

Innovation Value Creation and Capture Model for Leveraging Turks and Caicos' Emerging Food and Beverage Manufacturing Firms' Competitiveness

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ABSTRACT

In the constantly changing modern business environment, different emerging new businesses as well as the incumbents are increasingly adopting innovation as a performance enhancement strategy. In that context, this study uses interpretivist research paradigm as integrated with exploratory research design and qualitative research method to explore and analyse questions like how, what, when and why the emerging Turks and Caicos food and beverage manufacturing ventures undertake innovations in the way they do as well as the constraints associated with such innovation behaviours and practices. Using data from twenty purposively sampled product development managers that were drawn from 20 (twenty) emerging Turks & Caicos food and beverage manufacturing ventures, thematic analysis of the interview findings indicated most of the manufacturing entities to use a four steps' process for innovation value creation and capture that encompass market survey, product development, marketing and promotion. Even if some of the emerging new food brands were copied and pasted from the foreign based food concepts, they stated that the emerging food and beverage businesses that use the appropriate innovation value creation and capture strategies have still been able to gain the desired competitive edge. But even if this bolsters improved competitiveness and performance of most of the emerging food and beverage manufacturers, dynamics and complexities were still found to arise from inadequate financial capital, poor top management's commitment, changing competition landscape and lack of the required talents. To therefore deal with such complexities and dynamics, it is recommended that the emerging Turks and Caicos food and beverage manufacturing firms must adopt the Four Steps' Process for New Product Development/Innovation Value Creation and Capture Model encompassing industry and market analysis, product conceptualisation, product development, commercialization as well as periodic monitoring, evaluation and improvement.

Keywords: food and beverage manufacturing ventures, innovation, value creation and capture, competitive edge, market performance, new product development

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1. Introduction

Increasing attractiveness of Turks and Caicos' food and beverage markets is luring a significant number of local and foreign food and beverage manufacturers to join the food and beverage manufacturing industry (International Trade Centre, 2020). Located in the Atlantic Ocean and north of West Indies, Turks and Caicos Islands host a bounty of tourism scenes and resorts that attract about 1 million visitors per year from its neighboring countries like the United States, Canada, Iceland and other countries in the Americas (Turks and Caicos Department of Trade, Industry and Fair Competition, 2022).



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As these 1 million visitors combine with a population of 57196 people to catalyse the attractiveness of Turks and Caicos' food and beverage market, Turks and Caicos have also turned into a tax haven for several multinational corporations as well as the second private homes for most affluent holiday makers and immigrants (Turks & Caicos Government, 2022). This has increased the number of resident expatriates to spur the demand increment for superior quality food and beverage products.

Unfortunately as food and beverage manufacturers scamper to respond to such opportunities, most of the major players that succeed in reaping the desired values have often been foreign players as the local businesses only play minimal roles(International Trade Centre, 2020). Most local players in Turks and Caicos' food and beverage market often face challenges of creating and offering the desired food and beverage values that meet the tastes and preferences of foreign visitors and even local consumers.

Consequently, Turks and Caicos Islands have become more reliant on imports and food and beverages manufactured by the local foreign players (International Trade Centre, 2020). Given these disadvantaging operations of local players, this study seeks to evaluate how the innovation value creation and capture behaviours and practices of Turks and Caicos' emerging food and beverage manufacturers leverage or constrain their competitiveness. Innovation value creation and capture is the seamless strategic process of transforming inputs into outputs to create the desired benefits for customers and the business (Bessant & Moslein, 2019; Chesbrough, Lettl & Ritter, 2018).

Such desirable benefits are often reflected in improved superior product quality, attributes and features as well as cost-effective and efficient processes of manufacturing and delivering the desired values to customers. These unlock advantages that spur a firm's effective response to customer needs to catalyse improved its competitiveness, sales, revenue, profitability and returns on shareholders' value (Cusumano, Gawer & Yoffie, 2019).

Unfortunately, even if that is so, utilisation of all aspects of innovation capabilities to create and capture the desired differential values is still a challenge that most of the emerging Turks and Caicos' food and beverage manufacturers are still grappling with. Most of Turks and Caicos' food and beverage manufacturers that have been lured into the market due the increasing attractiveness of Turks and Caicos' food and beverage market as well as Turks and Caicos government support to the emerging businesses in the manufacturing sector face the challenge of product innovation conceptualization (Chesterton, 2022).

Poor product conceptualization is explained by the acute shortage of food scientists and technologists as well as the required talents, skills, experience and experts to engage in the often more complex process of innovation ideas' search, selection, implementation and capture (Aalbers & Dolfsma, 2015). This affects the capabilities of most of the emerging food and beverage manufacturers to create and capture differential values that bolster their competitiveness (Grant Thornton, 2022).

Given such deficiencies, learning and imitation of foreign food and beverage concepts have become the modus operandi of most local food and beverage manufacturers (International Trade Centre, 2020). Learning and imitation is part of the innovation methodologies, but as overseas' food and beverage product concepts are just copied and pasted by the local manufacturers, it becomes difficult for local firms to defend their market position once the copied foreign firms that understand their products better enter the local Turks and Caicos' food and beverage market.

As this undermines the competitiveness and sustainability of local food and beverage manufacturers, poor R&D investments has also emerged as another limitation for effective

innovation value creation and capture (Grant Thornton, 2022). Most of the emerging Turks and Caicos food and beverage manufacturers that aspire to develop product concepts of their own often still develop and maintain just smaller R&D units as part of the cost minimisation strategies. This undermines the development of more effective R&D departments that can engage in more radical innovations to emerge with more novel disruptive food or beverage concepts (Foley & Willis, 2022).

Less effective R&D units also affects continuous innovation and re-innovation capabilities to modify the existing food and beverage concepts to respond to the changes in customers' needs. The effect is that as new disruptive food and beverage products emerge, it often becomes difficult for the emerging food and beverage manufacturing ventures to defend their position and outwit such competition threats (Adeniran & Johnston, 2016).

Even for businesses that initially establish more vibrant R&D departments, their R&D departments are often scaled down as the product is successfully developed to diffuse across the market. Though such initiatives are aimed at minimising further costs and wastage as the product becomes more successful, it often becomes difficult for the emerging Turks and Caicos' food and beverage manufacturers to immediately re-assemble their R&D units to counter new disruptive rival products that emerge in the market (Turks and Caicos Department of Trade, Industry and Fair Competition, 2022).

These are exacerbated by the greater preponderances of most of the food and beverage manufacturers to use closed innovation models in which the internal product developers only interact amongst themselves to limit the utilization of other open innovation models that integrate the larger customer views, innovation partners and even competitors (Tidd & Bessant, 2021). This limits the required collaboration and interface with all actors to undermine efficacy of information exchange and sharing as well as capabilities to mobilize and share innovation resources with their partners to engage in game changing innovations that can induce outcomes that can reshape the food and beverage industry to their favour (Kaplan, 2017).

Yet due to low investments in agriculture, even manufacturers that have managed to emerge with more attractive food and beverage product concepts, have often still failed to secure the local sources of input supplies (Turks & Caicos Government, 2022). Instead, they tend to rely on foreign inputs sourced from Europe, Brazil and the United States. Combined with import duties, transportation costs and local currency depreciation against the US Dollar, these instigate cost escalations to undermine food and beverage manufacturers' costs competitiveness (International Trade Centre, 2020).

These challenges often mutate with poor marketing that affects the faster diffusion of new innovations as well as poor innovation quality management that affects the capabilities of the emerging Turks and Caicos' food and beverage manufacturers to create and capture the desired innovation values (Murray, 2003; Grant Thornton, 2022; Foley & Willis, 2022; Turks & Caicos Department of Trade, Industry and Fair Competition, 2022).

Given such dynamics, this research seeks to explore and evaluate the innovation value creation and capture behaviours and practices of the emerging Turks and Caicos' food and beverage manufacturing ventures that leverage or constrain their competitiveness, so as to discern the improvement strategies that can be adopted.

2. Literature Review

Innovation value creation and capture is a strategic process of creating and delivering the desired benefits to the users of innovation outcomes while also extracting the desired benefits

for the actors in the innovation processes (Zobel, Balsmeier & Chesbrough, 2016). Such actors include the business itself and other partners in the collaborative open innovation process. Innovation value creation and capture is a fundamental innovation concept that ensures the innovation process creates and delivers the desired benefits to customers and the business through more efficiency-enhancing processes.

Chesbrough, Lettl and Ritter (2018) elaborate that innovation values connote the technical, economic, service and social benefits provided to the customer in exchange for a price of market offerings. It is the superiority of such technical, economic, service and social benefits that leverage a business' capabilities to extract the desired values from its innovations through high sales at premium pricing to spur increment in revenue, profitability and market share (Cockburn et al., 2018; Hou & Neely, 2018). Value capture and creation which is the desired consequences of deploying innovation resources in a particular way leverages a business' competitive edge to create, deliver and extract even more differential values (Chesbrough & Rosenbloom, 2002; Choi et al., 2010).

However, Michel's (2014) notes that value capture is not just about the high economic and financial returns on investment derived from premium pricing, but also a process of exploiting the innovation capabilities, processes and intellectual property rights from innovations to create and capture more desired values for the business and customers as well. It is through such capabilities that innovation in general spawns a firm's sustainable competitive advantage.

Such a view echoes Tidd and Bessant's (2021) reasoning that one of the major complexities of innovation management is discerning how to create and capture as much values as possible. As many players and actors engage in creative destructive activities to reshape the existing industry structure to their benefits, it becomes difficult even for the leading innovators to easily translate their innovations into commercially viable products or outcomes. To overcome such hurdles, Tidd and Bessant (2021) suggest that usage of a business model that seamlessly combines all the complementary assets and capabilities across the innovation partners is not only critical for creating and delivering superior product offerings, but also bolstering a firm's marketing and distribution capabilities. This aids innovation's faster market diffusion and its commercialization.

But such a business model must also integrate superior defensive strategies for outwitting imitators through high levels of secrecy, standards and intellectual property protection, and management which is able to provide the required complementary assets in time for a business to exploit and maintain its innovation lead (Michel, 2014; Brynjolfsson et al., 2017).

Even if these would drive value creation and capture, Nambisan and Sawhney's (2017) "Open Innovation Models" still highlight that open innovation is a cornerstone of value creation and capture in the increasingly smarter networked world where talents and capabilities are distributed across different boundaries.

However, theories imply besides the methodologies for innovation value creation and capture, the strategic process of innovation value creation and capture is also often driven by a combination of certain underlying innovation drivers (West & Bogers, 2014; Pisano, 2019; Scott, Cobban, Painchaud & Parker, 2020; Bessant & Goller, 2017; Flor, Cooper & Oltra, 2018; Hooge, Bejean & Arnoux, 2016).

2.1. Methodologies for Innovation Value Creation and Capture

Innovation value creation and capture does not only require investment and deployment of superior physical assets and manufacturing capabilities, but also seamless integration and management of a combination of complementary assets across all the innovation partner platforms (Hurt & Dye, 2020). It is such capabilities that leverage a venture's capabilities to harness all the resources to emerge with the desired values. Effective management of a combination of complementary assets is elucidated in Tidd, Hull and Storey (2016) "Total Value Development" theory to integrate all capabilities from all the innovation partners to bolster seamless product and service integration.

It also links value creation and capture by harnessing the internal assets and external resources in partner businesses like distributors, advertisers, wholesalers, customers and retailers. Seamless integration of all complementary assets further spawns exploitation of diverse portfolio of tangible and intangible resources to link value creation and capture through the emerging value delivery system (Jean, Chiou & Sinkovics, 2016).

Such a view echoes Hopkins, Tidd, Nightingale and Miller's (2011) "Generative and Degenerative Interaction" theory that hold generative interactions to create and capture enormous values through a series of reputation and relations. As firms in the innovation ecosystem interact with each other, it creates a linkage between the internal and external capabilities to bolster exploitation of internal and external knowledge and resources to create and capture the desired values.

Overtime, such generative interactions enables all the partners to build and nurture innovation experience, knowledge and expertise that spur innovation reputation and capabilities for even firms in the innovation ecosystem that are not very creative (Kennedy, Whiteman & van den Ende, 2017). However, other theories highlight innovation value creation and capture methodologies to require innovation ventures to devise and adopt the appropriate methodologies for exploiting both external knowledge and new technologies (Klarin, 2019).

Exploiting external knowledge requires firms to develop and build absorptive capabilities to integrate and utilize the existing and new external knowledge in the creation, delivering and capturing of new values. It requires the establishment of an effective R&D system that integrates and exploits the existing internal knowledge whilst also exploring the external knowledge that can also be absorbed and integrated in new product/service development (Appleyard & Chesbrough, 2017).

External knowledge exploitation must be accompanied with new technologies' exploitation through a "fast-follower" approach rather than a "first-mover" approach to minimize failure risks (Brock & Von Wangenheim, 2019). A "fast-follower" approach does not necessarily suggest imitating and copying patents, but also investing in the required modifications to create additional values that are not offered by the existing innovation leaders. This spawns the venture's capabilities to attract new customers to catalyse increment in sales, revenues and returns on the invested capital (Strobl et al., 2020).

As internal and external knowledge is acquired, Friso den Hertog and Huizenga (2014) "Knowledge Enterprise" theory highlight that it is of essence to utilize the appropriate framework for exploiting and translating knowledge and intellectual property into new innovation outcomes. It requires innovation ventures to have appropriate systems for identifying, learning, absorbing, sharing, exploiting and translating the acquired knowledge into new values or products/services.

To accomplish that, Friso den Hertog and Huizenga (2014) "Knowledge Enterprise" theory suggests exploiting knowledge and intellectual property in innovation value creation and capture to require five tasks' approach that encompass generating and acquiring new knowledge, identifying and codifying existing knowledge, storing and retrieving knowledge, sharing and distributing knowledge across the organisation, exploiting and embedding

knowledge in processes as well as product/service development. This aids conversion of knowledge into innovation.

Birkinshaw, Bessant and Delbridge (2007) also highlight the other forms of innovation networks that drive value creation and capture to take the form of new technology development consortium, learning network, recombinant innovation network, open innovation network and user network. New technology development consortium reflects the collaboration and cooperation between different specialist firms in the development of more complex technologies, as learning networks constitute of a group of firms or product development specialists that converge to explore and learn more about a particular product concept prior to translating it into the tangible and intangible innovation outcomes (Bessant & Moslein, 2019).

Recombinant innovation network reflects a group of product specialists from completely unrelated products that converge to exchange and transfer ideas across boundaries so as to create a new product from combining different ideas from the existing technologies or products (Cusumano, Gawer & Yoffie, 2019).

Open innovation networks seek to aid collaboration with innovation partners, customers and rivals so as to extract novel ideas that can be used in the modification of the existing products or the creation of completely new products (Chesbrough, 2003). Unfortunately, even if these leverage innovation ventures' successes, empirical facts still imply most of the contemporary businesses still face the challenge of applying such innovation value creation and capture techniques to bolster their innovation competitiveness (Vanhaverbeke, et al., 2017).

2.2. Limitations of Innovation Value Creation and Capture

Most of the theories highlight that as businesses adopt open innovation as a strategy to improve their value creation and capture capabilities, it tends to expose the business to the risks of creating future rivals or even disrupters (Audretsch & Belitski, 2023; Vanhaverbeke et al., 2017). Open innovation is the collective and collaborative process of dealing with innovation challenges by sharing, exchanging and transferring knowledge and resources by different partners in the innovation value chain.

As much as this improves innovation efficacy to bolster the creation and capture of more novel differential values, open innovation exposes the business to risks of loosing critical innovation and business secrets (Stadler et al., 2022). In that process, some of the partners can engage in the learning and relearning process aimed at building knowledge and capabilities for leveraging their overall effective performance in the future. This implies despite the value of open innovation, it must be cautiously pursued as part of the strategies for innovation value creation and capture.

Open innovation also causes resource deployment and relocation that may temporarily or even permanently disrupt activities in the selected partner businesses. It can also be limited by differences of operational, technological, cognitive, cultural and regulatory barriers that different selected innovation partners face (West & Bogers, 2014; Stadler et al., 2022).

Open innovation may also induce the higher dependence of weaker firms on the stronger innovation firms. This reliance limits the capabilities of weaker firms to develop and improve their internal innovation capabilities by increasing R&D investment, and training and developing the skillfulness and competencies of internal staffs to effectively accomplish the required innovation activities.

In the long run, this affects the innovation value capture and creation capabilities of such firms (Audretsch & Belitski, 2023; Vanhaverbeke et al., 2017). Besides such challenges, Astrom et al., (2022) highlight that artificial intelligence (AI) technologies are being used to improve value creation and capture capabilities by generating novel opportunities that create addition values for the customers and the business. But they caution that the challenge still arises from lack of suitable AI technology business model for commercialization of such technologies (Agrawal et al., 2019). This is because once the AI technology is introduced; it also requires the modification of the existing business models to accommodate new changes required for the commercialization of the new technology.

Unfortunately, Gambardella and McGahan (2010) reveal that most of the businesses often fear altering the existing value creating business models to create a new one to create the yet unknown values. The implication is that once AI technologies are introduced as part of the value creation and capture improvement strategies, most of the innovation ventures often do not understand how such new required changes must be accommodated within the existing business model (Bouncken et al., 2021).

To address such limitations, Astrom et al., (2022) suggest that AI business model must use three phases for innovation value creation and capture that include identifying prerequisites for AI value creation, matching value capture mechanisms and developing AI business model offer. Yet as frugal innovation is used as part of the innovation strategies for value creation and capture, it also tends to be affected by certain deficiencies and underlying bad practices and behaviours (Cockburn et al., 2018). Frugal innovation is the elimination of the non-essential features from the over-engineered or over-offered products to lower the cost of product development and render it cheaper for the low income consumers.

In that process, frugal innovation has been used to eliminate some of the non-essential features from the products sold in the developed markets. This renders them easily sellable in the developing or emerging markets without compromising on quality (Cockburn et al., 2018). Though the logic of frugal innovation is to undertake product modifications without compromising quality, the challenge has often been the compromise of quality. This tends to dilute the brand image of some of the previously best performing innovations and products to affect their capabilities to generate more sales, revenue and profitability (Hou & Neely, 2018).

3. Methodology

To analyse the innovation value creation and capture behaviours and practices of the emerging Turks and Caicos food and beverage manufacturing ventures, the study used interpretivist research paradigm as integrated with exploratory research design, and qualitative research method. Interpretivist research paradigm was used to analyse the compatibility of the innovation value creation and capture behaviours and practices of the emerging food and beverage manufacturing ventures with the innovation behaviours and practices that are critical for leveraging a firm's competitiveness and sustainability.

Interpretivism is an epistemological approach that undertakes in-depth analysis of the phenomenon being investigated so as to make social construction and reconstruction of its nature and real existence in real world situations (Alvesson & Skoldberg, 2018). Interpretivism contrasts with positivism that does not permit any social construction and reconstruction that integrate the principal investigator's opinions, but just pure scientific reasoning and facts as the basis of reaching logical conclusion about the phenomenon being investigated (Brinkmann, 2017; Matta, 2021).

Usage of Interpretivism was integrated with exploratory research design and qualitative research method to explore and analysis questions like how, what, when and why the emerging Turks and Caicos food and beverage manufacturing ventures undertake innovations in the way they do as well as the constraints associated with such innovation behaviours and practices.

As this enabled the study respond to the critical research objectives and questions for the study, participants in the study were sampled using convenience and purposive sampling.

3.1. Sampling

Samples of the emerging food and beverage manufacturing ventures were drawn from the target population of 300 emerging food and beverage manufacturing firms that are operating as per the data from Turks and Caicos Department of Trade, Industry and Fair Competition (2022) in different cities in Turks and Caicos Islands.

However, to limit the cost of data collection, convenience sampling was used to draw only the emerging food and beverage manufacturing ventures in major populated Turks and Caicos cities like Cockburn Harbour, Cockburn Town, Downtown Providenciales and Bottle Creek.

From these four cities, purposive sampling was then used to draw 20 (twenty) emerging food and beverage manufacturing ventures that meet the condition of having operated for a period of two to five years. This aided discerning how their innovation approaches have been critical for leveraging or even constraining their competitiveness. Such analysis was accomplished using interviews as the main primary data collection method.

3.2. Data Collection

Qualitative data from the 20 emerging food and beverage manufacturing ventures was collected using semi-structured interviews which are partially based on the pre-designed Interview Guide (Lune & Berg, 2017). To elicit only relevant information, the design of the Interview Guide was aligned with the research objectives and questions for the study. The Interview Guide had five sections reflecting:

- Section A: Effectiveness of the Innovation Value Creation and Capture Processes used by the Emerging Turks and Caicos' Food and Beverage Manufacturing Ventures
- Section B: Impact of the Used Innovation Value Creation and Capture Methodologies and Techniques on the Competitiveness and Performance of the Emerging Turks and Caicos' Food and Beverage Manufacturing Ventures
- Section C: Dynamics and Complexities of Innovation Value Creation and Capture Experienced by the Emerging Turks and Caicos' Food and Beverage Manufacturing Ventures
- Section D: Participants' Suggestions on the Remedial Innovation Value Creation and Capture Model that can be Extracted and Recommended for Leveraging the Emerging Turks and Caicos' Food and Beverage Manufacturing Ventures' Competitiveness.

With interview guide in place, data from each of the 20 emerging food and beverage manufacturing ventures was collected through one-on-one interviews with either a member of production and operations executive or a senior manager in that department. Upon completion of interviews, the obtained data was analysed using thematic and narrative analysis (Lune & Berg, 2017).

3.3. Data Analysis

Thematic analysis as integrated with narrative analysis entailed organising data, reading and re—reading interview scripts, extraction of main themes and subthemes as well as their associated narratives. In that context, the first phase of analysis aimed to extract key themes and their accompanying narratives that explain the effectiveness of the innovation value creation and capture processes that are used by the emerging Turks and Caicos' food and beverage manufacturing ventures.

This was followed by the analysis and extraction of key themes and their accompanying narratives on the impact of the used innovation value creation and capture methodologies and techniques on the competitiveness and performance of the emerging Turks and Caicos' food and beverage manufacturing ventures.

Analysis also extracted key themes and their accompanying narratives on the dynamics and complexities of innovation value creation and capture that the emerging Turks and Caicos' food and beverage manufacturing ventures experience in their food and beverage production activities.

Finally, thematic analysis extracted key themes and their accompanying narratives on the remedial innovation value creation and capture model that can be extracted and recommended for leveraging the emerging Turks and Caicos' food and beverage manufacturing ventures' competitiveness. This aided discerning how the emerging findings coherently explain how the innovation value creation and capture processes, methodologies and techniques used by the emerging Turks and Caicos food and beverage manufacturing ventures leverage or even constrain their competitiveness.

As all these were being accomplished, measures for enhancing credibility and trustworthiness as well as ethical considerations were also integrated in the entire research process. In that context, the details of the findings are as follows.

4. Findings

In line with the research objectives and questions for the study, the findings are as analysed and presented according to three subheadings encompassing:

- Innovation Value Creation And Capture Processes Used By The Emerging Turks And Caicos' Food And Beverage Manufacturing Ventures
- Impact Of The Used Innovation Value Creation And Capture On The Competitiveness And Performance Of The Emerging Turks And Caicos' Food And Beverage Manufacturing Ventures
- Dynamics And Complexities Of Innovation Value Creation And Capture Experienced By The Emerging Turks And Caicos' Food And Beverage Manufacturing Ventures

Details are evaluated as follows.

4.1. Innovation Value Creation and Capture Processes Used by the Emerging Turks and Caicos' Food and Beverage Manufacturing Ventures

When ask to list and describe in details the innovation steps that the manufacturing enterprises use in the creation of its different food and beverage products, most of the interviewed product managers revealed that their manufacturing entities tend to use a three steps' process for innovation value creation encompassing market survey, product development, marketing and promotion. They explained that is the most common processes that are used in the innovation value creation and capture.

4.1.1. Market Survey

Regarding the market survey, the product development managers noted that they often do market survey as the first activity to discern and understand what kinds of products that the customers want. In that process, they elaborated that they tend to conduct local market survey among the food and beverage consumers in Turks & Caicos to understand what kinds of products that the consumers want.

For the product development managers in the fish processing sector, they revealed in the past, most of the food manufacturers just used the local traditional ingredients to create the packed food aspects of some of the traditional meals. However, following the increasing proliferation of foreign food operators and traders, they noted that new favourable recipes and ingredients have emerged among the local Turks & Caicos' consumers.

To integrate such recipes and ingredients in their food production, the interviewed product development managers explained that market survey and research have entailed the analysis and extraction of the local consumers' views as well as visits to the other international markets to understand the latest food trends and recipes that must be adopted. Such a view is corroborated in the narratives of one of the interviewed product development managers from the fish processing sector who stated that:

"In the past, some of the food manufacturers used just to translate the traditional ingredients used for preparing local foods into the packaged food version of the local traditional meals. With some modifications, this enabled the meeting of local consumers' needs. But when foreign food manufacturers and traders started coming in, the local consumers were exposed to new ingredients offering new tastes This signified to thrive, the local food manufacturers also had to ensure that their food products offer some unique preferable ingredients and tastes in order to attract local consumers as well as the several expatriates that work in Turks & Caicos. And it also meant market survey must be done both locally and internationally in order to develop a more preferable food product among the consumers."

However, some of the interviewed product development managers noted that as much as it is market survey which is the first step for product development, some of the emerging food and beverage manufacturers often do not use market survey. They explained that such manufacturers do not either have adequate financial resources to commit on market survey or just are not willing to do market survey. In that process, they revealed that some of the emerging food and beverage manufacturers prefer imitation and copying and pasting foreign food ingredients into the locally manufactured foods. In that process, one of the interviewed product development managers stated that:

"There are several tasty food ingredients which are popular among the local consumers. But because these products are imported, they tend to be limited in quantities and expensive. So with such opportunities about their higher local demands, we just research on the ingredients used and develop the local versions of such food and beverage products. This enables us to create and capture the desired values as we are able to sell more of such products to the local market more than the imported foreign food products."

Nonetheless, most of the interviewed product development managers noted that after understanding the product concept, the next step in their innovation value creation and capture deals with the actual product development or manufacturing of the product.

4.1.2. Product Development

When asked what kinds of manufacturing systems that they use, most of the interviewed product development managers noted that most of the emerging food and beverage manufacturers import the food manufacturing equipment either from the United States, Germany or from China.

Because of the uniqueness of some food and beverage products that are even copied from the more complex foreign based food manufacturers, some of the product development managers revealed that it is important to have exact machines, equipment, technology and more talented personnel that will be involved in the actual manufacturing of the product.

Otherwise, they stated that if the manufacturing entity adopts and uses a different approach, the food could taste different. Unless the objective of the manufacturing entity is to develop food or beverage product with different tastes, most of the interviewed product development managers noted that failure to replicate the ingredients and tastes of the foreign food or beverage product being imitated implies it will still be unable to tap the opportunities in the local markets.

4.1.3. Marketing and Promotion

If the product does not taste well, most of the product development managers stated that it becomes difficult to market and promote such a product. But if the developed food or beverage product is good, they revealed that it becomes easier to market and promote the product. To market and promote the new product, most of the interviewed product development managers reiterated that they use exhibitions where consumers are free to taste any food or beverage product of their choice for free, advertise and inform the local markets about where the availability of a particular new food or beverage product as well as where to find it.

In that process, some of the product development managers indicated that some of the emerging Turks & Caicos food and beverage manufacturing firms also have their own restaurants, distribution, wholesale and retail entities that act as the outlets through which different new food and beverage products find their way into the final consumer market.

Though some of the participants disagreed and expressed contrary views, most of the interviewed product development managers noted that through such innovation value creation and capture as reflected in the used four stages for new product development, most of the food and beverage manufacturers have been able to gain improved competitiveness.

4.2. Impact of the Used Innovation Value Creation and Capture on the Competitiveness and Performance of the Emerging Turks and Caicos' Food and Beverage Manufacturing Ventures

Most of the interviewed product development managers reiterated that businesses that invested in innovation value creation and capture to create different food brands have been able to gain from improved business performance. Even if some of the emerging new food brands were copied and pasted from the foreign based food concepts, they stated that the emerging food and beverage businesses engaged in such actions have still been able to gain.

They attributed this to the fact that once customers taste the new food brands and find them to match or even exceed the foreign food tastes that they are used to, they tend to shift away from the consumption of imported foods to the consumption of the local food brands. Such a view is accentuated in the narratives of one of the interviewed product development managers who stated that:

"Yes we have been able to gain quite significantly because I mean if create a food brand that the local consumers were spending plenty of dollars just for a few dollars without compromising quality, it becomes a boom. People access and try our products from different stores and restaurants and I think they have been impressed with the quality because ever since we started, we have been doing well."

Some of the interviewed product development managers noted that they key has been significant price reductions. They explained that through innovation value creation and capture approach that seek to replicate most of the most popular food brands, they stated that the emerging food and beverage manufacturers that are successful in doing so have been able to eliminate import duties associated with foreign food imports.

They noted that the emerging food and beverage manufacturers also do not have to incur the often hefty freight costs of moving the imported foods from the overseas suppliers to the local Turks & Caicos market. So by investing in innovation value creation and capture that introduce new locally made food brands, they noted that they different emerging food and beverage manufacturers have been able to capture the local market. Even if some of the previously established foreign players in Turks and Caicos food and beverage market are fighting back, one of the interviewed product development managers stated that:

"We did proper evaluation of the market condition and we emerged with this new food brand that every consumer came to prefer. This exposed us to rising customer attraction, retention, sales and revenues. I mean although some of the businesses could have not been lucky, we have been able to reap what we desire, year in, year out higher returns. The shareholders are happy and to me that is the value of innovation, make the customer happy and they pay back by making the shareholders also happy."

In their narratives, some of the interviewed participants revealed that as some of the emerging food and beverage manufacturers extend their operations to the establishment of online distribution and retail systems, as well as in the creation of restaurants to reach the wider market, it was not only the product quality of the newly introduced food brands that matter, but also the customer service quality. To respond to customers' needs not only for quality products, but also for better customer service quality, they stated that different emerging food and beverage manufacturers started partnering with different courier companies. This rendered it possible for businesses using the online business system to improve the efficiency of the delivery services to respond to the needs of different consumers.

For the emerging food and beverage manufacturing entities venturing in the establishment of restaurant chains to reach customers in different parts of Turks and Caicos market, they revealed that others also had tom partner with well-established international restaurants in order to offer better customer service quality. Though some conflicts emerged among certain businesses to undermine the value of such a strategy, most of the interviewed product development managers still reiterated that introduction of such a strategy enabled most of the emerging food and beverage manufacturing firms to reach different corners of Turks & Caicos markets as well as to other markets in the Caribbean. But even if that is so, some of the product development managers noted that there are still some dynamics and complexities that affect the effectiveness of most of the emerging food and beverage manufacturing firms' innovation value creation and capture strategies.

4.3. Dynamics and Complexities of Innovation Value Creation and Capture Experienced by the Emerging Turks and Caicos' Food and Beverage Manufacturing Ventures

It emerged from the narratives of the interviewed product development managers that the major challenges and dynamics undermining the effectiveness of innovation value creation and capture undertaken by the emerging Turks & Caicos' emerging food and beverage manufacturing firms often arise from inadequate financial capital, poor top management's commitment, changing competition landscape and lack of the required talents.

4.3.1. Inadequate Financial Capital

Participants narrated that most of the emerging food and beverage manufacturing firms often aim to engage in more efficient innovation value creation and capture, but the challenge is often the money to do so. They explained that research involving new product development is very costly in terms of hiring the experts for market survey and expert scientists for the actual product development.

Even if some of the emerging food and beverage manufacturing companies engage in copying and pasting food product concepts from different foreign firms, some of the interviewed operational managers noted that such process of imitation also requires enormous financial resources just like a new start-from-the-scratch product development. Such a finding is echoed in the opinions of one of the interviewed product development managers who revealed that:

"Money is the major problem. It is not enough-since you have to buy or hire machineries and equipment, hire labour, buy ingredients and hire experts for market survey and the actual engagement in new product development."

Since capital finance is the problem, the product development managers stated that once the first successful food product concept is developed and introduced in the market, some of the emerging food and beverage firms often become reluctant to pursue further growth. They explained that engagement in food and beverage manufacturing requires the importation of some of the materials, ingredients or inputs from outside the country.

In Turks and Caicos, they noted that inputs for fish processing and manufacture businesses are in abundant. But if it is for other types of foods, they revealed that there is always a mixture of the importation of foreign and local ingredients. According to most of the product development managers, these increase the overall costs of new food product development. The effect is once the business starts to performance well and generate the desired returns, the product development managers revealed similar views that most of the top managers and business owners prefer to first generate revenues to cover their costs of new product development and some profits before engaging in new improvements. Such a finding is echoed in the views of one of the interviewed product development managers who noted that:

"Food and beverage products' manufacturing is a very expensive venture. Once we develop the product and it begins to perform well, top managers and even the business owners often inform us to first concentrate on recovering the money that was lost plus some profits. Without recovering the costs of initial investments, they are often more reluctant to commit more resources even if new market survey reveals that customers are raising issues with some aspects of the product."

Yet as some of the emerging food and beverage manufacturers become reluctant during the period before they recover their initial costs of investment, some product development managers revealed that failure to make necessary improvements to address issues being

raised by customers about the new product often affects the branding of the product. They explained that branding of the product is affected because the tendency for the customers to keep complaining as the sales personnel lie that they are going to address the issue, but fail to do so within the reasonable expected period often affects customer trust and confidence about the product.

Declining customer trust and confidence also affect branding of the product to instigate rising customer defection. They noted that as customer defection increases, most of the customers revert back to consuming imports or even to the products being offered by other rival firms. According to most of the interviewed participants, this affects successful value creation and capture because it affects the profitability of most of the emerging food and beverage manufacturers.

Besides such challenges, other product development managers highlighted changing competition landscape to be another factor affecting Turks & Caicos' emerging food and beverage manufacturers' innovation value creation and capture.

4.3.2. Changing Competition Landscape

Changing competition landscape emerged from most of the narratives as one of the dynamics and complexities that are affecting the innovation value creation and capture activities undertaken by the emerging Turks & Caicos food and beverage manufacturers. They explained that during the commencement of new product development, there is often no much competition or even competition at all because Turks & Caicos is a small island. However, they noted that when the product is developed to become more successful, its attractive market performance often induces other Turks & Caicos businesses to also engage in the production of such products.

According to most of the product development managers, this increases the competition heat and pressure since the business has to lower operational costs to sell cheaply. Other product development managers revealed that even if the business not lowering the operational costs to sell cheaply, they noted that some of the emerging food and beverage manufacturers just sacrifice some percentage of their profit margins and sell cheaply to beat competition.

In that process, participants revealed that the drawback is that engagement in the production of some of the food products becomes less interesting and profitable. They explained that to thrive, the emerging food and beverage manufacturers must find additional something to offer so as to entice customers. Such approach as they noted becomes very expensive to reduce profitability. During the interviews, one of the interviewed product development managers corroborated such a finding by stating that:

"It is a competitive landscape. If you introduce a new product new competitors will come. Even when you imitate and come with the food product versions of imports, the importers will still find the way of undercutting you by lowering the prices or additional something else to attract customers. For emerging food and beverage manufacturers that are usually not yet well resourced financially, doing a successful business in such environment becomes difficult. It is difficult because you have to sell cheaply or provide additional offerings to attract customers. Those with limited capital finance find it difficult and leave the market."

Yet as some of the emerging food and beverage manufacturers engage in the new product improvement to offer better quality and more attractive features, some of the product development managers noted that lack of the required talents is often also a major impediment. They reiterated that Turks & Caicos is just an Island with limited population

with the effect that even the citizens that qualify with the requisite skills and talents often leave for overseas companies for better pay. This leaves Turks & Caicos Island with very limited talented skills that even require more money to successfully hire and retain them.

In that process, most of the interviewed product development managers revealed that even if the business is interested in improving its product features to create and capture more values, lack of funds to hire the requisite experts would still be a challenge. Such a narrative is reflected in the summation of one of the interviewed operational managers who stated that:

"To develop the best product that beats the competition, you need money, machines, technology and talents. But our problem here in Turks & Caicos is that some businesses have money, but no talents. Others have talents but no money. Banks are not willing to come in unless the business has been operational for some good years. That is the problem. It is difficult for new businesses to survive and thrive in the midst of all competition without the required resources."

Yet besides lack of the required talents, some of the interviewed participants revealed that the other challenges that emerging food and beverage manufacturers often face arise from different seasonal changes. They explained that some products tend to perform well during certain periods and quite poorly during some other seasons. For emerging food and beverage companies that often do not have adequate financial resources, some of the product development managers noted that it becomes difficult for them to survive during the periods when sales are low.

To deal with the low sales season, they stated that some of the businesses often borrow to improve their liquidity to keep moving. However, still when the good period comes, it often becomes still difficult to balance and move forward since all the revenues being collected are all use for repaying the debts incurred during the low sales' season. This affects some of the emerging food and beverage manufacturers' sustainability to continuously engage in the desired activities of innovation value creation and capture.

5. Managerial Implications

Findings imply that to improve innovation value creation and capture capabilities of the manufacturing firms, it is recommended that the emerging Turks and Caicos food and beverage manufacturing firms must adopt the suggested Innovation Value Creation and Capture Model for Emerging Food and Beverage Manufacturing Ventures in Figure 1. Innovation value creation and capture is about the development of new products or the improvement and commercialization of the existing products. Since findings revealed some of the emerging Turks & Caicos not to use the three steps process for new product development as other use such a process, it is suggested that all the emerging businesses must streamline and improve such new product development processes by adopting the five steps encompasing:

- Industry and Market Analysis: Must be undertaken by the emerging food and beverage manufacturers to identify the values that customers prefer and how the existing industry operators are responding to such customer preferences. This must be followed by the analysis of what the customers would want which are not being offered by the existing industry players. Such insights must offer information for new product conceptualisation.
- **Product Conceptualisation:** Will require emerging food and beverage manufacturers to frame the ideas extracted from different forms of analyses into the image reflecting the kind of a product that would be created. Emerging food and beverage

manufacturers must ensure that the conceptualised product is translated into a prototype that can be used for experimenting what customers feel or dislike about the product. This leads to product development.

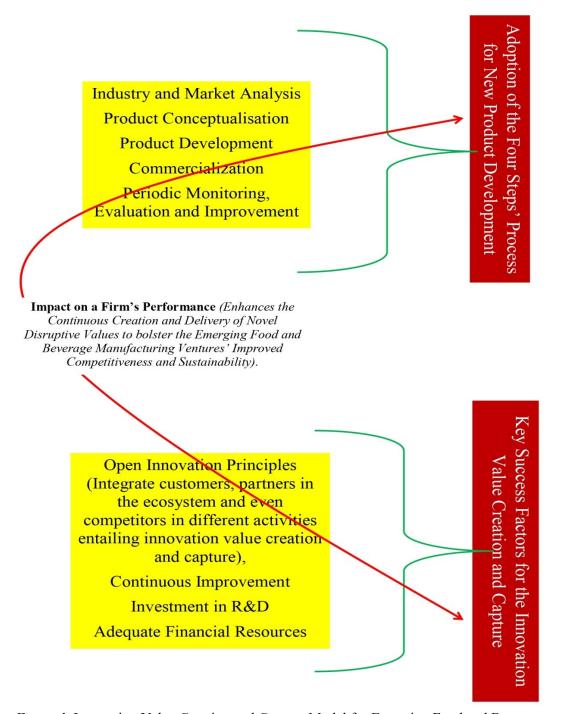


Figure 1. Innovation Value Creation and Capture Model for Emerging Food and Beverage Manufacturing Ventures

Product Development: Will require the emerging food and beverage manufacturers to ensure that the conceptualised product is translated into the actual product. This will require that emerging food and beverage manufacturers invest sufficient financial resources, machineries, equipment, infrastructure, skills, talents and all the unique inputs used in the manufacture of the product. Once the product is produced, it can then be commercialised.

- Commercialization: Is the innovation value capture process that will require the emerging food and beverage manufacturers to adopt the appropriate marketing and promotional strategies for promoting the product. It also require the emerging food and beverage manufacturers to adopt the appropriate distribution strategies to ensure that the finished products are brought to areas proximate for meeting all the customer needs. This must be accompanied with periodic monitoring and evaluation.
- Periodic Monitoring, Evaluation and Improvement: Will require the emerging food and beverage manufacturers to periodically monitor and evaluate their products to discern whether there are any areas where the customers are dissatisfied with. This can also be accompanied with the use of the Balanced Scorecard and Strategy to discern whether the product development strategy being used is contributing to improving the achievement of the desired profitability goals and objectives. After the analysis and evaluation, the obtained insights must inform the improvement initiatives that the emerging food and beverage manufacturers must undertake to improve their products.

However, as such five steps for new product development and innovation value creation and capture are being used, the emerging food and beverage manufacturers must also integrate the utilisation of the key success factors for the innovation value creation and capture that encompass:

- Adoption of Open Innovation Principles; By integrating customers, partners in the
 ecosystem and even competitors in different activities entailing innovation value
 creation and capture.
- Continuous Improvement: Emerging food and beverage manufacturers must not recognise that innovation is just about a once off new product development, but a continuous improvement initiative. Through such approach, they can be able to develop new products and apply the continuous improvement initiatives to create additional values that delight the consumers.
- Investment in R&D: Must be undertaken by the emerging food and beverage manufacturers as a critical strategy that will determine the success of their innovation value creation and capture activities.
- Commitment of Adequate Financial Resources: Will require the emerging food and beverage manufacturers to commit the necessary financial resources to ensure the success of different innovation value creation and capture activities.

6. Area for Future Research

This research has proved that innovation value creation and capture bolsters a firm's competitiveness. However, given the fact that the Four Steps' Process for New Product Development and innovation value creation and capture as well as their key success factors were just extracted from the qualitative study, future research can use confirmatory factor analysis to scientifically test and validate the critical constructs that determine Innovation Value Creation and Capture Model for the contemporary businesses.

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