AN INNOVATION STRATEGY FOR LG ELECTRONICS

Life’s Good

LG
Thanks to the continuous technological innovation of handsets, the rise of mobile phones has been nothing short of phenomenal and the trend is expected to continue in the years to come (Frost & Sullivan, 2006). Their continued success is down to the fact that today’s handsets have become much more than simply mobile phones. A mobile phone can function as a camera, PDA and has many other features such as gaming functions and access to the Internet. Based on 3G, broadband is also paving the way for video-telephony and TV viewing.

Characterised by continuous change and innovation, the mobile phone industry then sets an exciting stage for devising an innovation strategy. Our focus will be on mobile phone manufacturer LG. LG Electronics, Inc. is in fact a consumer electronics company with two other business units (Digital Display & Media and Digital Appliances), besides the Handset unit we will focus on in our report. On a global scale, LG’s handset division is 5th in terms of market share based on handset revenue, behind Nokia, Motorola, Samsung, and Sony Ericsson (see Appendix 1). Despite not being in the ‘Big Four’, LG’s market position is that of a strong challenger considering the many other ‘me too’ competitors that exist (e.g. NEC, Sanyo), but who fail to register in consumers’ minds. LG’s achievement can be seen to be mainly due to the success of their ‘Black’ series with popular models such as ‘Chocolate’ and ‘Shine’. Industry experts predict that if LG can replicate this success, they will eventually be able to surpass their main competitor Samsung (Screenshots, 2007).

Considering the importance of technological innovation for LG’s future success, this essay aims to support the company in achieving a better market position by means of devising an innovation strategy for the global market.

In order to devise a strategy, we shall first look at the company’s external environment in order to identify what particular threats and opportunities LG faces.
1. Threats and opportunities arising from changes in the external operating environment

<table>
<thead>
<tr>
<th>Threats</th>
<th>Opportunities</th>
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<tbody>
<tr>
<td>Decrease in market growth and marginal revenues due to market saturation → Leaves room for new entrants to compete on price (Sanyo, Haier, TCL, Amoi, Pantech, VK)</td>
<td>In mature markets, sales will be driven by attractive device design and user interface configuration rather than advanced software &amp; operating systems</td>
</tr>
<tr>
<td>Expected decrease by 1% in subscribers from 2006-2010 in mature markets</td>
<td>Mobile telephones play an ever increasing importance in consumers’ daily lives → (i-mode technology) e.g. e-wallet to pay for parking fees, drinks in electronics distributors, online banking etc.</td>
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<tr>
<td>Shorter product-life-cycles (PLCs) implies quick time to market and continuous innovation &amp; R&amp;D</td>
<td>DTV - development of TV technology for mobile phones</td>
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<td>Unclear where the development of the telecommunications technology is headed. Some manufacturers build on 3G (Nokia, LG) while others focus on Wi-fi, WIMAX and Bluetooth (Apple)</td>
<td>Market will increasingly resemble the consumer electronics market → opportunity for manufacturers with consumer electronics background</td>
</tr>
<tr>
<td>Dependence on retailers and operators in terms of sales</td>
<td>The rise of the ‘smart’ consumer and opportunities to target the low-end segment in mature markets → opportunity for cost positioning</td>
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<td>3G to be threatened by WIMAX which is predicted to have 40% of the wireless broadband market by 2009 leaving 3G with less than 60%</td>
<td>Trend to commoditisation of the mobile phone (Nokia now developing phones below $100).</td>
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<tr>
<td>Trend of commoditisation entails that existing players will have to reinforce their value propositions to consumers with strong brands</td>
<td>Growth in developed markets generally to focus on replacement and upgraded sales</td>
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<tr>
<td>Lack of unified software platforms and standards derail full interoperability between handsets, carriers, and networks</td>
<td>Growth opportunities in emerging markets in the mid to low-end market segment → opportunity in attracting first time subscribers</td>
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<tr>
<td>4-5G next generation migration deployments will create numerous challenges in terms of timing the release of new handsets</td>
<td>Market opportunities in 3-4-5G (media convergence)</td>
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<td>Average life of equipment is in the process of declining from 25-26 months down to 16-18 months → higher replacement rate means increased sales</td>
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<td></td>
<td>Technological compatibility issues leave room for players to set industry standards as battles are not yet won</td>
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Note: Commoditisation, lack of software standards and shorter PLC can be seen as both threats and opportunities.
Besides these threats and opportunities that may arise from changes in its external environment, we also identify how technological change in particular is likely to influence the external operating environment of LG’s business.

We see the convergence of technologies as the major factor shaping the industry. According to Accenture (2005: 6), it is in fact “the single most important trend to reshape the mobile handset industry”. This technology-driven change is taking place in four key areas: devices, operating systems, wireless Internet and cable networks (ibid). Although this undoubtedly gives LG and other mobile manufacturers many opportunities to produce handsets for the high-end market that maximise customer satisfaction, convergence is also reshaping the industry to an extent that “it will look very much like the consumer electronics industry” (ibid: 2) entailing increasing price pressure, intensified competition and slower growth rates.
2. Assessment of the strengths and weaknesses of LG’s business with respect to technological innovation and competitors

Before delving into details on LG’s technological strengths and weaknesses compared to its competitors’, one must first define what technological innovation is. We define technological innovation as a two way process between the technical design, development, manufacturing and the management of commercial activities involved in the bringing to market of a new product or service (Freeman & Soete, 1997).

Starting with LG’s strengths and weaknesses, one sees that the company has been extremely successful in technical design. LG phones are generally perceived as refined, cutting-edge mobile phones that have avant-garde based innovative designs. This has been evidenced by various design awards the company has won such as the ‘red dot’ design award for the KE850 Prada or the 2007 CES ‘innovations’ award which the company received for its overall success in the design for the ‘Black’ series. With a ‘design’ focus, LG targets the high-end consumer segment by being the second most expensive handset manufacturer behind Samsung (see Appendix 2).

LG’s strengths in technological innovation are also highlighted in technology development. This is the case for its pioneering touch-sensitive displays in the LG KE850, the company’s sound grounding in 3G technology and the overall simplicity and intuitive technology that come with any LG device.

Despite having a strong position in technological design, development and manufacturing, LG however shows a rather weak performance in terms of innovation process and marketing. Since LG is a relative newcomer to the mobile industry, it seems that the company’s focus resides on developing distribution networks and product development rather than offering consumer added value services (for example imaging software) and developing customer loyalty. A major weakness we see for LG in 2007 and upcoming years is the company’s decision to cut model development by focusing on a platform strategy. Although such a strategy will allow for economies of scope, the downside is that the strategy will ultimately come at the expense of customer choice. Another drawback in LG’s marketing is that the company supplies one operator at a time to negotiate optimal contracts and only when a certain upper limit of incentives has been
reached, moves on to supplying new operators, one by one. The danger with this strategy relates to the time needed until LG will be able to establish full market presence.

In comparing LG to Nokia, one finds that Nokia performs weak in terms of design, display resolution and focus on 3G technology. However, Nokia is market leader and hence cannot be underestimated. Nokia’s strengths reside in LG’s major weaknesses namely marketing, customer focus and the offering of additional features and services such as the Symbian Operating System – that allows other compatible features and softwares to be downloaded, the possibility to synchronise mobile devices with PCs, or GPS technology. It is also interesting to note that Nokia’s price per unit is the lowest in the industry with prices per handset that are below $100 (see Appendix 2). The trend of market commoditisation, as such, is well recognised by Nokia.

Motorola is also an interesting brand from which LG can learn. Motorola’s engineering spirit is evidenced through developing the ‘finger writing’ technology. This technology is an innovative text-input method for mobile phones that brings the convenience of text messaging and email right into the user’s finger. By integrating a sensor underneath the keypad, users’ finger movements are detected while handwriting recognition translates them into recorded text. Motorola’s weaknesses compared to LG lie in offering smaller displays, shorter battery life and the fact that the consumer interface is not user-friendly.

Sony Ericsson’s strength originates from the combined forces of Sony’s Music and Imaging technology (e.g. Walkman, Cybershot-camera) and Ericsson’s telecommunications background. The company is a strong player in Bluetooth technology and developed the first phone to work with voice recognition. Lack of marketing experience, however, work to the detriment of the company’s success.

Samsung is LG’s main competitor and who we believe LG can gain market share from. Samsung’s strengths lie in pioneering Wi-fi technology and its high-end designs which successfully support the company in charging the highest average handset prices in the industry (see Appendix 2). LG however has potential to build on Samsung’s weaknesses which essentially reflect LG’s strengths. In other words, Samsung’s devices are not differentiable and all have similar designs and features. Also, Samsung suffered a major
loss in 2006 due to increased sales of 3G technology which the company did not anticipate.

In addition to the above analysis of market opportunities and threats, as well as LG’s technological strengths and weaknesses vs. its competitors’, Porter’s 5 forces model (1985) was applied (see Appendix 3) to discover major factors that must be taken into account in order to devise and ensure a successful innovation strategy. Resulting from the research conducted, we have chosen to focus on the following: growth opportunities in the low-end segment (in developed and developing markets) and in the high-end segment (due to convergence and the fact that mobile phones play an ever increasing role in consumers’ lives), as well as LG’s strengths in design. Major threats and weaknesses however shall also be addressed. This particularly concerns overcoming the retailer and operator dependence, and LG’s major weakness in bringing to market e.g. marketing and customer focus/loyalty.

3. Role of technological innovation in LG’s competitive strategy

A well-defined competitive strategy guides the firm in its "search for a favourable competitive position in an industry” (Porter, 1985: 1). Although competitive advantage usually originates from possession of assets and the company’s size, this has been changing in favour of those firms using knowledge and technological skills to create and customise innovations in their products and services (Kay, 1993). Today, competitive strategy and innovation go hand in hand e.g. a company’s competitive strategy defines the objective for technological innovation, and in turn suitable technological innovation supports the materialisation of corporate competitive strategy.

Applying this rather theoretical framework now to LG, one sees that the importance of LG’s competitive advantage mainly resides in technical design. This was evidenced through the ‘Chocolate’ and ‘Prada’ models which became the avant-garde designed handsets on the global market in 2006/2007.

Considering LG’s strength in innovation design, it seems that technological innovation determines the company’s competitive strategy. We see technological innovation (e.g. technological design) not as defined by the objective of LG’s competitive strategy but rather forming the overall layer of the company’s competitive strategy i.e. it is the core (raison-d’être) of the competitive strategy.
4. Innovation Strategy

Nowadays, the future of the mobile telecommunication industry is mainly dependent on developments of telecommunication infrastructures. With the rise of 4G technologies and platforms, radical or disruptive innovations in the saturated mobile handset industry are more likely to appear. The product life cycle of handsets is seen to be rapidly shortening as a consequence of cut-throat competition based on incremental innovations of existing products. Inevitably, mobile phone manufacturers must seek for new ways to sustain their competitive advantage and enhance product differentiation and segmentation in the market.

Drawing on the previous analysis, we believe the future of the mobile handset industry rests in two market segments: the high-end market and low-end market. To create and sustain competitive advantages in both markets, according to Johnson et al. (2005), LG can have three strategic options which include a price-based strategy, a differentiation strategy and a lock-in strategy.

Figure 1: A proposed innovation strategy for LG

Source: Authors
High-End Market Segment

In the high-end market segment, which is highly concentrated, LG needs to find effective means to differentiate itself from its key competitors so as to succeed in the fierce competitive environment. Given this scenario, LG’s excellence in industrial design will play a key role in the company’s short-term as well as long-term strategy. Innovative and cutting-edge design will be crucial for LG’s differentiation strategy (Porter, 1985) by launching stylish handsets, perceived as unique by the community of mobile users. Design is relatively easy to change, so the company can roll out new products at a faster pace than other competitors so that LG can always lead and benefit from new demands in the market. As such, continuous design innovation will be achieved by improving in-house capabilities, collaborating with design agencies and finally by allowing the customers to customise and personalise their handsets online.

Customer satisfaction is always a prominent factor even in the development of an effective design innovation strategy. In its pursuit of continuous innovation, LG has been philosophically very ‘Korean’, as symbolised in its national emblem of a tai-chi like motif, which stands for balance. According to Chang Ma, the head of the Marketing Strategy Team who directed the LG Chocolate’s successful global launch, LG’s “industrial designs will incorporate a balance between concept creation and lifestyle creation, so that the needs, desire and dream of the customers must feature prominently in the overall value innovation process” (Screenshots, 2007).

This process might be further sped up by allowing customers to directly take part in the design creation online. LG’s official website might potentially become a significant source of new ideas for up-to-date and personalised designs. According to Thomke & von Hippel (2002) manufacturers rather than users have traditionally been considered the most logical source of innovation for products and services. Despite this traditional expectation however, empirical studies of the sources of innovation in both the industrial and consumer goods fields have shown that users rather than manufactures are typically the initial developers of what later become commercially significant new products and processes. In the case of LG’s website, visitors will be offered the opportunity to customise the exterior of their handsets online, by selecting specific case features, colours, materials, accessories, etc., while technology remains identical. By offering
customers this possibility, LG is tapping into a growing trend of customisation, as evidenced by e.g. Nike and Adidas’ customised shoes.

At the same time, by letting customers express their creativity online, LG will be able to survey users’ preferences and needs in the high-end market as well as in the low-end market. By promoting interactivity and multi-directional communication, the company’s website might become a valuable instrument to sense the global market’s trends, periodically communicate with the end-users and build strategic customers loyalty programmes. An additional benefit of online customisation and commercialisation is that the dependence on operators and retailers will be somewhat reduced, thereby improving LG’s bargaining power towards them.

Low-End Market Segment

The mobile industry has reached millions of people over the world; to illustrate, in the UK alone there are more mobile phones than UK citizens (Short, 2005). Although developed markets are highly saturated, reports show that there is still growth potential in the low-end segment of these markets. More importantly though, emerging markets (e.g. China, Russia, India) show considerable market potential, also in the low-end segment of the market. Expanding LG’s mobile phone portfolio to the price-conscious low-end market can be considered as a means to pursue a deeper penetration in the industry to increase market share.

In the low-end market segment (both developed and developing countries), consumer price sensitivity is one of the key drivers to be able to successfully compete. But at the same time, LG has to take advantage of its level of design differentiation from its competitors. Based on the framework developed by Johnson et al. (2005), to achieve and sustain competitive advantage, LG’s innovation strategy for this specific segment will be supported by two of its elements: cost focus (price-based) and differentiation. The cost-focus strategy will be approached by a process innovation and differentiation strategy by a product innovation.

One way to approach the cost-focus strategy (process innovation) is by optimising the value chain. Porter (1985) introduces the term ‘Value Chain’ referring to the activities
performed by an organisation and how they are linked to its competitive position. In order to achieve cost leadership, a company must find and exploit all sources of cost advantage throughout the value chain.

LG should consider modifying its business model and outsource some of the activities performed in its value chain. If we refer specifically to the manufacturing process, LG produced more than 97% of its mobile phones in-house in 2005, following mainly a traditional vertical model (Wu, 2006); compared to its competitors, LG’s internal production is extremely high. Instead of manufacturing in-house, we suggest to take advantage of the specialisation of external organisations in this area, such as Original Design Manufacturers (ODM) or Contract Electronics Manufacturer (CEM), also known as Electronics Manufacturing Services Suppliers (EMS). Companies using the services of the EMS providers can reduce costs in their supply chain, shorten the time of the product development process and, consequently, bring a new product to market in less time, thereby overcoming the time-pressures of product life cycle shortenings. Utilising EMS providers’ expertise in manufacturing, LG would be able to meet and exceed growth expectations since EMS providers have the capability to fulfil demand overshot and effectively manage inventories (Barnes et al., 2000).

Along with the optimisation of the value chain and in order to achieve a successful cost focus strategy, LG can offer a portfolio of products with a reduced number of features. Budget handsets will be ‘degraded’ in terms of features and functionalities, for those mobile users who want a simple phone without complicated attributes, but not sacrificing the design style.

Bringing to the market a combination of reasonably priced models to offer a comprehensive range of products that suit all lifestyles and budgets, is not enough for LG to be successful in this new market. There still needs to be a degree of differentiation achieved in this segment; here is where the second element of the Johnson et al.’s (2005) framework comes in: differentiation (product innovation).

As mentioned before, one of the most important of LG’s strengths is its capability to create handsets with a stylish design. Applying these capabilities to the low-end market portfolio of products can be the key element for LG to be successful and sustain a competitive advantage. LG must be smart enough to emulate its ‘differentiation’ core
competency by researching into consumer needs combined with innovative designs. Since the mobile industry is highly competitive, customers’ needs have to be accommodated in a more individual manner. The development of handsets with robust functionality, simplified user-friendly interfaces, appealing designs and pocket-sized comfort can help LG pave its way to become the 3rd largest mobile phone manufacturer in the global market by 2010 (Screenshots, 2007). In this way, LG can achieve its objective of growing its mobile phone business in this increasingly important low-end segment, while maintaining its brand premium position for the high-end market.

Commercialisation of the low-end models can forego through the same channels in developed markets as their high-end models. Specific attention should be paid to making sure that distribution infrastructure is in place in emerging markets, as this is a key component to commercialisation. At the same time the marketing strategy, that so far only targeted the high-end market, should be adapted according to the specific needs of the low-end user segment.

**Long term innovation strategy (Lock-in)**

As outlined so far, we see LG’s future success in design, i.e. that the focus should be on strengthening current strengths. Yet, it can be argued that design may only be a key to success in the short run and that LG cannot focus merely on design but in the long term must equally address functionalities. Therefore a long term strategy shall also be envisaged.

As we have outlined in the external environment analysis, we see convergence as the major force influencing the business environment. As such, we consider it important that our innovation strategy should also entail a long-term focus, taking care of convergence. Mobile phones, as we have seen in the threats and opportunity analysis, play an ever increasing importance in consumers’ lives. Already now, mobile phones are multifunctional devices. In the future, however, we see mobile phones as becoming ‘a universal remote control’ of our lives. In other words, mobile phones will become the device that will be responsible for the flow of our daily life. Mobile phones will act as keys opening front doors and cars; they will switch the TV, radio on/off and be connected to our fridges doing our food shopping by ordering replacement supplies online. This vision
is not a wishful thinking but indeed how mobile manufacturers (Nokia, Motorola) envision the future.

To take a first step into this future, LG needs to develop competence in 4G technologies. Reason being that the ‘remote control of life’ concept will work effectively through Wi-fi technology for which the benefits that 4G technologies bring are essential. We do not anticipate the development of competence in 4G to be of a great challenge for LG, due to its existing strength in 3G technology and the obvious technological capabilities it possesses in this area. However, we do suggest collaboration with other handset manufacturers and operators on the issue of 4G in order to facilitate the development of an industry standard.

Of equally great importance for the ‘remote control of life’ is that compatible devices exist which LG’s handsets can ‘control’. Since LG has two other business units that in fact produce Digital Appliances, intra-company coordination can easily be used to produce devices that incorporate compatible Wi-fi technology. However, in the long-term, success of LG’s mobile phones will undoubtedly depend on the ability of their handsets to interact with devices from other manufacturers such as Philips or Daewoo. Due to the fact that LG is still a relatively small player, it cannot be expected that LG can force its technology onto the market as the industry standard. Therefore development of the technology has to proceed by means of collaboration with other manufacturers such as Philips, or Matsushita. Only an alliance with major electronics market leaders will allow LG to have an effect on industry adoption.

A critical point in the competitiveness of this long term innovation strategy is also that LG protects its intellectual property through patent registration. Not only will this ward off competition, but it may also be beneficial for future licensing. However, in line with this, sufficient resources need to be set aside to be able to effectively uphold the patents, without which they are pointless.

Commercialisation is of course a major element to every strategy; however, seeing as the ‘remote control of life’ is our long-term strategy that we see emerging within 7-10 years, we believe that it is not wise to make a commercialisation plan just yet. Consumer tastes change so rapidly that any commercialisation we propose now may be obsolete in 10 years time.
5. R&D budget allocation

No innovation strategy can be pushed through effectively without appropriate resource allocation to support its implementation. The R&D budget for the mobile handset division of LG should be derived by benchmarking against its key competitors within the industry. Therefore, 8.7% of net sales (resulting in a 2007 budget of approximately $1 billion) will be allocated for technology research and development. The budget will continue to increase in the following years in order to live up to the company’s strategic vision of becoming the world’s 3rd largest mobile phone manufacturer by 2010.

Table 1: R&D Allocation:

<table>
<thead>
<tr>
<th>PROJECTED GROWTH IN R&amp;D BUDGET FOR LG (2007 as base year)</th>
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<tbody>
<tr>
<td>R&amp;D Budget **</td>
</tr>
<tr>
<td>2007</td>
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<tr>
<td>8.7%</td>
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<table>
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<tr>
<th>ALLOCATION OF FUNDS AS %AGE OF R&amp;D BUDGET</th>
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<tbody>
<tr>
<td>Innovation Activities</td>
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<tr>
<td></td>
</tr>
<tr>
<td>2007</td>
</tr>
<tr>
<td>Investment in Next Generation Technologies</td>
</tr>
<tr>
<td>5%</td>
</tr>
<tr>
<td>Low-end Platform development</td>
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<tr>
<td>20%</td>
</tr>
<tr>
<td>Enhance Existing Industrial Design Strength</td>
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<tr>
<td>75%</td>
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** Total % of Net Sales

The R&D funds will be more or less split according to Tidd’s framework (2005) among three innovation activities: enhancement of industrial designing capabilities (Business investment), development of a low-end product platform (Strategic positioning) and investment in the development of next generation technologies (Knowledge building). As described in the previous section, LG’s core competence resides in its designing capabilities, thus the majority of the R&D budget is devoted to strengthening this area and it will remain at approximately 70% for the next five years to come. In the low-end market, due to lack of expertise and internal development and production capabilities in
this particular segment, LG requires a considerable amount of initial investment in setting up a low-end product platform. Therefore 20% of the R&D budget will go into this area and the amount will increase gradually. Once a low-end platform is well established and effectively operating, the resource allocation will decrease again. In addition, in terms of investment in next generation technologies, the projects do not require substantial financial commitment at the moment, as most of the projects are still at the initial idea generation stage of the innovation process; however, as time goes by, the number will go up as some projects move into the development phase of technological innovation.
6. Key Challenges expected in the implementation of the innovation strategy and ways to address them

Having discussed the resources that must be considered for the implementation of LG’s innovation strategy, it is also important to reflect on the key challenges that this strategy involves and how these can be addressed. We have summarised these in the table below.

<table>
<thead>
<tr>
<th>Key challenges to implementation (Short term and long term strategy)</th>
<th>How to address them</th>
</tr>
</thead>
</table>
| How to keep a continuous flow of new ideas for the design innovation | - Pool worldwide design resources  
- Organise competitions at design centres, universities, etc. |
| How to manage the supply chain of the customised handsets            | - Set up a ‘virtual’ supply chain such as Dell’s, where customers’ online orders directly trigger the production, distribution process and so on |
| How to make sure operators are willing to support 3G (and future generation technologies) in terms of broadband infrastructure (since this is a crucial departing point to bringing the remote control to the market) | Form alliances with market leaders such as Nokia, but also other handset manufacturers and develop a push strategy towards operators |
| How to deal with targeting the low and high-end market whilst this requires different technologies | Start development of two different platforms |

Table 2: Key challenges to implementation
7. Final Words

As we have seen at the beginning of this report, mobile devices of the future will assume greater, more personalized roles in our lives than they do presently. Convergence of technologies is the single most important factor shaping the trends of the future mobile phone market. This convergence will evidently put a lot of pressure on the mobile phone manufacturers to come up with distinctive value added features to cater for this extremely competitive market characterized by ever decreasing PLCs, lowering margins, rapidly evolving customer demands and increasing competitive pressures from low cost entrants. Mobile phone manufacturers thus will have to devise innovation strategies that will supplement their existing strengths and allow them to tap into future avenues of innovation by being proactive in initiating processes that support this objective.

In line with this philosophy, LG too has to build on its existing strengths of possessing strong technical design competence and having a technology leadership position in 3G technologies to cement its position as a major player for the future. They would need to incorporate improvements in their innovation strategy to cater for a growing low-end market by offering cheaper, customer focussed alternatives to capture more market share, while simultaneously keeping the high-end customers in hand. To achieve this they will have to focus both on the differentiation/cost focus strategies as well as lock-in strategies to secure the future technology investments. This report has tried to provide a clear picture of how this can be achieved.
Appendix

Appendix 1:

**Chart 1.1**

Mobile Handheld Device Market: Market Share of Major Market Participants by Handset Revenue (World), 2005

*Note: All figures are rounded. Source: Frost & Sullivan*

*Source: Frost & Sullivan (2006)*
Appendix 2: Average Selling Price for Handsets

Chart 1.3
Mobile Handheld Device Market: Average Selling Price for Handsets by Major Market Participants (World), 2006

Note: All figures are rounded. Source: Frost & Sullivan

Appendix 3: Porter’s 5 Forces model

Bargaining power of suppliers is not considered to be a specific issue which is evidenced by ODM, CEM, EMS etc. who have not yet tried to bypass manufacturers, as the market is characterised by squeezed margins and growth decline (Datamonitor, 2006b).

Bargaining power of buyers: Bargaining power of consumers is high, due to low switching costs. Bargaining power of operators and other sales channels is high, however, the internet can be seen as an opportunity to sell online and overcome operator’s dependence on sales.

Threat of potential entrants is high. Decreases in market growth and marginal revenues due to market saturation allows for new entrants to compete on price (e.g. Sanyo, Haier, TCL, Amoi, Pantech, VK). Competing on price opens market opportunities in the low-end segment in developed markets and emerging markets (Accenture, 2005). This trend has been emphasized through consumers’ demand of cheap commoditised handsets (see Nokia success in selling handset below $100).
Threat of substitutes is low as mobiles play an ever increasing role in consumer’s life and convergence is likely to sustain this trend in the future.

In terms of rivalry among existing firms one observes that this is affected particularly by consumers’ bargaining power and the threat of new entrants. Shorter product life cycles, convergence and price are main elements characterising global industry rivalry.
References