

ASSESSMENT OF INNOVATION-ACTIVITIES OF SMES IN NIGER-DELTA NIGERIA

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ABSTRACT

Innovation performances are crucial determinant of competitiveness, national progress and sustainable development (OECD 2007). Recent studies have shown that Small and Medium Enterprises (SMEs) have the potential to greatly contribute to the innovation systems by introducing new products / services and adapting existing products to the need of customers. Very often though, SMEs in many developing economies try first and foremost to go for market shares and financial profits for survival and growth. However, the question remains whether SMEs consciously pay attention or pursue innovation as a long term strategy for profitability and sustainable growth. This paper tends to examine the state of art of innovation activities of SMEs in the Niger Delta Region of Nigeria. The objective is to ascertain how innovative or non – innovative the SMEs are in the region. It examines the types of innovation activities conducted in the SMEs, identifies the factors that influence innovation and determine the linkage between innovation activities and the SMEs performances and sustainable growth.

The methodology of the study involved use of structured questionnaires to gather data on innovation activities of some SMEs in different sectors within the region as well as empirical observations through an in depth case study of a typical high growth SME (Pepperoni Foods, Nigeria). Responses gathered and observations recorded were analyzed using statistical tools to interpret and deduce inferences from the study.

Although there are other factors responsible for SMEs growth and profitability, our research findings show a strong linkage between innovation activities and sustainable growth of SMEs within the region. We also find out that most innovation activities are carried out in an informal way without proper linkage and support from the National innovation system.

Given the importance of SMEs to development of the economy, we would recommend a more robust and structured intervention program to encourage and stimulate innovation in SMEs in Nigeria.

Key words: Assessment, Innovation activities, SMEs and Sustainable growth

INTRODUCTION

Since the formal study of innovation began in the early 1900's, various scholars have looked at this subject from various perspectives. Several theories and principles have also been propounded to try to explain the causes, types and effects of innovation within the economic space.

In the context of this paper, we adopt the OECD broad definition of innovation as "the implementation of a new or significantly improved product (that is, a physical good or service), process, a new marketing method, or a new organizational method in business practices, workplace organization, or external relations {1}. Our focus is innovation activities in the SMEs, which according to the Oslo manual entails "All scientific, technological, organizational, financial and commercial steps which actually, or are intended to, lead to the implementation of innovations" – OECD, 2005 {2}

Various studies have shown that small and medium enterprises (SMEs), especially young firms, contribute greatly and increasingly to the innovation system by introducing new products and adapting existing products to the needs of customers {3}. The role of SMEs in economic development is therefore very crucial.

Globally, SMEs plays very important socio – economic role of providing goods and services and in the process creating wealth and employment {3}. According to a 2010 National survey on Micro, small and medium enterprises (MSMEs), Nigeria has 17.28 million SMEs, employs 32.4 million people and contributes 46.54% to the GDP in nominal terms. Pertinent to mention that out of this number, over 90% are micro enterprises with capital base of less than N5.0 mill (USD30,000) {4}

The definitions of SMEs are usually derived in each country, based on the role of SMEs in the economy, policies and programs designed by particular agencies or institutions empowered to develop SMEs. In Nigeria, the definition and classification of MSMEs is shown below.

Table1. Classification of SMEs (Source –National Policy on MSMEs) {5}

S / NO	SIZE CATEGORY	EMPLOYMENT	ASSEST (N) – EXCL LAND & BUILDINGS
1	Micro enterprises	Less than 10	Less than 5 mill
2	Small enterprises	10 to 49	5 mill to less than 50 mill
3	Medium enterprises	50 to 199	50 mill to less than 500 mill

Also, the Central Bank of Nigeria, Micro, Small and Medium Enterprises Development Fund (MSMEDF) Guidelines adopts similar definition and classification of MSMEs {6}.

There are two sided argument with regards to the propensity of SMEs to innovate. On one hand it is argued that given their flexible nature and due to paucity of resources, SMEs are prone to adapting new products and services to gain market entry. While on the other hand, larger firms have more R&D budget and better structures to carry out innovation activities {7}. Either way, we take as a guiding principle of innovation studies, that if we can discover what activities and context foster or hamper innovations, then we will be able to intentionally shape the innovation processes (Hekkert et al, 2006) {8}.

In this paper, we hold the view of Joseph Schumpeter that innovation is an essential driver of competition and anyone seeking profit must innovate {9}. We therefore try to carry out an assessment of innovation activities by investigating the different Schumpeterian types of innovation being practiced in a typical SME {9}. We look at innovation activities in the SMEs with regards to;

- i. Launch of new products or adaptation of existing products – Product innovation
- ii. Application of new method of production – Process innovation
- iii. Exploitation of new markets
- iv. Acquiring of new sources of supply of raw materials and
- v. New ways to organize business - business model innovation

From our study, we intend to seek answers to some basic questions: How innovative or non – innovative, are SMEs? Do SMEs consciously pursue innovation activities as long term strategy for profitability and sustainable growth? Do innovation activities have effect on SMEs business performances?

Our main objective is to ascertain the state of innovation of SMEs in the Niger Delta region of Nigeria by

- i. Assessing how innovative or non-innovative SMEs are in the region
- ii. Examine the various types of innovation activities conducted in the SMEs under review and
- iii. Identify factors that influence innovation in SMEs and the linkage between innovation activities vis-a-vis the profitability and sustainable growth of the firm.

METHODOLOGY

In this study, we employed a hybrid of structured questionnaires for a survey of selected SMEs in different sectors and an in-depth case study analysis of a typical high growth SME in the Niger Delta region of Nigeria.

The questionnaires were designed to enable us ascertain the innovative status of the SMEs being surveyed. In the questionnaires, respondents were asked about their

- company profiles / sectors
- Innovation awareness and strategy
- Types of innovation activities carried out in the firm
- The enabling factors employed to drive innovation and
- Effect of innovation activities on their operating performances

Respondents were required to answer between YES and NO to some of the structured questions. In other cases, they were required to choose between types and options and to state some results due to innovation activities. Not much of financial figures could be obtained as respondents are not so willing to disclose their financial figures for fear of disclosures to third parties and in most cases proper accounting records are not kept and updated in the firms.

Questionnaires were sent to about 200 SMEs by email in sectors covering

- i. Agriculture / Food processing
- ii. Building / Construction
- iii. Consulting, Engineering
- iv. Entertainment and media
- v. Food / beverages
- vi. Manufacturing
- vii. Retail and
- viii. Services.

A response rate of about 20% was gotten. The results were analyzed and compared to ascertain the general state of innovation of SMEs in the region.

Case Study:

An in-depth innovation performance analysis of a high growth SME - Pepperoni Foods, Nigeria {10} was carried out during the course of the study. Pepperoni Foods is a Quick service restaurant (QSR) and catering company. It was founded in 2005 and currently operates in 4 states of the Niger Delta region of Nigeria. The company started operations with 1 Outlet (restaurant) achieving a turnover of about USD 450,000 in its first year and grew rapidly to have 7 Outlets and several production facilities with a turnover in excess of USD 6.0 million within 10 years. {11}

The company was one of winners of the **2011 African awards for Entrepreneurship** held in Nairobi, Kenya, selected out of 3,300 SMEs evaluated from 48 countries across Africa {12}. Some of the key criteria used for the evaluation were innovation to address market needs, growth and profitability.

To carry out the innovation analysis for Pepperoni Foods, we used the frame work developed by IMP³rove – A. T. Kearny “House of innovation” (www.improve-innovation.eu) {13} whose structure covers all dimension of innovation management. The evaluation assesses five dimensions of innovation management as shown in fig 1 below.



Fig1 – Dimensions of innovation management (A. T. Kearny “House of innovation”)

- i. Innovation Strategy – this gives the firm the direction and focuses innovation activities for maximum impact
- ii. Innovation organization and culture – this covers the gearing of the organization and innovation network towards innovation management, and the embedding of innovation management in the firm's culture.
- iii. Innovation life cycle processes – covering the integration and management of innovation life cycle processes including idea management, product/service and process development, launch and continuous improvement. This essentially covers the Schumpeterian typology of innovation earlier mentioned.
- iv. Enabling factors – This include factors such as IT, R&D, project management and personnel that helps to drive innovation within the firm
- v. Innovation results – This highlight the output of innovation management activities and the impact on indicators of business success, e.g. Revenue, profitability and growth.

The framework thus enabled us to assess the innovation readiness and capability of the firm, innovation activities and enabling factors deployed to drive innovation in the organization.

Data for the analysis were obtained from the annual accounting reports of the company and operations records covering a period of 4 years. Interviews were conducted with the founder and CEO of the company as well as other key managers. First hand observations were made by shadowing the CEO and participating in various strategy and management meetings.

The various data obtained from the company were then fed into an online assessment questionnaire of the IMP³rove program and analyzed. The data were benchmarked with 141 world class high growth champions and average companies in the Food and beverage sector. Various innovation results are then generated that show the firm's innovation performances.

RESULTS ANALYSIS

The feedback obtained from the questionnaires sent out shows that many SMEs are aware of the concept and the need for innovation in their firms. However, most of them (over 80%) do not have a strategy for innovation. Majority of the SMEs carry out innovation in the areas of services and business model. Most SMEs surveyed do not have any linkage to external innovation systems but uses IT to drive innovation activities in their organization. It was not possible to correlate the firm's financial performances due to innovation activities as financial records are not tracked and in most cases not documented.

Case study analysis results:

The results from data on innovation activities obtained from the Pepperoni Foods' survey were generated from an online assessment software developed by IMP³rove - A. T. Kearny "House of innovation". These results were benchmarked against some 141 global SMEs in the Food and beverage sector for comparisons.

The results were presented in graphical forms representing the various dimensions of innovation management performances analyzed.

Fig 2 to Fig 7 below show the various innovation performance profiles generated for Pepperoni Foods.

Graphical Representation Of Results

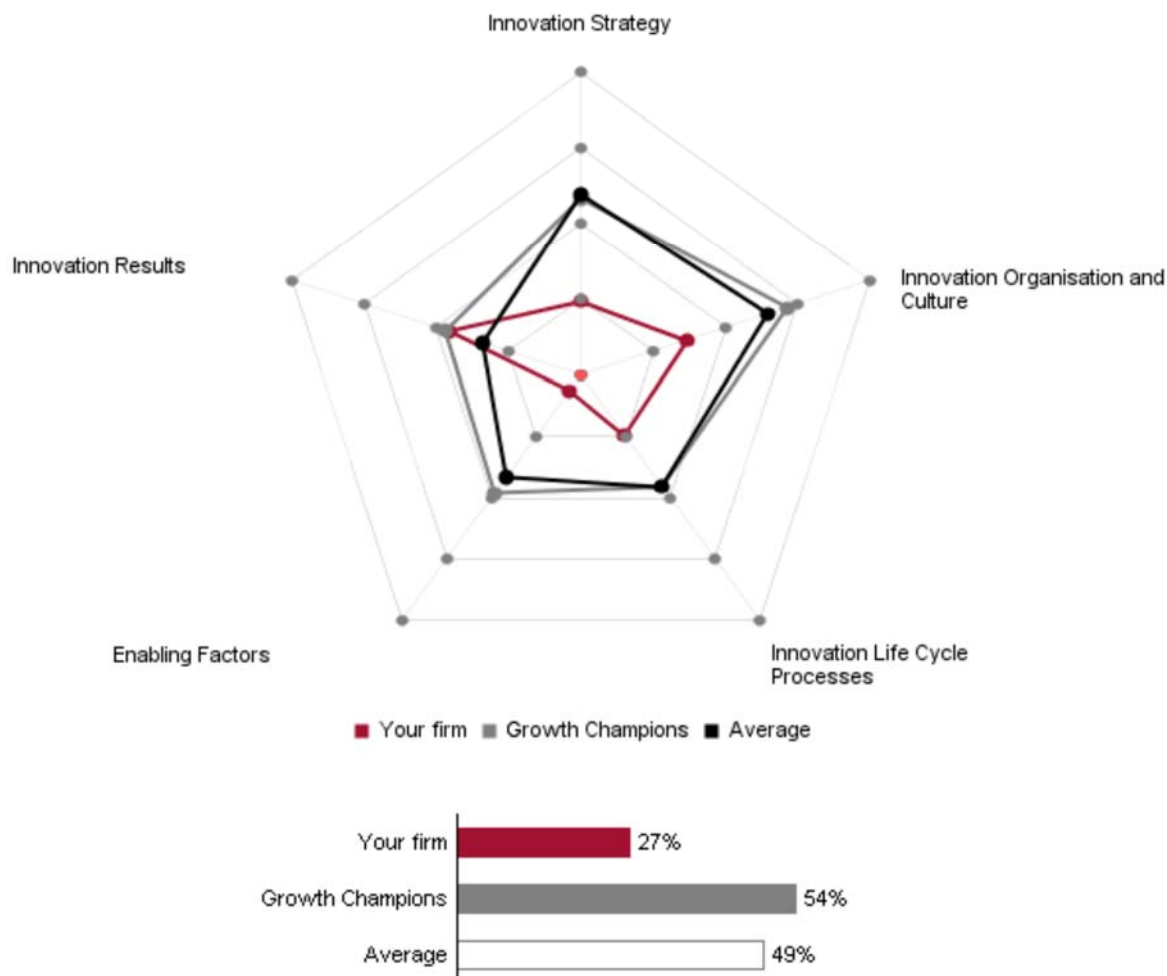
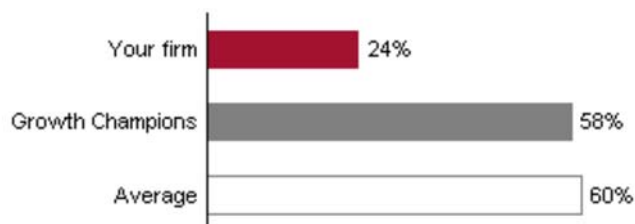


Fig 2 - Innovation Management Performance Profile - Overall

Fig2 shows an overall innovation performance score of 27% for Pepperoni Foods. The firm's scores in each dimension of the A.T. Kearney "House of Innovation" are presented as a value on a scale between 0% and 100%. They are also benchmarked against growth champions and industry averages within the Food and beverage sector.

The overall result shows that although Pepperoni Foods is a high growth company, it is not as innovative compared to other global growth champions and industry average within the same sector that scored 54% and 49% respectively.



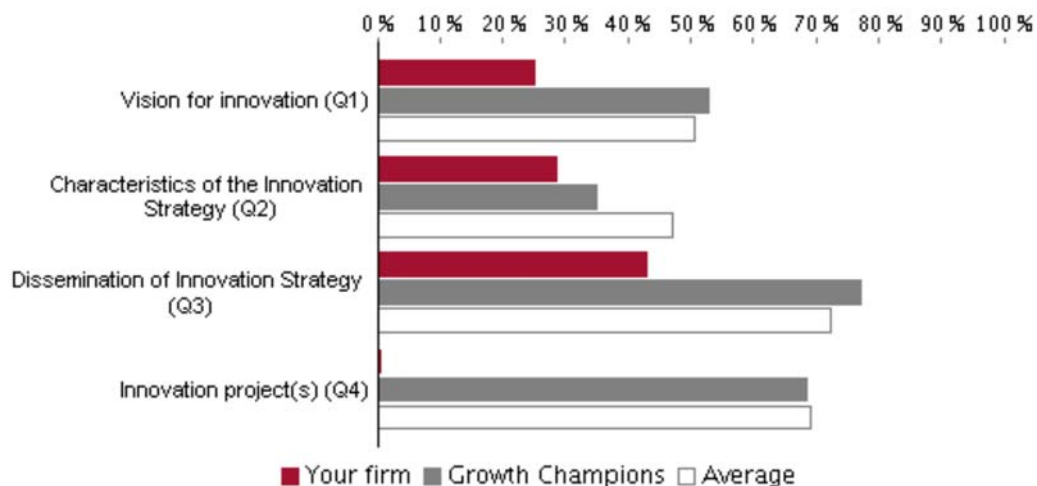


Fig 3 - Innovation Management Performance Profile - Innovation Strategy

Fig 3 shows Pepperoni Foods performance for innovation strategy which is 24% compared to 58% and 60% for global growth champions and industry average within same sector. The major weakness is that innovation strategy is not disseminated across the organization and formal innovation projects are not undertaken.

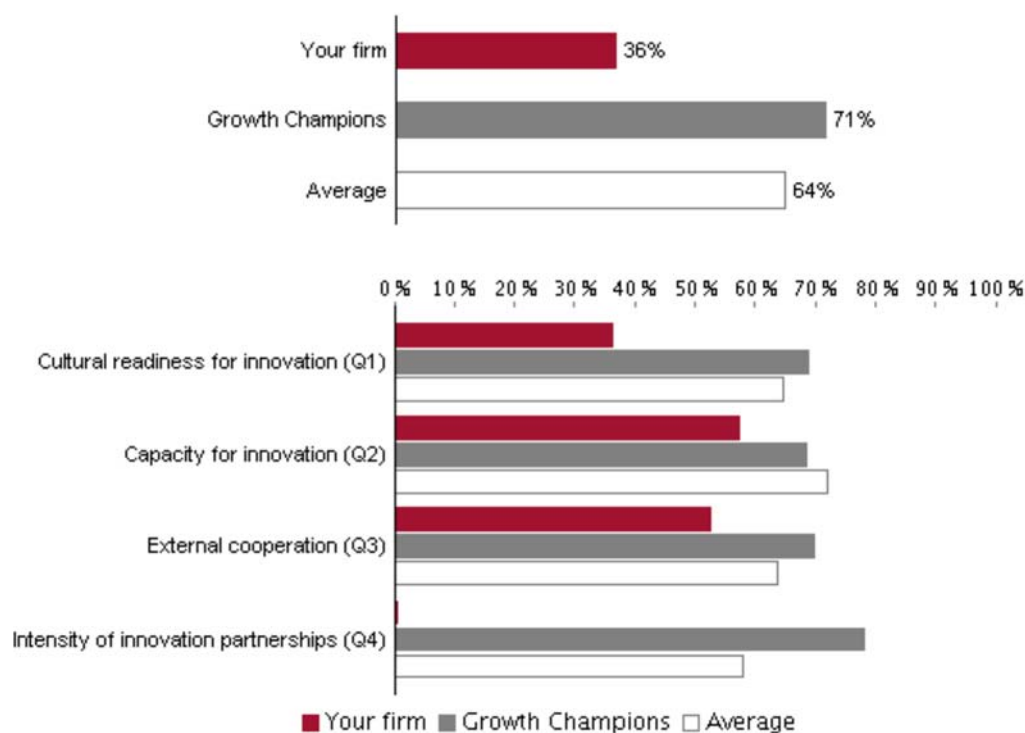


Fig 4 - Innovation Management Performance Profile - Innovation Organization and Culture

Fig 4 shows a score of 36% for Pepperoni Foods compared to 71% and 64% for growth champions and industry average respectively in the area of innovation organization and culture. The major drawback here is the low level of innovation partnership within the firm and external systems.

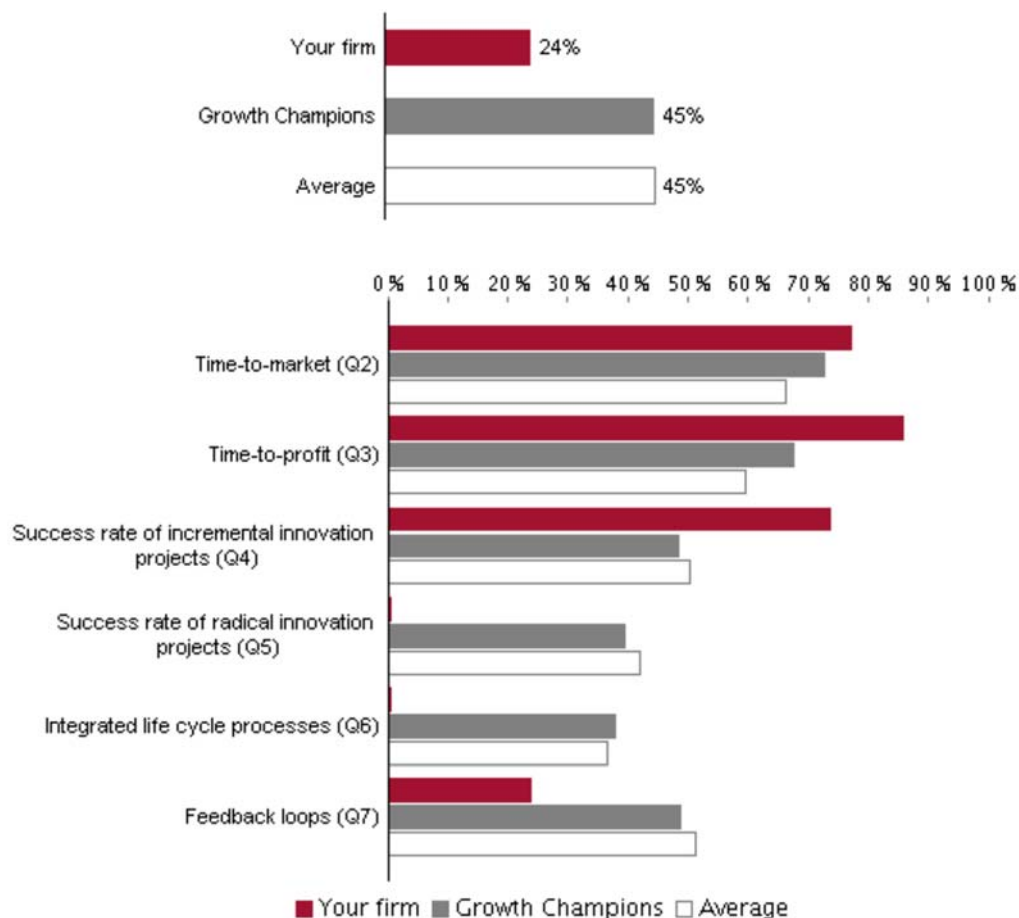
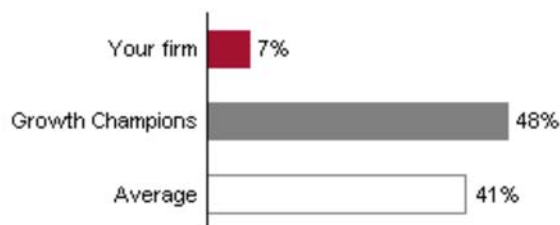


Fig 5 - Innovation Life Cycle Processes - Innovation Life Cycle Management

Fig 5 shows a score of 24% on innovation Life Cycle management for Pepperoni Foods. Although generally this score is below those of growth champions and industry average which stand 45%, it is observed that the company is doing very well in the area of incremental innovation management, especially in areas of product innovation and business model. The major drawback here is lack of radical innovation projects and low level of integrated life cycle process management especially in areas of ideas management.



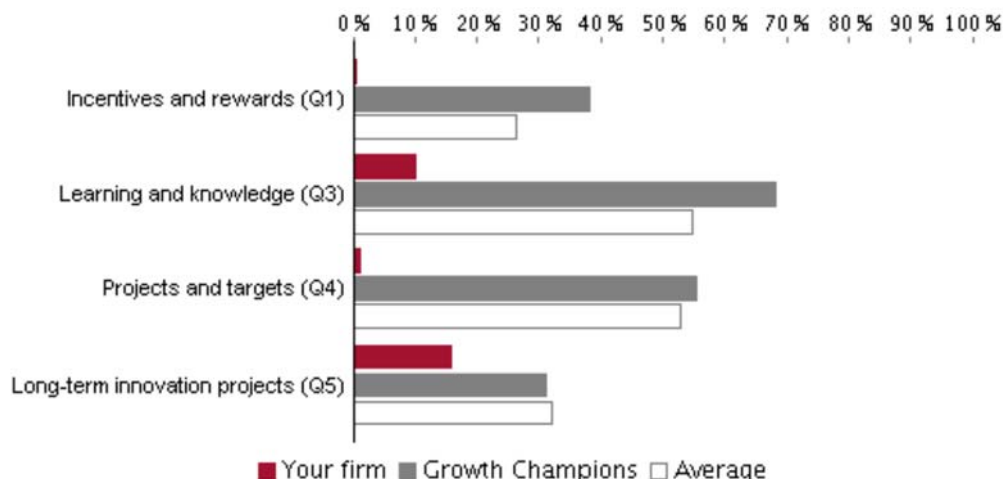


Fig 6 - Innovation Management Performance Profile - Enabling Factors

Fig 6 shows a low score of 7% for Pepperoni Foods in deployment of enabling factors to drive innovation in the firm, compared to 48% and 41% for growth champions and industry average respectively.

The major drawback here is lack of formal innovation structure and systems in the firm. Critical innovation drivers like IT, innovation projects and targets, R&D and incentives and rewards system are not fully exploited in the company. Pepperoni Foods will greatly enhance its innovative capability if these critical enabling factors are put in place.

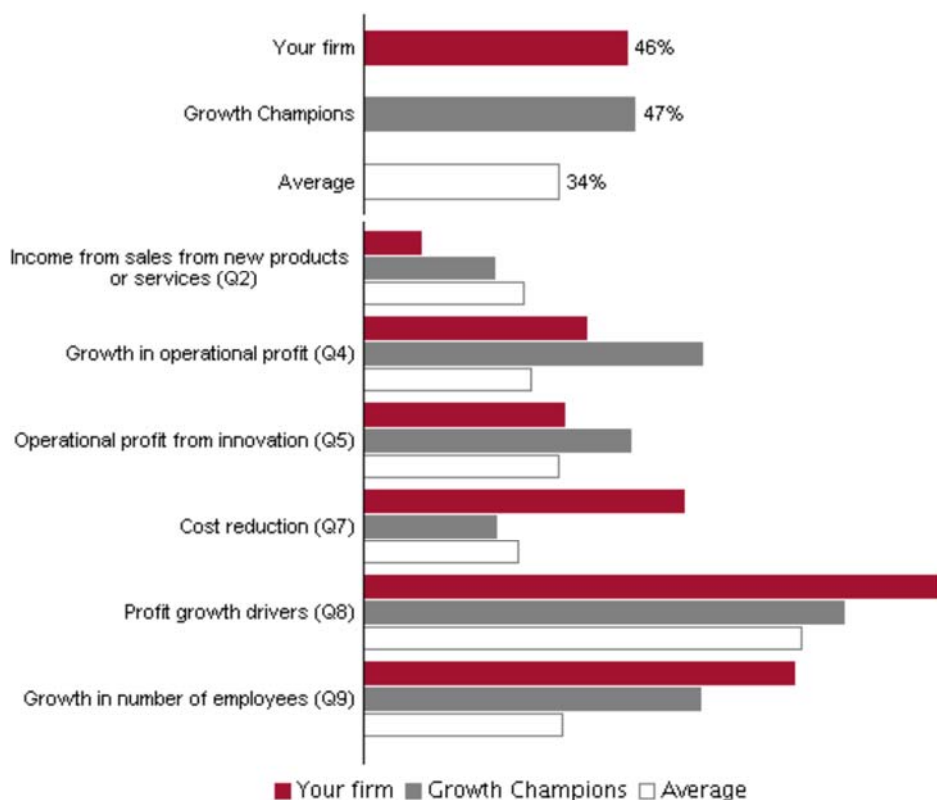


Fig 7 - Innovation Management Performance Profile - Innovation Results

Fig 7 shows an impressive score of 46% for Pepperoni Foods in innovation management performance in the dimension of Innovation results. This compares favorably to global growth champions and industry average scores of 47% and 34% respectively. This result clearly shows that Pepperoni Foods is a profitable and high growth company using normal indices. The company consistently post excellent results within the period under review. There is also evidence that some innovation activities contribute greatly to this outstanding results. We observe though that this innovation results are not so reflected in the overall innovation management performance profile, this can be attributed to the very informal way innovation activities are carried out in the firm.

CONCLUSION

We have seen that SMEs plays crucial role in the development of national economies due to their role in wealth and job creation. We have also seen from our study that for SMEs to survive the competition, become profitable and ensure a sustainable growth, they need to adopt a systematic innovation approach in both their product and service offerings {14}. It is therefore imperative that innovation activities in SMEs be strongly encouraged and developed.

Although we agree to the fact that SMEs have natural tendency to innovate, from our study, we have seen that innovation activities are not being taken seriously as a management function. The primary objective of many SMEs is to gain immediate market share and make quick profit. The culture of imitation (copy-cat) syndrome is very high. Many SMEs tend to participate in ventures where there is seemingly ready market and money to be made. The investment culture is to look at seemingly successful businesses, duplicate their business model with the expectation of achieving similar results. Unfortunately, the resultant effect is that sooner than later, the competition became too fierce and many of the businesses become unprofitable and begin decline. This perhaps account for the high failure rate of SMEs within 3 years of startup {15}.

On the other hand, innovative SMEs tend to survive competition and grow to become mature businesses. This is confirmed from the feedback of the survey carried out with SMEs in this study. Many of the respondents confirmed that to beat the competition, they had to change or innovate on their product / service offerings or business model.

However, it is observed that innovation activities in most of the SMEs are being carried out in a rather informal way since most of the SMEs surveyed do not have a formal system / development of innovation management.

Interestingly, the case of Pepperoni Foods with overall innovation management performance of 27% shows that some SMEs can be high growth and profitable companies without being highly innovative. This is evident in the innovation result (46%) profiled for Pepperoni Foods in Fig 7. The company business performance and growth history compares favorably with that of global growth champions (47%) in same industry sector. A detail analysis shows that these results were achieved as a result of some innovation activities in the firm especially in areas of incremental product innovation and business model. The other success factor can be attributed to prudent and efficient management of resources.

Like many other SMEs, Pepperoni Foods do not have a formal and structured system for innovation management development. The absence of R & D, innovation projects, IT and other innovation enabling factors, has hampered strong innovation activities in the firm.

Therefore, to ensure continuous profitability and sustainable growth, Pepperoni Foods and other SMEs must adopt a strong culture, strategy and management of innovation activities in their firms.

On the other hand, the region and the national government should establish strong innovation systems / support institutions and ensure open access and linkages to SMEs for rapid national economic development.

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