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Baraa Abudawod Portland State University

Christophe Perrenoud Portland State University

Chris David Portland State University

Farshad Madani Portland State University

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Samsung OLED TV Marketing Plan

Course Title: Technology Marketing

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Instructor: Dr. Charles Weber

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Author(s): Baraa Abudawod, Christophe Perrenoud,

Chris Davis, Farshad Madani

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<u>1. Abstract</u>

The evolution of television has substantially evolved within the last 2 decades to introduce revolutionary modern technology seen in Plasma, LCD, and LED backlight TV. The changes of television technology will offer thinner, clearer, brighter TV, and reduce energy consumption. After a brief transition of corporate strategy, Samsung has grown into the market as the leading innovative television manufacturer and currently holds 97% market share of AMOLED (Active Matrix OLED) currently seen in mobile devices.

In January of 2012, Samsung introduced a high definition 55 inch prototype OLED TV at the Consumer Electronics Show (CES) that seemingly will revolutionize the television in performance and in design. Samsung OLED TV entering in the market early as in the late 2012 will open a new market to the television industry that will appeal to the early adopters.

This report is a study of the new Samsung 55 inch OLED TV which introduces the technology of OLED, the market segment, and will forecast the OLED TV market. With innovation of OLED technology, the television will significantly change in improving clarity and performance, and also cut the thinness and weight in half, while implementing interactive and smart technology that will optimize the consumer's television experience.

2. Samsung Company Overview

Samsung is the biggest OLED manufacturer in the world having 40% of OLED displays market by 2004, and 98% of the current market global market share. Samsung is a holder of more than 600 American patents as of 2006. It makes Samsung the largest AMOLED patent owner. In 2008, Samsung presented the world's largest and thinnest OLED TV at the time, at 31 inches of diagonal screen and 4.3 mm in thickness. In the same month, Samsung went even further and unveiled an even larger OLED Television at 40-inch diagonal measurement with a Full HD resolution of 1920×1080 pixel [1].

3. OLED Technology Overview

3.1. Introduction to OLED Technology

An OLED is a light-emitting diode (LED) in which the emissive electroluminescent layer is a film of organic compounds which emit light in response to an electric current. This layer of organic semiconductor material is situated between two electrodes. Generally, at least one of these electrodes is transparent. There are two main families of OLED displays: those based on small molecules and those employing polymers. Adding mobile ions to an OLED creates a light-emitting electrochemical cell or LEC, which has a slightly different mode of operation. OLED either passive-matrix (PMOLED) displays can use or activematrix (AMOLED) addressing schemes. OLED displays are used in television screens, computer monitors, smaller portable system screens such as mobile phones and PDAs, watches, advertising, information, and indication[2].

3.2. Current TV technologies

There are five TV technologies currently in the market:

- 1. The color CRT TV: emerged in 1951. This technology is cheap and has relatively high resolution, but it consumes energy more than recent technologies.
- 2. LCD TV: has been developed since 1970s. This technology was used mostly in small/medium size applications, such as mobile phones, notebooks, and computer monitors. LCD displays for TV were produced in 2003 in dimensions of 26, 27, and even 30 inch.
- 3. Many Japanese companies in 1990s started producing plasma display panel (PDP) over 30 inches. These TVs were large but high-quality resolution. The PDP market share increased because some companies stopped producing PDP models to invest in LCD displays, although 50-in. PDPs remain relatively competitive with LCDs. However, PDPs face increasing competition in the near future, as LCDs are increasing in size and RP TVs are already competing in the 50 in. display size category.
- 4. RP TV: RP TVs came to market in the 1970s. Although they couldn't compete with CRTs in image quality, current models are improved, and have developed fast since 2002. , focused on large sizes. RP TVs cannot display computer signals. These disadvantages, in combination

with stiff competition from both LCD displays and PDP displays led to a decline in RP TV shipments in the fourth quarter of 2007.

5. OLED TV: OLED technology made as a breakthrough in 1998 in collaboration between Kodak and Sanyo. The first OLED TV released in 2007 by Sony which had an 11-inch display. International companies such as Sony, Samsung, Toshiba, and Panasonic soon thereafter announced plans to invest in OLED technology.

	CRT TV	RP TV	PDP TV	LCD TV	OLED TV
Launch date	1928	1970s	1996	1998	2007
Advantages	Relatively inexpensive, the best picture, wide viewing angle higher contrast ration Longevity	Lower cost, relatively inexpensive, larger screens, low power consumption, no radiation	Good image quality, wider viewing angle, large dimensions, light, thin, image free of terrestrial magnetism, accepts digital signals, Deeper blacks for a Better contrast ratio, Clearer color and saturation of the colors, Good motion tracking, very little or no motion lag especially with	Thin, low power consumption, less radiation production, higher contrast, larger range of sizes, higher resolution, no danger of burn-in, bright, Small flat screens, accepts digital signals an increased image brightness, Longevity	Good image quality, Higher contrast, emit own light, broader color gamat, larger viewing angle, fast motion and rapid eye movement more life-like, low power consumption, simple production procedure
Disadvantages	Bulky, heavy, limited screen size (<40 in.), lower resolution, usually not PC-compatible	Large, heavy and occupy a lot of floor space, lamp replacement can be expensive needs periodic maintenance, not ideal for bright rooms, narrow viewing angle, softer image than microdisplays, most cannot display computer signals	the faster moving images Lower Brightness Shorter Life Fragility Small screen size, higher price, luminance and color saturation decays over time, Not the Lightest or Slimmest,] high power consumption, burn-in prone, short life span more sensitive to the burn-in effect of static images	Did not have a fast refreshing rate, poor color saturation, higher price of larger screen, relatively narrow viewing angle, have a difficulty going fully black Doesn't track motion well Some pixel failure rates can be as high (or higher) than 10%	Limited life span of material immature fabrication, high cost, low color purity
Main brands		LCoS-Sayon, DLP-Samsung, LG and Optoma	Pioneer, JVC, Toshiba, Sayon	View Sonic, Sony, Panasonic, Samsung, Sharp	Sony
Typical size	27 and 30 in.	15 to 57 in.	42 to 58 in.	37 to 73 in.	Start at 11 in.
Price range	\$450 to \$600	\$250 to \$7000	\$1000 to \$5300	\$1300 to \$5200	\$1600
Most popular size and price	30 in. for \$500	32 in, for \$600	50 in. for \$2000	56 in. for \$2000	

Table 1- Comparison of TV technologies [3]

3.3. Advantages of OLED TV

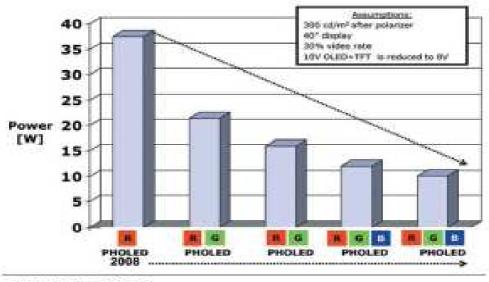
Power Consumption

OLED displays have a great advantage over LCD displays in terms of power consumption because each pixel in an OLED is individually controlled to generate light according to input signal images. According to manufacturers, a 30-to 32-inch(76.2-cm)OLED TV panel consumes about 30 Watts in full white mode (at 200cd/m2) [2].

Screen Size	Screen Area	Resolution	On-Mode Power (Estimated)	
11-inch (27.9-cm) (commercialized in 2007)	51 inch ² (333 cm ²)	960×540 pixels	25-26 W	
30- to 32-inch (76.2- to 81.3-cm) (prototype in 2010)	384 to 437 inch ² (2,479 to 2,822 cm ²)	1920×1080 pixels	33-40 W	

Table 2- Estimated On-mode Power Consumption of OLED TVs [2]

According to Samsung, phosphorescent light-emitting materials are being improved and will replace fluorescent emitters, resulting in greater power efficiency. Samsung reported Universal Display Corp's claim that a 40-inch (101.6-cm) OLEDTV panel based on phosphorescent OLED (PHOLED) can consume less than 15W at 300cd/m2. Figure 1 shows consumption for different types of PHOLED TV panels [4].



Source: Kim et al. 2009

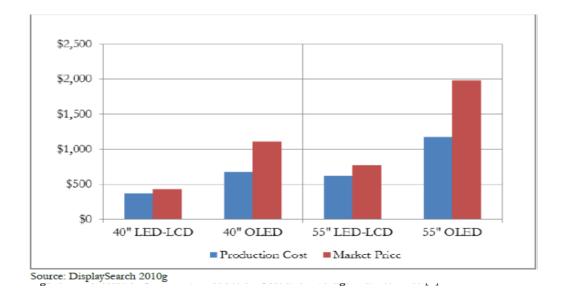
Figure 1 - Power Consumption Roadmap for40-inch (101.6-cm) OLED TV Panels [2]

Production Cost

OLED TVs larger than30 inches are expected to be commercially available in 2012. Because OLED TVs are an emerging technology; it is difficult to predict manufacturing cost at full

scale. In addition, most efficiency improvement options depend on proprietary OLED panel technologies[2].

Although the OLED TV cost and price forecast will become more reliable when large-size OLED TVs have matured in the market, it might be useful to consider currently expected price gaps between OLED TVs and LCD TVs. The average market price of 40-to 55-inch (101.6-to 139.7-cm) OLED TVs is expected to be about 2.5 times that of LED backlit TVs in 2014.



4. TV Market Overview

Based on the report by Display Research OLED revenues will grow to about \$8B in 2017, up from \$0.8B in 2009. Mobile phone main displays had strong growth recently, and will continue to lead revenues to around \$4B in 2017. OLED TV will become the second largest revenue –production application, at around \$3 billion in 2017[5].

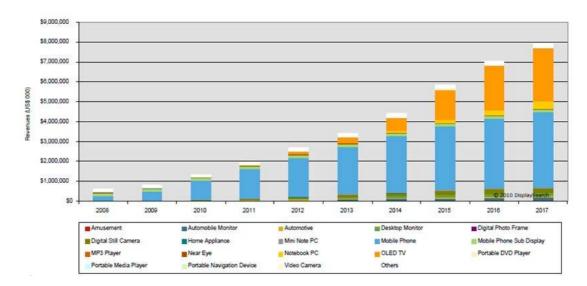
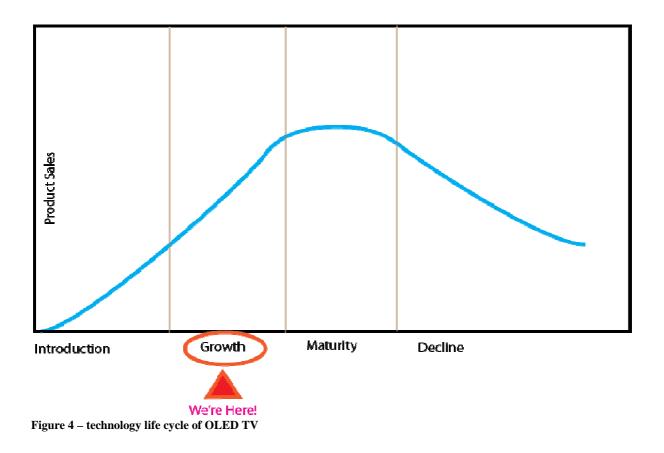


Figure 3 - Global OLED TV Shipment

4.1. Technology life cycle

Currently the life cycle of the product is shorter than that of the LCD/LED, and plasma brand TVs that are on the market. This shortens the technology life cycle. If the advancements are made in technology that prolongs the life cycle of the product then the technology life cycle will improve. The technology life cycle is dependent on the product life cycle, and the advancements in the technology. The OLED technology in big screen TV is not a disruptive technology therefore, early innovators, and early adaptors will not apply to this product. There is no proverbial market chasm to cross to reach the main stream audience. This product will be in an early growth period trying to appeal to the early majority. The goal in the technology life cycle is to be able to make it to the mainstream majority by saturating the market. There have already been major improvements made in the technology to improve the product life cycle to the point of outlasting any other brand of TV on the market.



The first couple of years of growth for this Samsung product will endure some loss in profits, but that loss will be rewarded with product growth coupled with technological advancement that ensures a long lasting technology life cycle for the OLED TV. As seen earlier in this paper, the projections for this product in terms of sales and distribution are good. Market projections for this product sees the Samsung OLED TV hitting maturity around 2016. When this happens OLED TVs will see a steep incline in growth, while LCD/LED and plasma brand TVs should see a steeper decline. Eventually the OLED brand of TV will take over the market to the point becoming the next generation in TV technology.

5. Situation/Market Analysis

Understanding the customers' needs is very important for any company. The company needs to understand the factors that affect the customers' purchasing decision. For the most part customers do not really know what they want, therefore, it is the company's mission to figure out and appeal to the needs of its customers. The Samsung OLED TV is an innovative product that a lot of people would be interested in, but who are those people? A company like Samsung should answer this question before promoting a product such as the OLED TV.

Samsung has to specify its target segments by analyzing the factors that affect the customers' purchasing decision. Identifying the value drivers of the OLED TV is very important for Samsung as the value drivers enhance the value of the OLED TV in the minds of the consumers, which eventually creates value for Samsung [6].

Subsequently, for the market analysis section of this paper we are looking to identify/specify the OLED TV market segments. We want to identify the customers' value drivers and the compelling reason to act, and finally select the segments that should be targeted for this product. This market research would enable Samsung to figure its target customers and know how to appeal to their needs. It would also enable Samsung to know exactly where to spend its money and attract the right customers who would maximize the company's profit margins.

In order to achieve this goal, we conducted a survey to understand the customers' buying behaviors and the factors that affect their purchasing decisions. The survey was a set of 13 questions with a sample size of 52 respondents with different demographics (See Appendix A - 1). The survey results were very helpful for our team as it helped us in identifying the OLED TV target segments.

5.1. Market Segmentation

As mentioned previously, the survey results were the key to identifying the different target segments that are interested in buying a product like the OLED TV. Based on the survey results, 50% of the respondents find performance to be the most important factor that affects their decision when they want to buy a TV. The other factors that were mentioned in this question were price, dimension/size, and sustainability/durability. With performance being the most important factor, we were able to know that OLED TV would be very attractive in the market, as high-performance seems to be one of the best features of the OLED TV. Another important question in the survey was the question about whether customers are interested in brands or not. We asked the customers if brand matters for them when they decide to purchase a TV, and 85% of the respondents said that brand does matter when making a purchasing decision. 48% of the respondents said that they prefer Samsung TVs. Therefore, these answers showed us the attractiveness of the OLED TV in the market and especially for Samsung OLED TVs.

In addition, when customers were asked about their needs for a TV, the highest percentages were for technology enthusiasm and wanting the newest technology. Family and social gathering, boredom and leisure were also among higher percentage of respondent's answers. Moreover, the time for purchasing a new TV is very important for us in order to understand the customers' need for a TV. According to the survey results, 37% of the respondents said that they buy a new TV when their TV no longer works while 33% buy a new TV when the technology is outdated. This means that customers buy a new TV when they need a new TV and when they want a newer technology (i.e., technology enthusiasts).

One of the most important questions that were asked to potential customers was, why would you buy an OLED TV? 45% said they would buy the OLED TV because they always want the new technology (i.e., technology enthusiasts), 29% said they would buy the OLED TV because they want a product that's easy to operate/use, and 22% said they would buy the OLED TV because they want to support green products. We believe that these answers are very helpful when it come to identifying the value drivers and compelling reason to buy an OLED TV. These answers enable Samsung to understand the customers' needs and expectations. It shows what customers value the most when they decide to buy a TV. Survey results also shows that around 50% of the customers are average users and willing adopters.

Furthermore, the OLED TV is an easy device to operate/use, therefore, it would appeal to the customers who are average users and willing to adapt to the new technology. As a result of the survey, we were able to identify the market segments/customers who would be interested in buying the OLED TV. These market segments are listed below:

Technology Enthusiasts

A technology enthusiast is the person who just wants the technology for its own sake, and he/she likes having all types of technologies. According to Shane Greenstein in an article he wrote in 2010 he says, "Most early adopters are technology enthusiasts in one respect or another. That is, enthusiasts often become early adopters when they want to put technology to use in some grand vision, making their first purchase when the technology is still quite

young and not yet mainstreamed" [7]. Basically, customers within this market segment must have the newest technology even if they don't really need it. They just like the idea of having the latest technology as they believe it sets their social status. Based on the survey results, the customers within this market segment value performance (59%), ease of use (41%), and support green (23%). Figure 5 shows the customer profile within the technology enthusiasts' market segment as well as the percentage of market penetration (Based on the survey).

Need a New TV

The customers within this market segment are the people who buy a new TV whenever their old TV is no longer working. Based on the survey results, the customers within this target segment are loyal Samsung customers (58%). Therefore, those people might be interested in what Samsung has to offer, which is the OLED TV. The survey results also show that customers within this market segment support green (47%), want the new technology (32%), and value performance (32%). Figure 5 shows the customer profile within this market segment as well as the percentage of market penetration (Based on the survey).

Family and Social Gathering

The customers within this market segment are the families who want to enjoy quality times with their families and friends. We believe that this is a very important target segment that Samsung has to appeal to. Samsung has to be able to identify and appeal to the needs of the customers within this target segment. According the US Census Bureau, the current population of the United States is around 313,172,860 people [8]. The number of families in the United States in 2010 was about 78,833,000 families with an average of 3.16 persons per family [9]. This means that families represent approximately 80% of the US population. Therefore, families represent an important market segment that must be focused on.

Based on the survey results, the customers within this market segment want the new technology (72%), value performance (50%) and ease of use (28%). Figure 5 shows the customer profile within this market segment as well as the percentage of market penetration (Based on the survey).

Boredom, Leisure, and Diversion

Customers within this market segment buy a TV to kill the time. Based on the survey, the customers within this target segment care a lot about price (67%), support green (33%), and want a TV that's easy to use (42%). Figure 5 shows the customer profile within this market segment as well as the percentage of market penetration (Based on the survey).

Segments	Customer Profile	%
Technology Enthusiasm & Desire for New Technology	 Mostly males between 25 to 34 years old Upper class or upper-middle class Interested in high-performance and easy-to-use products Ease of use is vey important to this segment Must own the newest/latest technology Mostly average users and willing adopters 	45%
Need A New TV	 Males and females between 25 to 34 years old Upper class or upper-middle class Loyal Samsung customers Support green products Want to have the new technology 	37%
Family & Social Gathering	 Mostly families Upper class or upper-middle class Interested in high-performance and easy-to-use products want to be up-to-date with technology 	27%
Boredom, Leisure, and Diversion	 Mostly males between 25 to 34 years old Price is the most important decision factor Want to support green products Want a product that's easy to use 	23%

Figure 5 – OLED TV Market Segments and Percentages of Market Penetration

5.2. Target Segments Selection

Based on the results of the survey and the customer profiles for each of the market segments mentioned above, it is easier now to identify and select the target segment that Samsung should target. We believe that Samsung should target the first three market segments in figure 5, which have the highest percentages of market penetration based on the survey. Those three market segments are the technology enthusiasts (45%), need a new TV (37%), and family & social gathering (27%). The significance of these market segments were mentioned earlier in the market segmentation section of this paper. All of these three market segments represent potential target segments that can have a positive impact on Samsung profitability.

On the other hand, the reason why the fourth market segment in figure 5 is not considered as a good target segment for the Samsung OLED TV is that customers within this target segment care a lot about the price aspect of the TV. Unfortunately, price is not one of the core competencies of the OLED TV, therefore, the boredom and leisure market segment should be excluded from the list of the potential target segments.

5.3. Value Drivers

After analyzing the survey results and identifying the target segments for the OLED TV, it is very important to identify the value drivers that impact the customers' willingness to buy the OLED TV. The results from the survey helped us in identifying those value drivers which enhance the value in the minds of the customers. Figure 6 below lists the value drivers that were generated from the survey responses, which we believe are the most important for our customers.

Supporting Green Products

Supporting green products is one of the most important value drivers for the OLED TV customers. When a customer purchases an OLED TV, he/she is contributing in saving the environment. "The leading companies and leading financial institutions in the world see environmental and social sustainability as a niche marketing tool, a way to communicate to their customers about the environmental and social sustainability attributes to the products they deliver" [10]. Therefore, companies realize people's concerns with regards to saving the environment and making the world a better place. People are concerned about green products to satisfy their emotional, social, and psychological needs.

Owning the Newest Technology

For many people it is a must to have the newest technology. Those people may not necessarily need the new technology, but they buy it to satisfy their emotional and psychological needs. They like to be the first to own innovative products like the OLED TV; they believe that it sets their social status. They like the idea of being up-to-date with technology, so they can show off in front of friends and family.

Ease of Use

Based on the survey results, ease of use was a very important purchasing factors for the three market segments we are targeting. The OLED TV is considered to be a product that's easy to use. Therefore, ease of use can be considered as an important value driver which could impact customers' willingness to buy the OLED TV.

High Performance

Performance is the most important factor that affects the customers' purchasing decision when deciding to purchase a TV. The OLED TV's unique features like image quality, refresh rate, connectivity, and 3D graphics and capabilities makes the OLED TV the best high-performance TV available in the market [11]. Therefore, high performance can be considered as an important value driver that enhances the value of the OLED TV in the customer's mind.

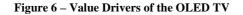
Entertainment

The OLED TV provides the customers better gaming and movie watching experience. Its unique features add value to the customer's experience, which would play an important role in creating value in the mind of the customer. The OLED TV's amazing graphics and sound system would enhance the customer's gaming and movie watching experience [12].

Brand

Based on the survey, brand is a very important factor that affects the customers' purchasing decision when buying a TV. As mentioned earlier in this paper, 85% of the respondents said that brands matters and 48% prefer Samsung. Therefore, Samsung could consider its well-known brand as a value driver that impact customers' willingness to buy the OLED TV. People probably associate brand with high quality and performance, and that's why they prefer to go with well-known/established brands in the market.

Drivers	Type of Value
Supporting Green Products	Emotional/Social/Psychological
Owning the Newest Technology	Emotional/Psychological
Ease of Use	Operational/Technical
High Performance (F.g., Connectivity, High Image Quality, & 3D Graphics & Capability)	Operational/Technical
Entertainment (E.g., Movies, Games, & etc)	Emotional/Psychological
Brand	Emotional/Social



5.4. Compelling Reason to Act (CRTA)/Value Proposition

The OLED TV fulfills the customer's need of being up-to-date with technology. It fulfills the customer's emotional and social needs of setting social status and being the first among his/her friends to own a new innovative product like the OLED TV.

The OLED TV also satisfies the customer's esteem by contributing in saving/protecting the environment. People support green products because they want to do the right thing. Thus, the OLED TV satisfies the people's emotional and psychological needs of feeling good about them by knowing that they're making the right choice.

<u>6. Competitive Analysis</u>

In the OLED TV market there are three primary companies for Samsung to compete with. Samsung still dominates the flat panel TV market with around 20% of the global market share [13]. The other competitors that are involved in the OLED TV market are LG, Sony, and Panasonic. Currently Sony is the leader in OLED screen manufacturing for mobile products, and smaller screens. Sony first brought OLED technology to the public in 2001 when it developed a 13 inch screen [14]. Sony has not yet started on creating any kind of prototype for an OLED TV screen larger than 42 inches. Sony has been rumored to be entering the market for OLED big screen TV brand next year after they get an idea of what the market will be like for the particular brand of TV, and also wait till production costs have decreased.

LG has taken a claim in the LCD / LED TV brand market. The Korean based company has taken second place in the overall TV market share right behind Korean counterpart Samsung. LG is sitting at around 13% of the market share for overall TV sales. LG has enjoyed a 6% growth in the 2011 fiscal year for sales [15]. LG has already begun with a prototype 55 inch OLED TV that was shown along with Samsungs 55 inch OLED TV at the electronics consumer show in Las Vegas Nevada in January of 2012. Both companies have stated plans of introduction to the market in late 2012 in time for the 2012 holiday season.

Panasonic is also rumored to be entering in the OLED TV market with start up of a pilot production line. Panasonic currently leads the market in the plasma brand of TV currently having recorded over 5.7 million units sold in the 2011 fiscal year [15]. Panasonic currently holds over 40% of the market on plasma brand TV [16]. Much like Sony Panasonic is more inclined to watch how the market fairs for OLED big screen TVs and also wait for production costs to lower. Panasonic has been rumored to be entering the OLED TV market in 2015 [17]. Figure 7 shows a graph depicting the current percentages of TV market share among TV manufacturing companies.

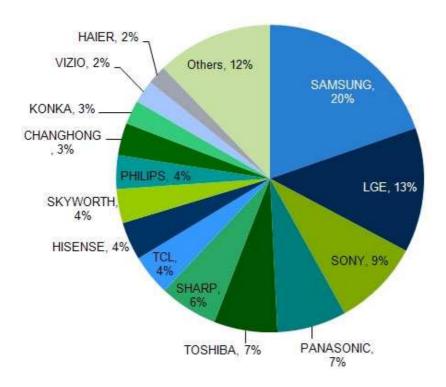


Figure 7 – Graphical reference of current TV market percentage

As seen from this graph it is clear that the main competition Samsung would need to worry about in the OLED TV market would be LG, Sony, and Panasonic. LG would pose the biggest threat to their OLED TV market share. Currently the technology supporting OLED screens is stated to be stronger in the Samsung Company. LG OLED technology uses higher power consumption due to the white layer that needs to remain bright [18].

6.1. Competitive Strategy

Using Porters five force model, and S.W.O.T. analysis our group was able to conduct a good competitive strategy by identifying who the competitors are and determining where the threats are. This strategy will determine who the major competitors are, bargain power of the suppliers, bargain power of the buyers, threats of new entrants, and threats of substitute products. The S.W.O.T. analysis will focus on the strengths, weaknesses, opportunities, and threats that are poised for the new OLED product.

Rivalry among competitor is seen as a medium level threat for Samsung

As discussed earlier in this report, the major competitors for the OLED TV brand market are going to be with LG, Sony, and Panasonic. Sony and Panasonic are both taking a "lagging" approach to entering the market due to production costs, and low expectations of sales in the first year of market entrant. Right now as it stands LG would appear to be the biggest threat in the OLED TV market. After the year 2016 when the market warms up to the OLED TV and the price in production and product sales has decreased then competition will grow, and become a higher threat.

Bargaining power of suppliers is a low level threat

Right now for Samsung Corporation the supplier level of this product is going to be dependent on the production costs and technology advancements. The more the technology advances the lower the production costs will go. It has taken a long time to start production on the big screen OLED TV because the technology would not allow for a cheap production cost. Samsung has not indicated that they predict any kind of profit margin for the first year that the 55 inch OLED TV is introduced to the market. They predict a first year supply of just over 34,000 units to be shipped in the first year of manufacturing, but the number doubles the next year with having over 2.1 million units predicted to be shipped by the year 2015 [19]. Samsung has been producing OLED TV product will not deviate too much from the companies regular suppliers. Advancements in the OLED technology are the more important factor to producing the OLED TV on a commercial level. Companies like EMAGIN have made some significant advancement to the technology using active matrix on silicon micro-

displays [13]. This helps minimize the power consumption and the dissipation. As technology advances so does production costs.

Bargaining power of buyers is seen as a high level threat

For the first year of commercial production of the OLED TV, the LCD/LED brand of TV will still be in control of the market. Samsung will not have enough compelling reasons to buy the OLED TV when the customer is satisfied with the lower priced LCD/LED TV. Performance is the going to be the primary value driver to be able to move the product, because at nearly 3 times the cost of any other type of TV brand on the market, the general public will have a hard time convincing themselves that the OLED TV is a good buy for them. There are a group of buyers on the market that Samsung will want to appeal to that want to buy a new product when the technology is outdated for that product. In 3 or 4 years time the OLED TV will be that newer substitute technology that will replace the buyers LCD/LED TV. Samsung will have to appeal to the higher income demographic of the market for the first 2 years of product induction.

Threat of substitute product is a low level threat

The OLED TV will be seen as the substitute product to LCD/LED brand of TVs on the market. There will be no other product on the market that will substitute this product. There are developing technologies that might enter the market in the future, but there are no findings on how expensive production of these products will cost. This leads to threats of new entrants being a lower level of a threat.

Threat of new entrant products is a low level threat

The only emerging new technologies that are coming out to the market are either a byproduct of the OLED TV, which would put Samsung at the forefront of that new entrant, or production costs are too expensive or unknown to be able t compete with the OLED TV. The first new entrant would be the transparent OLED TV that is so thin that when turned off the user will be able to see through the TV [20]. The other new entrant is what will be known as a holographic TV, and it is still in the experimental phase of the product life. A prototype is slated to be built in 2016. New technology has made it possible to create refresh rates fast enough to support holographic imaging for TV purposes [21].

6.2. S.W.O.T. Analysis

Strengths of Samsung OLED TV product

The biggest strength for the Samsung OLED TV product will be the better overall performance it has over any other TV brand on the market. It will have a higher refresh rate per second on the image quality, than LCD/LED and Plasma brand that is out on the market. This strength will be of major importance because it will be a big part of what substitutes or out dates the current TV technology that will be on the market. When people see that the quality of the TV that OLED puts out is better than any other TV technology on the market then they are going to want to get that product. The OLED brand of TV is the next generation brand of TV, and the performance is the biggest part of what makes it the next generation.

One other strength for Samsungs OLED TV coming out is the fact that it works without the use of a backlight. This gives the TV a thinner dimension than any other TV brand available on the market. The dimensions give the TV a lighter weight with a greater aesthetic appeal. Recent research has also shown that the chemicals that are in the bulb of the back light for the LCD/LED TV is poisonous to the environment and to human health. The OLED TV eliminates these kinds of issues.

Weaknesses of the Samsung OLED TV product

The biggest weakness to the OLED TV brand is going to be the price. The price of production will start out great to the point of making the launch of the product on the commercial level being 3 times greater than any other brand of TV on the market. There have been advancements in the technology which make it promising that production prices will drop and with that product sales prices will also drop. The product sales price is projected to drop by half just after the first year of induction to the market.

A less concerning weakness to the OLED product is the product life cycle. Current technology has the OLED display lasting about half as long as the LCD/LED counterpart. This is less concerning because recent advancements in technology have made it possible for OLED TVs to last even longer than LCD/LED TVs. Currently OLED TV has a product life

cycle of about 20,000 hours while LCD/LED TVs have a life cycle of about 40,000 hours. The life expectancy of the OLED TV is due to change soon.

Opportunities for the Samsung OLED TV product

A considerable opportunity lies with partnerships among online affiliates. Companies like Facebook, Google, and Amazon will want to be a part of the applications to the online capabilities of the OLED TV. This introduces a new kind of market, and also helps aid in financial stability of the product. There have been no mentions of any kind of online partnerships of any sort with Samsung and their OLED TV. The opportunity still exists though.

An even more ominous opportunity that arises with the OLED TV product lies with the lagging efforts of Sony and Panasonic getting into the OLED TV market. With their lagging efforts Samsung has an opportunity to corner the market and create their own niche in the TV market. Much like LG is known for its 3D products, and Panasonic is known for their Plasma display products, Samsung can be known for their OLED TV product. When people go to buy an OLED TV in the future they will think of Samsung before they think of any other brand on the market that produces the OLED TV. Samsung sees entering the OLED TV market as possibly being a little early, but it could end up being a way to keep the Chinese and Japanese companies out of contention for the OLED TV market.

Threats for the Samsung OLED TV product

While the Chinese and Japanese companies might seem as though they are "lagging" in their efforts to enter the OLED TV market, this might actually become a ploy to either partner with an existing company in the OLED TV market, or conduct enough research and development to improve technology in production, and make it even cheaper to produce an OLED TV. It has been rumored that Sony might stay out of the OLED TV market all together, and just partner with LG to supply them with OLED TV screens. Sony is the top manufacturer of OLED display screens right now. This could create a serious threat to Samsung.

An even more potentially fatal threat to Samsung in the OLED TV market would be Chinese OLED suppliers discovering newer technology that lowers the cost of production, and them

supplying other companies such as Sony or Panasonic. Samsung so far has stayed on top of advancements in the technology that produces OLED display. This is not to say that more improved advancements exist in different regions such as China. Samsung will have to stay focused on whatever advancements their suppliers have made in production. So far the advancements are great enough to entertain the risk of lost profit for the first couple of years of the products induction. It is projected that there have already been enough advancements in the OLED technology made that the product life cycle will outlast all other products on the market and be valued at an affordable cost by the year 2015.

7. Marketing Strategy

7.1. Branding

In the high tech marketing with OLED TV, branding of electronic products has grown to become an important factor for both corporations and the consumers. Samsung in the last 16 years has significantly changed their corporate strategy with sub sectors of product brands and revamped their investment into one Samsung branding. In 1996, Samsung made a transition of corporate strategy and shifted towards the focus of corporate unification in building and improving its branding with the emphasis of building customer relationship [22]. Samsung has taken its brand into great heights and built it to improved customer brand loyalty. Samsung has strong branding in mobile devices, and Samsung has displays that include computer monitors and television. Mobile devices and television are currently Samsung's largest market segment with high market share, Samsung 3DTV has a market share of 60% [23].

Samsung branding mission statement is to focus on

- Innovation
- State of the Art Technology
- World Class Design

Samsung's branding will play a vital role in the OLED TV marketing. Samsung OLED TV incorporates the entire Samsung branding mission. The OLED TV will include Samsung's state of the art AMOLED technology. It also implements innovative technology that

enhances the television experience including voice synthesis innovation, Smart television technology, synchronization among all household products and connectivity to the web. Samsung's previous LED backlight TV was focused on world-class slim design. Samsung's LED backlight and plasma TV marketing approach for design motto was "Finger Slim design" television [24]. Staying with branding consistency, the OLED TV will continue with the sleek and slim design with "Razor Slim design."

In relating to Samsung's branding impact of customer, the survey result do indicate that customer's decision-making is influence by brand and that product brands are an important factor. The survey result indicates that consumers want to be up to date with latest technology innovation. In the relationship to the survey and Samsung's branding mission statements is correlated with the survey results in technology innovation and customer relationship through branding are important aspect for consumer drive to purchase and decision making.

7.2. Market Position

The market position for Samsung is place in the right quadrant of the Porter's 4 Market position as a broad focus differentiator. The differentiator position fits for Samsung because of Samsung's innovation leadership in AMOLED technology that holds 97% of the market share for AMOLED technology [25]. Samsung is the market leader for TV with 20% of the market share and is neither competing in cost nor competing in a narrow focus [26]. The price range for Samsung's OLED TV will place in the upper price range that target at broad customer target. This sets Samsung as the differentiator in the market position.

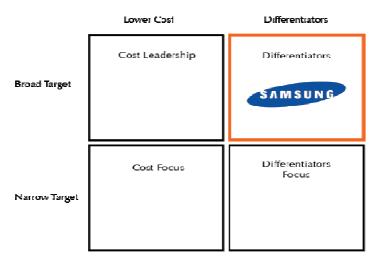


Figure 8 – Porter's Market Position Quadrant

7.2.1. OLED Market Position Differentiator

Samsung's leadership and dominance in AMOLED technology and R & D has put Samsung ahead in the market. With their leadership in Television and dominance in OLED, R&D allows them to be ahead of the market and the first to release large dimension OLED TV in the market. Samsung was not the first to release OLED TV, but will plan to be the first to release large dimension OLED TV for consumers to purchase. The release will be scheduled for commercial release ahead of Samsung rival competitors LG [27].

OLED TV Differentiators

- High Definition Visual Experience
- Smart TV and Interactive technology
- Usability
- Razor thin and aesthetic design
- Energy Efficiency
- AMOLED Technology

Marketing Position Statement

"Samsung Television will continue to lead the competition with superb image quality, performance, slim design, energy efficiency and high quality OLED TV to the next decade."

Objective

With a growing OLED market and competition making their entrance, Samsung will continue to maintain its branding strategy and continue to lead the competition by supplying revolutionary breakthrough image quality in the OLED TV. Samsung will implement its leading technology of AMOLED into coming OLED products that provides innovation sharpness and clarity of image, lush colors, brightness, and contrast that is the leading edge performance in the OLED TV.

Samsung will provide world-class design in the OLED TV and continue to focus on aesthetically razor-slim design that will maintain Samsung's world class design. Samsung's OLED technology strongpoint also has a focus to include energy efficiency in the OLED TV. Reducing energy consumption to operate the OLED TV and providing its performance and quality is an important factor to maintain the higher efficiency of the Samsung brand.

Samsung's OLED TV will fulfill all aspects of its branding with innovative product, leading edge technology, and world class design. This attribute plays an important role in the company consistency of branding and continued efforts to fulfill customer loyalty.

7.3. Communication and Promotion

Communication will be a vital part of Samsung promotion of OLED TV. OLED TV will be a high-tech product that will be newly introduce to the market and is still in very early stages of the maturing phase. New OLED TV product is still in an unknown status and mainstream consumer will still be reluctant before making a purchase. The communication plan will help break barriers and gradually penetrate into the market so the product can be familiarized. The communication plan will be important to provide information for the early adopters and tech enthusiast. The survey indicated that a higher percentage of consumers are tech enthusiast and willing adopters for new technology and consumer also have a need to have the latest technology (See Appendix A - 3).

In order to familiarize OLED TV in the market, establishing a good communication plan is vital to the marketing strategy and the market plan. OLED TV is high-tech product and when released it will be a product with cost in the upper range. With the Samsung OLED TV product having upper range cost, the consumer will be careful when investing in high-tech and high cost product. They will be researching and seeking information that will justify and assure confidence of their product purchase decision [35]. The communication strategy for Samsung is to have as much control of information as possible that will provide the necessary information and positive reviews in all sources of public source of information of the web in the

digital marketing strategy, and continue influencing the sources of information in the traditional analog marketing strategy.

Digital Marketing and the Web

Samsung will be utilizing the web and digital marketing strategy as form of communication with customers. Using the web provides an effective tool for determining customer relationship and sharing information to mass audiences. Samsung's web presence already exists and Samsung's OLED TV will be included on Samsung's website in Consumer Product for Television [28].

Samsung will also be using its website to publish press and news release as online public relation that can be accessible to customer and will publish updates and information on blogs [29,30]. Samsung's forum will be available to provide FAQ's and address customer's questions, concerns, and customer feedback [31]. The communication will not be limited to Samsung's website. They will also take advantage of web 2.0 tools, and social media will provide an effective opportunity for online customer relationship and communication.

Social Media Networking

With growing popularity of social media networking sites and applets, using social media will be an effective tool to reach across millions of customers. Social media sites such as Facebook have grown with 200 million users [32]. Facebook will be used to provide online presence and exposure of Samsung OLED TV and Samsung branding as a source of delivering information, maintaining customer relationship, marketing and promoting product events, advertisement, and an effective form of communicating. Using Facebook's online advertisement tool will also be tool for advertisement.

Blogs, Online Magazine, and Micro-blogs

Blogs have become a popular Web 2.0 tool that allows any writer to publish journals and writing on website. Blog sites have been increasing growing and they allow users to share information and write about their subject of interest [33]. Samsung will be approaching this strategy on using blogs as a way to share information about the latest news of OLED TV. Technology blogs will be effective tools to spread information and have tech enthusiast and

professional authors write new products releases and reviews about the OLED TV and Samsung products. Using popular online magazines can also be another mean to spread information to consumers and customers. Micro-blogging such as twitter will also be used as mean communication, updates, and customer relationships on Samsung OLED TV.

Web Advertising and Web Media

Online advertising solution can reach massive audiences and establish presence and influence over the web. Samsung will Use interactive advertisement that responds to customer and provides visual depiction of OLED TV. Web media advertisement will be used for promoting OLED TV and be advertising through famous video streaming sites like YouTube, Vimeo, Dailymotion, and Hulu. Google ad also provides online advertisement through the Google search engine.

Magazines and Media Advertisement

Traditional advertisement by ads and reviews in magazines will reach wide ranges of audience from general to niche audiences in various subjects. Television commercial and radio advertisement will also be a traditional strategy to reach audiences. These are the more expensive means of advertisement but can be the most effective methods of advertisement.

Sales Person and Public Relations

Sale person will be the most expensive solution on promotion but it can be an effective solution that allows physical and social relationship with customers. Sales people can be effective approach by using sales tactics and marketing strategies to persuade and communicate with customers on selling Samsung OLED TV. This will present both visual and aural persuasion, communication, and promotion to customers. Public relations will be another strategy to promote Samsung OLED TV to mass audience. This would happen through trade shows, events, and sponsorship.

7.4. Distribution

Samsung division is spread throughout the US. In terms of OLED TV, Samsung has a division for Samsung Electronics America and Consumer Business Division located in Ridgefield Park, New Jersey. Samsung also has Information System division that focuses on development for products including Television that is located in Silicon Valley in California [33].

Online Distribution and Distribution Alliances

Samsung will partner with online companies that will distribute and sell OLED TV. Online shopping has grown in unison with the web revolution, and Samsung partnership with authorized sellers will help distribute their products. Samsung's partnership with authorize reseller will include, but not be limited to, Amazon, B&H, Crutchfield, Newegg.com, and TigerDirect.com.

Retailer Stores and Distributive Alliances

Physical retailer stores will also serve as location of purchase for customers to have access viewing and purchasing their OLED product. Retailer stores will be partnerships that will work with Samsung as a Samsung authorized distributors. Many retailers will also have an operating website that does online distribution as well as physical retailing. Retailing stores will supply OLED TV to customer through means of physical location and online distribution. Partnerships with authorized retailers would include, but not be limited to, Sears, Fry's, Best Buy, Costco, B&H, and Circuit City.

7.5. Pricing

The conducted survey indicated that the majority of consumers are willing to spend within a price range of \$500 to \$1500 for OLED TV. A smaller percentage of potential customers would be willing to spend \$1600 to \$2500. The suggested retail price for OLED TV would range between \$1400 to \$2800 for TV dimension that is below 48 inches in diameter and \$3000 to \$6500 for TV dimension that is above 46 inches (See Appendix A – 3).

The release of OLED TV to market is a new product that is still in a very early phase. The AMOLED development is also still in the process to mature. Once the OLED TV is release in the marketing, the pricing will be available in the upper range of \$4000 to \$8000 for 46 inch and above OLED TV. As the OLED TV market and development matures and stabilizes, cost of OLED TV will lower substantially to half of the debut price. The target market for OLED TV is geared towards a demographic of customer with incomes of \$70,000 and above. Over time in a more mature market for this product the price will substantially decrease to a much more affordable price for the general public in a wider demographic income range.

7.6. Partnership and Alliances

OLED TV will include Smart TV technology that will allow users to access the Internet and network with electronic devices. With Internet connectivity Samsung will partner with various popular online sites to include a Smart TV application within their TV. Application will allow simplicity of use and instant connection for users to access Youtube, Netflix, Blockbuster, ESPN, and Hulu video that can be streamed and previewed in HD on the OLED TV. The user can launch applications that will allow them to connect to their Facebook, Twitter, and Google and allow them to listen to online radio with Pandora. Smart TV applications are all accommodates the OLED TV through partnership and alliances.

With Samsung razor slim design and the thinness of OLED may have fragility issue for the durability of the TV. To remedy the fragility issues of OLED TV revolutionary thinness, Samsung formed a partnership with Concord a glass manufacturing company that supplies extremely durable, scratch resistance, strong and clear glass. Samsung will be manufacturing their OLED TV with Gorilla glass together with Samsung Mobile devices. The Gorilla glass will enhance the robustness and durability of the OLED TV.

OLED TV will be including Smart TV apps. These will provide revolutionary quality and performance, and voice synthesis within the OLED TV. The technology will require an amount of information processing to perform. To remedy qualitative and quantitative performance, Samsung will partner with Nvidia a known PC graphic component that manufacture desktop and workstation GPU (Graphic Processing Unit) and CPU (Computer

Processing Unit) for mobile devices such as mobile phones and tablets. The OLED TV will include the latest version of the Tegra processor.

Samsung will be partnering with the EICC (Electronic Industry Citizen Coalition) for supporting sustainability and green business. This will help Samsung with their Social Corporate Responsibility initiative and plan to contribute to the environmental needs and promoting sustainability as Samsung's goals and for public relation.

8. Conclusion

Samsung looks to be the leader in OLED TV sales and distribution creating their own niche in the TV market, and making the OLED TV brand the next generation in TV technology. There is a possibility that it might be too early to introduce the OLED big screen TV to the commercial market, but Samsung has been doing well enough in the TV market the past few years that they can afford to take a loss for a couple of years on a project like the OLED TV. If projections are correct for the market then Samsung looks to reap great rewards after enduring a tough first few years. The slow start will start to pay off after the year 2015 when production costs and consumer costs look to go down enough to saturate the mainstream market. Samsung looks to have the OLED TV take over the LCD/LED and plasma brand of TVs that are currently dominating the market.

The market strategy that our group created for this product looks to optimize the value drivers by targeting a select group of demographics in the market segment. These demographics will be the best opportunity to ensure the survival of the OLED TV market. This will carry the product through a sluggish first couple of years for commercial distribution of the product. When the production costs decrease, and technology advances then Samsung will be able to enjoy the rewards of leading the way into the OLED TV market.

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Appendix A – 1: Survey Results

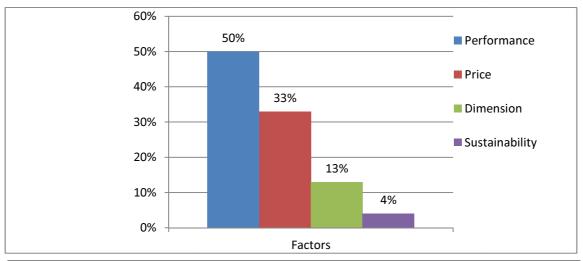


Figure 1 – TV Decision Making Factors

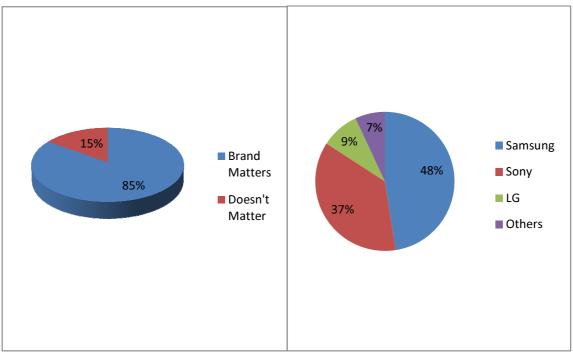


Figure 2 – Brand Impact of Purchasing Decision

Figure 3 – Brand Preference When Buying a TV

Appendix A – 2: Survey Results Cont'd

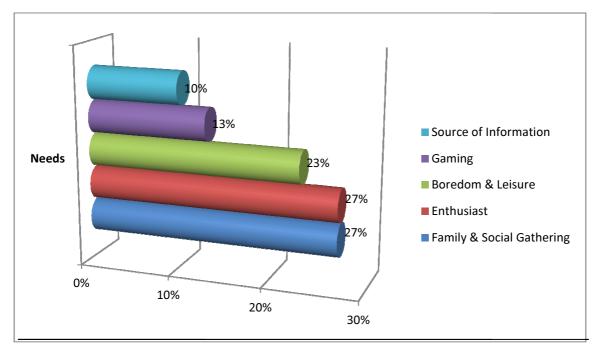


Figure 4 – Customers' Needs for Buying a TV

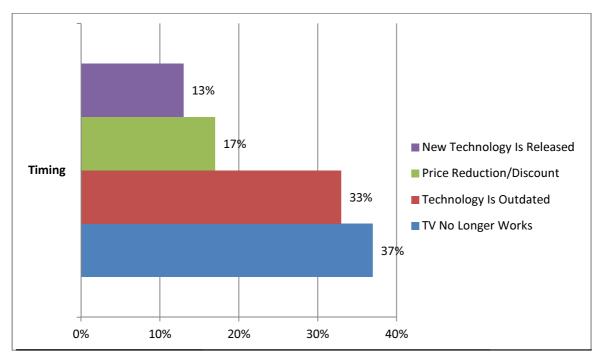
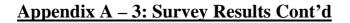


Figure 5 – The Time to Purchase a New TV



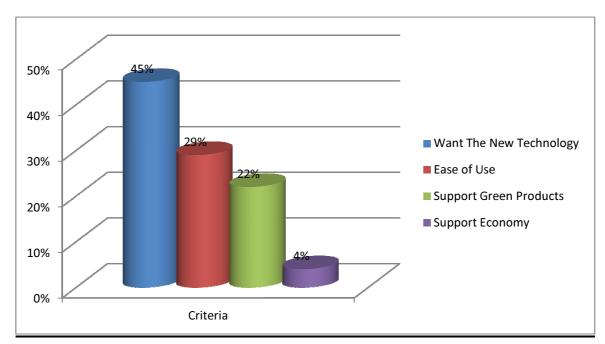


Figure 6 – The Criteria for Buying an OLED TV

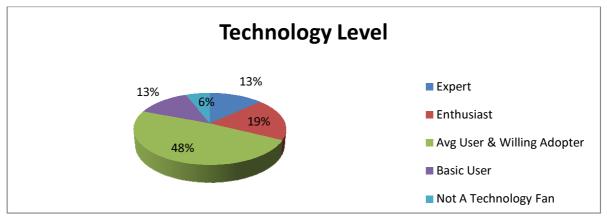


Figure 7 – The Technology Level of the Customers

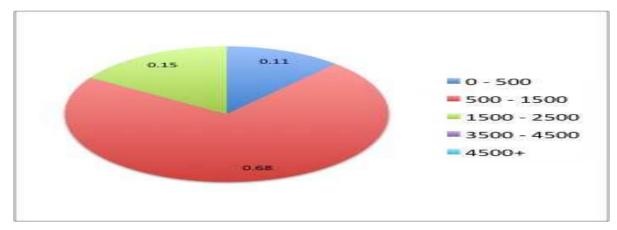


Figure 8 – Pricing of the OLED T

Appendix B: Marketing Research Log

Marketing Research Log

Samsung OLED TV Marketing Plan

Baraa Abudawod Chris Davis Christophe Perrenoud Farshad Madani

Project Plan

We developed following scheduled plan to gain the objectives of the research, market plan. All activities have done over the below scheduling. To do these activities, the team has had one meeting per week in average.

	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11
Phase 1- Finding main Idea											
Phase 2- Preliminary											
Marketing Plan											
Phase 3- Market Survey											
Phase 4- Situation Analysis											
Phase 5- Market Planning											

Phase 1- Finding main idea

In this phase every member of the team searches in the internet to find their own favorite idea. The results were:

- 1- OLED TV
- 2- Construction Materials
- 3- Smart Robots
- 4- Nanotechnology (Functionalized surfaces)
- 5- Smart Automobiles

After finding draft ideas, members studied alternatives in a meeting and discussed and prioritized by using factors including data availability, the position of technology in its life cycle, and having specific product(s). In this meeting OLED TV was chosen as the first choice and smart car and smart automobiles selected as backup options.

The main ides presented in the class and finally Samsung OLED TV was opted as the subject of team's marketing research.

Phase 2 – Preliminary Marketing Plan

To determine the approach of the study and preparing an executive plan, the team reviewed following resources:

- Book references introduced in the class
- Sample reports in ETM's site

After reviewing all above resources, the team designed the process of the research as below:



Based on this model, team, firstly, is going to analyze customer values and competitive situation to find a comprehensive recognition from customers, suppliers, and rivals. Regarding this process the team developed the following content for the report:



After determining process and framework of the research, the following tasks were assigned to the members:

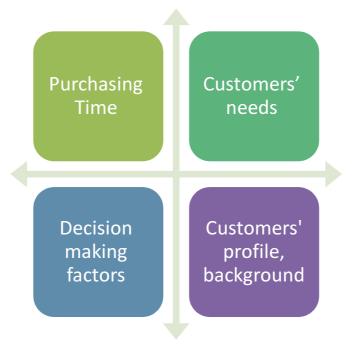
- Investigating around OLED technology
- Studying OLED TVs features and advantages
- Searching on OLED TV market forecasting
- Comparison OLED TV Competitors
- Studying Customers

After a week, the team discussed about the main problems in customers' view and found customers are concerned mostly about these problems:

-pleasant feeling	-energy efficiency
-connectivity	leisure time
-sustainability	-ease of use

Phase 3 – Market Survey

To deepen cognition from customers, the team designed below conceptual model:



After that, our team met two times to generate questions for the survey. Those questions are listed below:

• Others

Which features is most favorable in a TV.

- Connectivity and Synchronization (Ex. Internet, Mobile Devices, PC, ETC..)
- 3D Graphics and capability
- Simplicity and ease of use
- Image Quality
 Which of these following b

Which of these following best describe your needs for a TV?

- Family and Social Gathering
- D Boredom and Leisure
- Companionship
- 🖸 Gaming
- Source of Information
- Enthusiast (Ex. Movie, Drama, Technology, ETC..)

When do you see yourself buying a television?

- 🖸 When the current television no longer works.
- D When new TV technology is release.
- D When the price is reduced or lowered.
- When the current technology is outdated.
 Which of these statement appeals to you the most?
- I would buy the OLED TV because I like to support green products.
- I would buy the OLED TV because I always want the new technology.
- I would buy the OLED TV because I want to support the economy.

What is the most important factors in buying a TV

- Price
- Performance
- Dimension
- Sustainability (Ex. Energy Efficient, Toxic Free, Recyclable, etc..)

What kind of TV do your currently owned?

- 🔹 🖸 Plasma TV
- , 🖸 LCD TV
- 🔹 🔲 LED Backlight LCD TV
- 🗖 DLP TV
- CRT TV

What is the current brand of your TV?

- , 🖸 Samsung
- Sony
- LG
- Panasonic
- , 🖸 Toshiba
- , 🖸 Others
 - 1. Does brand impact your decision in buying a TV?
- 🖸 _{Yes}
- 🖸 _{No}

If yes, which of these brands would you choose?

- Samsung
- Sony
- 🖸 _{LG}

- Average technology users and willing adopter.
- Basic user of technology and can manage.
- Technology is little hard to follow and it is not my thing.

Age

- 🖸 Under 18
- **1**8 24
- 25 34
- . 35 45
- • 45+ Gender
- 🖸 Male
- 🖸 Female

• I would buy the OLED TV because I want a product that's easy to operate

What is the maximum price that you are willing to pay for an OLED TV?

- **•** \$0 \$500
- \$500 \$1500
- \$1500 \$2500
- \$2500 \$3500
- S3500 \$4500
- 🖸 _{\$4500+}

How would you rate yourself in term of technology?

- Expert in technology guru, know all the in and outs.
- Technology enthusiast, up to date with current technology.

Based on above model, the final questionnaire was distributed using Quatrics software which was available online through this link:

https://qtrial.qualtrics.com/SE/?SID=SV_6L52ov5KAATFOPG

Phase 4 – Situation/Market Analysis

4-1- Customer Analysis

Based on statistics derived from survey analysis and previous studies, the team tried to complete the following matrix to determine what customers need and what values we can propose to them.

	Customer Needs	The Whole Product				
		Product	Solution	Experience		
Financial						
Psychological (Individual)						
Social						

To complete the matrix, the team followed these steps:

- Each member spent 15 minutes to do research or find a approach to customer needs
 - o Farshad designed a matrix approach with economical, psychological,
 - o Christophe: Brainstormed needs, behaviors, and do breakdown
 - o Chris: Strategized various customers needs through.
 - Baraa: found information and technological to approach customer.
- Listing Information on matrix Making table

- Quality of product matrix
 - Sustainability
 - Economics
 - Aesthetical
 - Dissipation
- Defining experiences in product
 - Aesthetics
 - Networking
 - Ease of use

According this process, the team succeeded to develop drivers as below:

Drivers	Type of Value
Supporting Green Products	Emotional/Social/Psychological
Owning the Newest Technology	Emotional/Psychological
Ease of Use	Operational/Technical
High Performance (E.g., Connectivity, High Image Quality, & 3D Graphics & Capability)	Operational/Technical
Entertainment (E.g., Movies, Games, & etc)	Emotional/Psychological
Brand	Emotional/Social

Among above values these values were considered as CRTAs:

- The OLED TV fulfills the customer's need of being up-to-date with technology and setting a social status.
- OLED TV satisfies the customer's esteem by contributing in saving/protecting the environment.

In next step, the team found possible segments in the market based on the market survey. Each of segments was introduced by determining customers' profile such as age, gender, and need. The four-main segments are:

- Technology Enthusiasm & Desire for New Technology

- Need A New TV
- Family & Social Gathering
- Boredom, Leisure, and Diversion

4-2- Competitive Analysis

The second step in situation analysis is competitive analysis. In this step, the team tried to find business facts about competitive forces based on Porter's five-force model.



The Five Forces That Shape Industry Competition

from "The Five Competitive Forces That Shape Strategy" by Michael E. Porter, Harvard Business Review, January 2008

Based on Porter's model, the team found that:

• Competitors:

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- LG Was one of two companies to unveil 55 inch OLED TV.
- Sony Is the leader in OLED display technology but has not yet produced a display over 13 inch.
- Panasonic is rumored to be setting up a pilot production line.

• Major Suppliers:

- Sony Has been a leading innovator and forward-thinker in bringing OLED technology to the market.
- eMagin eMagin is the first and only OLED manufacturer of active matrix OLED-on-silicon micro displays.
- Chi Mei Optoelectronics CMEL is fully devoted to the R&D, design, production, and sales of OLED panels. CMEL currently focuses on small and medium-sized OLED panel production.
- Other suppliers include TPO Toppoly Optoelectronics; OSD Displays;
 Dynamic-Organic-light; Inteltronic; Dupont to name a few.

• Buyers:

- Price is going to be up to three times more than substitute products like LCD/LED and plasma brand TV's.
- Many other products perform well enough for customers standards of a TV, and also meet customers standards for energy efficiency.
- Samsung OLED TV does not have enough compelling reasons for the mainstream market to switch to OLED brand of TV.

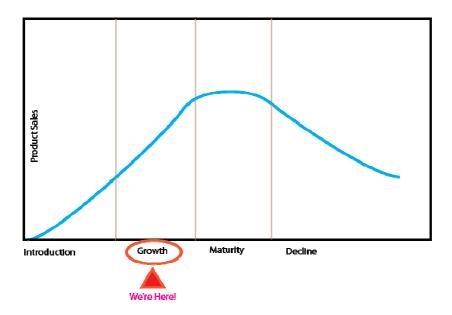
• Substitutes

- \circ Clear OLED TV TV so thin that it would be see through when shut off.
- Holographic TV Prototype is slated to be introduced in 2016.
- Substitute Products: High Level Threat
- $\circ \quad LCD/LED \ brand \ TV$
- Plasma TV

To have a conclusion on competitive analysis, the team developed SWOT analysis:

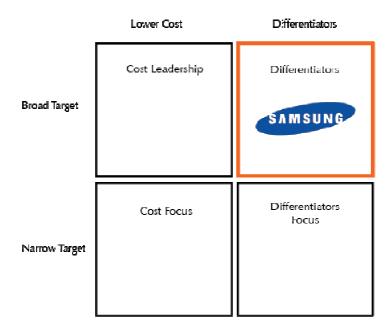
- Strengths
 - Better overall performance than any other brand of TV on the market.
 - An OLED display works without a <u>backlight</u>. Thus, it can display deep <u>black levels</u> and can be thinner and lighter than a <u>liquid</u> <u>crystal display(LCD)</u>
- Weakness'
 - Price: OLED technology in a TV that is 40 inch or greater is projected to cost up to three times higher than any other TV technology on the market.
 - Life span of the TV is currently not as long as the LCD brand of TV.
- Opportunities:
 - Developing online capabilities and partnering with companies such as Google, Facebook, Amazon, and Netflix
 - Have ability to really hurt Sony and Panasonic TV market share with there lagging efforts to start manufacturing of an OLED TV.
- Threats
 - Sony & LG partnering would cause a significant threat.
 - China & Japan research & development on OLED technology.
 - Process innovation threats of OLED TV development.
 - Cost leadership threats of OLED TV development.

However, OLED technology is assumed radical technology; OLED TV is assumed an incremental product. So the team didn't need to pursue marketing rules concerning radical products. The position of OLED TV in its life cycle is demonstrated in the following graph.



Phase 5 – Market Planning

The team developed business strategy based on competitive analysis by using the following matrix:



Regarding Differentiation Strategy, the team developed this marketing position statement:

Samsung Television will continue to lead the competition with superb image quality, performance, slim design, energy efficiency and high quality OLED TV to the next decade

Before developing market strategies based on 4Ps, the team needed to find target markets. So they followed these steps:

- Determining Market segments Based on market survey
- Evaluating market segments based on
- Determining target markets
- Determining customers profiles in target segments

As mentioned before the segments are:

- Technology Enthusiasm & Desire for New Technology
- Need A New TV
- Family & Social Gathering
- Boredom, Leisure, and Diversion

To evaluate these segments, the following framework was used by the team:

Segment	Size	Growth	Level of	Capability	Attractiveness
			Competition		
Technology					
Enthusiasm &					
Desire for New					

Technology			
Need A New			
тν			
Family & Social			
Gathering			
Boredom,			
Leisure, and			
Diversion			

And at the end, the profiles of segments were developed as below:

Segments	Customers Profile	%
Technology Enthusiasm & Desire for New Technology	 Mostly males between 25 to 34 years old Upper class or upper-middle class Interested in high-performance and easy-to-use products Ease of use is vey important to this segment Must own the newest/latest technology Mostly average users and willing adopters 	45%
Need A New TV	 Males and females between 25 to 34 years old Upper class or upper-middle class Loyal Samsung customers Support green products Want to have the new technology 	37%
Family & Social Gathering	 Mostly families Interested in high-performance and easy-to-use products want to be up-to-date with technology 	27%
Boredom, Leisure, and Diversion	 Mostly males between 25 to 34 years old Price is the most important decision factor Want to support green products Want a product that's easy to use 	23%

Marketing strategies were developed for product, Place, Price, and Promotion separately as below:

Product strategy:

- Supply superb picture quality and performance in OLED TV.
- Enhance connectivity and smart technology in OLED TV.
- Supplying energy efficiency for all OLED products.
- Sustaining customer brand loyalty and product quality.
- Continue to provide aesthetically slim and elegant design of OLED TV.

Place and Distribution Channels:

Online Internet Shop

- Amazon
- Newegg's
- Tiger Direct
- Crutchfield

Retailers Shops

- Best Buy
- Sears
- Fry's
- Costco
- B&H
- Circuit City

Samsung Headquarters

- California (Northwest)
- New Jersey (East cost)

Price Strategy:

- Samsung and LG 55 inch OLED TV is projected to cost \$8000 in the first year of entrant to the market, with the price falling sharply to \$4000 in the next year following, with improvements in manufacturing.
- Researchers developed new pure-organic OLED materials, can help make OLEDs cheaper

Partnership and Alliances

Complementors

Smart TV Applications Youtube Facebook Netflix Twitter Blockbuster Pandora Hulu Google ESPN Samsung Corp Supplier Corning Gorilla Glass Durable Damaged Resistance Glass use for TV Screen Nvidia Dual core Nvidia Tegra # Processor Nanosys Development

Samsung Corporate Social Responsibility

Electronic Industry Citizenship Coalition

Promotion Strategy

Digital Communication

- Social Networking
 - Facebook

- Twitter
- Google
- Forums
- Web and Media Advertisement
- Tech blogs and Online Magazines
- Web pages
- Samsung Blogs
- Sales Person

• Magazines and Media

- Entertainment Magazines
- Hobbyist Magazines
- Tech Magazines
- Gossip Magazines
- Movies and Gaming
- Consumer Report
- TV Ads
- TV Show sponsorship

• Public Relationship

- Physical Advertisement for Events
- Sport Events
- Sponsorship
- Gaming Events
- 2012 Olympics London

• Trade shows

Based on official report, OLED TV shipment is forecasted which is showed in the following graphs:

