ABSTRACT

The Objectives of this research is to determine whether a product can be categorized as old product or a superior product and making the business to be excellent. Product retirement is a term used for products that are considered “old” based on profit performance, cost, technology and markets. The product is already at the end of product life cycle, which raised the question of whether the product is still perform to continued.

Product retirement process begins with understanding the product life cycle in which each product has an age limit. The process occurs because the product life cycle means: age of product is limited when the products are sold through several stages, each stages have different challenges, opportunities and problems, profits rise and fall at every stage of product life cycle, product has a different marketing strategy at every stage of product life cycle. The next process will be influenced of some other natural elements such as: longevity of the product not always predictable, the speed of competitors producing similar products, and the technology used.

Stages of product entering the retirement phase are: Sales growth begins slows, have a very mature product, no more sales growth, there are no new distribution channels, new competitors emerge, stagnant sales only based on population, declining in sales, customer buy competitors' products, declining sales resulted in excess supply and fierce rivalry, competitors race to get a niche market, an increase in advertising and promotion, increasing research and product development budget.

Methodology of this research is descriptive explanatory with quantitative method that combines survey and interviews. All stages of the processes to develop strategic business unit that will produce a superior products and the rest will be product retirement.

Keywords: Product Retirement, Process, Strategy, Competitive Products

Introduction

Beginning with the a request largest telecommunications company in Indonesia to examine some of its product considered of performance seen declining revenues and profits. The Company also notice that the presence of these products are getting not exist because of the function and the technology has been replaced with a new internal product with the latest technology, but the old products still have contributed in terms of infrastructure and identical to the company's image.

This is particularly relevant because the products are always changing all the time to follow the market and competition, it makes marketing activity to be very dynamic and challenging. The key is the ability to manage existing products to adapt with changes under any circumstances and to carry the company's success in winning the competition.
The telecommunications industry is an industry that changes so fast, why?, Because telecommunications is highly dependent on technology that changes and new technology resulted in the changing telecommunications products. When the product first made spending a lot of money and the returns are not significant to the period use. In addition as length of considered as aspects of telecommunications products such as the regulation is made, resources, supporting infrastructure, economy, market structure, strategy and operations.

Based on the phenomenon that occurs the companys had dilemma of the product decisions, whether the products are already spending so lot of money and effort, however the product has been rendered obsolete will be destroyed or continually maintained by a specific strategy. Judgment are taken when eradicate products are:

1. The product is identical with image of the company
2. Regulation often change according to the interests of the ruling government
3. Had already a lot of resources including human resources invested in managing the product.
4. The technology that used while product is created is terminal that moment.
5. Not all telecommunications infrastructure has the same capabilities at all locations with consideration of Indonesia has a vast territory that required a huge investment to pursue the use of latest technology at the time.
6. For some areas of the product is believed to still have customers.
7. Revenue potential is still existing However not significant to generate profit.

From all that description researchers are trying to understand from basic to advanced level to get a complete picture about what concept will be used to answer the entire phenomenon and challenges for an appropriate business solution.

**Related theory**

The product is something that is offered to the market to fulfill and satisfy the needs Kotler & Keller said (2011), then the product will be classified in the five levels of that is core benefit, basic product, expected product, augmented product and potential product. In addition the products can be classified into three classes that is endurance, form and usage. Within its journey product has experienced phase of of life cycle process known as product life cycle (Kotler & Keller: 2011). Kotler & Armstrong (2008) the product life cycle is the concept of product life stages that begins from the process of developing followed by the introduction stage, growth, maturity and decline. The process can be explained by the following chart:

![Chart of the product life cycle](Chart_of_the_product_life_cycle_Kotler_armstrong_2008.png)
To understand the product life cycle process begins with the understanding that each product has a limits (Kotler & Keller: 2011) where the products will naturally experience the process and cycles with the following indicators:

1. The life of the product is limited in terms of technology, models, features, trends, user boredom.
2. When the products are sold through several different stages of the challenges, opportunities and sales problems.
3. Earnings fluctuations occur at every stage of product life cycle.
4. The product has a different marketing strategy at every stage of product life cycle.

In addition there are several other elements such as:

a. Long life of the product are not always able to predictable.

b. Speed of competitors producing similar products

c. The technology used.

From the several marketing literature which discusses many of the products from the the beginning of the cycle until the maturity stage following interrelationships with marketing activities (Mohan & Krishnaswamy: 2006) but still a few who discussed on the stage of decline, especially the strategy and whether action is should be taken when the product enters the stage decline particularly in telecommunications products that require a large investment, technology loaded and high infrastructure linkages.

Researchers offer a the concept of assessment products on the category of Plain Old Telephony Service (POTS) which capable of mapping the stage decline products clearly with certain parameters is called the concept of retirement products. Product assessment according to Cooper, Wehrenberg & Hiebring (2012) are included a list of products, identification of product formation history, identification of strengths and weaknesses of products and comprehensive information about the product target market trends

According to Kotler & Keller (2011) phase of decline occurs in three stages are:

A. The first stage:

1. Sales growth slowed,
   The Company has a target increasing the sales by assuming similar size of increase the revenues target and the profits, cost of promotion, cost of human resources and other operational costs. Within this stage of growth does not occur and getting smaller tends to are not comparable with the expected increase in sales.
2. There are no new distribution channel,
   Products are not be able to penetrate the market on new distribution channels in addition to existing distribution channels during this period. Product distribution channels remain with no increase in the distribution of new products because they are considered too mature.
3. Competitors emerging,
   Thorough process of competition occurs where the competitors are not only externally However appear competitors emerged from the internal development of products either similar or not similar Internal competition is more dangerous because it raises a new internal product condition kills the old product.

B. The second stage:

1. Sales become stagnant based on population percapita, all the customer has used the product.
   The sales process so far has fulfilled the entire segments of the intended targets,
assuming the entire target consumers has been reached then the sale become stagnant and dependent only on population growth in some areas.

2. Sales growth only occurred because of population growth. Possibility of sales growth is still possible but it limited to the amount of population which still requires telecommunications products.

C. The third stage:
   1. Sales decline in to a minimum point.
      At this stage the sales decline until the point where the company has a sales threshold. The threshold point is a combination of break-even point in terms of revenue and sales quantity as well as the company decide determination the continuing sale the product or review.
   2. Customer divert purchases by using competitor products.
      The product rivalry happen not only external but an internal products. The internal process becomes more dramatic due to the renewal of technological features and attributes of the new product will kill the old product.

In the third phase there is a specific phenomena such as:

   1. The decline in sales resulted in excess supply and a sharp rivalry. Product inventory are still quite a lot and more difficult to sell because its over supply.
   2. Competitors race to get a niche market.
      The company saw a niche market as an alternative besides the existing, because the main market is already saturated.
   3. An increasing in advertising and promotion continuously but declining sales happen.
      The company will take anticipation steps and strategies to increased its advertising and promotion as an effort to prevent continued decline in sales and efforts to boost sales growth
   4. An increase in research and product development budget the following product lines
      The main product maturity level in terms of technology and its application so that the company considers it important to do research and product development of the technology side, the following features and attributes the development of product lines to improve product performance.

Based on the specific phenomenon will occur within the company:

   1. The declining sales that will ultimately make the company reduce the price and a reduction in earnings. Price adjustment process is done periodically until it reaches a minimum price point with consequent of reduction in revenues of company.
   2. Reducing the products offered by generating new products
      The new product internal with the new technology, features, attributes and functions will substitute the old product as well as new products is likely killing the old product.
   3. Stop selling the a small distribution channels and weakest segment.
      Management decision is to stop selling the on multi-segment and focus on one segment and distribution channel selection with enormous potential.
   4. Reduce the cost of advertising and promotion costs
Under consideration to increase the sales by products bundling so the cost of advertising and promotion can be minimized.

5. The adjustment of prices happens again and again.
   The price adjustment period become uncontrollable in the context of time, adjustments are made at any time in response to competitive market and sales declining that occurred.

6. Spending time to review this product
   Management had review of the product continuously that takes time only for the products category at a mature stage.

   Company’s management has been hesitate to decide continuing the product which considering aspect of investment, technology and customer.

Within an industrial scale there are the few manufacturers with similar products POTS halted production and replace the product with another which is the same function.

The Concept Model of Retirement Products

This research is applied research with reference to the needs of the company on continuous process of assessment products. The purpose of this research is the exit strategy for products that are considered old in telecommunications products. The model of concept offered propose a simplified model, called the concept of Product Retirement. The Product Retirement concept can be described as follows:

A. Approach to research methods of marketing research (Churchill & Iacobucci Jr.: 2010) are:

   Define the problem
   Develop research plan
   Collect information
   Analyze information
   Present findings

   Make Decision (Recommendation)

B. Approach to the model of product research assessment are:
C. Variables, parameters and indicators used and measured in the assessment of products are:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indikator</th>
<th>Parameter</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>Monthly / years</td>
<td>The quantity, value, changes in%</td>
<td>Secondary</td>
</tr>
<tr>
<td>Profit</td>
<td>ROE, ROI, ROA, / Profit of each product/division</td>
<td>The quantity, value, changes in%</td>
<td>Secondary</td>
</tr>
<tr>
<td>Investment</td>
<td>Total investasi, investasi teknologi investasi per produk, investasi per divisi</td>
<td>The quantity, value, changes in%</td>
<td>Secondary</td>
</tr>
<tr>
<td>Cash flow</td>
<td>Cash Out &amp; Cash In total, Of each division and product</td>
<td>The quantity, value, changes in%</td>
<td>Secondary</td>
</tr>
<tr>
<td>Cost</td>
<td>Fixed &amp; Variable, operation cost, maintenance</td>
<td>The quantity, value, changes in%, funding and policy</td>
<td>Secondary</td>
</tr>
<tr>
<td>Market growth</td>
<td>Buyers, reoeat buyers and potential buyers and market</td>
<td>Number of purchase, repeatedly purchase, magnitude of the consumer to purchase access</td>
<td>Primary &amp; secondary</td>
</tr>
<tr>
<td>Customer</td>
<td>Existing consumer</td>
<td>The number of consumers are purchased, doing repeat purchases, the responses / perception</td>
<td>Primary &amp; secondary</td>
</tr>
</tbody>
</table>
D. Final characteristics of a product included in the category of retirement products (Kotler & Keller: 2010) are:

<table>
<thead>
<tr>
<th>Overview</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>Declining sales</td>
</tr>
<tr>
<td>Cost</td>
<td>Low cost per customer</td>
</tr>
<tr>
<td>Profits</td>
<td>Declining profits/became low</td>
</tr>
<tr>
<td>Customer</td>
<td>Laggards</td>
</tr>
<tr>
<td>Competitors</td>
<td>Declining numbers/few</td>
</tr>
<tr>
<td>Strategic market objectives</td>
<td>Maintain position</td>
</tr>
<tr>
<td>Investment</td>
<td>Low</td>
</tr>
<tr>
<td>Cash flow</td>
<td>Moderate</td>
</tr>
<tr>
<td>Product</td>
<td>No change/limited</td>
</tr>
<tr>
<td>Segment</td>
<td>Few</td>
</tr>
<tr>
<td>Market growth</td>
<td>Negative</td>
</tr>
<tr>
<td>Product line</td>
<td>Reduce</td>
</tr>
<tr>
<td>Channels</td>
<td>Selective</td>
</tr>
</tbody>
</table>

Competitor | Similar companies, earnings, asset value | Number of, earnings, asset value competitors | Secondary  
Segment     | Demography                               | Age, education, occupation, gender, status | Primary  
Product     | Kinds of products, amount, type, specification | Line & mix, policies, partners | Secondary  
Channels    | Type and length of distribution channel | According with the purpose of the channel, the scope of services, and policies | Primary & secondary  
Communicatio n | Advertising, sales promotion, event & sponsorship, public relationship | Costs and policy | Secondary  
Strategy    | Product, price, channel, target market | Range of price high mid and low (subjective), how the price is applied (objective), the communication-intensity and cost, and cost of channels, target market and repeat purchases, product differentiation and diversification | Secondary objective, subjective-primary  
Technology | Hardware & software) | Variations, HR, age, value Other resources, technology, policy | Secondary
Communications

E. Products that will do the assessment in the concept of retirement products is telecommunications products by category Plain Old Telephony Services (POTS). The range of POTS products at a telecommunications company in Indonesia are:

<table>
<thead>
<tr>
<th>No</th>
<th>Name Of Product</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wireline telephone</td>
<td>Telecommunications services between service subscribers using cable.</td>
</tr>
<tr>
<td>2</td>
<td>Public Coin Telephone</td>
<td>Telecommunications services for public.</td>
</tr>
<tr>
<td>3</td>
<td>Public Card Telephone</td>
<td>Public phones that use the card as payment at the expense of the conversation.</td>
</tr>
<tr>
<td>4</td>
<td>TIC 007</td>
<td>Telecommunications services between service subscribers across the country by using the clear channel via wireline technology.</td>
</tr>
<tr>
<td>5</td>
<td>Wireline SMS</td>
<td>More commonly known to Telkom SMS. Service that allows customers to send and receive Short Message Service (SMS) from a home phone (PSTN).</td>
</tr>
<tr>
<td>6</td>
<td>Wireline TeNI</td>
<td>Service that allows customers enjoy the a dial up internet access without a subscription to use the telephone cable (PSTN). Customer be billed according to usage, with no subscription fee.</td>
</tr>
<tr>
<td>7</td>
<td>Wireline ISDN</td>
<td>Telephone communication services between subscribers using ISDN PRA (30 Channels) or ISDN BRA (2 channels).</td>
</tr>
<tr>
<td>8</td>
<td>Wireline VoIP</td>
<td>Service that allows customers to communicate especially long distance calls and SLI through VOIP technology with prepaid and postpaid systems.</td>
</tr>
<tr>
<td>9</td>
<td>Wireline VAS</td>
<td>Call Center</td>
</tr>
</tbody>
</table>

Research Methods
Design of research methods used in this study was Descriptive and Explanatory Survey. The technique of determining the respondents using Cluster Sampling techniques, Sekaran (2006:132). The cluster sampling technique was performed by dividing the population into several groups. After conducting cluster sampling technique, then researchers used purposive sampling techniques, Sekaran (2006:136).

The purposive sampling is limited to certain type of person who can provide the desired information within the criteria in question is a sample are customers of POTS telecommunications products, employee in each POTS product division and expertise POTS product. The process of filling out the questionnaire will be guided to obtain optimal results and simultant with the focus group discussion. Before the questionnaire used for the actual data collection, questionnaires tested to determine the level of validity and reliability. Indepth interviews conducted separately with invited experts with specific criteria.

Analysis of the data used in this study are:
1. Descriptive Analysis
   a. The performance index and gap analysis between performance and expectations of the product.
      To find out the gap of product performance questionnaire and compare the results between performance and expectations in all aspects of the product and the indicators measured.
   b. Cartesian diagram to position the product.
      The results of gap analysis can be mapped into a cartesian diagram to get a complete picture of the performance of the product.
   c. Different test - Run test, Mann Whitney and Wilcoxon.
      To find the difference as a whole all the variables and parameters are investigated.
   d. Analysis of the results of focus group discussions and depth interviews are interpreted to be a resume as the basis for recommendations.

2. Verificative – inferential Analysis
   a. Trend analysis.
   b. Multiple Regression Analysis.

Recommendation

The results of descriptive analysis and verifikatif combined into a resume by considering the results of focus group discussion and depth interview. Several recommendations on products retirement categories are:

1. The POTS product can be maintained with the criteria entered in the unit service obligation
2. POTS can be a feeder products for a new generation of telecommunication product.
3. POTS products used in certain areas with a level of network infrastructure according to broad and coverage areas in Indonesia.
4. POTS product applied to a specific service customized to the region or country intended use of the service.
5. POTS product still be used by subscribers in certain segments with a minimal amount.
6. POTS product which is eligible for continued operations will be grouped in a superior product portfolio and created its product strategy.
7. POTS products which categories to product retirement if it has fulfilled all the descriptive and inferential analysis by considering the results of focus group discussion and indepth interview will lead to criteria for retirement products. It has consideration in utilization of network infrastructure and technology on post-retirement phase and interests of customers who still used.

References


Journal


