Analysis of the innovative strategies for value creation in the smartphone market: A case study approach using blue ocean framework.

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Abstract:

Purpose:
According to (Ramirez, 1999), need for value has been identified since the Ancient Greek period. Prahalad & Ramaswamy, (2000) opine that to create value for addressing the customer’s dynamic needs, organisations should collaborate with their customers. Value creation should mainly emphasize on creating fresh solutions according to (Kim & Mauborgne, 2005). In their opinion, organisations should adapt to the logic of value creation in order to achieve differentiation and a SCA (Sustainable Competitive Advantage). The Blue Ocean Strategy (BOS) framework promoted by them challenges and displays the ways in which an organisation can achieve the conventional trade-off amongst differentiation and low-cost.

Globally, the smartphone market is blooming rapidly and in 2014, it is likely to touch $150.3 billion. Growing at a CAGR of 18.6% during 2009 – 2014, the smartphones market in Asia-Pacific is anticipated to touch $45.2 billion in 2014. This progress has resulted in intensified competition generating a need for organizations to distinguish themselves and create value for customers. The purpose of this paper, hence, is using Blue Ocean Strategy Framework for the analysis of the ways in which value innovation has been exercised by various players of the smartphone market to create a competitive advantage (CA) for themselves and be the front-runner.

Research Methodology and Approach
A case study approach has been used wherein the tactics of the prime competitors in the smartphone market as well as the factors directing them to their success and failures will be analysed. The Blue ocean framework and the strategy canvas will be used as a conceptual framework for the study. Analysis will be done using secondary as well as primary data.

Practical Implications
To come up with a conceptual model that will identify the competing factors from the strategy canvas to fabricate a captivating blue ocean strategy for the smartphone players.

Keywords:
Value Innovation, Blue Ocean Strategy, Strategy Canvas, Smartphone market, Case study.
1) Introduction:

According to International Data Corporation (IDC) shipments of smartphones are expected to grow 32.7% year-on-year to reach 958.8 million units in 2013 in comparison to 722.5 million units in the previous year.\(^1\) 52.2% of all mobile phones shipments across the globe will be smartphones. Consequently, the average selling prices of smartphones have dropped $443 in 2011 to $307 in 2013 which has posed myriad of challenges to handset manufacturers and OEM and component suppliers\(^2\). Number of key vendors in Indian marketplace has increased to 13\(^3\).

This market is currently facing many challenges such as customer acquisition, lower cost of mobiles, and differentiation. Increased competition has created a need for organizations to differentiate themselves and create value for customers. BOS (Blue Ocean Strategy) is one of the methods by which organizations can create value as well as differentiate themselves from competition. Hence the objective of this paper is to implement the Blue Ocean Strategy Framework to analyse the ways in which various players in the smartphone market have tapped value innovation for creating a competitive advantage and realizing the leadership position.

2) Literature review:

2.1 Value innovation and Blue Ocean Strategy:

According to Edvardsson & Enquist, (2008), value has two aspects – economic and ethical. Value is about judgement, as per the ethical aspect, and as per the economic view, value means utility. As per Holbrook (2006), value to the customer is based on four pillars – interactive, relativistic outcome and user experience. As believed by Kim & Mauborgne, (2005), value is shaped in the value-chain, outlined and shaped with customers and evaluated by them based on their experience and the value-in-use.

Value creation, according to Peteraf and Barney (2003), means the ability to create additional economic value in the product market as compared to its marginal competitor. Value creation is defined as having a fair accomplishment in the future by Porter (1985); Ghemawat, (1999); Barney and Hesterly, (2006). According to Payne et al., (2008), customers are proactive co-creators of value and companies are facilitators of value creation. Christensen (1997) and Hamel (2000) give the notion of customer value creation through fusion of capacity and business models, which also helps creation of wealth for investors. They perceive that competition is present between competing innovative regimes rather than amongst products or services.

Value innovation encircles all the activities of the company, bringing the entire system forward in terms of value for the customers and the company. As suggested by Kim and Mauborgne, (2005), Value innovation forms the base for Blue Ocean Strategy (BOS). It concurrently pursues low-cost and differentiation to enhance the value, create fresh demand and create an uncontested market space. Value innovation is the theme of Sustainable Competitive Edge (SCA); it goes beyond product or service innovation.

Blue Ocean Strategy (BOS) is defined, by Kim and Mauborgne (2005), as a creative strive where the competitors explore, create and procure novel markets, rather than competing with one another enduring in the same market, by catering to new demands through the effective use of value innovation. BOS provides an outline and tool-set for discovering new markets within the traditional market by altering the nature of competition. This requires tools like Strategy Canvas, Value-curve, ERRC Grid (Eliminate-Reduce-Raise-Create).
2.2 Identification of GAP:

There are many studies done in BOS in fields other than smartphones. For instance, the case study on growth of IKEA in Nanjing, China, done by Lu Chaoren and Apinya Thawatthatree, Karlstad Business school, projects how IKEA used value innovation to attain competitive advantage (CA) and become the leader in the market (online furniture retailing) with qualitative research study of the rise of the company in Nanjing, China. Another study on Emerging ICT Business done by School of Management, Boston University develops methods which are useful for the emerging ICT business and it records the most successful tactics for network convergence technologies such as RFID. A study has been done by Andrejs Čirjevskis, Genadijs Homenko, Valērija Lačinova on implementation of Blue Ocean Strategy in B2B Sector which proves that Blue Ocean Strategy is viable in B2B. Apart from these, there are various other studies done, on similar lines and objectives, in emerging markets, implications on economic policy, in strategic management.

But there are only a few studies done in area of smartphones. A research done by Hee-Chan Song depicts the analysis of global smartphone market and it also studies the strategies of its main players. Another specific study has been done by Ian Brook on Apple’s Blue Ocean Strategy.

As stated in the literature review not many studies have been conducted in the smartphone market with respect to the BOS, hence in this study authors are using the BOS Framework in order to analyse how various players in the smartphone market have adopted the concept of value innovation to stand out in the marketplace.

3) Research Methodology and Research Objective.

The objective of this research is to use the BOS Framework in order to analyse the benefits of using value innovation by different players in the smartphone market which helped them create competitive advantage and be a fore-runner.

The case study method has been used in this paper in order to understand the innovative strategies used by the major players in the smartphone market in order to sustain in the market. Three companies have been considered for study. Apple Incorporated, Nokia and Research in Motion. The reason for selecting these organizations was as follows: Apple incorporated (with its I phone series in the smartphone market) was chosen for study as it has been adjudged as the most innovative company in the world for the ninth time for the year 2013 by the Boston Consulting Group.  
Nokia was selected for study as Nokia from the year 1998 to 2012 was the largest seller of mobile phones, but it started losing market share from 2007 mainly due to competition from companies who introduced smartphones especially the Iphone from Apple Incorporated. From 2011 to 2013, Nokia lost its leadership position as the largest smartphone vendor. They are now trying to revive with the introduction of Nokia X android phone and merger with Microsoft hence it proves to be an interesting case for innovative strategies.
Research in motion was selected for study because the Blackberry smartphone launched by them in 2001 created a blue ocean in the smartphone market. They created a new category of devices which allowed employees to be connected even while away from their workplace and created a new demand from the B2B market. The company which was at one point of time a giant contender in the smartphone market is currently running losses of $965 million. Hence the purpose was to study the reasons for the failure of blackberry.
Based on the literature review, secondary data, and primary research done at SITM with 70 students, nine parameters were chosen for creating the strategy canvas, as shown below for each of the companies.

4) Research Questions and Hypothesis Formulation:
   i. **Research question:** How did Apple gain competitive advantage in the smartphone market?  
      **Research hypothesis:** Apple focussed on innovation and used the Blue Ocean strategy which helped them to gain competitive advantage in the smartphone market.

   ii. **Research question:** What strategy did Nokia apply to revive the brand?  
        **Research hypothesis:** Nokia applied the Blue Ocean strategy to revive the brand.

   iii. **Research question:** Why did Blackberry fail to create a mark in the smartphone segment?  
        **Research hypothesis:** Blackberry failed to use Blue Ocean strategy which led to its decline.

5) Conceptual framework:

   The Blue Ocean framework has been used for analysing the three companies.
   
   i. **Strategy Canvas and Value Curve:**
      It is an action framework which fabricates a compelling BOS. It encapsulates the current condition of the known-market (or Red Ocean) helping the organisation understand the competitive trends and scenario. Plotting the factors of the industry on the x-axis and the its level-offered on the y-axis, the organisation can create a value curve of different companies in the industry or even a value curve for the industry as a whole. The collection of all value curves, plotted on the same x-y axes is called a Strategy Canvas. Based on this, the organisation can create its BOS.
      The 9 parameters chosen for creating the strategy canvas, as shown below for each of the companies, have been chosen based on primary research done at SITM with 70 students. The students had been asked the parameters they would consider or prefer while choosing or rating a smartphone. They were also asked to rate the offering of these parameters by the three companies considered for study-Apple, Nokia and Blackberry, on a scale of 1-5 (1=Low level of offering; 5=high level of offering). Based on this, the strategy canvas for each of these companies has been mapped.

   ii. **ERRC Grid:**
      This grid helps in breaking the conventional differentiation and low cost trade-off and it also helps create a BOS. The organisation should *eliminate* the factors which have been long-competed and hence have lost value; *reduce* factors which have been over-designed or which over-serve the customer; *raise* factors which are incumbent, provide value and are desired by the customer; *create* factors which are new and for which the need
is still unknown to customers. The application of this four action framework helps create a new value curve.

6) **Case study: Apple**

i. **Brief about the company**

   Tasting a grand success with its iPod line, Apple decided to march in to the swelling smartphone industry which seemed to promise great potential. Smartphones seemed unattractive, initially, with keyboard facility, they were bulky and difficult to use. Steve Jobs saw this and decided to craft an alluring device that gave users all they expected from a phone, such as ‘Favourites’ caller list, easy-to-scroll contacts and games, for starters. In the subsequent year, they released a platform for developing apps for the iPhone. This idea paid off spectacularly well. It helped them create a whole new industry for mobile app developers. It took more than two years for the competitors to match the iPhone; even today the use of the latter is so wide that it will be challenging for the competitors to win over the iPhone customers. The iPhone 4 promised to capture a higher market share as many of its features were miles ahead of the competition. Though they may not have adopted a BOS, in terms of smart phones, they did so when they launched one of the first-ever user-friendly smartphones. And this stratagem was a perfect value innovation back then.
Map the strategy canvas.

Figure 1: Strategy Canvas for Apple iPhone

The above parameters of value have been plotted in the ERRC grid as shown below.

ii. **ERRC Grid**

<table>
<thead>
<tr>
<th>Eliminate</th>
<th>Raise</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Variety of models</td>
<td>&gt; Mobile internet</td>
</tr>
<tr>
<td>&gt; Physical buttons</td>
<td>&gt; Style &amp; Entertainment</td>
</tr>
<tr>
<td>&gt; Embedded business applications</td>
<td>&gt; Ease of use</td>
</tr>
<tr>
<td>&gt; PC-like performance</td>
<td>&gt; Simplicity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reduce</th>
<th>Create</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Freedom to customize through App Store</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: ERRC grid for Apple iPhone

iii. **Hypotheses testing**

From the strategy canvas stated above and the by plotting the same in the ERRC grid, we can see that some parameters like variety of models were ranked lowest in value has been eliminated by Apple as they offer only one brand iphone. Parameters like physical buttons, embedded business applications and PC like performance were ranked on lower side has been reduced in Iphone. Parameters like Mobile internet, style and entertainment features, ease of use and simplicity are the factors which have been raised by the Apple smartphone. And Apple has created freedom to customize through the App store.

Hence we attest to the hypothesis that Apple’s focus on innovation and its constant use of the Blue Ocean strategy has led to increase its presence and customer loyalty.
7) **Case study: Nokia**

i. **Brief about the company**

Nokia was one of the first handset companies to enter the India market in the early 1990s and the brand almost became generic to cell-phones. Its hold on the Indian market was far stronger than in the international market. Adding to this is the fact that the Indian mobile phone market grew at a scorching pace in the early 1990s; Nokia even started one of its largest manufacturing facilities in India. However, along with the rest of the world, Nokia lost its leadership position in India, unable to capitalise on the smartphone trend. It did not adapt to the technological changes like Android and hence suffered a huge blow with respect to its market share, revenue, sales and brand. To cope up with the losses, Nokia came up with the Asha series (low-cost feature phones specifically designed for the average Indian consumer) and the Lumia series (with the help of which, now, it has regained its brand and sales). These phones had pre-installed popular apps plus they came at an affordable price (segmented at different price ranges for different consumer segments). Also they were better in terms of memory, processing power, battery life and the USP of Nokia- durability. Facing competition and erosion from all sides, Nokia responded by cutting the prices of its feature phones, introduced the feature-rich Asha range and jettisoned its OS for the smartphones in favour of Windows OS in mid-2011 with the launch of Lumia range. The high-profile launch of the Lumia and subsequent marketing pressure has not really resulted in a reversal of fortunes for Nokia. They portrayed the Windows OS in the Lumia series as more beneficial as along with all popular apps compatible with the Lumia series, one could also perform Microsoft Office tasks and other applications on the phone which one used to perform on the laptop.

ii. **Map the strategy canvas**

![Strategy Canvas for Nokia Lumia Series](image)

The above parameters of value have been plotted in the ERRC grid as shown below.
iii. **ERRC Grid**

<table>
<thead>
<tr>
<th>ELIMINATE</th>
<th>RAISE</th>
</tr>
</thead>
</table>
| > Variety of OS | > Battery life  
|                | > Device reliability  
|                | > Variety of Apps  
|                | > Multiple utility of the smartphone |
| REDUCE | CREATE |
| > Price (for similar Set of features)  
| > Traditional Style (by providing trendy variety of colors)  
| > Presence of physical buttons | > Customization through App store  
|                                 | > Fun and Style  
|                                 | > Windows Compatibility |

Table 2: ERRC grid for Nokia Lumia series

iv. **Hypotheses testing**

From the strategy canvas stated above and by plotting the same in the ERRC grid, we can see that parameters like price, traditional style, presence of physical buttons, were ranked on lower side has been reduced by Nokia in the new smartphones. Parameters like battery life, device reliability, variety of applications, multiple utility of smartphone are the factors which have been raised in the new Nokia smartphone. And Nokia is trying to create customization, fun and style and windows compatibility. Thus we conclude that Nokia has used the Blue Ocean strategy in order to revive the brand and regain its loyalty and market-share. Hence our second hypothesis holds valid.

8) **Case study Blackberry**

i. **Brief about the company**

Research in Motion (RIM), in 2001, launched the “BlackBerry” smartphone hence created a class of devices which enabled users to send & receive e-mails faster and more reliably when they are away from office, it was easy to use with a QWERTY keypad; it had a better battery life, it supported multiple mailboxes at once, it supported web browsing, it accommodated traditional PDA functions like calendar, address book, etc. and above all, it was an excellent example of the third principle of BOS: Reaching beyond existing demand. BlackBerry was a different type of wireless handheld device for enterprises and it created an uncontested market space within the corporate segment. Companies could save time and money as employees could access their email account from any place, at any time. RIM reached beyond the prevailing exigency unlocking an entirely new mass of B2B customers, which were absent till then. In April 2009, RIM launched the ‘BlackBerry App World’ which was a simulated store that collected all BlackBerry applications at a central site.

With this disruptive offering and a unique fusion of service and hardware, the sales of Blackberry rose in sales from 2002 to 2010 but its sales fell in 2011. Blackberry had become a cult; it was a must-have for all the C-level executives and Top Managers any organization. In fact, to many, Blackberry became an addiction affecting many of its users. It had become a status symbol. Blackberry owners enjoyed flaunting their device and hence BlackBerry created a need of ‘constantly stay in touch’.
ii. Map the strategy canvas

Figure 3: Strategy Canvas for Blackberry

The above parameters of value have been plotted in the ERRC grid as shown below.

iii. ERRC Grid

<table>
<thead>
<tr>
<th>ELIMINATE</th>
<th>RAISE</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Remote client software installation</td>
<td>&gt; Battery life</td>
</tr>
<tr>
<td>&gt; Unnecessary trips to the office to check emails</td>
<td>&gt; Device reliability</td>
</tr>
<tr>
<td></td>
<td>&gt; Speed of sending/receiving emails</td>
</tr>
<tr>
<td></td>
<td>&gt; Integration of email, PDA tools and phone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REDUCE</th>
<th>CREATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Implementation time and complexity</td>
<td>&gt; Secure email</td>
</tr>
<tr>
<td>&gt; Training time and cost</td>
<td>&gt; Multiple mailboxes</td>
</tr>
<tr>
<td>&gt; Support time and cost</td>
<td>&gt; Simple, easy to use</td>
</tr>
</tbody>
</table>

Table 3: ERRC grid for Blackberry

iv. Hypotheses testing

From the strategy canvas stated above and the by plotting the same in the ERRC grid, we can see that some parameters like remote client software installation, trips to office location for checking emails were ranked lowest in value and were eliminated by Blackberry. Blackberry reduced complexity, reduces training time and cost and support time. They tried to raise battery life, device reliability, speed and integration but they failed to create security in the transactions. If we compare the value parameters of Apple, and Nokia we find that Blackberry failed as they failed to offer certain value parameters such as fun style, status symbol, customization.

In the case of Blackberry, our hypothesis that the company failed to use Blue Ocean strategy as a result of which the company faced a serious decline stands true.
9) Proposed Conceptual framework:

We have studied the strategy canvas and ERRC grid for the three smartphones. In the below mentioned table we have highlighted the value parameters and their respective ranking based on the above study which involves secondary and primary research conducted as part of our research study.

<table>
<thead>
<tr>
<th>Factors</th>
<th>iPhone</th>
<th>Nokia Lumia</th>
<th>Blackberry</th>
<th>Myphone</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>3</td>
</tr>
<tr>
<td>Variety of OS</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>8</td>
</tr>
<tr>
<td>Presence of physical Buttons</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
<td>7</td>
</tr>
<tr>
<td>Business Applications</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>5</td>
</tr>
<tr>
<td>PC-like Performance</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>9</td>
</tr>
<tr>
<td>Mobile Internet</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>1</td>
</tr>
<tr>
<td>Style and Fun</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>6</td>
</tr>
<tr>
<td>Ease of use</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
<td>2</td>
</tr>
<tr>
<td>Customization</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>4</td>
</tr>
<tr>
<td>Platform Independence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Value Parameter table
[Note: Low=0.0 to 0.3; Medium=0.3 to 0.7; High=0.7 to 1.0]

As categorized in the above table certain parameters are ranked lowest and some have a higher ranking. We have tried to capture the strategy canvas based on the above table.

Figure 4: Proposed Strategy Canvas for a new phone (Considering the value curves for iPhone, Nokia Lumia series and Blackberry as shown above)
From the strategy canvas stated above and the by plotting the same in the ERRC grid, a conceptual model has been proposed by the authors. This model will be useful for those organizations, who wish to create value for their customers.

From the table above and the strategy canvas mapping, we can see that some parameters like variety of OS were ranked lowest in value hence they need to be eliminated. Parameters like price, presence of physical buttons, PC like performance are not considered very important by the customers hence these parameters can be reduced. Parameters like Battery life, ease of use, business apps, and customization are ranked higher on value hence we propose that these parameters need to be raised in the current smartphones by the smartphone vendors. Platform independence seems to be a factor which is preferred highly by the customers and is currently not been utilized by the smartphone companies. Hence we propose that organizations can create innovation by creating platform independent smartphones.

<table>
<thead>
<tr>
<th><strong>ELIMINATE</strong></th>
<th><strong>RAISE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Variety of OS</td>
<td>&gt; Battery Life</td>
</tr>
<tr>
<td></td>
<td>&gt; Ease of Use</td>
</tr>
<tr>
<td></td>
<td>&gt; Business Applications</td>
</tr>
<tr>
<td></td>
<td>&gt; Customization and Entertainment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>REDUCE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Price</td>
</tr>
<tr>
<td>&gt; Presence of Physical buttons</td>
</tr>
<tr>
<td>&gt; PC-like performance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CREATE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Platform Independence</td>
</tr>
</tbody>
</table>

**Table 5: ERRC grid for My Phone (hypothetical)**

**10) Managerial Implications:**

The above study proposes a conceptual model for the smartphone companies. As stated in the model there are some factors which need to be eliminated, some factors need to be reduced, some factors need to be raised to a higher level and some factors can be given as an innovative parameter. Managers must keep these parameters in mind while deciding their product and design strategy. The model can also be used by the R&D or innovation team for developing or launching new products.

**11) Scope for future research:**

The authors have proposed a conceptual model which will help companies in value creation. This model has been proposed based on secondary data and a very small sample size as primary data. The model needs to be validated by doing primary research on a larger sample size.
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