Responsive Innovation through Perceived Shared Values and Preferences of Customers

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Abstract. Responsive Innovation can be defined as the attempt from the corporate or respected individual to bring the solution from particular problem by offer more ideal practical implementation based on specific requirement in the market. This type innovation can be generated or effectuate through modifying, combining, substituting or eliminating current process of problem solving or decision making in the market to be more precise, efficient and rigid compare to the previous. This study explore the possibilities to identify the characteristics of responsive innovation by developing web and mobile application based on the demand in the market with the several criteria namely number of exist application, higher demand, user experience attachment, attractive market and small routine margin of profit. Thus, this study present the application design called eLo and FunBuz to make it easier the process of order or reservation online.

1. Introduction

Innovation is simply doing or doing something different to satisfy the perceived needs or the market gap [1]. Therefore, it is not just doing something different from the difference to present the different thing towards different segment, but it can occur in any type of industry that uses an action to change their objective about providing certain product services. In general, innovation implies a creative thought that escapes from a traditional point of view or think differently by optimizing resources and assets internally and externally. Furthermore, it can be extremely difficult when the awareness of something to do differently have been co-exist with the motivation to changes within the environment. Many techniques have evolved to help the process take place or execute in the right manner, therefore the essential question related to the timing to conduct the attempt to innovate. On the other hand, the first routine is to carefully observe the product or the service area and divide it into several breakdown of the components, which is in the form of activity or to do list. Meanwhile, the kind of innovative ideas do not always come from executive offices or management sides, instead every possible channel of medium can extract it, through creative thinking and constantly emphasizing on the optimization. The starting point can be through monitoring the feedback or complaint from the employee or the customers with positive thinking to develop proper solution to improve the quality of product service or solve the issue. This kind of innovation only take low risk and small investment, which can be categorized as responsive innovation but the implication enable to motivate or encourage every employees to participate in generating their own ideas about certain products or services through brainstorming sessions or forums. On the other hand, employees also can create an invaluable contribution, not only in the development but also in implementation of the application by offering more effective and efficient certain business processes. After all, it is important to be systematically...
deliver this kind of innovation improvements and aligning the vision with the company’s goals. Thus, this study want to explore the systematic approach to execute problem solving and decision making in the frame of creating responsive innovation by implementing application based on demand in the intuitively and data driven through understanding the broader picture of how a single process affects overall productivity.

2. Literature Review

Promotions are indispensable marketing activities widely used by various company in order to increase awareness of the customer about their product service to encourage the routine utilization, which implicate on how they perceived value on certain product service [2]. Therefore, many relevant factors must be considered, such as the human being, the environment, culture, language, literacy and regulation to improve the effectiveness of interaction and communication among stakeholders [3]. Meanwhile, there can be a digital divide and a digital divide to accept innovation in society due to the lack of human resources, the low availability of infrastructure and the small bandwidth of the Internet. Historically, many of the first companies that have become pioneers in the use of the Internet have obtained enormous benefits, such as controlling demand in the market, establishing the direction of innovation, increasing sales quickly and reducing the cost of production in comparison with the competitors [4]. On the other hand, Industry 4.0 indicates that increased competitive pressures, reduced margins, the availability of new technologies and marketing development techniques suggest more complex decisions to succeed and maintain [5].

The policy has led to a radical change in the way governments should justify their investment priorities to support innovation and economic development. One of the many new preconditions sought to improve the design of regional innovation policies by strongly emphasizing the basic evidence base of policy strategies [6].

Actually, it is necessary to initiate a reform through shaping what so called the responsive innovation, where the new conditions can provide the solution for the current problem derive from a socioeconomic crisis, a critical report of the system's performance or a change in leadership. Although, the continuity of leadership is necessary not only to instigate reform but also to preserve it in the organization [7]. Therefore, traditional linear and sequential models of innovation are inadequate in highly competitive environments. Instead, it is suggested that companies establish their own innovation processes in the collective detection of front-line employees and clients working around the regulatory environment. This framework establishes the concept of responsive innovation, where key stakeholders involved in ongoing business activities in the organization identify problems that central managers can solve later [8].

Responsibility comes when shared knowledge is used by the parties, the provider and the user responsible for society and nature, as well as for the future generation. Therefore, no person can assume their responsibilities with respect to each interested party in equal conditions. When the researcher and the provider of knowledge and innovations develop mutual trust and responsibility, they also become respectful of the cultural and ethical sensitivities and limitations of others. However, in practice, this reciprocity is rarely obtained because sensitive innovation often arises from competitive pressures [9].

3. Research Methodology

Prior to the development of the application, the study used the business panel to identify two type of problem in specific market segment, which is small enterprises that provide product service to the students in the university. Then, this study identify relevant key partners, key activities, value propositions, customer relationships, customer segments, structure costs and revenue streams to establish attributes and service descriptions of products. At the development stage, the website design and database should be designed to avoid duplication and the problem of redundancy that can eliminate customers due to dissatisfaction with the product's service. The design process uses an initial application model to increase knowledge and feedback in order to improve the representative and interactive design of the application. The user interface has been built through a universal design as a
principle to achieve usability, accessibility and learning for an effective and efficient system. To use this technique, first separate the problem or topic and ask questions about each attribute. Make a list of all the brainstorm results and group them in common areas. Then choose the region that is the most likely candidate for innovation. It is necessary to have an exact achievable innovation, the consideration of suitable or simplification should prioritize compare to revolutionary improvement, which can be exciting and powerful but are unlikely to resonate with customers or end users. In general, by utilizing the focus group discussion through inviting relevant customer can provide several insight to formulate the design more quickly and clearly. In this case, this study is using user experience design as the approach and persona as the methodology by providing the mock-ups to explain the operational, representational and interaction design of the application.

4. Discussion

In the process of develop the responsive innovation, the designer should ask relevant question about the product, process and purpose such as the risk, impact, public interest, alternative, standards, benefit, changes, ethics, moratorium, techniques and motivation [10]. A transparent and interactive process in which both social actors and innovators respond to each other with a view to moral acceptance, sustainability and social resistance to the process of innovation and marketable products to allow science and science to incorporate properly the technological advances in our society can be as the definition of responsive innovation [11]. On the other hand, it requires the ability to change form or direction in response to stakeholder values, general values and changing circumstances. Meanwhile, the limited capacity to allow the social agency to opt for technology and adjust the innovation routes was an important criticism of the impact of public participation [12]. In this case, this study identified that demand based, market pull, collective nature, responsibility consequences and building capacity as the triggers for responsive innovation in the business environment.

| Innovation Type | Triggers | Drivers | Supporters | Indicator | Value |
|-----------------|----------|---------|------------|-----------|-------|
| Incremental     | Performance Driven or Reframing Function | Event, Moment or Series Initiative | Specific Ecosystems Industry | Enhanced or Improved Product Service | Competitive Position, Pipeline Management, Cultural Pushback |
| Responsive      | Demand Based or Market Pull or Collective Nature Responsibility Consequences or Building Capacity | Business Process Evolution, Anticipation of Problem, Reflection of Issues | Communities Segment or Customer Focus in Local Context | Sustained Requirement or Fulfillment of the Needs | Competitive Advantages, Architectural Change, Information Spread |
| Disruptive      | Technology Push or Application Realization | Customer Centric or Dynamic Market | Initiative within Attractive Market Target | Challenger towards Incumbent or Originate in New Type of Market | Sales Revenue, Company Growth and User Satisfaction |
| Radical         | Business Forces and Rivalry Orientation | Transition Phase | Value or Supply Chain Generator | Substantial Change or Diversification | Differentiated Product or Service |

Table 1: Innovation Type Attributes within Business Environment
Certain characteristics of strategy and literary innovation have realized that frontline employees and clients working in the regulatory environment tend to be at the forefront of important developments and can often sense important emerging events of strategic importance. However, the specific approaches for the continuous grouping and the integration of ocean detection in the decision-making processes have been elusive [13]. On the other hand, in the certain location close to campus, many small or medium enterprise provide the laundry service to help student spent their times in the washing process or invest their money into washing machine that only utilized in the limited 3-4 years. Therefore, the delivery service often happen by the students themselves or request via phone number calling. This kind of process is quite bothersome by several students who demanded more quick and easy way to do order. This opportunities bring the responsive innovation to come fruitful through identification process of the primary and supporting business process, then develop the suitable or
proper application to solve and overcome the issues to fulfill the demand from the customers. This application provides various menus such as order to take booking or arrange the schedule or particular sequence in quota or queue time in washing process together with other added value such as fragrance selection, ironing service, price negotiation and exclusive washing. Meanwhile, there is also pick up menu to see the prediction of finishing time of the order and decide the specific time to collect the belongings or even ask for more service such as delivery service or keep them until a certain period. Furthermore, menu of feedback to provide form to the customer to complaint, recommend or suggest certain thing about the service while menu maps to select certain location for the delivery service by tagging or searching. Last feature about the weather, which has function to inform the list of forecasting from various television station and meteorology, climatology and geophysics council about respected area.

The responsive innovation uses the collective of intelligence from internal and external parties to identify problems, while often focusing on continuous adjustments to their operational capabilities [3, 13]. In other context, during the time of ordering tickets, customers also utilize the channel of telephone calling or by coming directly to the sales counter, which can be claimed as waste of time and energy especially for those who live far from the bus counter. To solve this kind similar issues like the previous, the application that provide easiness to order tickets online to serve customers should be made respectively. It also should present convenience to prospective passengers to optimum level with the accuracy and reliability based on customers’ preferences. It is expected, the process will reduce the time, energy and money to be spent by customers to order bus tickets and optimally help customers to achieve more satisfaction through prize comparison. Besides that, the costs reduction in the operational level also can be optimized, which associated with printing tickets or other manual activities instead digital receipt that can be stored in log history. Basically, customers can search for information regarding the availability of bus departure schedules with various destination cities and the description of the route and time prediction or any other relevant information. Thus, to achieve responsive innovation, the attempts to do collaboration should be encouraged in frequent manner such as through social gatherings, study tours, theme-based meetings and collaboration to create news [14].

Figure 4: Collection Menu Interface from FunBuz

The establishment of the expectation also should be done to set the priority in developing certain features that can enhance the ability of the feature as well as provide complete control to the customers to show the commitment in the group of developers. Actually, it should take a note that the responsiveness required personal responsibility by defining the metrics in every process that is involving customers focus or communities segment to sustain the requirement or fulfill the needs. The process of shared the value between developer and customer in the end can enhance the
communication performance between them to understand proper preferences in the respected application, such as the structure of certain button, the background color in particular weather, the conviviality in the reminder, the tagline used in particular context, the utilization of font size in order detail or the processing time of booking. Every consideration should put priorities in the perspective of customer’s preference to develop highly and mutually exclusive user experience in using both application. The process may take time to be ideal, but as long as the direction is right, the output will be suitable in the end. However, it is very difficult to identify indicators that already measure what is appropriate and agree on a common understanding of their interpretation with relevant stakeholders. This requires not only the commitment of the organization, but also the detailed availability of detailed data in each of the priority areas [5].

5. Discussion
This application has been design through rigid and strict criteria using active participation within team member internally through persona and focus group discussion externally by inviting potential customers from targeted segment, which is university students. Thus, it is essential to have shared vision between developer and customer to develop clarity in understanding the motivation to create certain application to solve certain issues. On the other hand, the responsive innovation should be considered in the perspective of the prospect, which can be potentially provided value to present self-awareness or insight in respective environment or even change the culture of doing certain activities in the organizational or institutional entities. In conclusion, the responsive innovation should be recognized as the alternative to sustain the buying process and build the foundation for differentiation in delivering competitive advantages about certain product services in the business environment within local context.

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