INNOVATION STRATEGY OF HEWLETT-PACKARD INDONESIA TO COMPETE IN INFORMATION TECHNOLOGY INDUSTRY

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Abstract: Innovation Strategy of Hewlett-Packard Indonesia to Compete in Information Technology Industry. Research objectives: 1. Analyze the quality level of Hewlett-Packard (HP) Indonesia services provided to its customers in Indonesia, 2. Analyzing to what extent the delegation of authority of Hewlett-Packard (HP) headquarters to Hewlett-Packard (HP) Indonesia which includes autonomy discretion in innovating both in terms of process and measurement instruments (support). Knowing the information technology industry strategy in the case study is Hewlett-Packard (HP) strategy in building a culture of continuous innovation that can be categorized as a strategic innovation. This study is generated through quantitative and qualitative method by disseminating questinaire to 112 loyal customers which have been at least 3 years experience with Hewlett-Packard (HP) Indonesia as well as have spent at least 1 (one) million US$ every year and interview top management of Hewlett-Packard (HP) Asia Pacific and Hewlett-Packard (HP) Indonesia. The result of research found human capital and the role of top-management have played a very important role-model to implement A-to-F model in innovation and disseminate a socialization, externalization, combination and internalization (SECI) in spiral mode within company to create innovation culture. It is purposed to manage their sustainability of life and growth in a changing strategic environment in Indonesia.

Keywords: innovation, hewlett-packard, A-to-F models, SECI, sustainability

INTRODUCTION

Information Technology Industry is the industry that grows very rapidly and very dynamic in the world. Information Technology has drastically changed all aspects of people's lives, individually, family, relationships and social community as well as in business as well as influential and highly influenced aspects of governance.
In today's modern era, the existence of information technology contributes greatly to the civilization of the world, because it becomes a practical tool for humans, making it easier for humans to perform various activities. Information technology has a very important role to support that ease. Already a lot of information technology created by humans to realize the human desire itself. Efforts are made this, so that we no longer need to bother to do activities that tiring.

So the choice of society will need information technology more broadly. Because of the intense competition and challenges faced in various aspects of human life both in business, education and acting and thinking as well as in conducting research and development as well as daily activities are all inseparable from the existence and the important role of information technology. Information technology also helps create creative beings that produce so many new products and products that are categorized as innovative and beneficial to mankind.

So many companies are investing heavily in research & development and also hearing from their key customers (Christensen, C.M., 1997, The Innovator's Dilemma) but in reality they are still collapsing and failing in their business. They are facing cyberspace marketing through digital marketing that disrupts and destroys their business.

Therefore it takes a strategy in the face of real good competition and without form in the real world and virtual. It needs a special strategy in the face of intense competition in the information technology industry that is full of innovation and high creations value. Strategies can also include from marketing innovations tailored to the environment and the context in which the company that produces the products and services is located.

Strategy itself according Rangkuti (2014) strategy is a tool to achieve goals, or how to achieve goals. In its development, the concept of strategy continues to grow. This can be demonstrated by the different concept of strategy over the past 30 years. The strategy itself should be supported by the operation or execution or implementation of the strategy itself (Hutabarat, J., Huseini, M., 2012, Strategy).

According to Hutabarat, J., Huseini, M., (2012) and strategies and operations are divided into 4 (four) quadrants as follows:

![Figure 1. Strategy and Operation](source)

From the picture above can be explained that the company with a good strategy and operational to be a winner. While companies that have good strategy but are weak in implementation or execution, the company is just as a dreamer. There are also companies that attribute as explorers, have bad strategies but good execution and implementation (Me-Too). The company has no creation and innovations, just waiting and imitating, its nature as a follower and imitator. The lowest quadrant is a company that does not have a strategy, and does not also have good operational skills,
consequently included in Christopher Columbus category, success depends on accidental factors. This strategy will be investigated by the author on Hewlett-Packard in Indonesia in building a good marketing innovation strategy framework along with good operational capability as well.

While related to innovation, innovation plays an important role for a corporate organization even institutions grow and develop and able to compete widely. Innovation itself has a sense of renewal, where innovation occurs when social practices change (Tuomi, I, 2006, *Networks of Innovation*).

Due to the nature of innovation in networking and collaboration and decentralization, the cooperation between the government and academia - community organizations will form open innovation (Chesbrough and Vanhaverbeke, 2013; press conference: *Exploring the Next Wave of Open Innovation Research*, Oxford University Press). The innovation network forms an innovation ecosystem to gain competitive advantage (Vanhaverbeke, W., 2013, *Rethinking Innovation beyond the Innovation Funnel*).

So a company does not have to create new products, but can collaborate with other companies from different industries to build open innovation through decentralization or spread over the strategic environment in which it operates (Holtzman, Y., 2014, *A strategy of innovation through the development of portfolio of innovation capabilities*). An open innovation pattern enables a company to sell its human resources and / or its reliable resources to third parties as a form of collaboration commonly called in-out. Similarly, a third party as a collaborating partner of the company sells its human resources and / or resources to a company that is commonly called from outside to inside (Gassman et al., 2010; Chesbrough, H., 2010; *Business Model Innovation: Opportunities and Barriers*, Long Range Planning 43, 354-363). Thus, open strategic innovation is conducted in an open coordination between the companies.

One of the innovations of information technology users is the internet. The existence of the internet is also able to move new creative ideas in the form of new innovations of electronic commerce. The impact of electronic commerce creates a virtual digital marketing pattern.

The impact of the enormous use of the internet resulted in the emergence of innovation in the form of digital marketing through electronic commerce which also increased rapidly and complex competition plan (Epstein, Mark ,J, 2005, *Implementing Successful E-Commerce Initiatives*, ProQuest pg.22) among information technology companies.

According to Rowan (2002) the role of the internet becomes the most important thing in transform marketing into fourth generation marketing (4) through digital marketing. The presence of digital marketing will build customer-friendly relationships, manage real-time information and be kept privacy and have high-security, build sustainable customer relationships and serve customers digitally (Rowan, W., 2002, *Digital Marketing: Using New Technologies to Get Closer to Your Customers*).

From the description above the author would like to describe the background of problems that have occured in information technology (IT) companies related to innovation and digital marketing strategies. They haven’t anticipated the impact of digital marketing that is not anticipated by information technology companies that have been failed and bankrupt ; some major IT companies have fallen down.

While the success of Hewlett-Packard (HP) both in the world and in Indonesia is believed to have tips in the form of a great marketing strategy. Because basically innovation is not only for products and technology, but also includes marketing, sales, business process, business model as well as service to customers.

As Hewlett-Packard (HP) is a world-class company whose presence leaves a
global footprint that changes the order of human life, changes in behavior in business, socializing and networking. As a global company as well as an international company it is definitely related to global marketing and international marketing.

Based on the background, then the research problems can be formulated in the following research questions:
1. What is the level of Hewlett-Packard (HP) Indonesia's quality service provided to its customers in Indonesia?
2. What is the delegation of authority of Hewlett-Packard (HP) headquarters to Hewlett-Packard (HP) Indonesia which includes autonomy discretion in innovating both in terms of process and measurement instruments (support)?

Research Benefits

Academic benefits

The researcher hopes that this research can be useful for other future research reference which is able to deepen the framework of innovation strategy implementation to produce strategic innovation. Likewise This is to link and match what Text Book says is in line with the way of Hewlett-Packard (HP)'s implementation of strategic innovation.

Benefit of Business Practitioner

This research is also expected to be an important reference for both established and new business (start-up). So that business people who run the company will grow with innovative work that benefits the community, nation and state. Likewise research can provide insight into Hewlett-Packard (HP) regarding the implementation of innovation strategies.

Theoretical Framework

Hamel and Prahalad (1990), say that strategy is incremental and continuous action and is done from the perspective of what is expected by the customers in the future. Thus, strategic planning almost always starts from "what can happen", not starting from "what happens". The occurrence of new market innovation speed and changes in consumer patterns require core competencies.

Companies need to look for core competencies in the business they undertake. From the exposure of the experts in the field of management and strategy each convey the basic ideas and views of the strategy ranging from simple to more profound.

The strategy is illustrated in a brief way that is how to reach a goal. So that the implementation of strategy can gradually follow the development of predictable changes until the implementation of a radical strategy, where the fundamental changes, so that companies are able to compete well, but can be sustainable, growing and developing.

Innovation in the present approach can also be expressed in the form of models A through F (Triass De Bes, F., Kotler, P., 2015, Winning at Innovation, The A-to-F Model), and can be described as follows that innovation begins from ideation which is the process of forming and incorporating a breakthrough ideas into a unified idea. First comes from activator (top management or board of director) in initiation. This initiation should be followed up by obtaining in-depth and detailed information (browsers) in this case is the engineer, researcher, analyst and marketing department to manage, sort the information as well as select it into valuable and useful information. Then to the creator to move the ideas that have been formed and connected and high value (ideation).

After that is done by developers which need to be researched to find and develop the product innovation. The executor is obliged to implement the goods of such innovation for sale or commercialization. The existence of the facilitator may be a President Director may also be a board of directors who serves as a facilitator including providing money for development, research and innovation up to trial, as well as providing resources for both human resources and resources owned by the company.

So the role of the facilitator is a very important component in the implementation of the strategy for model 6 I in building an
innovation culture as well as producing innovative products that are up-to-date. It may be said without the full commitment of the facilitator, then the policy strategy in innovation can fail in the middle of the road.

The innovation process is strongly influenced by the innovation culture that occurs in a company. This culture establishes a habit and is the daily food of employees in it's groundbreaking breakthroughs that can bring the company into a competitive advantage and unique-value advantage proposition and comparative advantage. Because all the actors inside and outside the firm boundaries come together, not only create innovative products, services but also create innovative new business processes (Norman, R., Ramirez, R., 1993, *From value chain to value constellation: Designing interactive strategy*).

Hewlett-Packard (HP) is also considered successful in applying A-to-F Models in creating endless innovation (Trias De Bes, F., Kotler, P., 2015). Interestingly, Hewlett-Packard (HP) has also successfully implemented a combination of radical innovation (disruptive innovation) and innovation gradually and sustainably (sustanaible innovation) (Christensen, C.M, 1997). Yet according to Christensen the present and the future that sustainable innovation will be eroded and gradually lost, eaten by the innovation of radicals that disturb and even damage (disruptive innovation).

Figure 3 below also illustrates the SECI process is closely related to the A-to-F Model since innovation is created due to an innovation culture that is created continuously within a company in this case Hewlett-Packard (HP). This culture of innovation arises because of the interaction between seniors and juniors, where seniors socialize their knowledge and experience (tacit) into explicit that their colleagues and juniors can understand so that the baton in innovation runs smoothly in one organization. The results of their competencies are combined into the full strength of a company in building strategic innovation. And last internalized. So they form 6 (six) models in forming strategic innovation ie activator, browser, creator, developer, executor and facilitator which all interact interaction produce initiation, information, ideation, invention, implementation and instrumentation. Ultimately forming a triangle where the facilitator becomes the heart of the six functional models for output in the form of innovative products and solutions.
One component of innovation strategy is the quality of service (Service Quality) to the customer. Innovation not only on products, but also from the new, unique service, sales patterns, business models and business processes that customers love or drive changes to customers to adopt this innovative approach. In the long run the most important main factor that affects the performance of a company's business is that there is a better product and service quality than similar competitors (Zeithaml, V.A., Parasuraman, A., Berry, L.L., 1990, Delivering Quality Service : Balancing Customer Perceptions and Expectations). For the short term exceptional quality will surely result in increased profits through the premium price. Then likewise according to Zeithaml (1990) the exceptional quality of service will form and create true customers. And through the words of mouth the customer becomes an effective way to marketing to his colleagues who give the effect of business dominoes and increased profits.

According to Zeithaml (1990) the quality of service or the SERBQUAL (Service Quality) service to see the current customer perception with what the customer expect (expectation) includes 5 (five) dimensions: 1. Tangibles is the physical of the office along with the equipment and the ingredients, the people inside and the communication materials within the company. 2. Reliability (ability) ability to present services that have been promised appropriately. 3. Speed Responsiveness is the desire to help customers provide appropriate and adequate service. 4. Assurance is the knowledge and decency of employees and their ability to display confidence.
5. Empathy is a caring, intact individual attention that the company provides to its customers.

For Analysis then add the 6th element which is innovation. Because innovation is a demand from customers what they expect, so their system runs much better than their similar competitors. The customer system is able to produce innovative products and services as well as production processes with efficient and effective production results as well.

The gap of the quality of this service occurs when there is a difference between the expectations desired by the customer and what the customer is experiencing (the perception of the customer). This gap is divided into 5 (five) disparities which are gap 1, gap 2, gap 3, gap 4 and gap 5 as illustrated as follows.

In accordance with the figures above the gaps 1, 2, 3, 4 and 5 are described as follows gap 1 to gap 4 is the shortfall of the organization providing service. As for gap 5 (gap 5) is a shortcoming as what is perceived by the customer (customer perception).

![Figure 4. Gap model in service quality](source: Delivering Quality Service; Balancing Customer Perceptions and Expectations (Zeithaml, V., Parasuraman, A., Berry, L.L, 1990)

Gap 5 is the accumulation of gaps 1 through 4. If we want to close the gap 5, then we have to close each gap 1, gap 2, gap 3 and gap 4. The various gaps presented above are a valuable inscription to gain a thorough understanding of the quality of service and its determinants. These ingredients can be combined into portraits that are closer to reality between the service provider and customer side of the shared view of the quality of service as well as the relationships between them.

**METHOD**

The research methodology used in this study are a quantitative and qualitative approach.

**Quantitative method**

The data collection is done using quantitative method through questionnaire using Likert scale (Likert scale is used to measure the attitude, opinion, and perception of a person or group of people about social phenomena or related to satisfaction of a product-technology or company. Spreading of question through primary data that is responder from customer Hewlett-Packard (HP) in Indonesia. The population of Hewlett-Packard (HP in Indonesia is 112 customers spread across Indonesia from various industries where the approach takes samples with the following criteria:

1. Has been a Hewlett-Packard (HP) customer in Indonesia for at least 3 (three) years.
2. Produce orders every year 1 million US dollars in the form of repeat orders (repeat orders).
3. Demonstrate loyalty as users of Hewlett-Packard (HP) products in Indonesia.

In deployment to the Hewlett-Packard (HP) subscriber population in Indonesia with the above 3 criteria, and only 30 customers gave responders and 30 customers from 112 Hewlett-Packard (HP) subscribers in Indonesia or 27 (twenty seven) % of the population is highly representative, as samples for further investigation and analysis. So as many as 30 Hewlett-Packard (HP) subscribers in Indonesia that we consider meaningful and have purposive sampling.

**Qualitative method**

Informants or resource persons in this qualitative research method is the key informant deliberately selected by the researcher. These are the people who provide important information related to this research. The information is obtained through interviews related to the concept and practice of Hewlett-Packard (HP) framework innovation framework framework and the authority and discretion given by Hewlett-Packard (HP) Asia Pacific to Hewlett-Packard (HP) Indonesia so that HP can be sustainable and continue to grow in Indonesia. The related parties in interview are: Top Management and decision-making elements at the strategic level of Hewlett-Packard (HP) in Asia Pacific.

**RESULTS**

The results of this research use 2 (two) methods that is quantitative method by spreading the questionnaire using TRRAE model (Tangibles, Responsiveness, Reliability, Assurance and Empathy) to see customer satisfaction through gap analysis of what is expected by customers (expectations) and what customers perceive (perceptions) (Zeithaml, VA, Parasuraman, A., Berry, LL, 1990, Delivering Quality Service: Balancing Customer Perceptions and Expectations) to some Hewlett-Packard customers (HP) in Indonesia using Likert scale (Neely, A., 2004, Business Performance Measurement) of values of 1, 2, 3, 4 and 5; where 1: very bad / very unsatisfactory, 2: bad / less satisfactory, 3: enough, 4: good / satisfying and 5: very good / very satisfying. This is according to Zethamal (1990) is a form of quality service or service quality (SERVQUAL).

The second method is qualitative method through electronic post interview to HP Asia Pacific Managing Director, Ng Tian Chong as attached answer from the Managing Director of HP. Interview material according to section 3.4 on informants. So we want to combine the questionnaire results with interviews with Hewlett-Packard (HP) Asia Pacific leaders to see Hewlett-Packard (HP) strategy, innovation, marketing and service in the form of authorization and discretion given and become market leader in the information technology industry both in the world and more especially in Indonesia.

From each of the SERVQUAL (Service Quality) components in the form of TRRAE-I, the overall results of 30 (thirty) Hewlett-Packard (HP) loyal customers in Indonesia are as follows:

<table>
<thead>
<tr>
<th>TRRAE-I</th>
<th>Expectation Results</th>
<th>Perception Results</th>
<th>Gap (+) or (-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangibles</td>
<td>3.71</td>
<td>3.75</td>
<td>0.04</td>
</tr>
<tr>
<td>Reliability</td>
<td>3.79</td>
<td>3.83</td>
<td>0.04</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>3.80</td>
<td>3.9</td>
<td>0.1</td>
</tr>
<tr>
<td>Assurance</td>
<td>3.80</td>
<td>3.85</td>
<td>0.05</td>
</tr>
<tr>
<td>Empathy</td>
<td>3.76</td>
<td>3.81</td>
<td>0.05</td>
</tr>
<tr>
<td>Innovation</td>
<td>3.73</td>
<td>3.79</td>
<td>0.06</td>
</tr>
</tbody>
</table>

*Table 1. The total result of questionnaire from sample customers*

The result of analysis from 30 (thirty) Hewlett-Packard (HP) loyal customers in Indonesia from the table above shows that Hewlett-Packard (HP) Indonesia as a whole shows customer satisfaction in the form of quality of services provided given from each component of TRRAE-I which is Tangibles,
Reliability, Responsiveness, Assurance, Empathy and Innovation show excellent results where the perception (what is experienced, perceived by the customer) of each TRRAE-I component is better than the expectation the customer wants.

While the results of interview as follows questioned to high-ranked officer of Hewlett-Packard (HP) Asia Pacific on the discretion and authority of Hewlett-Packard (HP) Indonesia in innovation, research and development, marketing, sales, strategy, cooperation / business alliance with local, university cooperation, corporate social responsibility CSR promotion, distribution and business partner formation, recruitment, currency application, funding, organization and organization structure, joint-venture acquisition and after-sales service. He

affirms that Hewlett-Packard (HP) Asia Pacific grants Hewlett-Packard (HP) Indonesia wide powers and discretion within 1 to 20 points attached (in the appendix) and high-ranked officer of Hewlett-Packard (HP) Indonesia to confirm what high-ranked officer of Hewlett-Packard (HP) Asia Pacific has to say in his written statement, as well as the format and contents attached below and to answer how the governance of Hewlett-Packard (HP) headquarters to Hewlett-Packard (HP) Indonesia which includes discretion autonomy in innovating both in terms of process and measurement instruments (support). Therefore it can be concluded from the interviews of the two Hewlett-Packard (HP) officials in the form of tables 2.

Table 2: Result analysis of qualitative method; results of interviews

Legend

- : Hewlett-Packard (HP) Indonesia
- : Hewlett-Packard (HP) Asia Pacific
- : Hewlett-Packard (HP) Headquarter

From the interviews summarized in the above table, it is clear that Hewlett-Packard (HP) Asia Pacific gives Hewlett-Packard (HP) Indonesia a substantial powers to discretion in terms of decisions based on the scope of the market context and the circumstances in Indonesia. Due to different economic, socio-political, cultural and environmental factors in Indonesia that can not be equated with other countries, as a developing and developing country. So that it can be seen from points 1 to 20 for strategic and independent things, Hewlett-Packard (HP) Indonesia is allowed to take full decisions without consulting the regional Hewlett-Packard (HP) in Asia Pacific. While points 21 and 22 are of great strategic
importance as they relate to joint ventures and start-up investments must involve Hewlett-Packard (HP) headquarters and Hewlett-Packard (HP) Asia Pacific.

By combining the results of interviews through qualitative methods with A-to-F models it is found that Hewlett-Packard (HP) Asia Pacific is considered excellent in delegating authority / discretion / authority / discretion to Hewlett-Packard (HP) Indonesia to initiate and proactively conduct breakthroughs or strategic innovations that make Hewlett-Packard (HP) sustainable, sustainable and growing in Indonesia.
Table 3: Summary of HP Delegation of Authority based on A-to-F Model

Referring to Figure 4 shows that Hewlett-Packard (HP) applies the SECI method (Socialization, Externalization, Combination and Internalization) that interacts with models A through F to Hewlett-Packard (HP) branches worldwide, in this case Hewlett-Packard (HP) Indonesia. Socialization and externalization are provided by Hewlett-Packard (HP) Asia Pacific to the branches within its scope, in this case the assignment of Hewlett-Packard Indonesia's leadership and managers and staffs to the impact of combined factors and internal re-organization within Indonesia. From the interviews also clearly affirm the authority and authority began to act as activators and then seek information as a browser, the next as a creator of business and solutions and cooperation (creator) and from the creation of these needs to be developed into products and real solutions (developers). The results of the product and the resulting solution must be executable and marketable and can be commercialized; because ultimately it leads to the direction of commercialization. Functions A through E are coordinated by the facilitator i.e management and Finance Director, as each innovation process to produce products and solutions ready for commercialization requires cost and management support.

CONCLUSION

Based on the results of the previous analysis and discussion that is for quantitative methods through questionnaires to Hewlett-Packard (HP) Indonesia customers and qualitative methods through interviews to high-ranked officer of Hewlett-Packard Asia Pacific (HP) Managing Director and high-ranked officer of Hewlett-Packard (HP) Indonesia, the researcher concludes and answers the research questions as follows:

1. The quality of service provided by Hewlett-Packard (HP) Indonesia to its customers is excellent where the overall average yield for perceptual value is greater than the expectation for all major components of TRRAE-I.

2. Hewlett-Packard (HP) headquarters in this Asia Pacific region authorizes discretion and autonomy to Hewlett-Packard (HP) Indonesia in innovating both in terms of process and measurement instruments making it a lively, creative and innovative independently in creating customer satisfaction and loyalty using Hewlett-Packard (HP) products and solutions.

1. The responsiveness of the existence of deficiencies owned by Hewlett-Packard (HP)
Indonesia, although very minor; not significant at all. However, it should be noted that the perception result is slightly lower than the expectation result, in this case the difference (gap) is minus: -0.03, where the perception is lower than the expected result. The response must be improved.

2. The price / performance for the products and solutions offered by Hewlett-Packard (HP) and the service installation and implementation of Hewlett-Packard products and solutions (HP) runs on time and can either be functioned well, each difference (gap) is minus: -0.03 and -0.03. So the price performance and the implementation must be improved.

3. The information of new product and solution and how to handle critics and complaints, the gap is minus -0.03 and -0.03. They must be improved. They must be more sensitive and empathy to customers' complaints.

REFERENCE
Epstein, Mark J., 2005, Implementing Successful E-Commerce Initiatives, ProQuest pg.22.