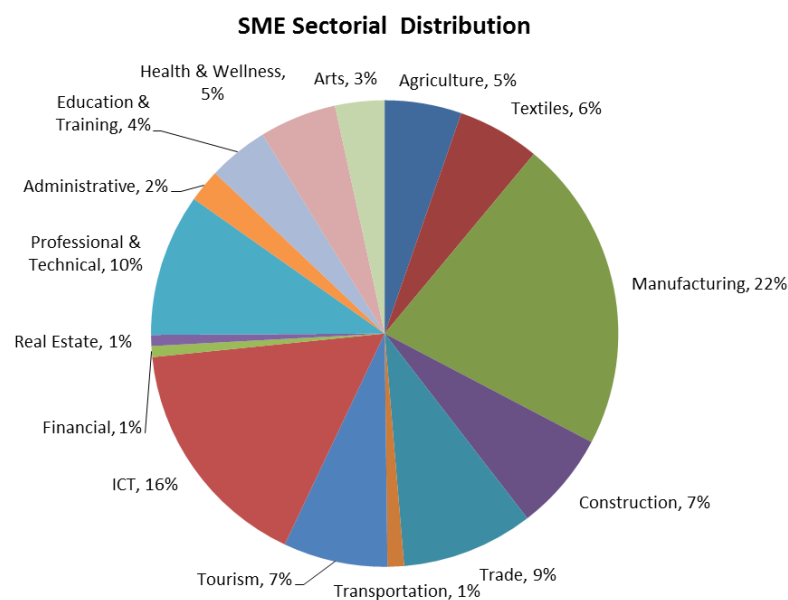


### **3.7 ETHICAL ISSUES**

Research ethics in order to protect the rights of respondents were considered during the whole process of the study, i.e. during data collection, data analysis and data reporting. The questionnaires were numbered with an ID instead for identification purposes during data analysis. The privacy and anonymity of respondents will strictly maintained at all times such that no one can be identified in the final report, dissemination workshop and related publications.

## 4 GENERAL FINDINGS

### 4.1 National Statistics

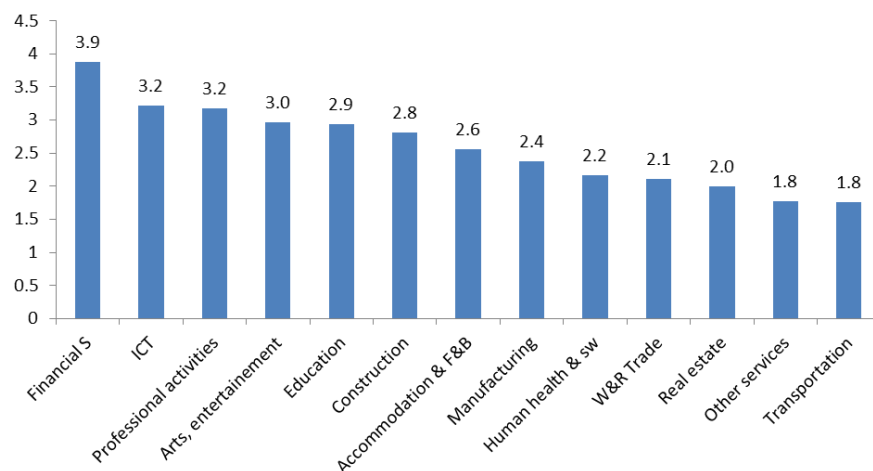
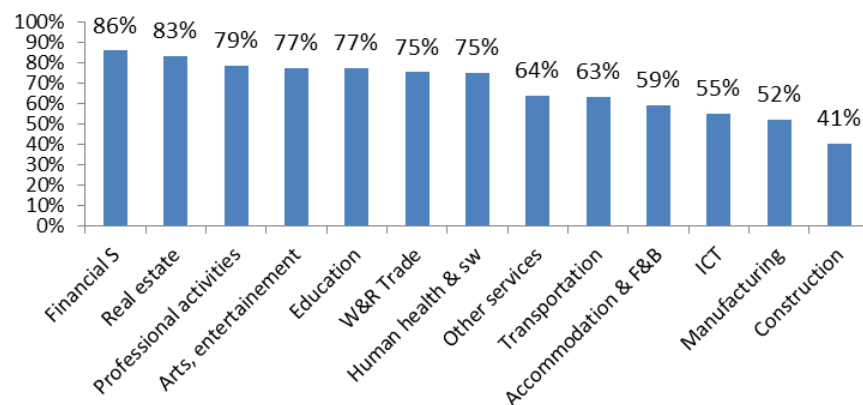


Though selection was done randomly the participants of the survey were asked to choose the major sector in which their businesses operations.

- Survey carried out covered all the major sectors of the Mauritian Economy
- There has been induced bias in the number of respondents like reducing the number of SMEs in the trade sector in favour of other sectors like ICT and the Financial Sector

Based on Statistics Mauritius, Figures from the Census of Economic Activities (Small Establishments) of 2013 small establishments is dominated by Wholesale & Retail Trade with 37% of the 125,543 Establishments recorded during the census.

- These statistics demonstrate that the SME Sector in Mauritius is highly concentrated in the low value added and saturated sectors

**Number of persons engaged per unit****SMEs Value Added v/s Gross Output**

The highest employers are in the financial, ICT and Professional activities with above 3 persons engaged per unit on average. However those sectors have the lowest population of SMEs.

On the other hand the sectors like Trade, Transport and Manufacturing have the highest population but show the lowest employment per unit.

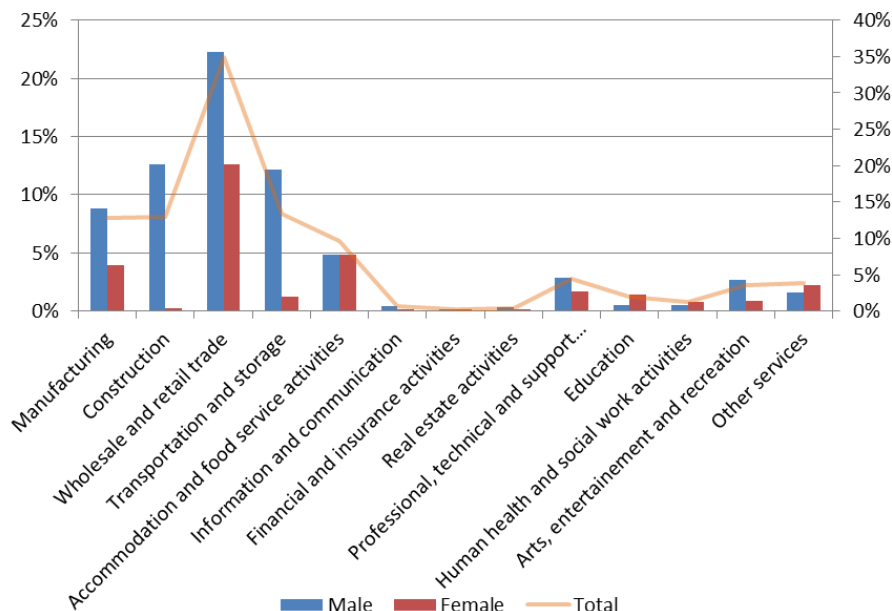
SMEs have been quoted as the Engine for growth which unfortunately has not yet been set to full gas in Mauritius.

The sectoral distribution and employment strongly suggest that Mauritian SMEs are in the least Entrepreneurial segments and of the value chain.

The percentage value added of SMEs is very high for the financial services which unfortunately have the least number of enterprises.

- Mauritian SMEs are concentrated in low value added sectors.
- Manufacturing is very poor in terms of value addition along construction and ICT.
- Growth will depend on the ability of the enterprise to add value and get market share.

## SME Survey 2017

**Employment by sector and Gender CEA 2013**

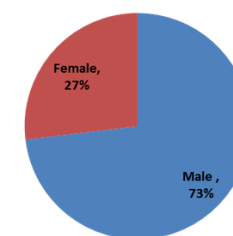
Based on the findings of the Census of Economic Activities, Small Establishments (2013) employment by sector and gender show that the highest employment is in the following sectors.

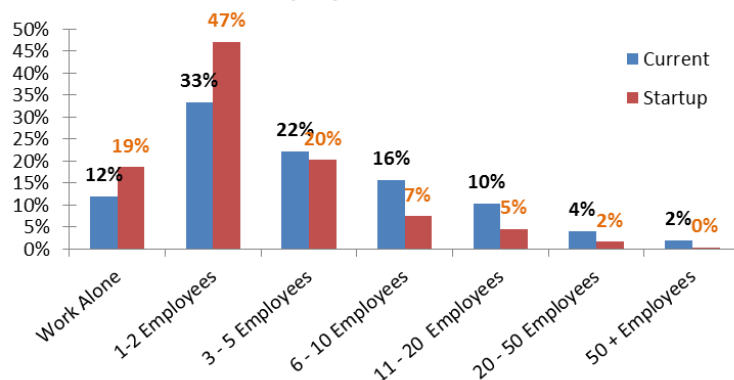
- Manufacturing
- Construction
- Wholesale and Retail Trade
- Transportation

High growth potential sectors are seen to employ the least number of people while having the least number of enterprises.

As shown by the CEA and the survey conducted by EM there is a gender imbalance where male owned enterprises constitute 73% of the pool of enterprises in the formal sector. However during qualitative discussions this tendency may be reversed in the informal sector where women dominate.

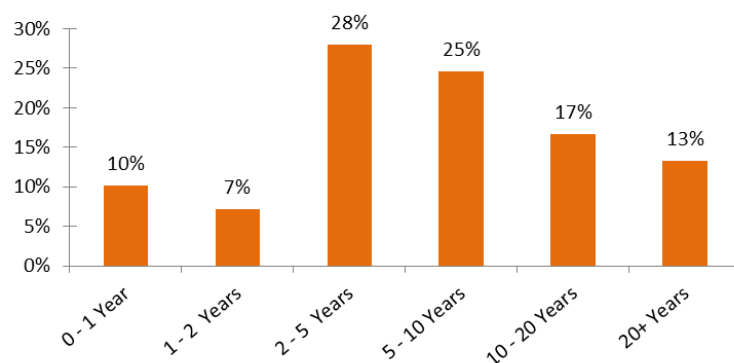
Findings suggest that women prefer to go for formal employment rather than starting their own ventures because of revenue sustainability and stability to support the family.

**SME Owner Gender Distribution**

**Employment in SMEs**

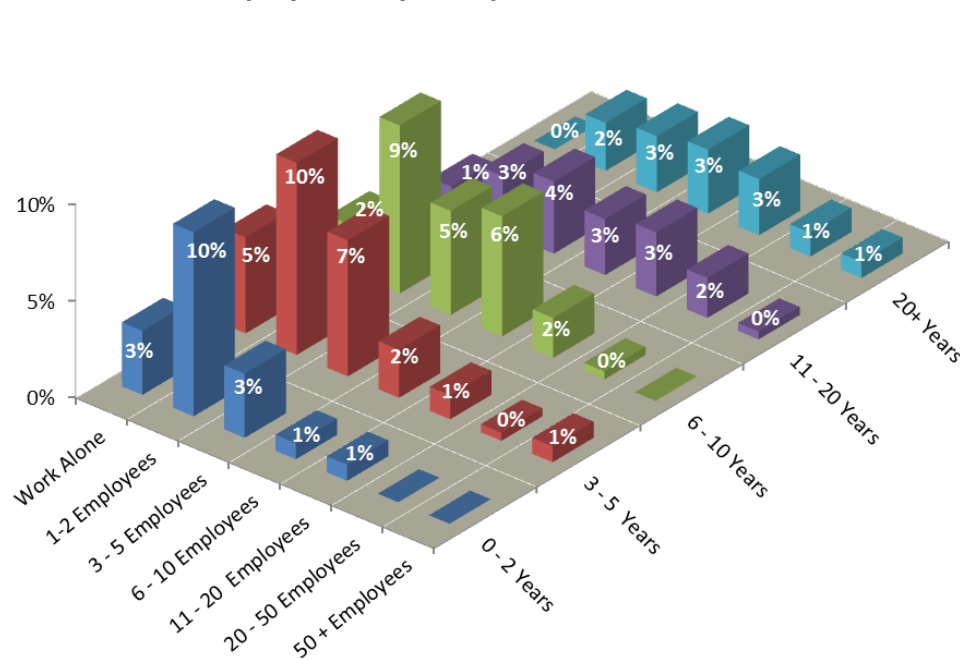
When asked about the number of people employed SME owners have indicated that 67% employ 5 or less people and

- At start up 86% of SMEs employed less than 5 people which gradually decreased as the company has grown
- Currently 33% employ more than 5 people as compared to 14% at startup which shows evidence of a shift towards larger employment synonymous to growth

**Age of Enterprise**

45% of SMEs in Mauritius have less than five years which is relatively recent and starting to show signs of stagnation but are still showing positive growth and still have potential to further expand and employ people.

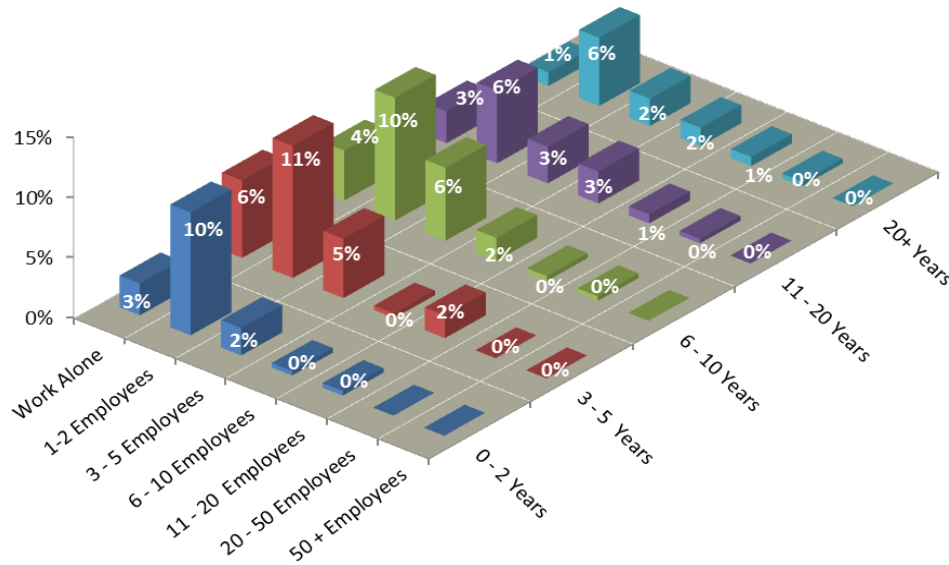
- For sustained growth there should have been frequent business model reviews so that stagnation does not occur in a too short time span.
- The remaining 55% are above five years but more prone to stagnation or even shrinkage in a saturated market
- Fierce competition affects both startups and established enterprises and is not limited to local competitors but also imported goods.

**Employment by Enterprise Years of Existence**

There is no significant evidence that SMEs employ more people as they go along the years.

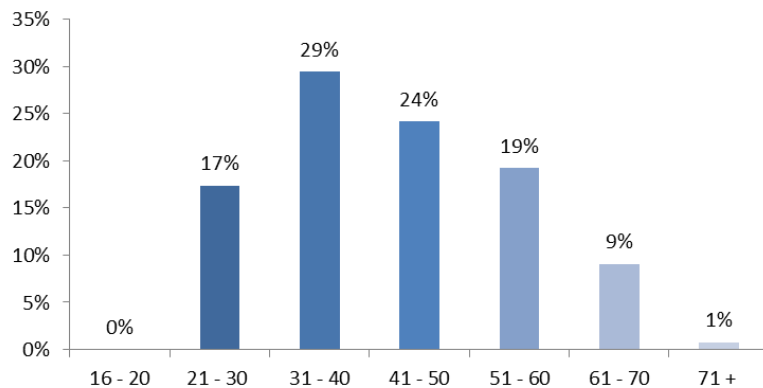
- Own Account workers (Work Alone) and those employing 1-2 persons represent 13% of startups and instead of shrinking (which represents growth in terms of employment) increases to 15% in the range 3-5 Years.
  - This employment cycle may coincide with the Valley of Death where SMEs shrink to jump back after the financial crisis which is explained by a reduction to 11% during the period 6-10 Years.
- 82% remain under the bracket of 10 employees irrespective of the years of operation
  - However nascent enterprises show an increase in employment over 0 to 10 years while after that period there is a decrease and stagnation
  - It confirms the theory that growing SMEs create more jobs than established enterprises

**Start Up Number of Employees  
by Enterprise Years of Existence**



- At Startup 89% of enterprises have started with less than 6 employees.
  - Comparing with the actual employment data only 19% of SMEs have been able to grow their business beyond 6 employees
  - 11% of the enterprises have been able to grow beyond 10 employees

**Age Distribution of SME Owners**

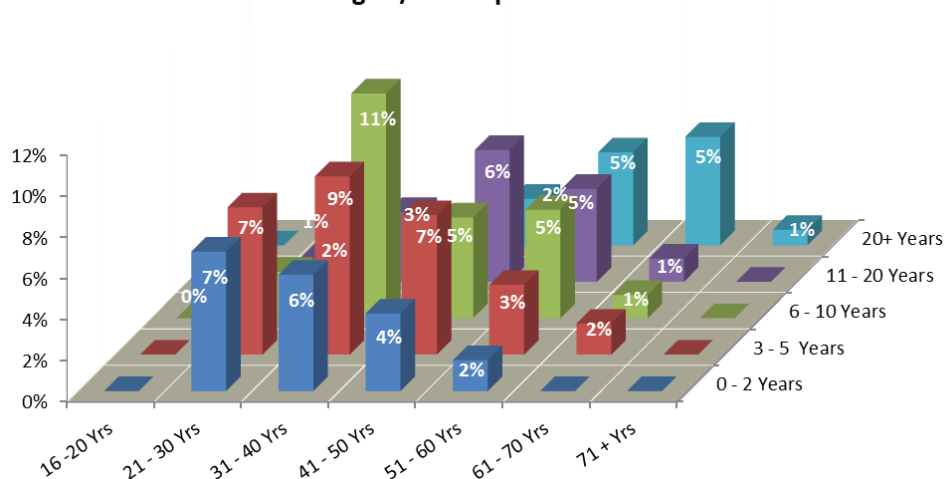


Over 50% of the SME owners were found to be within the age bracket of 31 to 50 years old.

Majority of SME owners fall within the age bracket of 31 to 50 years old which suggests that they have:

- Gathered work experience and expertise in a certain domain
- Saved to finance their start-up
- Matured in decision making and earned calculated risks
- Have clear goals and aspirations

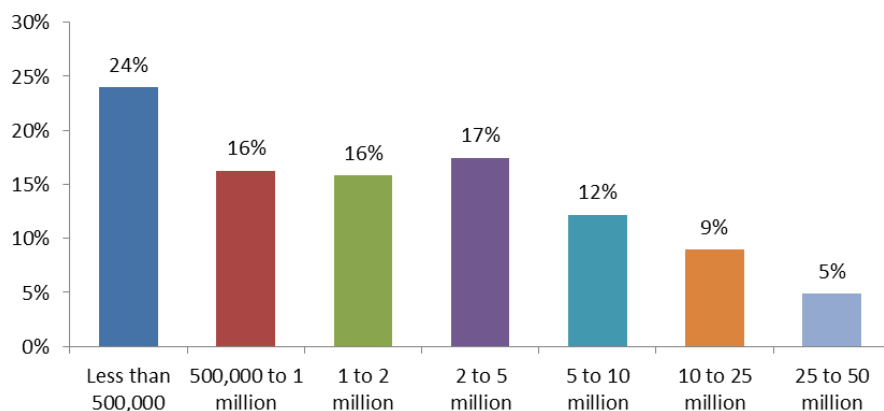
Owner Age v/s Enterprise Yrs of Existence



The age of the owner as compared to the number of years the business has existed shows the following findings:

- SME owners start their businesses mostly between the age of 31-40 years old which represents 64% of SMEs
- Startups among those below 30 years (youth as quoted) represent only 14%
- While 32% started business after a long career ranging from 50+ years

Distribution of Sales / Turnover

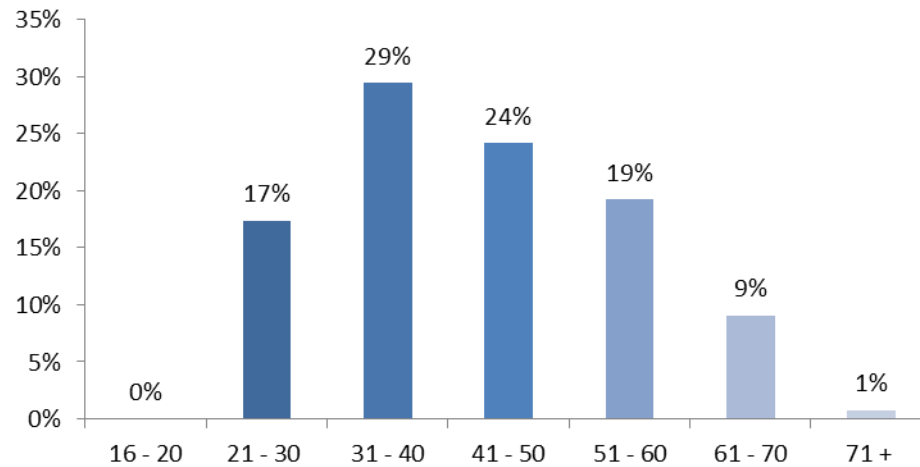


The respondents to the survey were asked about the range of their turnover and the graphical representation reveals that 56% of Mauritian SMEs are micro-Enterprises with a turnover less than 2 million rupees.

- 29 % are qualified as small establishments with yearly revenue between two and ten million rupees.
- The percentages go down further to only 5% enterprises earning from Rs 25 to 50 million.



### Age Distribution of SME Owners



Respondents were asked about their age:

- Over 50% of the SME owners were found to be within the age bracket of 31 to 50 years old.

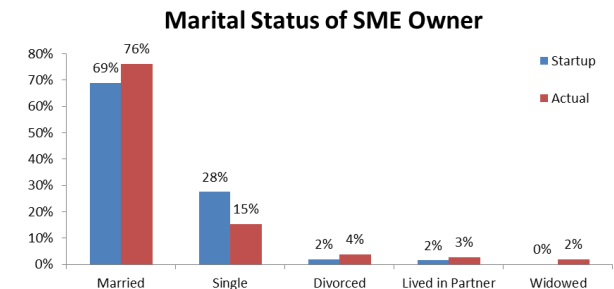
Majority of SME owners fall within the age bracket of 31 to 50 years old which suggests that they have:

Gathered work experience and expertise in a certain domain

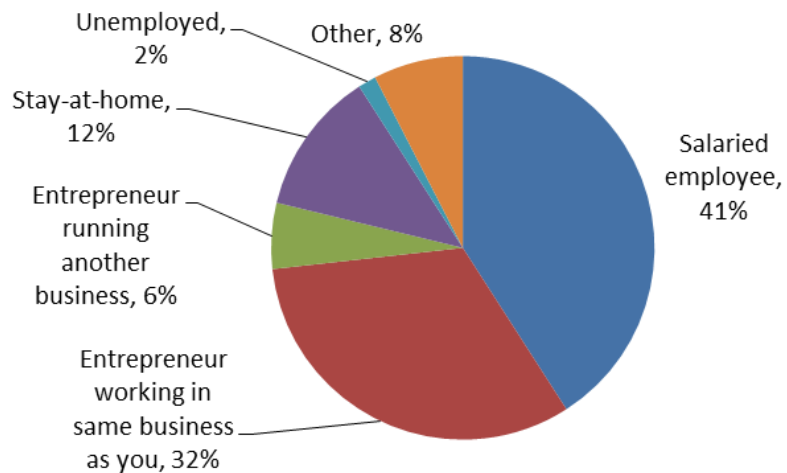
- Saved to finance their start-up
- Matured in decision making and earned calculated risks
- Have clear goals and aspirations

Irrespective of their marital status entrepreneurs / SME Owners launch businesses.

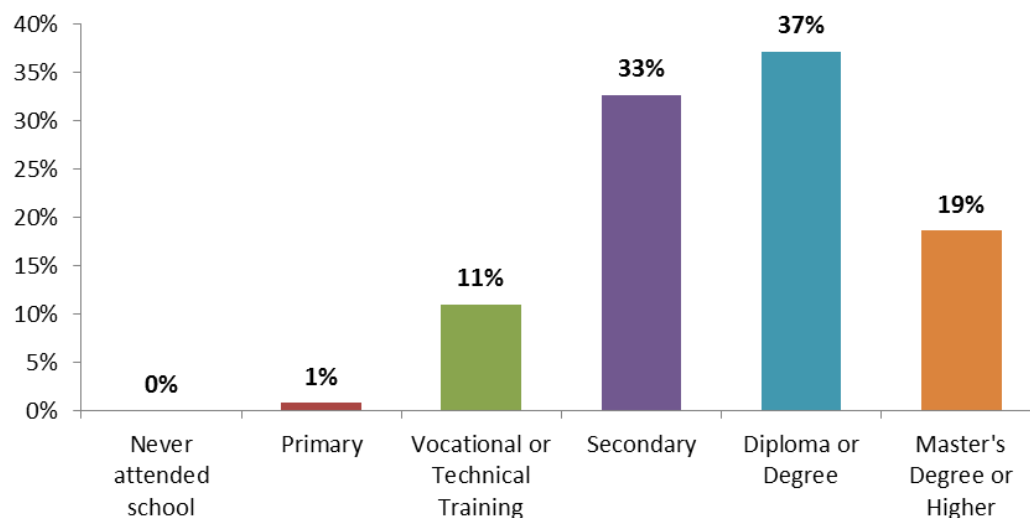
- At start-up there is a higher proportion of Start-up entrepreneurs who are single when they launch their enterprise
  - However the core principle is testing whether the SME owner has any alternative support when he starts his business.
- 69% of respondents stated that their spouse / partner earned either as salaried employees or SME owners releasing the pressure of End of Month challenges. The findings suggest with strong evidence that the SMEs owners have alternative sources of revenue and hence get support when things are not so bright.
  - However the drawback in such situation is that the core business model is not revised as often as it should, distracting the business



### SME Owner's Spouse Employment Status

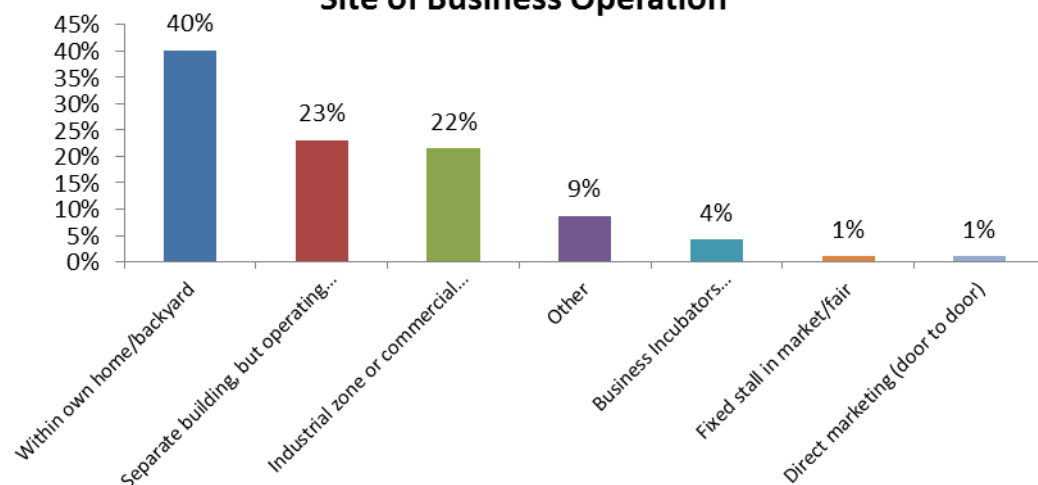


### Educational Achievement



All the SME Owners that have been interviewed were literate and education does not seem to be a major factor that holds back the SME growth potential.

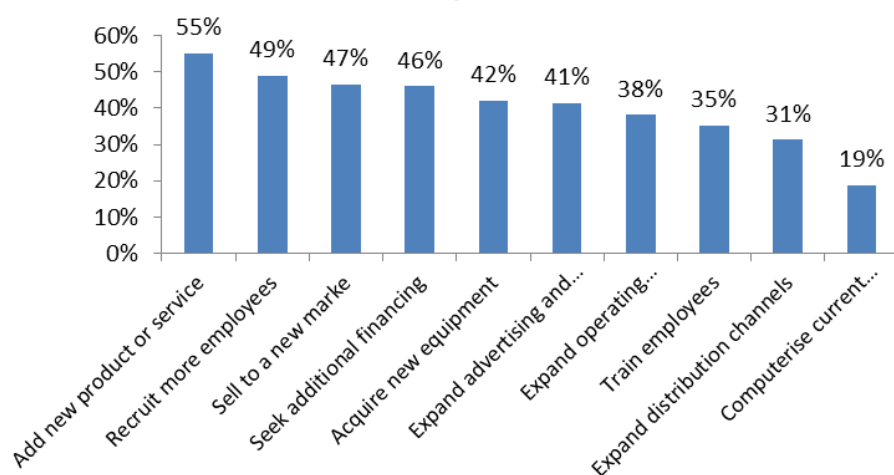
- Education plays a very important role in the development of an innovative ecosystem and high growth potential companies mostly depend on the ability of the enterprise to seize unusual and niche opportunities.
- The findings also dissipate the perception that setting up a SME is closely linked to subsistence and survival due to lack of opportunities. 99% of the respondents have the opportunity to look for a job and even earn better than own account workers but chose to become self-reliant
- More than 60% of the respondents have degrees or master degrees while 11% have TVET certificates
- *Based on the theory that the current educational system is forcing children to drop creativity for logic, the level of education of Mauritian Entrepreneurs may explain the noted lack of creativity and innovation.*

**Site of Business Operation**

SMEs interviewed on their site of operation have at 63% stated that they are still operating from their own yard or within residential areas.

The situation gives rise to the following limitations:

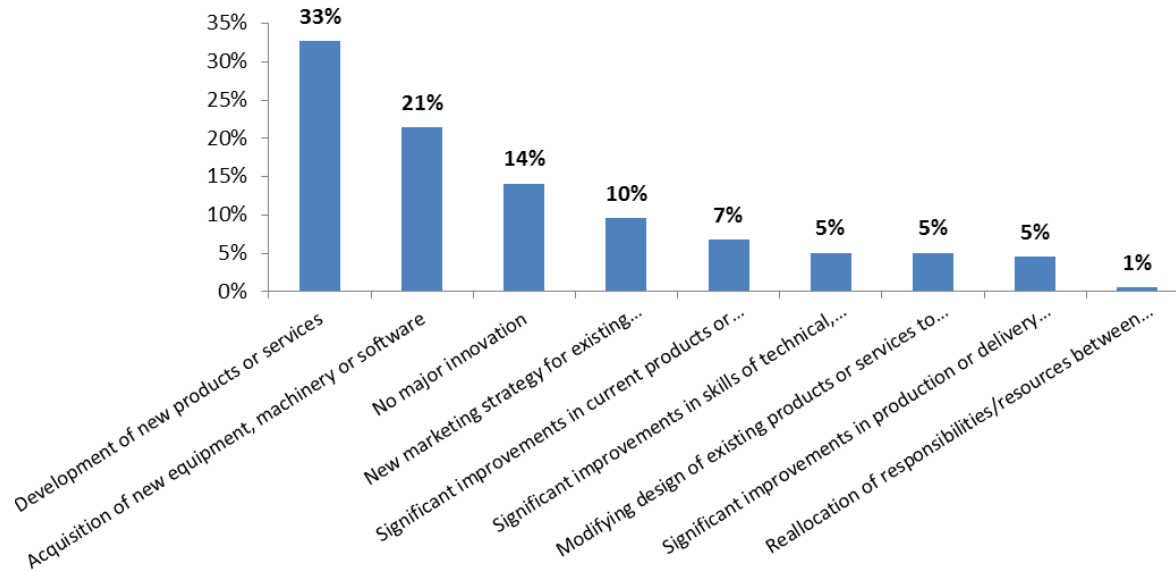
- Limited opportunities to grow with investments in larger machines
- Larger building for more work space
- Access to utilities
- Benefit from facilities with regards to logistics and services
- Also explains partially problems with licenses and permits

**Growth & Expansion Plans**

On the overall SMEs have clear ideas regarding their growth plans like:

- 55% state they will add new products and services
- 47% selling to new markets
- 42% will acquire new equipment

However growth should be opportunity driven and done systematically as a new start up with the advantage of having already a customer.

**Major Innovation Initiatives in SMEs**

Business growth is perceived to be closely associated to Innovation and measures taken to be different.

- 33% relied on the new products and services and 21% on acquisition of equipment
- 14% agree that they have not done any innovations in their businesses

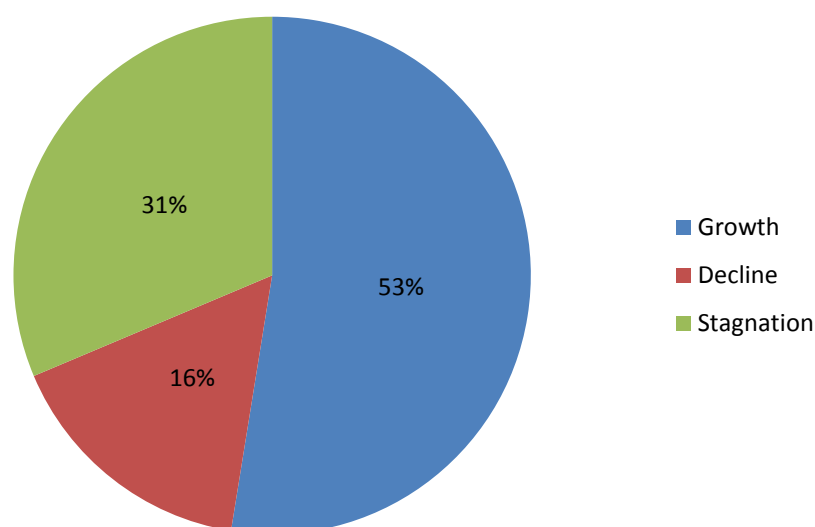
## 5 ANALYSIS AND DISCUSSION

### 5.1 Current status of SMEs and SME owner-managers

In this study, firm growth has been defined in terms of the change in the number of employees as high-growth SMEs have the potential to create jobs and employment. Moreover, employment growth is deemed relevant because entrepreneurs are often willing to disclose this type of information and it is easier for them to recall. Employment growth, i.e. the difference between the number of employees hired at the inception of their business and the number of employees currently employed (at the time of the survey) has been quantified.

Some observations:

- (i) 53% of SMEs were still undergoing employment growth;
- (ii) 31% of SMEs were still employing the same number of employees they had hired at the beginning of operations.
- (iii) 16% of SMEs have experienced employment decline.



**Figure 5.1: Current employment status of surveyed SMEs**

We have also investigated SME owner-managers being own account workers. 9.7% of SME owner-managers interviewed have always worked on their own. There has been a decrease of around 6% in the percentage of SME owner-managers who started as own account workers at launch and now.

**Table 5.1: SME owner-managers versus own account workers**

At launch (%)	18.2
Currently (%)	11.9
Has always been an account worker (%)	9.7
SME owner-manager started as an own account worker, but then hired employees (%)	8.5
SME owner-manager started with employees, but is now an own account worker (%)	2.1

Other findings observed are that 8.5% of SME owner-managers started as an own account worker, but subsequently hired employees. 2.1% of SME owner-managers started with employees, but have since undergone collapse and now subsist as own account workers. This may be due to bad business decision-making or the prevailing economic situation.

The number of workers currently employed by SMEs interviewed showed a reverse trend, i.e. SMEs having the lowest turnover employed the highest share of workers. SMEs having turnover less than Rs 500,000 employed the highest number of employees (25%) while SMEs having turnover Rs 25 to 50 million employed only 5% of the workers.

Analysis of the surveyed data gave rise to the following table which details the minimum, maximum and average number of employees currently employed by SMEs with different turnover categories. A salient point from the table is that there is an SME with turnover less than Rs 500,000 employing a maximum of 30 employees. On the other hand, there is an SME earning with Rs 5 to 10 million where the SME owner-manager is an own account manager.

**Table 5.2: Turnover of SME versus Employees currently employed**

Turnover	Min employees employed by an SME	Max employees employed by an SME	Average number of employees currently employed by an SME
Less than 500,000	0	30	2
500,000 to 1 million	0	8	2
1 to 2 million	0	4	2
2 to 5 million	0	13	5
5 to 10 million	0	45	9
10 to 25 million	1	160	26
25 to 50 million	5	196	35

They were also asked whether they plan to hire or fire employees or keep the number of employees unchanged in the next 2 years. SMEs with turnover less than Rs 500,000 accounted for the largest percentage of employees to be hired (25%). Across all categories of turnover, 72% of SMEs affirmed that they were planning to employ between 1 to 10 workers in the coming 2 years.

**Table 5.3: Turnover of SME versus Employees to be hired in the next 2 years**

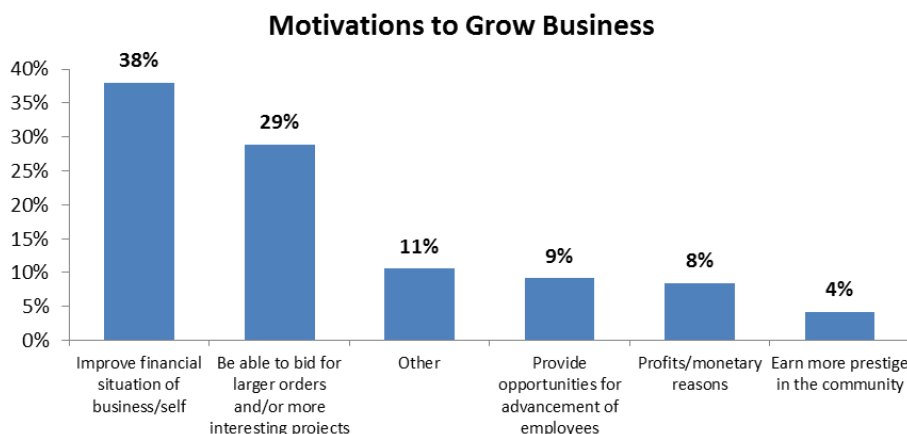
Turnover of SMEs	Share of Employees to be hired in the next 2 years (%)					Total (%)
	0	1-3	4-10	11-20	20	
Less than 500,000	2	10	10	1	2	25
500,000 to 1 million	1	6	5	2	2	17
1 to 2 million		8	6	1	1	16
2 to 5 million	1	4	6	1	2	15
5 to 10 million	1	3	5	3	1	13
10 to 25 million		3	3	1	2	10
25 to 50 million		1	2	2	1	5
Total	4	34	38	12	12	100

### 5.1.1 SME Growth

SME owner-managers were asked whether according to them they have been able to grow their business or not. 56% of them responded in the affirmative.

Growth for its own sake is insufficient as a goal—there have to be benefits. The entrepreneurs who have been able to initiate growth were asked the motivation behind striving to grow their SME. 68% either wanted to improve the financial situation of their business or themselves (40%) or be able to bid for larger orders and/or more interesting projects (28%). In a survey done on Canadian SMEs, improving the financial situation of leaders and their families was also the top benefit identified. Nine out of 10 leaders of growing SMEs mentioned this aspect. Growth allows a business to tackle larger projects, which can be more motivating for employees. Moreover, a successful business will be better positioned to spark the interest of qualified prospects in its recruiting campaigns, partly because it can guarantee a certain degree of stability. Profits/monetary reasons surprisingly were among the lowest rated reasons at only 9%.



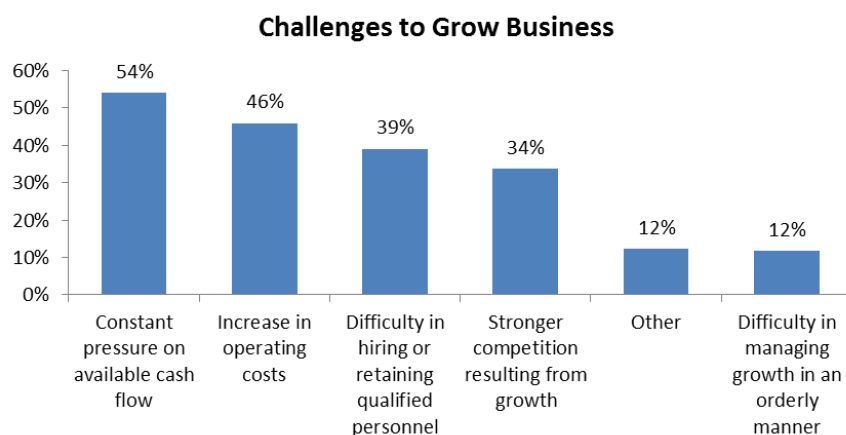


**Figure 5.2: Motivation to grow business**

Entrepreneurs know that managing a business will clearly never be a walk in the park and they will inevitably have to face their share of challenges, often on a daily basis. Particularly if it is poorly planned, growth will put additional pressure on the entire business.

Heading the list of challenges to be faced is a substantial increase in operating costs, according to 47% of surveyed entrepreneurs. To address rising demand, businesses have to dedicate more resources to acquiring inputs and managing accounts payable, which takes a bite out of their working capital. 45% stated that cash flow repercussions can slow the pace of growth.

However, it is not only the business's finances that can come under pressure during a growth phase—its human resources can, too. 46% of entrepreneurs noted difficulty to hire or retain qualified personnel. Work teams must step up their efforts to meet demand and constantly adapt to the business's pace of growth, which does not come naturally to everyone. Once again, careful planning and solid management are key, especially when challenges associated with employee recruitment and retention grow out of proportion and become genuine obstacles to growth.



**Figure 5.3: Challenges associated with growth**

### 5.1.2 Growth Strategies

Participants were asked to indicate the extent to which each of the possible growth strategy would be beneficial to SMEs in Mauritius. Data was captured using a 5-point Likert scale (where 1: Very important, 2: Moderately important, 3: Neutral, 4: Slightly important and 5: Not important at all).



**Figure 5.4: Growth strategies for SMEs in Mauritius**

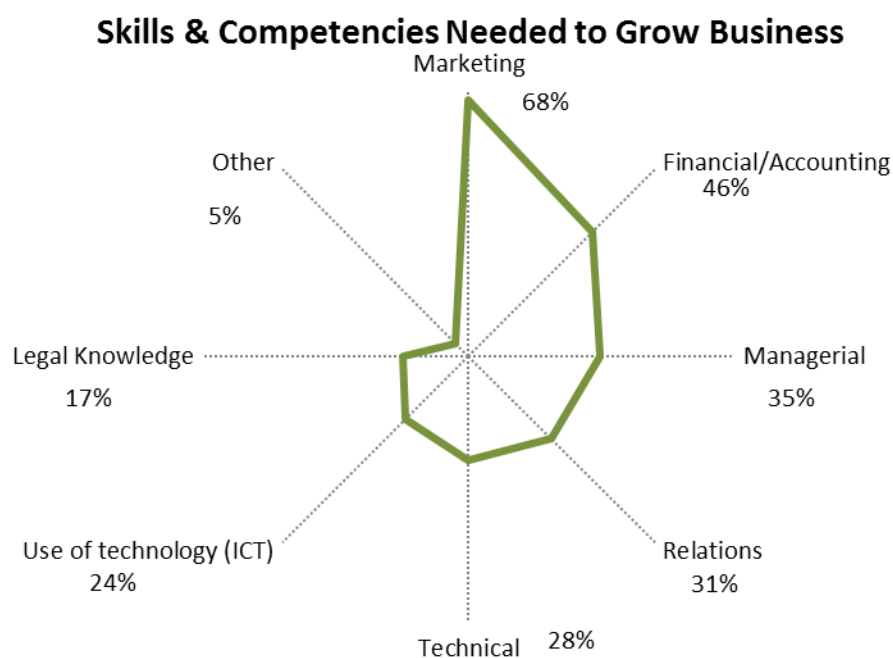
SME owner-managers surveyed identified three main strategies for Mauritian SMEs to adopt for growth:

- (i) Understand and satisfy customer needs (75%)  
In a study conducted by BDC Canada (2015), Canadian SMEs also mentioned that being a client-centric business was their number one growth strategy. Indeed, having a good grasp of client needs and satisfying them was decisive in ensuring growth of their business. Serving clients well and, if required, revamping product and service offerings according to their needs and expectations allows them to increase their sales to existing clients and attract new ones.
- (ii) Innovate (63%)  
This Innovation strategy came out third in the BDC Canada study. Innovation has been identified by numerous studies as basis for entrepreneurial success. Innovation by interviewed Mauritian SME owner-managers is further investigated below.
- (iii) Access new markets regionally or internationally (45%)  
Interestingly, “adding new markets locally” as a growth strategy scored very low (13%, ranked 9<sup>th</sup> out of 10 items). Mauritian SME owner-managers have recognised that the domestic Mauritian market is saturated due to dumping of foreign products, overproduction and competition by other SMEs and large companies. Turning towards new, foreign markets allows finding new possibilities.

However, only 14.7% of entrepreneurs have considered e-commerce as a growth strategy. Electronic commerce (e-commerce) is the process of buying and selling products or services using electronic data transmission via the Internet. By implementing and using e-commerce, sellers can access narrow markets segments that are widely distributed. For SMEs, the adoption of e-commerce “level the playing field” with big business, provide location and time independence, and ease communication. However, in spite of the many potential advantages of e-commerce, its adoption by SMEs remains limited. Few SMEs establish their own websites; most who do so use their website primarily to advertise and promote their business – they are still reluctant to conduct transactions online. Many SMEs use the internet mainly to communicate via e-mail or to gather business information. SME owner-managers do not seem to realise the strategic value of e-commerce to their business. The costs of access and launching a simple website have declined to levels where these no longer present barriers to e-commerce. A large percentage of the customers of SMEs are online and the Internet has penetrated a significant number of households in Mauritius and the nearby African region. It is no longer an option for most SMEs to ignore the Internet and take a ‘wait and see’ attitude (Drew, 2003; Grandon & Pearson, 2004).

### 5.1.3 5.1.8 Skills/competencies of SME owner-managers

SME owner-managers were questioned about the skills or competencies they felt they lacked in order to grow or further grow their business.

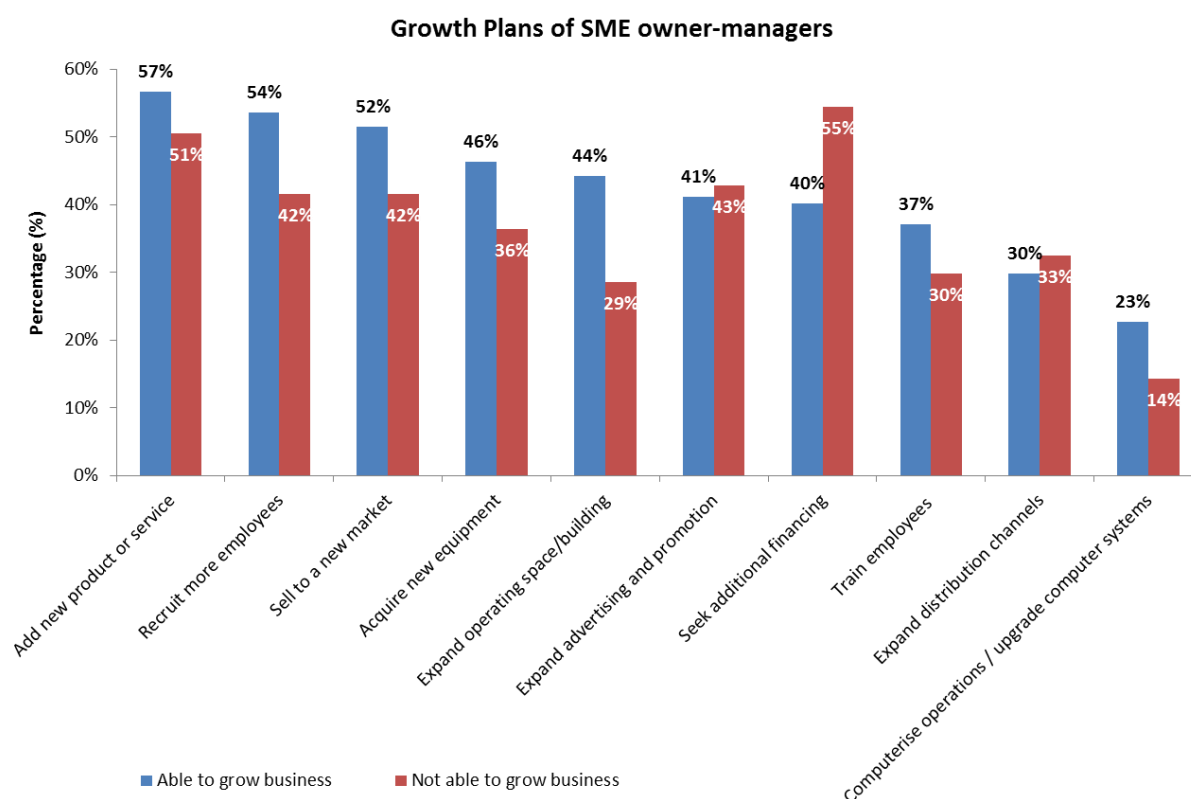


**Figure 5.5: Skills/competencies needed by SME owner-managers to grow their business**

An overwhelming 68% of them felt that they lacked marketing skills as they are keenly aware of the value of the results of good marketing. Indeed, entrepreneurs are not typically marketing experts. The most prevalent problem in small firms is a lack of knowledge about the marketplace and planning (Martin, 2009). Most owner-managers do not define their own marketing mix in terms of product, pricing, place and promotion, but appear to prefer interactive marketing (Carson *et al.*, 1995). Most SME owner-managers rely on their close relationship with existing customers, word-of-mouth marketing and using their immediate networks to market their products. Small entrepreneurial SMEs are often characterized by entrepreneurs' lack of marketing development competencies coupled with their high technical and professional skills (Capaldo *et al.*, 2001).

### 5.1.4 5.1.9 Growth Plans of SME owner-managers

SME owner-managers were asked about the future growth plans for their business. Depending on whether they have been able to grow their business or not in the past, their answers were different.



**Figure 5.6: Growth plans of surveyed SME owner-managers**

Those entrepreneurs who have been able to grow their SME had three main growth plans, namely: Add new product or service; Recruit more employees; Sell to a new market. On the other hand, those entrepreneurs who have not been able to grow their business had other

priorities. Their main growth plan is to seek additional financing so as they can increase their cash flow. Their next two growth plans are to add new product or service to their portfolio or to expand advertising and promotion to reach greater number of customers.

## 5.2 MOTIVATION

### 5.2.1 Entrepreneurial Competencies

Research by Man (2001) and Lopa and Bose (2014) were used to gather information about the entrepreneurial competencies of Mauritian entrepreneurs. 18 items were selected. As discussed in previous chapters, Porter (1985) has categorized six major areas of entrepreneurial competencies relating to SMEs, which are opportunity, relationship, conceptual, organising, strategic and commitment competencies. The same 18 items were also tested for McClelland's clusters (Figure 3.3). The interviewees were asked the extent to which they are able to carry out these activities as an SME owner-manager. Data was captured using a 5-point Likert scale (where 1: Strongly agree, 2: Agree, 3: Neutral, 4: Disagree and 5: Strongly disagree).



**Figure 5.7: Competencies and associated activities (Porter)**

After cluster analysis, it was noted that SME owner-managers surveyed scored highest on the Commitment competencies, i.e. they strive hard to run their business and are committed to make it succeed. In second position are the Opportunity competencies, i.e. SME owner-

managers believe that they are able to identify untapped market opportunities and fulfill them for customers with their products or services. Only 8% of entrepreneurs were able to think conceptually – which may prove to be an issue since the very basic definition of an entrepreneur is someone who is able to take risks to start their ventures and go for bold decisions once their business has taken off and someone who is able to develop new products or services based on what is currently missing on the market or problematic because of some lacking attribute.

**Table 5.4: Entrepreneurial Competencies (Porter) of surveyed SME owner-manager - I**

Cluster	Entrepreneurial Competencies	Percentage of SME owner-managers (%)
1	Opportunity	25
2	Organising	15
3	Relationship	12
4	Strategic	12
5	Commitment	29
6	Conceptual	8



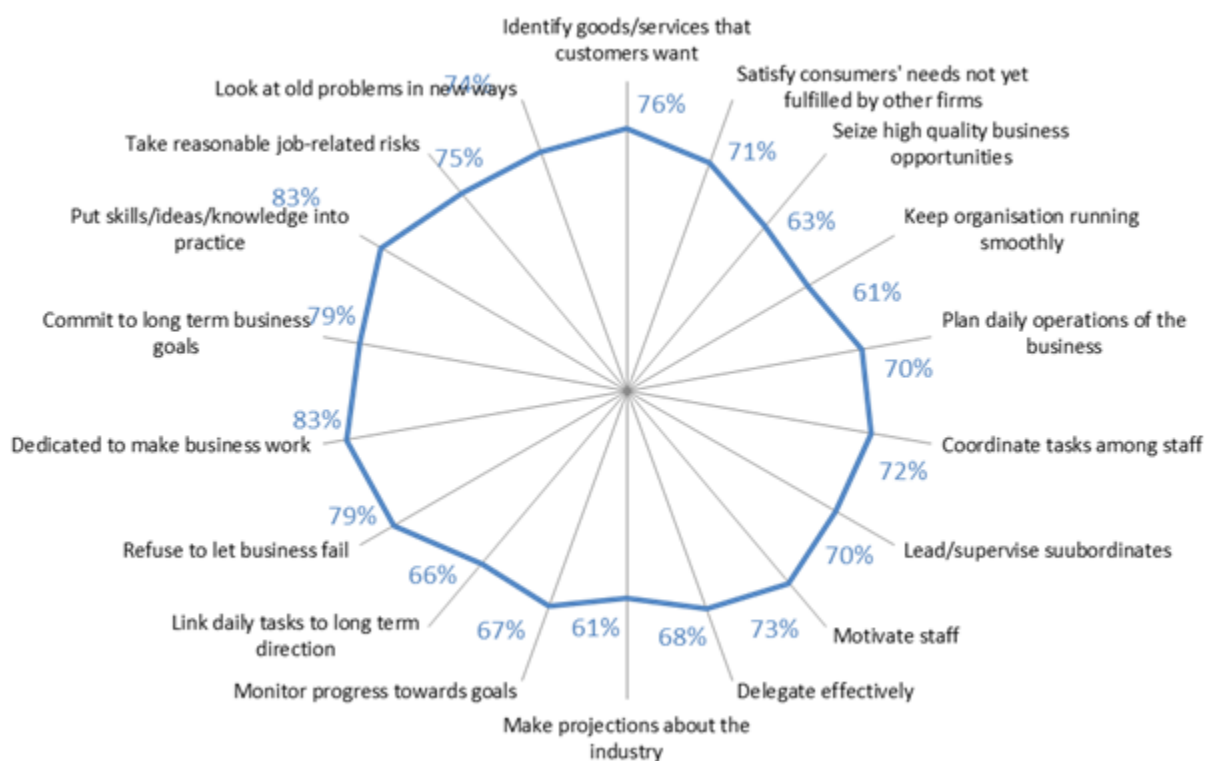
**Figure 5.8: Clusters and associated activities (McClelland)**

Cluster analysis also classified respondents into McClelland's three clusters. Most of the entrepreneurs scored high in two clusters, namely 'Power' and 'Achievement.' It was worrying to observe that only 10% of the SME owner-managers had the ability to strategically plan for their business.

**Table 5.5: Entrepreneurial Competencies (Porter) of surveyed SME owner-managers - II**

Cluster	Entrepreneurial Competencies	Percentage of SME owner-managers (%)
1	Achievement	40
2	Planning	10
3	Power	50

Strategic planning is concerned with the setting of long-term organisational goals, the development and implementation of plans to achieve these goals, and the allocation or diversion of resources necessary for realising these goals. In a practical sense, strategic planning is about competitive advantage. The purpose of strategic planning is to enable a business “to gain as efficiently as possible, a sustainable edge over its competitors”. Research has consistently shown that most SMEs do not engage in strategic planning. This is at odds with much of the strategy literature that dictates that enterprises “must actively plan for the future” to compete effectively and survive (Ennis, 1998).

**Figure 5.9: Overconfidence of SME owner-managers**



All the 18 items of Entrepreneurial Competencies scored between 61 to 83%, indicating that the SME owner-managers who responded to the survey believe that they have the ability to carry out all the different activities correctly and efficiently. This shows that there is a certain element of overconfidence in their responses. Overconfidence is a perceptual distortion in the sense that one's own abilities – normally associated with one's own success potential – are systematically overestimated. Some owner-managers may start a business with the erroneous belief that they have the sufficient skills and experience due to their overconfidence. At the same time, overconfidence may be at least partially responsible for the relatively high incidence of new venture failures, since overconfident entrepreneurs are likely to overestimate their ability to make correct decisions in establishing and growing their new businesses.

The presence of *some* overconfident individuals can benefit society as a whole. These individuals explore business opportunities and provide valuable information to their social group that would not be otherwise available. Thus, societies with some overconfident individuals can have evolutionary advantages.

### 5.2.2 Entrepreneurial Attitude

To investigate the entrepreneurial attitude of SME owner-managers, the Entrepreneurial Attitude Orientation (EAO) scale developed by Robinson *et al.* (1991) was adapted into 24 items (6 for each subscale consisting of Achievement, Innovation, Personal Control and Self-esteem as shown in Table. The respondents were asked to rate the extent to which they agree or disagreed with statements relating to their business. Data was captured using a 5-point Likert scale (where 1: Strongly agree, 2: Agree, 3: Neutral, 4: Disagree and 5: Strongly disagree).

**Table 5.6: Entrepreneurial attitude orientation investigated in the questionnaire**

<b>Achievement</b>	I feel good when I have worked hard to improve my business.
	I often sacrifice personal comfort in order to take advantage of business opportunities.
	To be successful a businessman must spend time planning the future of his business.
<b>Personal Control</b>	Any organization can become more effective by employing competent people.
	I get excited creating my own business opportunities.
	I spend a lot of time planning my business activities.
<b>Innovation</b>	I enjoy doing new, unusual things in my business.
	I usually take control in unknown business situations.
	It is important to continually look for new ways to do things in business.
<b>Self-esteem</b>	I feel very self-conscious when making business proposals.
	I usually perform very well on any business project I am involved with.
	To succeed in business, it is important to get along with the people you work with.

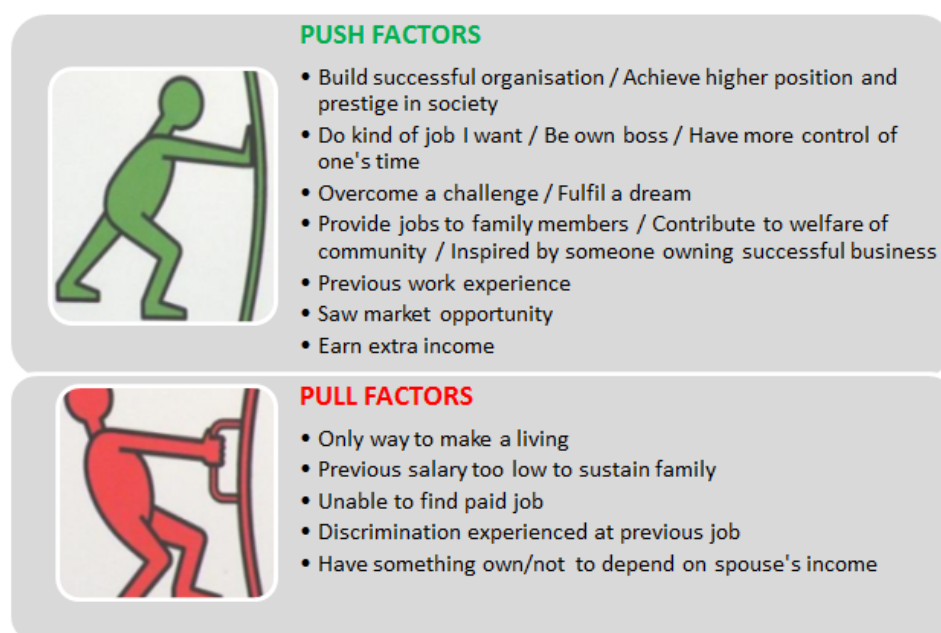
Most of the surveyed entrepreneurs scored highly in Innovation and Innovation. However, our Mauritian entrepreneurs lacked the attitude to achieve in their business and had low self-esteem.

**Table 5.7: Entrepreneurial Attitude of surveyed SME owner-managers**

Cluster	Entrepreneurial Competencies	Percentage of SME owner-managers (%)
1	Achievement	8
2	Personal Control	33
3	Innovation	39
4	Self-esteem	19

### 5.2.3 Reasons to start business and reasons to continue running business

Motives adapted from Gay-Perret and Mainali (2012) were used to gather information about the motivation of individuals for starting their SMEs. The motives consisted of both pull factors and push factors. The respondents were required to rate on a five-point Likert scale the extent into which different factors were important to them when they started their businesses (where 1: Strongly agree, 2: Agree, 3: Neutral, 4: Disagree and 5: Strongly disagree). SME owner-managers were also questioned about their motives to continue running their business after their given number of years of operation (Gay-Perret and Mainali, 2012).



**Figure 5.10: Push and Pull factors (Opportunity and Necessity Entrepreneurship)**

**Table 5.8: Reasons to start business**

Cluster	Type of SME owner-manager	Percentage (%)
1	Opportunity entrepreneurs (push factors)	55
2	Necessity entrepreneurs (pull factors)	45

Cluster analysis revealed that 55% of interviewed entrepreneurs are opportunity entrepreneurs. It would be interesting to next investigate the type of entrepreneur they are; whether they are truly innovative, being driven by passion and motivated by new ideas and markets or they are imitative, i.e. they believe their products or services are unique but are simply replicating and rebranding products/services found elsewhere.

SME owner-managers were next asked the reasons to continue running their business. The response options reflecting positive reasons were "Good profits & monetary returns", "Growth and expansion of business", "Happiness and satisfaction of customers and/or employees" and "Positive contribution to the society." The options reflecting negative reasons were "Not giving up" and "Running business at a loss as there are loans to pay and family to provide for." Cluster analysis showed that 83% were still striving to run their business for the right reasons. The remaining 17% were mostly continuing with their business despite probable issues such as limited cash flow, loans, daily frustration in their operations and could be close to shutting down or declaring bankruptcy in the near future.

**Table 5.9: Reasons to continue running business**

Cluster	Type of SME owner-manager	Percentage (%)
1	Positive reasons	83
2	Negative reasons	17

### 5.3 INNOVATION

The surveyed SME owner-managers were asked whether they had brought some form of innovation to their business in the last few years. They had the possibility of answering in the negative or selecting options from product, process, technological or organizational innovation (Figure). They were further asked to elaborate on the innovative practice(s) they have introduced to their business in an open-ended question.

<input type="checkbox"/> <b>PRODUCT</b>  <input type="checkbox"/> Development of new products or services  <input type="checkbox"/> Significant improvements in current products or services	<input type="checkbox"/> <b>PROCESS</b>  <input type="checkbox"/> Acquisition of new equipment, machinery or software  <input type="checkbox"/> Significant improvements in production or delivery methods  <input type="checkbox"/> Significant improvements in skills of technical, financial or managerial personnel
<input type="checkbox"/> <b>MARKETING</b>  <input type="checkbox"/> New marketing strategy for existing products or services (e.g. product packaging, product promotion and pricing)  <input type="checkbox"/> Modification of design of existing products or services to target specific customers	<input type="checkbox"/> <b>ORGANISATIONAL</b>  <input type="checkbox"/> Reallocation of responsibilities and resources between departments and/or employees

**Figure 5.11: Types of Innovation**

#### 5.3.1 Type of innovation

**Table 5.10: Innovation practices by surveyed SME owner-managers**

Type of Innovation	Percentage (%)
<b>No innovation</b>	14.0
<b>Product Innovation</b>	
• Development of new products or services	38.3
• Significant improvements in current products or services	8.1
<b>Process Innovation</b>	
• Acquisition of new equipment, machinery or software	24.2
• New or significant improvements in production or delivery methods	4.7
• Significant improvements in skills of technical, financial or managerial personnel	6.0

<b>Market Innovation</b>	
<ul style="list-style-type: none"> <li>New marketing strategy of existing products or services (e.g. product packaging, product promotion, product pricing)</li> <li>New marketing concept modifying design of existing products or services to target specific customers</li> </ul>	12.1
	6.0
<b>Organisational Innovation</b>	
<ul style="list-style-type: none"> <li>Reallocation of responsibilities and resources between departments and employees</li> </ul>	0.7

Table shows the percentage of responding firms that have introduced specific types of innovation. A higher percentage of firms implemented product innovation, followed by process, marketing and finally organisational innovation. The two innovations with the highest percentages were (i) Development of new products or services (38%) and (ii) Acquisition of new equipment, machinery or software (24%). Further elaboration of a few innovations brought by surveyed SMEs is given below.

**Table 5.11: Examples of Innovation practices**

ID	Sector	Type of Innovation	Innovation
2	Health, Wellness and Social Work	Acquisition of new equipment, machinery or software	"Company vehicle, office furniture and new computer to improve work environment"
79	Professional (Accounting, Legal, Marketing and Advertising), Scientific and Technical (Architecture and Engineering) Activities	Development of new products or services	"Streamlining processes to make more efficient way of doing things and extensively document changes to make it easy to track in the long term"
111	Professional (Accounting, Legal, Marketing and Advertising), Scientific and Technical (Architecture and Engineering) Activities	Acquisition of new equipment, machinery or software	"Implementation of accounting software"
122	Consumer Products, Wholesale and Retail Trade (Including franchising)	Significant improvements in current products or services	"A wider range of products is being offered compared to the early days of start of the business"
204	Professional (Accounting,	New marketing strategy for	"Using more social media network for

	Legal, Marketing and Advertising), Scientific and Technical (Architecture and Engineering) Activities	existing products/services (e.g. product packaging, product promotion, pricing)	direct marketing"
270	Manufacturing - Others	Reallocation of responsibilities/resources between departments	"Reallocate job to specific departments as to avoid duplication of work"
297	Information and Communication	Significant improvements in skills of technical, financial or managerial personnel	"Provided training to employees to help do better"

### 5.3.2 Innovative versus non-innovative SMEs

Comparing innovative firms and non-innovative ones, more than 60% of SMEs which have brought some kind of innovation in their firm have experienced employment growth since the launch of their business compared to only 17% of non-innovative SMEs. Moreover, a staggering 65% of non-innovative SMEs have experienced stagnation in the number of employees hired at the start of their business compared to the number of employees currently employed. 17% of non-innovative SMEs have faced a decline in employment compared to 13% of innovative SMEs. It can be concluded that there is a significant positive impact of innovation output on employment growth.

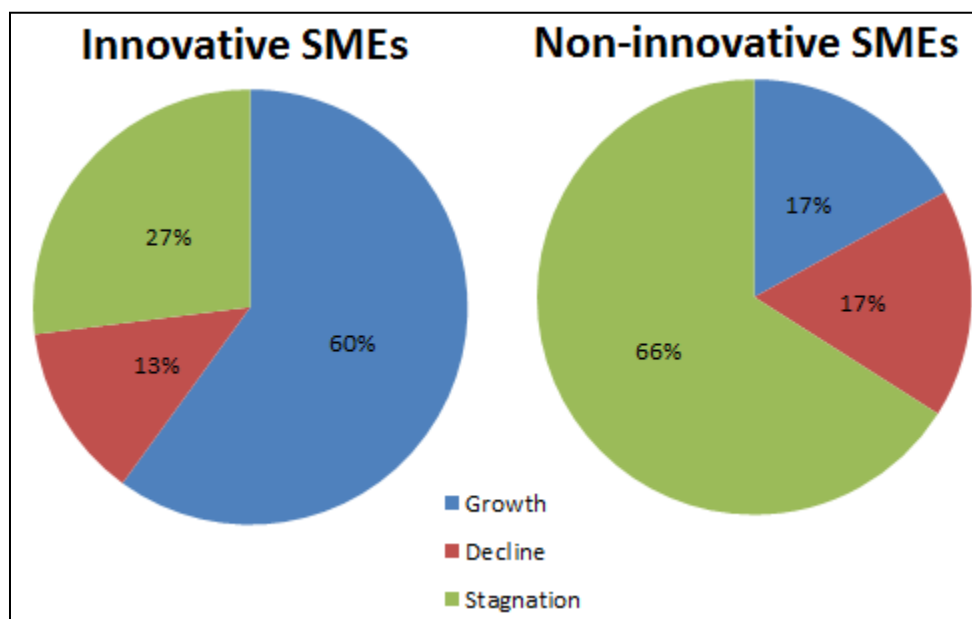
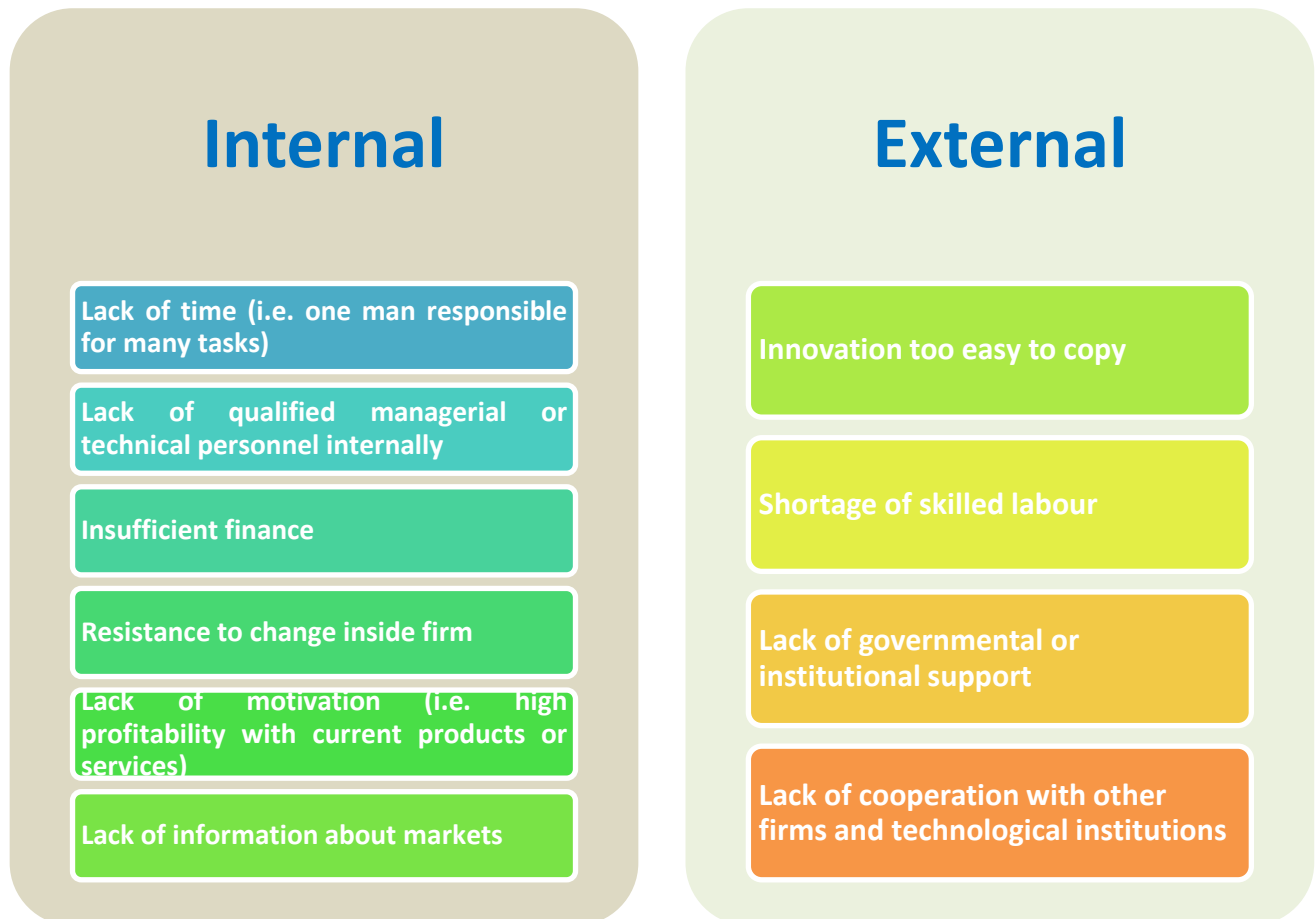


Figure 5.12: Influence of Innovation on SME growth

### 5.3.3 Challenges to innovation

Ten barriers to innovation were captured using a 5-point Likert scale in which the respondents indicated the extent to which each of the factors affect their innovation practices. The barriers to innovation were adapted from Hadjimanolis (1999) and Hashi and Krasniqi (2010).



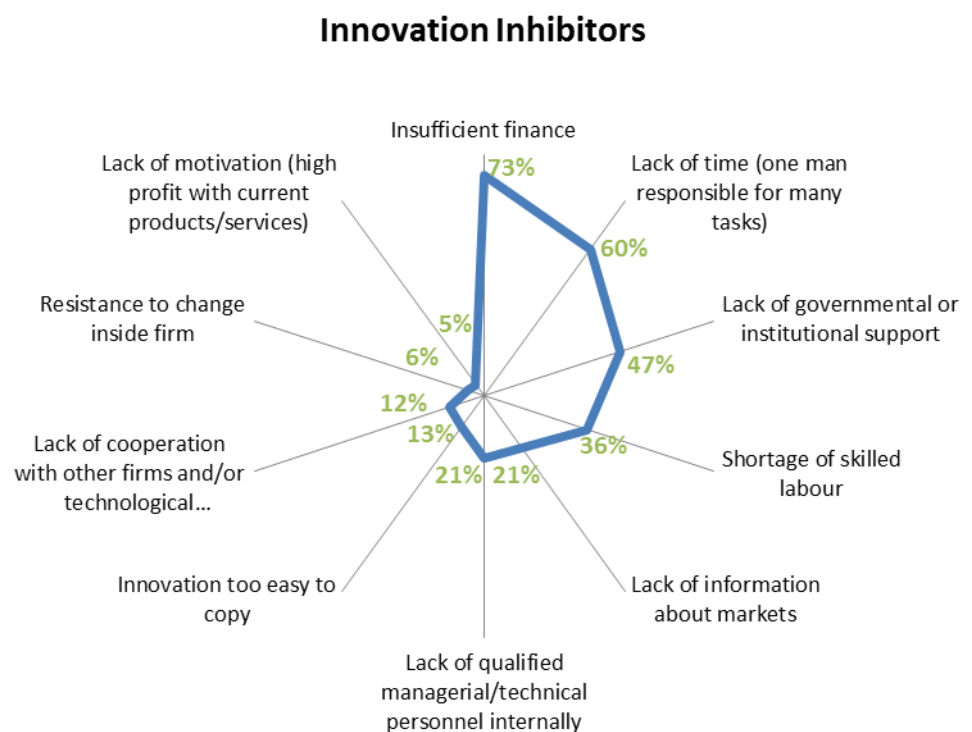
**Figure 5.13: Internal and External barriers to Innovation**

**Table 5.12: Challenges to ability to innovate**

Challenges	Percentage (%)
Insufficient finance	72.9
Lack of time (one man responsible for many tasks)	59.6
Lack of governmental or institutional support	47.3
Shortage of skilled labour	34.0
Lack of information about markets	21.8
Lack of qualified managerial/technical personnel internally	21.3
Innovation too easy to copy	13.3
Lack of cooperation with other firms and/or technological institutions	12.2
Resistance to change inside firm	6.4
Lack of motivation (high profit with current products/services)	4.8

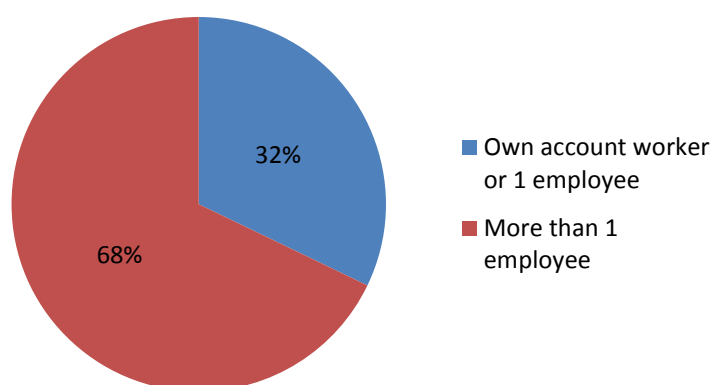
Table shows the rankings of the importance of factors influencing adoption of innovation. The top two barriers (insufficient finance and lack of time) are directly related to the cost associated with innovation and the handling of the business by the SME owner-manager, i.e. internal factors. External factors also have a significant but lesser impact on innovation practices. It was surprising to note that

44% of the SME owner-managers who reported “lack of motivation (high profit with current products/services)” had turnover less than 1 million. The maximum turnover achieved by SME owner-managers in this category was Rs 5 to 10 million. It was also interesting to observe the distribution of employees currently employed by SME owner-managers who cited “lack of time” as a challenge to innovation: only 32% of those SME owner-managers were either own account



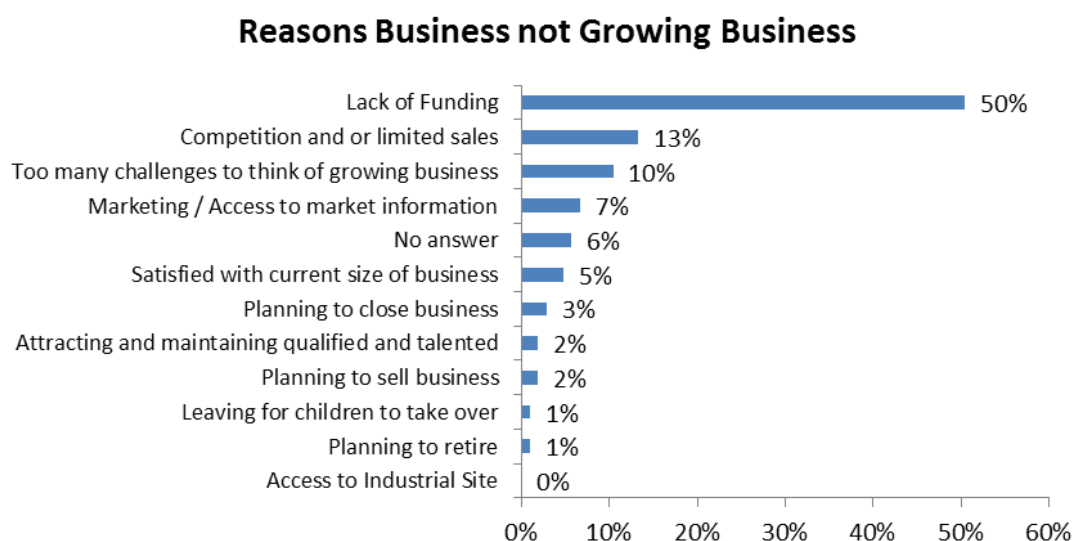


workers or employed only 1 worker.



**Figure 5.14: Lack of time (one man responsible for many tasks) being a challenge to innovation**

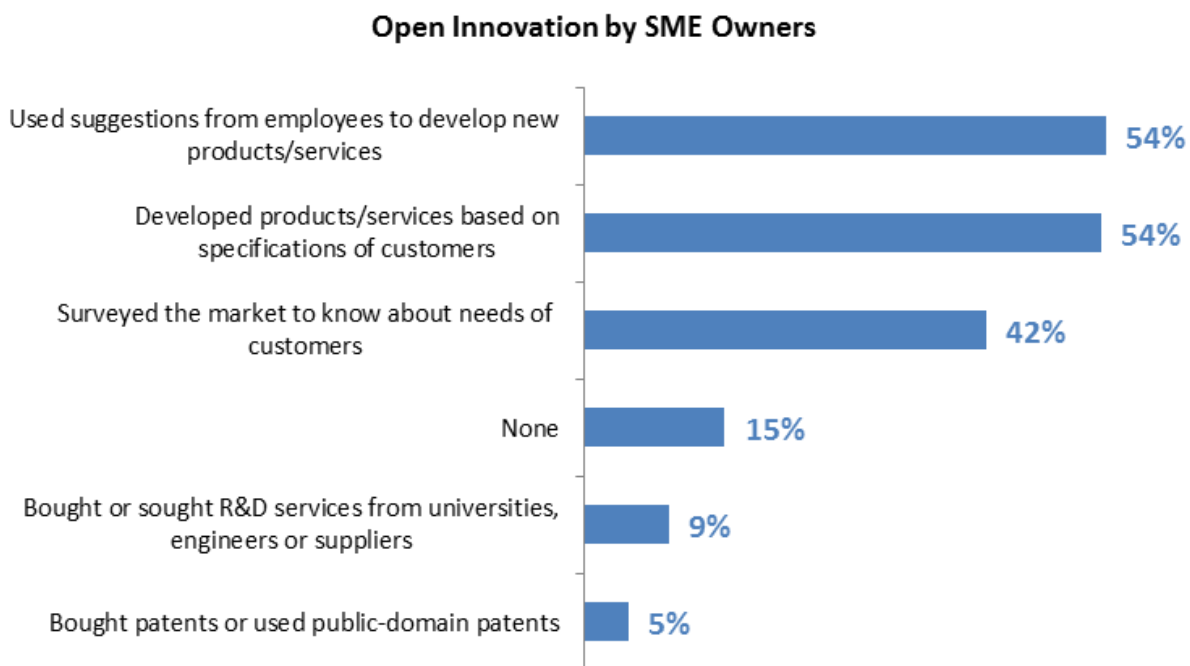
SME owner-managers have often stated in the survey that lack of funding is a barrier to growth and innovation, which is not really consistent with the true definition of an entrepreneur. Entrepreneurs do not need finance to innovate. Lack of funding is mostly an excuse for not growing or not innovating. Researchers are often skeptical that there is a major problem with access to finance by SMEs: in general, most firms get most of the funding they seek most of the time. However, it is an open question whether the small percentage of SMEs that have trouble raising money overlap with the small percentage of SMEs that drive economic growth and employment (House, 2013).



**Figure 5.15: Reasons for not being able to grow business (44% of surveyed SME owner-managers)**

### 5.3.4 Open innovation

Surveyed SME owner-managers were probed about the open innovation practices that they have done in their business. Most of the open innovation practiced by interviewed SME owner-managers came from either the employees or the customers. Employees may be accustomed to thinking internally and may not always have an external view of what is going on not only in other companies, but also industry or sector-wise. Involving customers in the innovation process is a cost-efficient way to acquire new perspective on the offered products or services. However, individually, customers might not be capable of creating the best possible products as their views of products might be limited to a certain perspective. Also, the market potential for products innovated by a single customer might be low (Antikainen and Ahonen, 2010). Buying or seeking R&D services from universities, engineers or suppliers, buying patents, using public-domain patents remain very low unlike in developed countries.



**Figure 5.16: Innovation channels (source of Open innovation)**

## 6 CONCLUSION

**Demographics:** Our survey findings give the profile of the typical Mauritian SME owner-manager: male aged between 31 to 50 years having amassed previous work experience, armed with a diploma or degree, operating his business from his own home or backyard, earning less than Rs 500,000 annually and employing an average of 2 workers.

**SME Growth:** 56% have undergone employment since the beginning of their operations. The entrepreneurs who have been able to initiate growth wanted to improve the financial situation of their business or themselves or be able to bid for larger orders and/or more interesting projects.

**Growth strategies:** SME owner-managers surveyed identified three main strategies for Mauritian SMEs to adopt for growth: Understand and satisfy customer needs, Innovate, Access new markets regionally or internationally. However, only 14.7% of SME owner-managers have considered e-commerce as a growth strategy. A large percentage of the customers of SMEs are online and the Internet has penetrated a significant number of households in Mauritius and the nearby African region. It is no longer an option for most SMEs to ignore the Internet and take a 'wait and see' attitude.

**Entrepreneurial Competencies:** Mauritian SME owner-managers scored high in the Commitment and Opportunity Competencies. They strive hard to run their business and are committed to make it succeed and they believe that they are able to identify untapped market opportunities and fulfill them for customers with their products or services. However, only 8% of them rated highly in Conceptual competency, i.e. they are not willing to take risks to start their ventures and go for bold decisions once their business has taken off.

They also lag behind in strategic planning, i.e. they do not actively plan for the future in order to be able to compete effectively and survive. They are also highly confident of their skills and abilities, even overconfident, which may explain why our Mauritian SME owner-managers do not go for training of themselves or their employees nor feel the need for the assistance of a business mentor.

**Entrepreneurial Attitude:** Mauritian SME owner-managers scored high in Personal Control (desire to have personal control over their business activities) and Innovation (creativity in business activities). However, they were lacking in Achievement (desire to have concrete results in their business) and Self-esteem (low sense of self-worth). Although outwardly our SME owner-managers express confidence in their skills and abilities to manage their business, internally they are hesitant and full of doubt when actually negotiating deals and contracts or when handling their business.

Competency and attitude-wise, it can be concluded that our SME owners function mostly as managers and are not fully entrepreneurs in the true sense of the word.

Innovation: Despite all initiatives in place and incentives being offered, the Ministry of Industry noted that the SMEs in Mauritius are not very innovative (Industrial and SME Strategic Plan 2010-2013). The culture of innovation is pretty non-existent amongst Mauritian SMEs owners-managers. Moran (2007) surveyed 500 SMEs on their training needs and human resource development and it was concluded that Mauritian SMEs should focus on innovation so as to be more competitive in both local and international markets. The Global Innovation Index 2016 also ranked Mauritius 53<sup>rd</sup> in the world and 1<sup>st</sup> in Sub-Saharan African, with South Africa being ranked just below. As noted above, it demands investigation whether our SME owner-managers are truly innovative, being driven by passion and motivated by new ideas and markets or they are imitative, i.e. they believe their products or services are unique but are simply replicating and rebranding products/services found elsewhere.

SME owner-managers have often stated in the survey that lack of funding is a barrier to growth and innovation. It was noted that 11.9% of the surveyed SME owner-managers are currently operating as own account workers, out of which 9.7% have always worked alone. These SME owner-managers are most probably earning much less right now than they would if they were paid employees and are probably those who will apply for loans and financial support from government schemes. Care should be taken that such SME owner-managers are not given funding while penalizing the small percentage of true innovative SMEs which drive economic growth and employment who seek financial support. The aim behind the support of government schemes to SMEs should be to encourage higher quality entrepreneurs and SMEs to grow, and not to increase the quantity of low quality SMEs or new entrants to have to cross the Valley of Death.

## 7 RECOMMENDATIONS

In seeking to help stimulate entrepreneurial high growth SMEs, it is important to avoid helping them in the form of government grants and venture capital funds that are too easily obtained. What is important is to grow firms with strong root systems that can sustain their own growth as much as possible before seeking additional funding. The focus should be on encouraging sustainable, growth oriented and innovative firms, not simply fostering more start-ups. Starting a new business is the easy part; successfully growing it is the challenge.

Government and institutional support should be developed to help potential entrepreneurs acquire the skills necessary to identify, plan, launch and operate a business. By educating potential entrepreneurs on how to generate and screen ideas and identify opportunities, the success rate of new ventures can be increased.

Women entrepreneurs: cultural norms and gender-related barriers discourage women from undertaking formal business ventures. It is particularly important that steps are taken to create the conditions for women to play a more active role in entrepreneurship. While much has been done, much more remains to be done to further involve them in entrepreneurial activities to spur economic growth and development.

Entrepreneurship education: Customised educational and training programmes should be developed to help nascent enterprises to survive and thrive. The government needs to encourage local institutions of higher education to develop training, research and consulting programmes that will be offered to current and aspiring entrepreneurs covering the critical aspects of starting and managing a business venture.

Inspiring entrepreneurship: Entrepreneurship has not been a career of choice for many educated Mauritians. The proportion of SME owner-managers who start their own businesses as a last resort and as a means of survival or who subsist as own account workers is worrying. Entrepreneurship is not as a preferred path to potential wealth accumulation and economic success by graduates. High school and university graduates prefer public sector employment due to job security despite the fact that there are increasingly fewer jobs compared to job applicants. Motivating the elite educated Mauritian citizens to pursue entrepreneurship as a viable economic and career option should be a priority of the Government. This is particularly By showcasing successful home-grown entrepreneurs as role models and by simplifying the process required to start new businesses, the stature of entrepreneurship may be raised among citizens.

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