

Case Study of Supply Chain Management:

Two foremost Smart phones

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Abstract

Supply chain management is used by most of the organizations worldwide; therefore the large number of studies has been done to explore this field. Every business fits into one or more supply chains and has a vital role in each of them. Today, the practice of supply chain management is becoming extremely important to achieve and maintain competitiveness. Many firms are just now beginning to realize the importance of supply chain integration. This paper provides some information and comparison between the supply chain management of the two main leaders of the smartphone market which are Apple and Samsung. Apple Inc. and Samsung are the two most common smartphone brands now holding most of the market shares all around the world. The reasons which made them the leader of the smartphone industry are various. This research paper first presents the case study of Apple and Samsung and then focused on comparative analysis of various aspects of Apple and Samsung such as market demand, growth, brand value, design, profit, pricing strategies.

Keywords:

Supply chain management, Apple, Samsung, Quality, Quality management, Smartphone, Enterprise

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Introduction

Supply Chain Management

SCM is management of material and information flow in a supply chain to provide the highest degree of customer satisfaction at the lowest possible cost. The supply chain management is the integration of key business processes from initial raw material extraction to the final end customer, including intermediate processing, transportation and storage activities and final sale to the end customer. These companies, acting on purchase orders and specifications they have received from component manufacturers, turn the raw materials into materials that are usable by these customers.

SCM requires commitment of supply chain partners to work closely to coordinate order generation, order taking and order fulfillment .Supply chains encompass the companies and the business activities needed to design, make, deliver and use a product or service. Businesses depend on their supply chains to provide them with what they need to survive .

Objectives of study

- 5. To understand the technology behind existing smartphones Apple and Samsung.
- 6. To analyze difference between them.
- 7. To study buyer preferences, existing market, growth and future of these phones.
- 8. To study various challenges faced.

Research Methodology

This research is descriptive in nature. The data collected for doing this research is collected from different websites, research journals, newspapers, books etc. Secondary data set is used to make this research useful and worthy

Case Study of Apple Supply Chain

What is Apple Inc.?

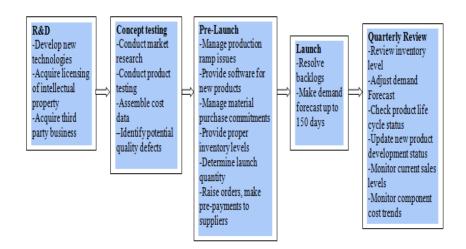
Apple Inc. is an American multinational corporation headquartered in Cupertino, California, America. It develops designs and sells computer software, personal computer and other electric devices. The computer software of this company are the OS X and iOS systems, iTunes media browser, the Safari web browser, the iLife and iWork creativity and productivity collections. This company was established on 1st April 1976 and



registered as Apple Computer Inc. on 3th January 1977. On 9th January 2007, it changed to Apple Inc. and it was also the day that Steve Jobs introduced the iPhone.

Apple's Supply Chain Model

Apple Inc is the world leader in Innovation, Branding and Software Ecosystem. When it comes to supply chain management practices, many people believe that its supply chain model and sophisticated software system are the secret weapons that help them maintain the market leadership. IT research firm Gartner ranks Apple Supply Chain as the best supply chain in the world for 4 years in a row. The following case study shows the analysis of Apple Supply Chain core processes.

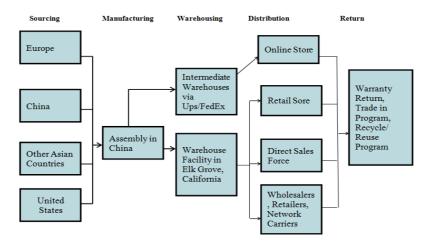


Supply Chain Planning at Apple Inc.

Supply Chain Planning at Apple Inc. is the classic example of New Product Development Process (NPD). It's the integration of R&D(Research and Development), Marketing and various functions under supply chain management. From the above graphic, Apple Inc. accelerates the new product introduction by acquiring the licensing and 3rd party businesses. Fascinating fact is that Apple Inc. has to make the pre-payments to some suppliers to secure the strategic raw materials



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Supply Chain Map is the way to express a large system from the points of origin to consumption. Apple Inc purchases raw materials and components from various suppliers, then get them shipped to an assembling plant in China. From there, assembler will ship products directly to consumers via UPS/FedEx for those who buy from the Apple's Online Store. For other distribution channels such as retail stores, direct sales and other distributors, Apple Inc will keep products at Elk Grove, California and supply products from there. At the end of product's life, customer can send products back to the nearest Apple Stores or dedicated recycling facilities.

CASE STUDY OF SAMSUNG SUPPLY CHAIN

What is Samsung?

Samsung Group is a South Korean multinational company headquartered in Samsung Town, Seoul, South Korea. It contains many different subsidiaries and affiliated businesses .Samsung was created by Lee Byung-chul in 1938 as a trading company. Over three decades, Samsung group had expanded into many different areas including food processing, textiles, insurance, securities and retail. Around the 1990s, Samsung had globalized its activities, and electronic industry especially mobile phones and semiconductors which had become the Samsung Group most important source of income.

Today Samsung Electronics has proven to be one of the most successful global brands to follow. In supply chain management context, they have demonstrated the operational excellence that leads them to the supply chain hall of fame. This article explains the case study of Samsung Inc.



Samsung's Supply Chain



7 Supply Chain Transformations in Samsung

1) Listen to Voice of Customer

- 2) Adopt Six Sigma Methodologies: Based on "quality movement" in the electronics industry, Samsung believes they can improve the internal operations drastically using Six Sigma. Then they study various Six Sigma approaches from GE, Dupont and Honeywell.
- 3) Utilize APS system: Since the electronics market changes quickly, they need to be able to create a flexible production plan. So they implement APS system which brings the remarkable success.
- **4) Setup Cross Functional Team:** They use the system called "Voice of Business" in which they gather the internal requirements and establish an action plan based on collective decision.
- 5) Streamline Performance Evaluation System: Samsung gradually integrate the merit-based system and allow high performers to have the fast track career path.
- 6) Standardize Processes and Parts: To achieve the economy of scale, Samsung standardize processes and parts. This also enables them to manage product quality moreeffectively due to the ease of control.



7) Establish Risk Management System: They implement a very comprehensive risk management system and their risk mitigation strategies are low inventory level, flexible capacity and redundant suppliers.

COMPARISION BETWEEN APPLE AND SAMSUNG

Innovation

From some recent times, Apple surpasses everybody with its new product breakthroughs: iPod, iPhone and iPad. Jong-Kyun Shin, the Samsung President/CEO tried the innovation with the Galaxy S4. Galaxy S4 has features unique to Samsung like Air Gesture that detect hand gestures. But the reviews of the hand and eye gestures in the Galaxy S4 suggest that they are not "fully-baked "and they actually slow the phone down and are more like just eye catching devices. Critics reviews of the Galaxy Gear smart-watch have also not been great, and it has only sold 800,000 units since its launch two months ago. But in contrast, the fingerprint sensor unique to the new iPhone 5s has been well-received and is thought to have been well-executed.

Originality

Apple was the first to have the original idea of a touch screen phone, and called it the iPhone. After copyrighting it, they were soon copied by Samsung. Apple's technology is sleeker and more efficient than that of Samsung. The Macbook Air is trendy andsmart. The app store is huge. But in case of Samsung, Google Play is complex and there are many bugs.

CEO & Leadership

Samsung has not just one but three CEOs. In post since June 2012, <u>Dr. Oh-Hyun Kwon</u> is Vice Chairman & CEO. Then in March 2013, Samsung also promoted two of its presidents to CEO, Jong-Kyun Shin, who heads up Samsung's mobile division, and also Boo-Keun Yoon, head of the appliances division. Under <u>Kwon</u>, Samsung became the second largest chip maker in the world.

In case of Apple, Tim Cook is the only CEO On August 24, 2011; Jobs resigned his position as CEO of Apple. He was replaced by Tim Cook

Brand

The Apple brand and logo are currently more recognized around the Western world, and in London and New York. The Brand Finance Global 500 2013 puts Apple and Samsung right at the very top of the best brands in the world, ahead of Google, Microsoft and



Coca-cola. Apple may sit in top position now, but Samsung is catching up and is already no. 2.

ADVERTISING & PROMOTION

Samsung spends a bigger chunk of its annual revenue on advertising and promotion than any other of the world's top-20 companies by sales -5.4%, according to Thomson Reuters data. Apple spends just 0.6%.

Design

When the iPhone was launched in 2007, its all-touchscreen and single-button front was distinctive and simple. Apple has enhanced the design over the years with glass casing and then unibody aluminum, but fundamentally it remains unchanged. The iPad takes the same design cues and it gets ever lighter and thinner. Apple's aluminum MacBooks and iMacs are widely considered to be the most beautiful, slick and minimal.

Samsung's current flagship the Galaxy S4 in some aspects has a less polished look than the iPhone 5s, with a polycarbonate plastic backing. However, it has a singular design feature: big, beautiful, highest-definition screens that dwarf the iPhone and its "Retina" display. The design is "good enough" for consumers who are more focused on features, price and a bigger screen canvas.

Ecosystem & User Experience

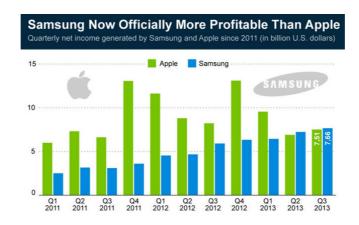
Apple products have made technology more accessible and made us more connected. About 1,000,000 apps are available in the App Store to download and have a very powerful platform that is flawless across multiple devices.

Samsung on the other hand is highly reliant on Google's Android mobile operating system for smartphones and tablets, and on Microsoft for Windows PCs. Where Samsung adds onto its devices its own user interface, this is sometimes considered to be "bloatware" that gets in the way of the user experience and duplicates or slows down the core Android or Windows operating system.

Profits & Growth

The most recent Fortune 500 Global rankings of worldwide companies (based on revenue in their fiscal years ended on or before March 31st, 2013) shows that Samsung topped Apple with revenue totaling \$178.6 billion, compared to \$156.5 bn.

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This might be changing – this graph from Business Insider shows that, for the last two quarters, Samsung's profits were actually higher than Apple's. Having settled into a pattern of releasing new iPhones and iPads in September/October, Apple is now highly reliant on the holiday quarter in Q4

For now, Apple's iPhone business is holding up well – it sold 150 million iPhones in its last fiscal year ending in September, as well as 71 million iPads.

OVERALL: ANALYSIS

	APPLE	SAMSUNG
INNOVATION	✓	✓
ORIGINALITY	√	•
CEO & LEADERSHIP	•	✓
TEAM		
BRAND	✓	•
ADVERTISING &	✓	✓
PROMOTION		
DESIGN	√	•
ECOSYSTEM & USER	✓	•
EXPERIENCE		
PROFITS & GROWTH	•	✓



So overall today they seem to be neck and neck but the growth of Samsung to be steadier and more sustained. We're all fascinated by Apple. Right now it remains a profit generating machine, but long-term that will change if it fails to recapture the public imagination and innovate into new product categories. Samsung has weathered years of legal action, and having initially copied parts of the Apple playbook, it is now starting to innovate into new areas.

LITERATURE SURVEY

Kong Ping Sin, in the paper "The Comparison between Two Main Leaders of Cell phone Industries Apple and Samsung in terms of Pricing Strategies and Market Demands" does the comparison on the various smart phone brands and concludes that Apple is the leader of the smartphone market but Samsung is the strong competitor for Apple now.

Basu Rana et.al identified and prioritizes the risk factors in context to supply chain management of Indian manufacturing organizations. They deal with the risk issues and thus empirically assess which risk factors are most influencing one in supply chain operations. Their study provides the partial support for the explanation of risk mitigating issues in context to Indian supply chain matters

Datta Shoumen et.al explored advanced forecasting tools for decision support in supply chain scenarios and provided preliminary simulation results from their impact on demand amplification. The proposed advanced forecasting models, by its very construction require high volume data.

Haywood Maj. Marc et.al studied the management of supply chain vulnerability in UK aerospace manufacturing. It examines the problem from a multiple-organization perspective, using an assembler of military aircraft, the Prime Contractor, as its point of embarkation. The risks readily identified by aerospace supply chain managers were the consequential risks to supply chain performance arising from other managerial practices and industry trends.

Kim Soo Wook concluded in their study that SC integration may have a significant influence on the linkage between SCM practice and competition capability inversely. They concluded that SC integration may have a significant influence on the linkage between SCM practice and competition capability inversely



Kleindorfer Paul R. et.al studied the risks, which may arise from natural disasters, from strikes and economic disruptions, and from acts of purposeful agents, including terrorists, integrated Enterprise Risk Management (ERM) systems. The challenges in managing disruption risks in supply chains encompass both levels of these management systems.

Maha Al Azzawiet.al in the paper "Students Brand Preferences between Apple and Samsung Smartphone" compares the brand value of Apple and Samsung based on the various factors. They conclude that Apple is more innovative as compare to Samsung.

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