



School of Social Science

Master of Business Administration (MBA)

Postgraduate Dissertation

Marketing and targeting strategies in telecommunication sector:

The case of Cisco

Vassiliki Galouni

Supervisor: Dr. Ioannis Pollalis

Patras, Greece, June 2021

Theses / Dissertations remain the intellectual property of students (“authors/creators”), but in the context of open access policy they grant to the HOU a non-exclusive license to use the right of reproduction, customisation, public lending, presentation to an audience and digital dissemination thereof internationally, in electronic form and by any means for teaching and research purposes, for no fee and throughout the duration of intellectual property rights. Free access to the full text for studying and reading does not in any way mean that the author/creator shall allocate his/her intellectual property rights, nor shall he/she allow the reproduction, republication, copy, storage, sale, commercial use, transmission, distribution, publication, execution, downloading, uploading, translating, modifying in any way, of any part or summary of the dissertation, without the explicit prior written consent of the author/creator. Creators retain all their moral and property rights.



Marketing and targeting strategies in telecommunication sector:

The case of Cisco

Vassiliki Galouni

Supervising Committee

Supervisor:

Dr. Ioannis Pollalis

International Hellenic University

Co-Supervisor:

Dr. Panagiotis Choudalas

University of Piraeus

Patras, Greece, June 2021

“Dedicated to my wonderful kids: Anna, Anastasia, Ariadne, George”

Abstract

This paper is concerned with the Cisco Systems company, a giant – business of the telecommunications and networking industry. This company is mainly known for its high innovativeness, the fact that it is a market leader and from the fact that it offers solutions with products and services, solving networking issues.

In particular, we will conduct a marketing analysis, by analyzing the marketing strategy, the business strategy and the targeting strategy of the company.

We will focus on its competitive advantages and the techniques Cisco uses to remain a market leader.

From our research, we have concluded, that Cisco focuses mostly on the acquiring of information from the market – in many cases with the use of artificial intelligence techniques – to be able to foresee what the future market needs will be and to bring these products that cover these needs earlier into the market than its competitors.

Keywords

Pestel Analysis, Porter's Five Forces, SWOT Analysis, Marketing Mix (4Ps)

Στρατηγικές μάρκετινγκ και στόχευσης στον τομέα τηλεπικοινωνιών: Η περίπτωση της Cisco

Βασιλική Γαλούνη

Περίληψη

Η παρούσα μελέτη ασχολείται με την εταιρεία Cisco Systems, μια επιχείρηση γίγαντα του κλάδου των τηλεπικοινωνιών και δικτύων υπολογιστών. Η εταιρεία είναι κυρίως γνωστή για την υψηλή καινοτομικότητα της, το γεγονός ότι είναι ηγέτης στην αγορά και από τις λύσεις που προσφέρει με τα προϊόντα και της υπηρεσίες της σε θέματα δικτύου.

Συγκεκριμένα, θα προβούμε σε μια ανάλυση μάρκετινγκ, αναλύοντας τη στρατηγική μάρκετινγκ της επιχείρησης, τη γενικότερη επιχειρησιακή στρατηγική αλλά και τη στρατηγική στόχευσης της εταιρείας.

Θα εστιάσουμε στα ανταγωνιστικά πλεονεκτήματα της Cisco, και τις τεχνικές που χρησιμοποιεί για να παραμένει ηγέτης στην αγορά.

Από την έρευνα μας συμπεράναμε, ότι η Cisco εστιάζει πολύ στην απόκτηση πληροφορήσης από την αγορά – πολλές φορές και με τη χρήση τεχνολογιών τεχνητής νοημοσύνης – για να προβλέπει ποιες θα είναι οι μελλοντικές ανάγκες των καταναλωτών και να φέρνει τα προϊόντα που καλύπτουν αυτές τις ανάγκες στην αγορά νωρίτερα από τους ανταγωνιστές.

Λέξεις – Κλειδιά

Ανάλυση Πέστελ, Οι 5 δυνάμεις του Πόρτερ, Ανάλυση Σουότ, Μίξη Μάρκετινγκ (4Π)

Table of Contents

Abstract	vii
Περίληψη.....	viii
Table of Contents	ix
List of Figures	xi
List of Tables.....	xii
List of Abbreviations & Acronyms	xiii
1. Literature review and conceptual framework	1
1.1 Marketing Definition.....	1
1.2 Marketing Mix	2
1.3 Marketing Mix strategies	5
1.4 Telecommunications Services in Greece	12
2. Company Background.....	14
2.1 Market Environment	15
2.2 Pestel Analysis	15
2.2.1 Political Environment.....	15
2.2.2 Economic Environment.....	16
2.2.3 Social Environment.....	17
2.2.4 Technological Environment	18
2.2.5 Environmental Factors	18
2.2.6 Legal Environment.....	19
2.3 Porter's Five Forces Analysis	20
2.3.1 Threats of New Entrants.....	20
2.3.2 Bargaining Power of Suppliers	21
2.3.3 Bargaining Power of Buyers	21
2.3.4 Threats of Substitute Products or Services.....	22
2.3.5 Rivalry among the Existing Competitors	22
3. Cisco's Strategy and Organization.....	23
3.1 Stage One - The initial acquisitions era	23
3.2 Stage Two - The recruiting effort of the most talented employees.....	23
3.3 Stage Three - The effort to retain new hires	24
3.4 Stage Four - The troubling times. Industry's down-turn in 2000	24
3.5 Stage Five - The turn from the acquisitions strategy to productivity and profitability	25
3.6 Stage Six - A new Human capital strategy. From buying talents to produce them internally	25
3.7 Stage Seven - Cisco's strategy in 2009	26
3.7.1 Capturing Market Transitions	27
3.8 Stage Eight - Cisco's strategy nowadays	27
4. Cisco's Marketing Strategy	28
4.1 Market Orientation	28
4.1.1 Customer and Market Focus	28
4.1.2 Relationship Strategies.....	29
4.1.3 Elements of Market Orientation	30

4.1.4 Marketing objectives	30
4.1.5 Action programs	30
4.1.6 Budget	31
4.1.7 Competitive advantage of Cisco	31
4.1.8 BCG Matrix in the Marketing strategy of Cisco	32
4.1.9 Distribution strategy in the Marketing strategy of Cisco	32
4.2 Competitive Analysis	32
4.2.1 Competitor and Issues Analysis	32
4.3 Customer analysis in the Marketing strategy of Cisco.....	34
4.4 Cisco's Marketing Mix (4Ps)	34
4.4.1 1. Product	35
4.4.2 2. Place	36
4.4.3 3. Price.....	36
4.4.4 4. Promotion.....	37
4.5 SWOT Analysis of Cisco	38
4.5.1 1. Strengths.....	38
4.5.2 2. Weaknesses	39
4.5.3 3. Opportunities.....	39
4.5.4 4. Threats.....	39
5. Cisco's Targeting Strategy	40
5.1 Sustained Differentiation across Customer Segments and Geographies	40
5.2 Cisco Channel Strategy	41
5.3 The Next Market Segmentation for Cisco	41
5.4 Cisco Key Success Factor	41
5.5 Managing the Product Mix – Positioning and Repositioning	42
5.5.1 Brand Measure	42
5.5.2 Market Share	42
5.6 Cisco Ansoff Analysis.....	42
5.6.1 Market Penetration	42
5.6.2 Market Development.....	43
5.6.3 Product Development.....	43
5.7 Diversification.....	44
5.8 Managing product over time – Product Life Cycle.....	44
5.9 The results	46
6. The Internet and e-commerce at Cisco.....	48
6.1 A. Cisco connection online (CCO) – Cisco's website	48
6.1.1 1. Marketplace.....	48
6.1.2 2. Technical assistance and software library	48
6.1.3 3. Customer service	48
6.1.4 4. Internetworking product center	49
6.1.5 5. Cisco supplier connection (CSC).....	49
6.2 B. Intranet – Cisco's Employee Communication.....	49
6.3 Benefits from the use of Internet and e-commerce for Cisco	49
7. Financial Performance of Cisco for the Fiscal Year 2020	51
8. Conclusion.....	54
References	55

List of Figures

Graph 1. Sub-Market market shares (3Q 2017)	33
Graph 2. Market Revenues (2018)	34
Graph 3. Cisco Systems Revenue 2007-2017	52
Graph 4. Cisco Systems Revenue 1995 – 2020	52
Graph 5. Cisco vs IBM dividend policy.....	53

List of Tables

Table 1. Political factors that affect Cisco	16
Table 2. Economic factors that affect Cisco	17
Table 3. Social factors that affect Cisco.....	17
Table 4. Technological Factors that affect Cisco.....	18
Table 5. Environmental factors that affect Cisco.....	19
Table 6. Legal Environment factors that affect Cisco.....	20
Table 7. Marketing Budget Allocation in Cisco	31
Table 8. Competitive advantages of Cisco.....	32
Table 9. Main competitors of Cisco	33
Table 10. Product Life-Cycle in Cisco.....	45

List of Abbreviations & Acronyms

PESTEL	Political, Economic, Social, Technological, Environmental and Legal
ATM	Automated Teller Machine
OTE	Οργανισμός Τηλεπικοινωνιών Ελλάδος
3G	3 rd Generation
4G	4 th Generation
CEO	Chief Executive Officer
IT	Information Technology
R&D	Research and Development
CV	Curriculum Vitae
SWOT	Strengths, Weaknesses, Opportunities, and Threats
B2B	Business to Business
B2C	Business to Customer
ISP	Internet service Provider
CCNA	Cisco Certified Network Associate
CCNP	Cisco Certified Network Professional
CCIE	Cisco Certified Internetwork Expert
CCO	Cisco Connection Online
IP	Internet Protocol
VPN	Virtual Private Network
AI	Artificial intelligence
NPS	Net Promoter Score
SEO	Search Engine Optimazion
ERP	Enterprise resource planning
CSC	Cisco Supplier Connection
CEC	Cisco's Employee Communication
EMEA	Europe, Middle East, and Africa
APJC	Asia Pacific, Japan and China
GAAP	Generally Accepted Accounting Principles
EPS	Earnings per share

1. Literature review and conceptual framework

1.1 Marketing Definition

Marketing is everywhere, it is in our daily lives, it affects our behavior but is also influenced by it since every day we accept infinite information from TV ads, magazines and the internet, which is key element of marketing strategy. Marketing for businesses is becoming more and more necessary, as the customer is now more informed, educated and demanding and societies are now are highly consuming, which requires good knowledge and use of marketing by businesses or organizations.

But what is marketing and why is marketing needed so much? This is answered by many famous and great economists such as Kotler. According to Kotler (2000) “Marketing is a social and a management process by which individuals and groups obtain what they need and through the production, supply and exchange of products of value with others”. Of course there are still dozens of definitions for marketing, written by various authors / economists, differently worded but with the same meaning and substance.

Another definition therefore says that “Marketing is the execution of activities that direct the flow of goods and services from producer to consumer” (Malliaris, 1990). According to Zotos, (1992) “the function of marketing within the company emphasizes the rational organization of the productive resources of the company, with the ultimate goal of achieving the greatest profit”.

All of these definitions come to a common conclusion about that Marketing in general is the effort, usually, of a business or organization to satisfy the needs and desires of the customer by offering products and services which are based on understanding their needs, proper advertising and their promotion, in the selection of suitable distribution channels and of course with the best possible combination of price and quality.

1.2 Marketing Mix

The role of the marketing mix is crucial in identifying a product and is used as a tool by the business in order to implement through this the strategy it has decided.

Kotler and Keller (2010) define the marketing mix as: “the means and techniques available to a company or organization to implement the strategy marketing planning”. Another definition says that “marketing mix is a system of interdependent marketing activities designed and made to meet the needs of customers and its business objectives” (Tsaglakanos, 2007). The general view is that marketing mix is a process that has four basic tools (product, price, distribution, promotion) which are recruited to meet the needs and desires of the customer, at the lowest possible cost.

So this mix consists of four basic parts / variables that must function and coexist as a unit in order to bring the desired results. A conflict among these variables exists will result into a non-successful strategy. This view was first established by Jerome McCarthy. These variables are product, pricing, place and promotion, the so-called 4P's. Three more P's come in services completing the marketing mix. The human factor, processes and business environment.

More specifically, these basic tools are as follows (Tsaklaganos, 2005):

Product: Refers not only to the actual product but also to the relevant accompanying services (such as the name and brand of the product name), packaging and standardization, the different varieties and sizes of the product, the guarantees etc.

Price: The price must be determined in such a way that the product will be attractive to the group of customers that are targeted (target market). The Product pricing includes decisions about price level, the margins and the types of discounts and the geographical or non-differentiation of prices.

Distribution (place): Refers to the actions that are necessary in order for the product to be ready and available to consumers. Every economy has a lot of distribution channels in the intermediate stage of the wholesale trade, as well as in the final stage of consumption with

retail. Distribution and the various distribution channels include transporting and storing the product. The choice of appropriate distribution channels can make a product successful in the market or cause its failure.

Promotion: This is the communication with customers or potential customers in order for them to be informed of all the product's features that the marketing management decided to disclose to customers. Promotion means communication through advertising, company sellers, reports, directories and publicity.

As for the other three complementary tools (3P's: human factor, procedures and business environment), the following could be mentioned: (Lympelopoulou, 2001).

Human factor (people): People are an important element of the marketing mix, and they are integral tool for services. When we say people we mean the customers, the employees, the production staff but mainly the sales staff after that comes in direct contact with customers. Sales staff's (who come in immediate contact with the customer) appearance and behavior play crucial role in shaping the relationship between service and customer. Obviously if they are rude and indifferent all actions to attract customers will automatically be undermined. On the contrary if the staff is polite and willing it will increase customer's satisfaction and thus such a relationship can establish stability as far as the cooperation between them is concerned. For example the quality of services offered by a bank, airline or commercial branch is closely related to the service offered by the employee, the seller, or the tradesman, or any other person in the business who comes into a direct or indirect contact with customers and play an important role in the quality evaluation of the service. The image that the customer has for the bank is mainly formed by him from the way he is being served by every employee with whom he has contact. Customer's favor to the employee is a condition of his trust in the bank and of course, any business success can be based on bank trust. The quality of service provided to the customer by the employee does not only build strong bonds among them but it is also the best advertising for the bank. It has multiple results with word of mouth.

But the effectiveness of such procedures to achieve good relations between service and customer depends on some policies as far as human is concerned. Key elements of human resources policy are:

Education: It concerns programs and seminars that will gradually make the employee able to cope with difficult and demanding situations appropriately so that the customer stays satisfied in any case.

Human Resource Development Programs: It is similar to the previous policy but mainly concerns the development of some specialized skills and knowledge of the employees, that when needed (in some individual cases) will make the service that uses them to acquire competitive advantage.

Incentives: Incentives relate to some methods that will motivate the employee to work harder and more creatively to deliver better and more profitably results in business / service. Such tactics are the improvement of working conditions, the main moral reward, constant differentiation of work to avoid the routine, forming the impression that the employee does something very important and last of all some bonus and salary increase.

Corporate culture: According to Schein (1989) "corporate culture consists of unconscious, facts, beliefs, assumptions, thoughts and feelings that form the basis of the success of the business ". Corporate culture is therefore something that guides the way employees of a company think, act and feel and if it is based and focused on customer's absolute satisfaction and followed faithfully by all human resources, then a perfect relationship of trust and stability is built between customer and service.

Processes: Employees can certainly do a lot to meet the needs of the client but cannot fully replace the shortcomings in regards to bureaucracy and inefficiency of procedures. The processes in services can also cause dissatisfaction that can threaten the relationship with the customer when there is a large discrepancy between promises, advertising or personal selling, and the reality faced by the customer in the production of services.

The nature of the various processes, their degree of complexity and the time required for their completion are also important elements of the mix Marketing and related to customer service quality. For example, the money transfers from one bank account to another can be made with visiting the bank branch during working hours or via ATM, telephone or computer from the client's office or home without him being obliged to visit the bank. In jobs with a desire for high degree of contact, it is much more difficult to standardize the procedures and make accurate schedules. So it should be different for each job and education.

Physical environment: It concerns those elements that affect the image of the company (real or psychological impact) and related to its infrastructure, environment and actions. It is well known that in general all people draw conclusions about the substance influenced by external characteristics and appearance. Customer perception for service / business is largely based on the stimuli it receives from its environment. Some elements related to the business environment is:

- Location of facilities.
- Building (quality of construction, exterior and interior decoration).
- Office equipment and technological equipment.
- Functionality, safety and hygiene of the space.
- Customer service department.
- Marking (facilities, vehicles, and staff uniforms).

All the above elements of the environment and the corporate identity help in creating a distinct and unique corporate personality that is so important both to its employees and its customers.

1.3 Marketing Mix strategies

The marketing mix strategies relate to those processes and methods which are necessary for the marketing mix mentioned above, to work correctly and harmoniously with various product shaping techniques, attractive price, finding suitable distribution channels and finally effective promotional advertising techniques. All these techniques should combine

maximum profit with as much as possible lower costs, material and intangible resources. Each business / service can follow different strategies. Each variable of the four basic ones include subcategories containing a variety of strategies. Businesses of course can choose to follow many different combinations of strategies.

As far as product strategies are concerned, some key concepts that compose the concept of the product should be mentioned.

Product - Product design: Often product design is what ultimately makes it sell as it is this element that the consumer will recognize and perceive first so for example depending on age or gender the corresponding color will be used. Colors like pink would be attractive to a woman while some other dark colors like blue or black would be ideal for a man. Colorful and fancy products would obviously be more appealing to younger children, some technical features would be more appealing than one simple color, etc.

Product features and benefits: A product should offer unique features in comparison to its competitors, consisting of a whole product with many benefits and privileges. Here comes Kotler to take a stand and suggest that in his view there are three stages, commodity, real and augmented.

Core product: Here the emphasis is on the essence of the product, which has more of an emotional effect and refers to the benefit of the customer. For example when you buy a camera, the essence of the market is about "memories", since you can immortalize favorite moments of your life with it. If you take as an example the offered services of a hotel, the main product here is comfort and convenience.

Product quality: The concept of product quality is difficult to fully clarify and define precisely since for each customer / consumer has a different perspective. The purpose of course is that the product will meet the expectations of the consumer. Quality in general consists of tangible elements such as appearance and performance but also of intangible elements such as its fame. But a good product quality strategy requires harmonization also with other elements of the marketing mix, such as pricing. For example, a high value strategy requires a similar high quality strategy of the product / service offered.

But in addition to shaping some product features you should also exercise the appropriate pricing policies. Pricing policy is not a simple price list of a service / product but the set of actions in order for the product to be transferred from the producer to the consumer (Kyriazopoulos P., 1992). According to Webster's Ninth New Collegiate Dictionary, price is defined as “quantity of one thing being exchanged for a claim or exchanged or sold for another”. The Dictionary of Business and Management defines price as “the amount of money that a seller receives for goods or services.” Pricing is a difficult case and should reflect the supply and demand relationship and according to Rao V.R. (1984) “price is the only variable in the marketing mix that lies in the fact that the price should be chosen very carefully, because a very high or respectively a very small price would result in bad results and damage for the business.

Regarding the pricing strategies, the following are formulated practices.

Penetration pricing: Here the company initially sets a low price in order to increase sales and gain a market share. When it does this then it can raise the price.

Skimming pricing: A company initially sets a high price for a product, usually innovative, and it then starts to reduce the price to make the product potentially attainable by a wider market audience and attract additional customers who are sensitive to price changes.

Competition pricing: In the pricing strategy based on current prices less attention is paid to cost or demand and the company bases its price mainly on competitors' prices. It is a quite popular practice in cases where it is difficult to measure the cost and determine the reaction of consumers. The company can impose a higher or lower price than that of its competitors depending on its objectives and its overall strategy.

Premium pricing: A fairly high price is established because the products are unique or at least they want to give that impression. It is observed quite often in luxury goods such as expensive perfumes, cruises, hotel rooms etc. This practice is well known and it tends to attract customers as they directly associate the high price with quality.

Psychological pricing: This approach is used to get the consumer to respond to an emotion rather than a rational stimulus. The most well-known method of implementation is the setting of prices lower than a whole number (usually close to the number 9), e.g. € 2.99 and

not € 3. The theory of psychological pricing is based on the fact that consumers ignore the least important digits in a number and in what they believe that a fractional price indicates that the product is priced at the lowest strong level.

Distribution: It is the mechanism through which goods and services reach the end user-consumer (from the supplier and producer). This view is also supported by Kotler with Armstrong saying that “attitude includes business activities that make the product available to the target consumer (Principles of marketing, 2010). The strategies of the distribution channels are aimed at ensuring excellent market coverage, with complete control and minimal cost, which is often not possible. There are many options as far as concerning the selection of the appropriate distribution strategy. Below are three of the main.

Intensive distribution strategy: The choice of this strategy aims at placing the product in as many points of sale as possible so that the business can earn the largest possible market share e.g. soft drinks, ice cream, cigarettes etc.

Selective distribution strategy: The use of this strategy is aimed at placing the product in specific points of sale concerning specific target groups e.g. stores of branded products in areas such as Kolonaki, Kifissia, Panorama etc.

Exclusive distribution strategy: The choice of this strategy is aimed at placing the product in a small number of points of sale, in specific geographical areas where for each area an exclusive representative is appointed.

But without the appropriate methods of product advertising and promotion the aforementioned pricing strategies and other strategies of the mixture are almost meaningless, if the product does not become known to the consumer public. This is how we get to promotion strategies that generally involve and include all those tools that used by the marketing manager and relate to communication. Such tools are advertising (print or electronic), sales promotion, public relations, direct marketing, word of mouth, exhibitions, sponsorships, points of sale in the store and the personal selling, which is the main tool of the services. Solomon et al (2009) defines promotion as “which includes all those activities

that the marketer does in order to inform consumers about the products goods, and encourage potential customers / consumers to buy these products or services”.

Marketers can choose between two mixing strategies, push or pull. The push strategy includes the "Push" of the product through marketing channels to end consumers. The producer directs marketing actions to channel members in order to motivate them to promote their product to the final consumers. The producer, using the attraction strategy directs the marketing actions appropriately in order to motivate the end consumers to buy the product. If the attraction strategy is effective, consumers will request the product from the channel members, who in turn will request it from producers. Thus, according to the strategy of attraction, consumer demand "Pulls" the product through the channels (Armstrong και Kotler, 2009).

Such promotion activities and strategies are:

Promotion / Advertising: “Advertising is a component of the product. A soft drink is probably less thirst quenching by water. With advertising, however, it becomes joy, smile, liveliness” (Costas Goblias). Advertising, in general, is a kind of non-personal presentation and is considered one of the most important ways of promoting and communicating it company. The marketing department of the company to create an advertising campaign always starts with identifying the market target and the consumer motivations and then makes five key decisions known as the 5M advertising campaign.

- Mission: What are the goals of the advertising campaign?
- Money: What is the amount of money that will be spent?
- Message: What is the message that will be launched?
- Media: What media will be used?
- Measurement: How will the results be evaluated?

Through these five decisions the company aims to inform, to convince and finally, to remind the consumer the reasons for choosing its product / service and not something else. In addition to the benefits, advertising presents and some downsides as it is impersonal and may not be as convincing with a salesperson of the company .Some of the types of advertising is the television, the radio, the internet and the in print.

Sales promotion: This strategy consists of short-term incentives that immediately encourage the purchase of a product and according to Paschaloudis “they make us want to buy now” (Paschaloudis, 2009). Sale promotion consists of tools such as contests, prizes, discount coupons and training staff.

Personal sales: It is the most effective means of promotion because it requires direct contact and interdependence between seller and buyer, although as Paschaloudis mentions “The personal sale and the services it offers cost more than advertising and sales promotion and makes it the most expensive means of promotion of the company's products / services”. With the personal sale if the seller comes in direct contact with the customer, the seller is able to notice the customer’s needs and his characteristics and make immediate / appropriate adjustments. The strategic goal of the seller is to create, maintain and manage the multiple relationships that are created between him and the individual consumer (Cova and Hoskins, 1997). The relationships that are developed in personal selling and interpersonal communication are of great importance since information is exchanged, evaluations, negotiations, adoption of ideas etc. The seller must show real interest in the buyer in order to make him feel important and provide services / products based on his needs and desires, but more important than everything, to make him feel "at home". The result of such a relationship, for the seller will be a happy customer who will trust and appreciate the efforts made by the seller. A smiling and warm customer gives motivation to the seller to do his best. It is also considered that it makes the customer less tough negotiator as he appreciates the high quality, services that offered to him. (Tzokas, Saren and Kurizidis, 2010).

Public relations: According to the definition given in 1994 at a world conference and is known as the “Mexican Statement”, “Public Relations are the management of reputation as a result of the actions, messages and perceptions of others about them”. Generally, it concerns the tactics applied by the company trying to build and promote a good image to the general public of the market. They choose some indirect and alternative ways to achieve this and positively impact the common opinion, such as participation in voluntary work, participation in charities or funding for reforestation of an area, good and friendly communication with the public and persuasion, that is, they try, in an organized and systematic way, to inform the public about how good the business or organization is, or how much it cares about issues of general interest.

Exhibitions: Exhibitions enable companies to be seen in the same space and at the same time with other larger or smaller companies, where they are given the opportunity to assess their value and effectiveness directly. So the reports are linked directly with personal sales, as “manufacturers and traders come together to introduce new products.” (Arrens & Weigol 2015, p.472, Lymperopoulos, Tzanavaras, Salamura M., 2015, p.154).

Sponsors: A sponsorship is “a payment in kind or in cash for a project, event, or organization in exchange for access to commercial exploitation” (Arrens & Weigol, 2015,. p.506) . The purpose is either to bring more publicity or improve public relations and ultimately increase profits and sales (Lymperopoulos, Tzanavaras, Salamoura M., 2015, p. 155).

Direct marketing: According to the definition of direct marketing association, direct marketing is a two-way marketing system that uses one or more advertising media in order to make a measured response or transaction to any point. It is generally an action that takes advantage of the business and customer relationship with a key feature of the response mechanism. The latest trend in our days in direct marketing is defined as the telemarketing, tele-information, tele-advertising and tele-promotion.

Word of mouth: Finally, word of mouth is based on interpersonal relationships and ultimately seems to have the greatest impact, indirectly or directly to the public opinion of the consumer public. This interpersonal relationship requires of course transmitter and receiver. So the essential element of this communication is that receivers perceive transmitters as persons of no commercial interest or otherwise personal benefit, as there is mainly just a dialogue where views are exchanged on various products or services. The receivers trust the transmitters as the their advice has no other motive than to persuade a third party to use the product because it just satisfied them and for that reason they do not have reason to distort the truth for the benefit of the company that offers the specific product / service. It is therefore understood that this process of interaction, which characterizes “Word Of Mouth” communication, plays crucial role in shaping consumer’s attitude and behavior, with as a result the product promotion and dissemination process being affected. “Word Of Mouth” is a factor that is being thoroughly considered by the business marketing managers. (Silverman, 2001).

1.4 Telecommunications Services in Greece

History

In modern societies it is now observed that the offer of services is becoming more and more necessary and frequent in relation to the supply of material products that prevailed in past. This is because people no longer rely solely on cultivating it land and livestock, because they realized that the combination of intangible goods / services and materials is more efficient and effective. Intangible assets in comparison to the materials present some basic differences that a business / service must take seriously. These are of course the immateriality, the indivisibility, the inability to store and standardize.

As far as the supply of services is concerned, we observe that the telecommunications services in particular are charting a continuous upward trend, being an integral and necessary part in the lives of people and of today's societies. It is a piece that some companies are constantly trying to optimize to the maximum, evolve and adapt to more and more greater demands of the consumer public.

The general term telecommunications, is associated with the wired or wireless, electromagnetic, electrical, acoustic and visual communication and data exchange that takes place independently of the distance. In modern times, this process almost always involves the transmission of electromagnetic waves or electrical signals from suitable electronics devices, such as the telephone or wireless, but used to include the use of acoustic signals, such as drums, or optics, such as smoke signal, etc.

The journey of wireless mobile phone starts immediately after World War II, with the attempts of the Swedish, the Finns and the Americans. However, the official beginning is considered the 3rd of April in 1973. An American, Martin Cooper, working for Motorola seems to have used the first cordless phone which weighed 900 grams and was 25 cm high. Then in 1978 Bell, then telecommunications service, was the one to build the first test mobile telephony network. In Scandinavia in 1980 the first automated network for mobile telephony was launched. Of course back then cell phones were very bulky, so they were mainly installed and used in cars. In 1990, the take-off of mobile phones began by digitizing networks and devices. In Greece, mobile telephony did its appearance around 1992 with Panafon and Telestet. In 1998 Cosmote (owned by OTE) made its appearance as well. At

the beginning of the 21st century came the third and fourth generation (3G) and (4G) mobile phones with unlimited possibilities of multimedia. Today, the penetration of the mobile phone on the planet reaches the impressive number of 67.01%. In Greece, however, it has been observed since 2009 that the course of the industry of mobile telephony is declining, not only due to the economic crisis, but also over-taxation.

2. Company Background

Cisco Systems is an American technology giant who was founded back in 1984 in the US and has its headquarters in California. The company is best known for its computer networking products who mostly sells to other companies. Cisco Systems does not directly sell to final consumers, households, but rather to other companies. In the decade starting from 2010, Cisco Systems became one of the most successful companies worldwide and one of the biggest in the US.

The founders of Cisco Systems were Leonard Bosack and Sandra Lerner, a married couple (later divorced) who had met while students at Stanford University. The pioneering idea of the couple and actually the core of the Cisco Systems products (and the future success of the company) is based on the understanding that the router technology used to connect computer networks could be used in large-scale worldwide and therefore make the company very profitable. This knowledge arose while they were working for Stanford University in the management of computer systems. Later, in 1984 they established the Cisco Systems Company in San Francisco.

In 1985 Cisco sold its first product, a network interface card for Digital Equipment Corporation's computers. Its first big success, a router that served multiple network protocols, came the following year. As the company grew more there was need for extra capital, so the founders turned into Sequoia Capital, a venture capital firm who took the management of the company in 1987 and appointed John Morgridge as president and CEO in 1988. Morgridge did not get along very well with Bosack and Lerner and in 1990 when the company entered the stock market and sold its first shares, Lerner quited the company and so did Bosack.

Cisco Systems grew rapidly in the early 1990s. The company introduced the improved 7000 model router in 1993. In that year the company started to acquire other technology companies to grow more. The first company that Cisco Systems acquired was Crescendo Communications, an acquisition that allowed Cisco to deal more with the network switching devices and that same year it began acquiring other companies. In 1994 the company relocated to San Jose, California and appointed John T. Chambers as CEO. Chambers' philosophy was also for further expansion through acquisitions, so, in 1998 Cisco Systems, acquired the technology company Selsius Systems, an internet technology company. This

latter acquisition helped Cisco to take a big market share in VoIP technology which was a cutting-edge technology at the time.

In 2006 Cisco introduced TelePresence, an elaboration of videoconferencing that is intended to allow people to speak to each other with use of video and sound as if they were at the same place. Cisco also plays a major role in the Internet of Things concept and in the latter years changed its main products from hardware to software network products. Chambers retired in 2015.

2.1 Market Environment

On this stage of our paper, we will conduct an analysis of the market environment of Cisco Systems' company. More precisely we will conduct a PESTEL analysis of the macro-environment and a Porter's five forces analysis of the micro-environment of the company. Later, we will conduct also a SWOT analysis, by analyzing the strength – weaknesses – opportunities and threats that Cisco faces.

2.2 Pestel Analysis

2.2.1 Political Environment

Political factors and the political stability of a country plays a major role for Cisco Systems as a factor to take into serious consideration before doing business with a country. Since Cisco is operating in many countries worldwide we will refer to the main factors that Cisco takes into consideration before the market entry or what kind of change in these factors can affect its business later on. Cisco does business mainly with governments of developed or developing countries, with enough IT and internet infrastructure to support its networking devices and software. The main factors are the following:

<ul style="list-style-type: none">• Political stability and how big is the part of the internet's sector in the country's economy.
<ul style="list-style-type: none">• Level of network and IT infrastructure in the country.
<ul style="list-style-type: none">• How safe in terms of a military invasion is the country.
<ul style="list-style-type: none">• Level of corruption - especially levels of regulation in Technology sector.
<ul style="list-style-type: none">• Bureaucracy in the internet and networks regulations.

• Level of protection of the intellectual.
• Trade regulations & tariffs related to Technology.
• Anti-trust laws related to the internet and network sector of the economy.
• Pricing regulations – if there are special pricing regulations for technology companies.
• Level of taxation and possible tax favorable schemes for multinational companies.
• Level of minimum wage that will affect its salary expenditures.

Table 1. Political factors that affect Cisco

2.2.2 Economic Environment

The general economic environment of a country or its macro-economic environment in other words, is a main factor that Cisco takes into serious consideration, before entering a market. Macro-economic variables like growth rate, level of unemployment, interest rates, foreign exchange rate, national budget's deficits or surpluses, level of national debt, subsidies, growth potential etc. are under serious analysis and consideration from the managers of Cisco Systems. More precisely, the following economic factors are considered:

• Type of economic system – market system or central planning.
• Exchange rates.
• How much skilled is the population in technology.
• Percentage of tertiary education graduates.
• Labor costs and productivity in the economy.
• Level of GDP.
• GDP Growth rate.
• Inflation rate.
• Level of unemployment.
• Interest rates.
• Level of national debt.
• Debt to GDP ratio.
• National budgets deficits or surpluses.

• Level of subsidies.
• How friendly or hostile is the country to a foreign direct investment.
• Network speed.
• Growth potential of the economy.
• Type of businesses in the country.

Table 2. Economic factors that affect Cisco

2.2.3 Social Environment

The social factors are also key factors especially for the marketing department, as they have to understand the country's culture, habits and way of living in order to be able to do a good placement of the products in this country and gain a big market share. This kind of analysis is not an easy one and takes a lot of time. People must travel to the country and spend some months of living there in order to learn people's and especially consumer's habits and be able to give a proper report to the management in order to produce a good marketing plan for entering this country. Several factors must be taken into consideration and especially the following:

• Demographics and skill level of the population.
• Level of racism.
• Country's culture and social norms.
• Education level of the population and especially how many people are educate into Cisco's networking programs.
• Public sector share in the economy.
• Level of public health infrastructures.
• Habits and especially consumer habits of the population.
• Leisure time habits.
• Income distribution amongst classes of the population.
• Level of transportation infrastructure and logistics.
• Ranking of local universities and level of technology research.

Table 3. Social factors that affect Cisco

2.2.4 Technological Environment

The technology factor plays a major role and must be taken under serious consideration by the managers of Cisco. Internet speed and level of IT and network infrastructure in a country's helps companies and boosts their operations to be done more quickly and more accurately. We live in the internet era and a country that does not have good enough IT infrastructures is not likely to be chosen by Cisco for investing. Several technology factors must be taken under consideration, with the more important being the following:

<ul style="list-style-type: none">• Level of companies' innovation and more precisely level of technology innovation.
<ul style="list-style-type: none">• Level of added value of products through technology innovation.
<ul style="list-style-type: none">• Level of IT and network infrastructure.
<ul style="list-style-type: none">• Internet speed and internet lag.
<ul style="list-style-type: none">• Internet charges.
<ul style="list-style-type: none">• How useful the Cisco products will be in that country.
<ul style="list-style-type: none">• Technology competitors.

Table 4. Technological Factors that affect Cisco

2.2.5 Environmental Factors

The environmental factors are also important and especially the kind of environmental legislation in a country and the costs of environmental aspects to be fully in compliance with the legislation are very important. For example, the European Union has established several environmental laws and the countries-members have a lot of directives to deal and comply with. In the U.S. different states have different levels of environmental legislation. As we are living, in the era where the renewable resources are a target for many countries both due to the depletion of other resources like oil and due to the need for decreasing the level of environmental pollution, a country that has more renewable resources or a strategy towards them is more likely to be chosen by Cisco for investing. The main environmental factors under consideration are the following:

<ul style="list-style-type: none">• Weather.
<ul style="list-style-type: none">• Climate change.

• Percentage of renewable resources in the country.
• Strategy and investments toward renewable resources.
• Level of energy dependence of the country.
• Number of vehicles and how environmental friendly they are.
• Number of industry's gas emissions.
• Level of environmental law legislation.
• Costs accreted to that legislation for fully compliance with the environmental laws.
• Level of pollution and costs of compliance with the legislation.
• Level of recycling and possible tax incentives for recycling.
• Level of waste management in Technology sector.

Table 5. Environmental factors that affect Cisco

2.2.6 Legal Environment

Last but not least, for the Pestel analysis, the legal environment must be taken under consideration. The more important factor from the legal environment for Cisco, is the level of protection of the intellectual property of the company, as this is a crucial factor for Cisco Systems. The most important legal factors are the following:

• Anti-trust law in Networking & Communication Devices industry and overall in the country.
• Discrimination law.
• Copyright, patents / Intellectual property law.
• Consumer protection and e-commerce.
• Employment law.
• Health and safety law.
• Data Protection.
• Cyber-security issues.
• Level of justice and courts corruption.
• Time needed for court decision.
• Number of laws.

<ul style="list-style-type: none">• Frequency of law changes and amendments.
<ul style="list-style-type: none">• Number of strikes.
<ul style="list-style-type: none">• Power of labor unions.
<ul style="list-style-type: none">• Stability of tax legislation.

Table 6. Legal Environment factors that affect Cisco

2.3 Porter's Five Forces Analysis

Porter Five Forces is a classic marketing tool, created by the marketing guru Michael Porter in order to analyze a company's micro environment. More specifically this tool analyzes the threat of new entrants, the bargaining power of suppliers, the bargaining power of buyers, the threat from substitute products and services and the level of rivalry amongst existing competitors. By analyzing these factors, a marketing expert can draw secure conclusion on how friendly or hostile is the micro environment of a company. We will perform this kind of analysis for Cisco Systems – a technology giant specializing in the IT sector - in the following paragraphs. As Cisco does business internationally we will write down the main factors that influence its presence in a country and arise from its micro environment.

2.3.1 Threats of New Entrants

As we live in the internet era and many companies are dealing with network and IT technologies, a new entrant is quite possible to arise for Cisco. This new entrant will bring with a kind of innovation, something that Cisco does not currently offers and will put pressure on Cisco to provide a different product offered with lower prices, more services and a better value for money for its products and services. A good way for Cisco to manage a possible new entrant or avoid its entrance into the market is through the following strategies:

- More innovation is needed. Cisco has to produce more and more innovating products and services in order to provide the customer with a constant high level product or service, so as the customer does not deflect to another provider.
- More research and development (R&D) expenditures are needed. More capital must be re-allocated to the R&D department which in turn must perform a cutting-edge research in order for Cisco to be able to produce more and more innovating products

or services in order to continue to set, as a state-of-the art company, the sector's standards.

- Economies of scale can help Cisco to get a competitive cost advantage towards new entrants.

2.3.2 Bargaining Power of Suppliers

The bargaining power of suppliers for the technology sector is an important issue. High bargaining power could pressure Cisco buy more expensive its raw materials and therefore this would mean a lower gross profitability. However, there are several strategies that Cisco Systems could adapt in order to avoid this unpleasant situation:

- Cisco has to build a diverse portfolio of suppliers, so it won't depend on one or two suppliers particularly and by creating a vast network of suppliers will lead to reducing their bargaining power.
- Experiments and research must be done from the research and development team, in order to be able at some time to produce cost-effective raw materials for its own use or for a possible tackle of a supplier.
- On the other hand, building long term business relations with certain suppliers, who depend totally on Cisco Systems for their business, can significantly reduce their bargaining power and lower the danger for Cisco.

2.3.3 Bargaining Power of Buyers

Byers often demand the best product at the lowest price. For a company like Cisco Systems, sometimes this can be a problem. The more powerful the customers are, the more pressure they will put into Cisco Systems to lower its prices and therefore reduce the volume of sales and thus the profitability. Again, there are several strategies Cisco Systems can adapt in order to avoid this:

- Firstly, Cisco has to build a wide portfolio of customers and a big customer base. Having more customers, simply reduces their bargaining power.
- Again, innovation is the answer to this problem. By producing more and more innovative products and services, customers will not stick to the price so much, as innovation is costly. However, innovation adds high value to the product and therefore to the customer acquiring such a service / product.

- Such innovative products or services will maintain and grow Cisco's customer base and avoid deflection to other providers.

2.3.4 Threats of Substitute Products or Services

As we live in the era of internet, substitute products may arise for Cisco. When this happens, the profitability of the company is reduced. There are several examples, of substitute products in the technology and communication sector. Cisco Systems can again tackle this possibility through adapting the following smart strategies:

- By producing more services, like after-sales service to maintain the loyalty of its consumers and the level of their satisfaction.
- Cisco Systems, has to identify the core needs of its customers rather than just sell the products.
- Last but not least, Cisco Systems could increase the customer's switching cost to another supplier in order to avoid / reduce customer deflection.

2.3.5 Rivalry among the Existing Competitors

A high level of rivalry among existing competitors in an industry is a kind of problem as it lowers a lot the profitability of a company. For Cisco, this a current case, as the technology and communication sectors are quite competitive. However, there are several smart strategies that if adapted they can help tackle this situation:

- Number one rule is the product differentiation. Consumers will still buy Cisco's systems if they offer something that the competition does not offer.
- Number two rule again is the level of innovation. A special product offered with highly innovative characteristics will be chosen favorably by the consumers.
- Building economies of scale can give Cisco a competitive cost-advantage.
- Collaboration or acquisitions of other technology and network companies can broaden the customer base, reduce the level of competition and therefore help maintain high prices, market share and profitability

3. Cisco's Strategy and Organization

3.1 Stage One - The initial acquisitions era

Initially, Cisco systems had set a strategy of buying other companies in order to expand its business. This was achieved through acquisitions and more precisely aggressive acquisitions. From 1993 through 2000, Cisco Systems completed more than 70 acquisitions and spent more than \$18 billion acquiring nine (9) companies in 1998 and another fourteen (14) in 1999, an average of more than one acquisition per quarter over a five (5) year period. Most of the acquisition targets were engineering companies, doing well in their sector. Cisco's leadership wanted with this kind of strategy, to be able to incorporate other companies' uniqueness and values into its own, in order to drive forward the company's size.

By using its high stock price. Cisco at the time was able to sell its high-speed network switches to large customers and in that way, Cisco Systems was established well in the market, competing now with the larger players like Siemens and Alcatel. Again, it was ahead of the competition in a way that it bought its way into the fiber optics high speed internet technology through its research and development teams efforts.

3.2 Stage Two - The recruiting effort of the most talented employees

Cisco had the ambition at the time and after the initial growth - through the acquisitions stage - to be the Microsoft and the IBM of networking. In order to be able to reach such a target, you have to recruit the most talented workers. As the CEO Chambers said at the time "we want to recruit the top 10 to 15% of the people in the industry in order to become an industry leader".

A strategy to find the best workers in the industry beyond the ones that you have already hired through the acquisitions, is to lure them. They watched carefully certain workers in competitors firms at the time and wanted to engage them, so hosted several garden shows or microbrewery festivals to be able to talk to them. This creative strategy worked out pretty well for the company as it made it to recruit some of the best employees that the competitors had.

Cisco also realized that its web site received the heaviest traffic between 10 a.m. and 2 p.m., meaning that people were looking for new jobs on company time. So it created an interface in the company's website in which active job seekers could send a CV and speak about themselves to an HR manager. Cisco systems also created the smart "Friends program" in which the current employees of Cisco spoke about their life in the company and at the time most of the 60% of the recruitments were because a friend of the recruited person was working already for Cisco. Of course the management was generous, providing the employees with several benefits and bonuses.

3.3 Stage Three - The effort to retain new hires

After the aggressive tactics to hire employees either through acquisitions or through other means, Cisco worked hard and creatively to retain its employees. At the time the internet and network industry was high-flying and all the employees had several lures, such as to work for another company, many competitors were actively seeking to steal them from Cisco. However, Cisco had one of the best tactics in the field of retaining its workers and had the lowest rate of worker's attrition in the industry.

In order to achieve this goal, it offered its employees several bonuses like having a desk looking at the window, while the managers were in the middle of the room. Moreover, they had a camera connected to their house in which they could see their kids if they are well and if they need something and a high reward systems containing company's stocks, cash bonuses etc.

3.4 Stage Four - The troubling times. Industry's down-turn in 2000

At the time of 2000, there was a rapid down-turn for the technology sector, which of course affected Cisco as well. The volume of sales and profitability went down in high percentages and even high losses were recorded at the time. In April 2001, due to bad economic condition of the company there was an announcement of 8.500 job cuts to drive operating costs lower. As Chambers stated at the time "this is an industry failure, however we are still way better off than our competitors".

According to Chambers the company's strategy had to remain the same, as this was an industry failure and that the company was still doing well compared to the competitors. He believed that networking was the future and stated the strategy will remain the same. Despite his claims, many workers believed that actually there was a steer into the company's strategy at the time, as it turned into a more mature organization, trying to gain ground after the industry down-turn in 2000. Actually, the company became more customer oriented and tried to expand through this channel.

Also, there was a change from the product oriented strategy to a more systems and solutions organization and in that way, the acquisition of Linksys helped, a low-end consumer level product. Also, Cisco had to lower the operating expenses by 35% at the time and actually many job cuts were done at the time to save the company's financials. In general, Cisco treated well the laid-off workers, by giving them remunerations and several other options to continue their life and even a promise that they will return to the company once things are better.

3.5 Stage Five - The turn from the acquisitions strategy to productivity and profitability

The next stage was a turnaround from the nostalgic acquisitions strategy to productivity and profitability targets and this will be done through a better alignment within the company. At the time, there were several workers working on the same project at different areas of the company. Several other initiatives were left over due to bad communication and lack of business alignment. So, in 2001, Chambers consolidated the engineering group and focused on standardization and versatility.

3.6 Stage Six - A new Human capital strategy. From buying talents to produce them internally

At the time, there was a need to develop the future leaders internally through business education programs within the company. For that reason the Pathfinder internal database was launched and through an interface the employees send their CVs to managers to be able to do some job re-allocation. Chambers stated at the time that in some years he wanted all the workers to be able to shift from engineering to financial or from sales to administrative.

This wasn't easy of course as it required both a technological and a business background from the worker's side but a huge effort was launched at the time. (Chatman, J., O'Reilly, C., & Chang, V., 2005).

This human capital strategy was boosted by the Cisco University which was established at that time and provided the workers with high level knowledge. The company, after 10.000 of job cuts and several other operating expenses cuts, combined with a recovered economy was again at positive profitability.

Moreover, there were changes in the performance management and development at the company, providing more time for dialogue between manager-employee rather than long texts of written-down reports. Several other changes were implemented at the time towards this new human capital strategy and every employee had its own performance and development plan, while even high-flying executives had their chance to become leaders of the company through this new strategy.

In the coming years there were several other aspects of strategy for Cisco with the main being towards effectiveness of its products, profitability and certain issues like cyber-security.

3.7 Stage Seven - Cisco's strategy in 2009

Reaching Market Adjacencies through a New Management Model

Cisco business strategy for the fiscal year 2009 was to address not less than 30 market adjacencies and they concentrated mostly in those areas where the networking technology and protocols have not seen widespread adoption (Chambers 2009). Cisco targeted markets like India and China, which provided at the time high growth opportunities. On the way to capture these markets, they wanted to move quickly and with effectiveness. A change in the management model was needed in order to be more flexible for such kind of business movements, so it was done.

3.7.1 Capturing Market Transitions

Cisco's success comes mainly from taking advantage of the market changes before they occur, as they want to be a pioneering company on everything and to be the ones to set the international standards for the market. They want to identify first what technologies are needed for the future of the industry that will play the crucial role and be the center of attention in the future years. Using this kind of strategy, they acquired many companies during the years 2008 and 2009, including wireless, unified communications and security technologies. A main characteristic of this kind of strategy is to advance the current products with more cutting-edge technology incorporated in them in order to get more revenues. Customer satisfaction is top priority for Cisco. In order to achieve this, they created customer partnerships which helped Cisco to get a good insight into the market needs and transitions. In addition to their technology, Cisco's knowledge of the macro economic environment through the PESTEL analysis, which they conducted for every acquisition has increased customer's trust in Cisco. Getting a good insight from customers is the best way, in their belief, to be ahead of the competition and be the first company which identifies the future needs and transitions of the industry in order to be a pioneer.

3.8 Stage Eight - Cisco's strategy nowadays

As Cisco's mission statement says nowadays:

"Cisco's strategy will change the economics behind how the internet will be built to support the demands of future digital applications and will enable customers to operate their businesses with simpler, more cost-effective networks".

As one can conclude from the above statement, Cisco wants once again to remain ahead of the competition. They want to pave the way for the future internet in a manner in which it will provide the consumers with simpler and more cost-effective products and applications to meet the future demands.

4. Cisco's Marketing Strategy

In this stage of our paper, we will conduct an analysis of Cisco's marketing strategy. More precisely, we will refer to a general market situation background for the company, we will refer to the marketing mix of Cisco (4ps), we will then conduct a SWOT analysis and finally we will also refer to several other marketing strategies and tools.

Current situation

Cisco System's marketing plan includes many promotional channels. A few types of promotional channel that Cisco System uses is TV advertising and web advertising. Another way that Cisco is advertised is by putting its products into cinema movies. For example, the movie Yes Man had Cisco's IP phones in it.

4.1 Market Orientation

Jaworski and Kohli (1996) defined market orientation as “the wide generation organization of intelligence market pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to it”.

4.1.1 Customer and Market Focus

The way to be a market leader today involves much market-driven orientation. This means that you have to hear the customers and the market in general in order to be able to understand what the needs are and how they are evolving in terms of future needs, so that you can be a first mover in the market, i.e. a pioneer. Actually this is what Cisco always did and it still does, successfully.

After you have identified the future needs, you have to also do R&D in order to produce the much needed innovation that will accompany your new products which adhere to this future needs. The innovation is something that will allow you to put your price a little bit higher. So after all, the key factor is to be a market-oriented company which has its eyes and ears open to hear what the customers have to tell.

4.1.2 Relationship Strategies

This market-driven strategy is a strategy that puts the customer in the center of attention. However, the customer is not the only one related to the company. So are the stakeholders and in case they are many, it might be a little difficult to satisfy all of them and convince them to make a change. So, what is needed here is a kind of total-strategy which incorporates the stakeholders, the business partners and the customers. Business partners must not be forgotten as they are also key-players who will implement this strategy together with Cisco. Partners are chosen with strict criteria related to both the current level of business success and the current technology knowledge level. As the customers are B2B organizations and B2C consumers, they want to buy the best product at the lowest price and you have to convince them, in order to be able to sell them at higher prices, that your product is really unique and innovative. Customers are also skeptical when they see changes from companies but Cisco's strategy is a strategy that puts them into the center of attention. That is why Cisco communicates with them in order to hear the customer needs, see how they are evolving and find what the future needs will be. Based on this, Cisco invests on research and development (R&D) for some years before the change actually happens, so it is well-prepared to capture all this new market from the beginning as a pioneer. It is this kind of strategy that has made Cisco equal competitor to Microsoft and Apple in the technology sector.

To be able to constantly be a marketing-driven organization you also have to evolve beyond your market capabilities and the way you communicate with the customers and the way the valuable information is gathered in order to be exploited for business needs. Listening customers is only a part of this data-collection process as several other marketing tools must be used. The changes in the macro-environment (political, economic, technological, legal, social and environmental) are quite a few and happen often, so the PESTEL analysis must be performed every 3 or 4 months in order to be up-to-date. Additionally, the micro-environment of the company changes frequently, the so-called competitive environment, so the five forces of porter analysis must also be done every now and then as environment changes with the entrance of a new competitor, with changes in the market shares and so on. Last but not least, the SWOT analysis is also an evolutionary situation which needs adaptments every now and then.

4.1.3 Elements of Market Orientation

The market orientation of Cisco is towards the customer. The customer will be the one to drive the company to identify the future needs and must be served at full level in order to be happy with Cisco's products and level of service. In order to do so, Cisco has improved a lot the quickness and the way it responds to a dissatisfied consumer, the way in all the products and services of Cisco add value to the customer, the way it responds to and manages the competitors' movements and the way it responds when customers change their preferences and likes.

Cisco does not only serve B2C customers but also B2B organizations. But the current focus is mainly on B2C market as it has been identified as a potential market with high growth potential and a lot of potential revenues for Cisco. It transitioned its Linksys subsidiary into a dedicated consumer business group, formed a consumer-focused council, and made key changes in the way it builds consumer products. This change has accentuated Cisco's efforts in building brand awareness among customers worldwide. Cisco has tried to adopt a unified approach to consumer market since it acquired Linksys, a home networking company. This kind of strategy can be seen as something that followed the belief of Cisco that the home-networking will play a major role in the future and is actually the current market change that happens.

4.1.4 Marketing objectives

Cisco Systems main marketing objectives are to:

- Introduce the company's products/ services to at least one new market annually (that market should account for at least 2% of sales for the year)
- Increase the sales within existing markets by 5%

4.1.5 Action programs

Cisco employ its marketing techniques which including some new ones too. A few new techniques that Cisco has used are:

- Explore ISP markets for products distribution
- Partner up with with major industry names e.g., IBM, Dell, Microsoft, etc.

- Branding their product to show well integrated products
- Keeping partnership with business to assist in getting into the enterprise markets

4.1.6 Budget

Cisco marketing budget is all based on their annual gross revenues. About 15% of their annual gross revenue goes to marketing their products. Cisco marketing budget is divided into:

• Trade shows: 25%
• Advertising: 40%
• Miscellaneous: 25%
• Product Placement: 10%

Table 7. Marketing Budget Allocation in Cisco

Segmentation, Targeting and Positioning Strategy of Cisco.

The main way in which Cisco does market segmentation is through the use of demographics. In particular, it wants to serve mainly younger people, as the elder do not have that much IT skills and cannot use its products and therefore are not potential customers. The targeting strategy of Cisco is a differentiated one, in order to offer its products and services at the highest customizable level as possible. Additionally, its positioning strategy is value-based, since it wants to be considered as a pioneer in its field and a company that is highly innovative and trustworthy. (Groeger L., Bruce K., & Rolfe I., 2019)

4.1.7 Competitive advantage of Cisco

Cisco offers customized products to its customers, having a huge level of IT infrastructure and strategic partnerships with other companies who have helped to grow, while it is operating with large economies of scale. These are the four main elements of Cisco's competitive advantage in the market.

• Customized products
• Big IT Infrastructure

<ul style="list-style-type: none"> • Strategic Partnerships with other companies
<ul style="list-style-type: none"> • Economies of scale

Table 8. Competitive advantages of Cisco

4.1.8 BCG Matrix in the Marketing strategy of Cisco

Since Cisco is considered as a leader in its market of networking solutions, is therefore a Star in the BCG matrix.

4.1.9 Distribution strategy in the Marketing strategy of Cisco

Cisco distributes its products through distributors who sell it to the resellers, system integrators & support service providers.

4.2 Competitive Analysis

4.2.1 Competitor and Issues Analysis

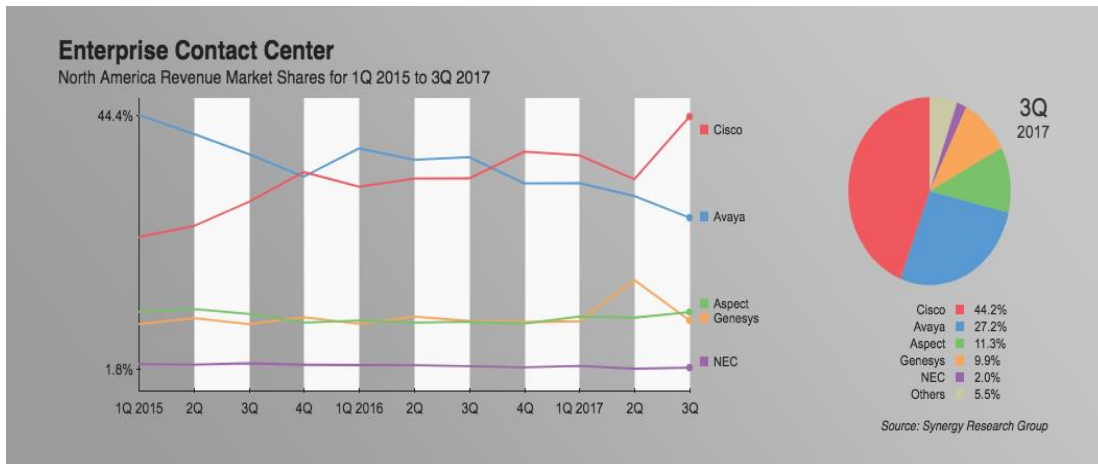
Although Cisco is ahead of the other competitors in the technology field, many companies are slowly becoming a greater treat to Cisco. A few competitors to Cisco are: Juniper Networks, Dell, IBM, and Microsoft. There are two issues that Cisco had to deal with. First, their products cost too much. Second, the lack of investor interest. Since Cisco products are expensive, Cisco competitors are finding investors which are then making them able to afford cheap labor. Therefore, the competitors are offering products that are cheaper than Cisco. Making it a bigger issue when it comes to corporations customers when deciding on which product they should buy.

Cisco is dealing with many sectors of the IT and network market. Therefore, it faces competition mainly from the companies listed below:

<ul style="list-style-type: none"> • Alcatel-Lucent, competitor in edge routing
<ul style="list-style-type: none"> • HP, competitor in Ethernet switching
<ul style="list-style-type: none"> • Aruba, a major competitor for wireless LANs in North America.
<ul style="list-style-type: none"> • Polycom, a competitor in video

- Juniper, a competitor in core internet Routing and security markets
- Others include: Avaya, Microsoft, Check Point, IBM and Brocade just to mention a few.

Table 9. Main competitors of Cisco

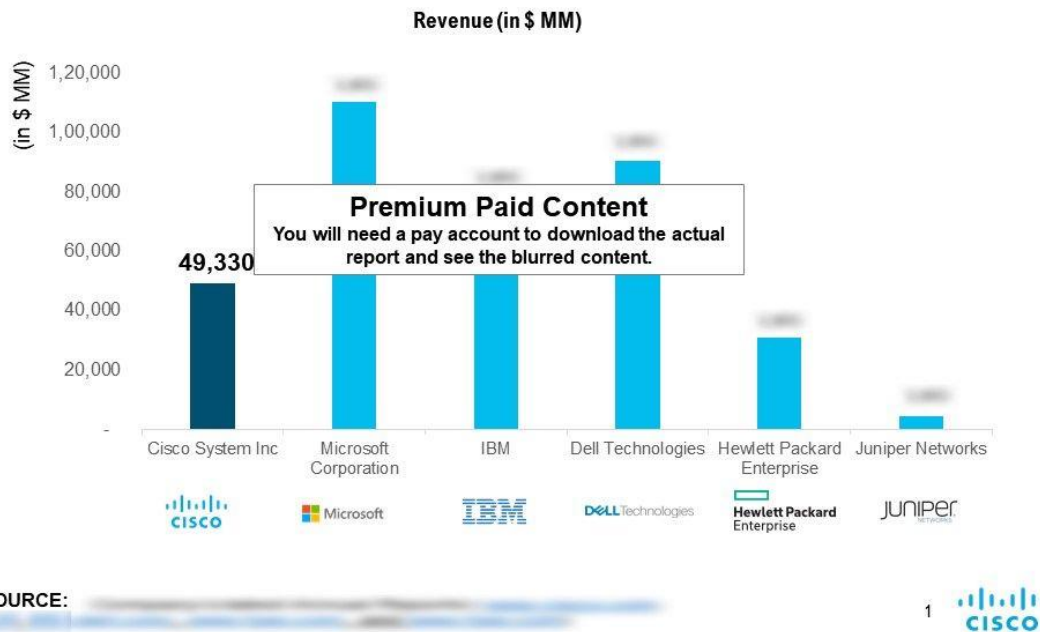


Graph 1. Sub-Market market shares (3Q 2017)

Source: www.tesrex.com

Cisco Systems, Inc – Major Competitors' Revenue Comparison(2018)

This slide provides Cisco Systems, Inc's comparison with Key Competitors (Microsoft, Juniper Networks, IBM, Dell Technologies, and Hewlett Packard) on the basis of 2018 Revenue (in \$ MM)



Graph 2. Market Revenues (2018)

Source: www.slideteam.net

4.3 Customer analysis in the Marketing strategy of Cisco

Cisco deals in both B2B and B2C markets. Its B2B customers are mainly government organizations for who it offers technological solutions while its B2C customers are people who are IT skilled and want some solutions for themselves.

4.4 Cisco's Marketing Mix (4Ps)

Few words about CISCO:

Cisco Systems is a technology conglomerate headquartered in San Jose. Cisco was founded in the year 1980, by Leonard Bosack and Sandy Lerner. It is pioneer in the field of network devices and network management. Over the years, Cisco has had a series of acquisitions, which has helped them to gain expertise and strategic advantage over its competitors. The latest in the list being AppDynamics for \$3.7 billion, this will help them to strengthen their

grip on the cloud platform. Cisco is shifting to software-centric solutions for their consumers.

Cisco has got over 10000 patents in the Technology sector, making it one of the highest patent holding organizations. Headed by Chuck Robbins and with an annual revenue of \$49.2 billion, Cisco is a giant in the Networking equipment industry.

The marketing mix of Cisco contains four variables, the product, the price, the place and the promotion. Following is the analysis of these four variables.

Marketing mix (4 P's)

Marketing mix is a marketing tool that incorporates four main strategies (price, product, place and promotion). By conducting such kind of analysis, companies have the ability to know better how they do their business and prepare more correctly the changes that are needed to respond to the market changes that are happening on the environment and be able to place its products more accurately in order to capture the highest possible market share and level of sales.

4.4.1 1. Product

Cisco provides its consumers, both B2B and B2C, with highly innovative networking products and networking services. It has a good positioning in the market and spends a lot of effort to maintain a high brand awareness and loyalty of its customers.

Cisco Product Strategy:

Cisco offers a gamut of products and services for B2B and B2C consumers. Cisco is primarily a product company. Cisco products include routers, wireless controllers, LAN controllers, security gateway, network switches, servers, network modulators, data services, amplifiers, Cisco IOS, security modules, WebEx, WAN automation and Cloud infrastructure. Products are segmented across corporate market, business and home solutions. Cisco also provides certifications for IT professionals such as CCNA, CCNP, CCIE. These certification courses help professional gain competency for a career in the networking industry.

4.4.2 2. Place

Cisco operates an online portal called Cisco Consumer Online (CCO), from which consumers buy what they want. In this way, selling is done directly to the customer and in an easy and safe way.

Cisco has a partnership program with which it chooses its business partners and allows them to sell their and Cisco's products through collaboration. Additionally, customers can be informed about Cisco's products through the internet and mainly through Cisco's website which has all the knowledge and information needed to help the consumer to pick up the most appropriate product that satisfies their needs.

Cisco Place & Distribution Strategy:

Cisco is almost everywhere in the planet something that shows that they have a good distribution strategy. Cisco has divided the planet into several market segments mainly according to geography or economic potential. Cisco tries to deliver the highest possible level of tailor-made solutions that will fulfill the needs of every customer in the best possible way. Cisco's sales team are always on the hunt of big B2B clients that will buy in bulk. For small business networking solutions, Cisco's website is really useful and helps the retail customers to pick up the correct product for them. For home solutions, Cisco also depends on retailers and local resellers who serve the customers and help them to choose the correct product that suits more their needs the best.

4.4.3 3. Price

Cisco uses mainly two pricing methods for its products. Firstly, for some products it uses the cost-based pricing to calculate the break-even point and put a "hat" over the marginal cost to calculate the selling price. Secondly, is the competitor oriented pricing scheme in which it first watches competitors' prices and then puts its own prices to its products according to its calculations.

Cisco Price/Pricing Strategy:

Below is the pricing strategy of Cisco:

Cisco has a wide range of offerings, which leads to diverse pricing plans.

Cisco's prices in general vary. It depends on what kind of product or service is sold and to what kind of customer (B2B or B2C). When Cisco calculates the prices of its products it takes mainly into consideration the cost of the product, the general market conditions and the prices of the competition. Of course, there exist expensive products with high prices like servers, network equipment, which are sold B2B in big quantities. For home consumers, Cisco network routers price hovers at around €5000 per module. Cisco VoIP products which can be used for both in the business environment and as well as for home solutions costs around €4000 per module. Cisco products' prices depend on the high brand value which accompanies them and are sometimes more expensive than their competitors like Netgear or D-Link.

Cisco is considered an expensive company but still worthy for their money. Although, the way that Cisco comes up with a price for products is based on a two major point. Firstly, the more important is the product the highest is the possible price that can charge (according with the product's characteristics). Secondly, the basic characteristic of Cisco products is the fact that they have durability, they last longer than those of the competition, so part of the expensive price is based on the fact that their products last longer so the customer does not have to buy a new one or upgrade it for some years therefore saving money.

4.4.4 4. Promotion

The promotion of Cisco's sales is done mainly through advertising in the internet, social media marketing, e-marketing, telemarketing, direct mail, telephone and more important public relations.

Cisco Promotion & Advertising Strategy:

Cisco's promotion and advertising strategy comprises of several things like web-advertising through its own official website and business partners' websites, through social media marketing campaigns (Facebook, LinkedIn, Twitter, etc.). The main idea of their campaigns and the main advertising message they pass to the consumers is actually the fact that there is no networking related need that Cisco cannot satisfy with its products. Additionally, there are several advertisements on television and radio and in some cases in Hollywood movies.

Business partners have the opportunity in collaborating with Cisco, to share knowledge, so there is some kind of knowledge diffusion, and to promote their business.

Cisco follows the following elements for their promotion strategy:

Direct Marketing

Direct marketing is the kind of marketing without intermediaries. It consists of direct telephone sales' calls, marketing e-mail and other ways. Moreover, the online shopping from Cisco's website is a kind of direct marketing technique together with some advertisements in cable television and several other means of communication.

Advertising

Advertisement can be defined as "any paid form of non-personal presentation and promotion of ideas, goods or services by an identified sponsor" (Armstrong, Kotler 2009). Cisco advertises itself mainly through the internet, but also through television, radio, magazines, newspapers which highlight the product and services quality and uniqueness.

4.5 SWOT Analysis of Cisco

4.5.1 1. Strengths

- Highly innovative products
- Brand Value
- Customer loyalty
- Good Financial condition
- Growth potential
- Leader in the market

The main strengths of Cisco are the fact that it is a market leader, that it offers highly innovative products, that is a huge brand value, it's big customer loyalty and also the fact that it has a good financial condition and potential for future growth.

4.5.2 2. Weaknesses

- Some Delays in orders

Cisco has an issue with its supply chain as the company suffers sometimes both from lack of components and delays in the delivery of the products to the customer.

4.5.3 3. Opportunities

- Huge potential growth in the markets of cloud computing and software.

Cisco has a great opportunity at the time since the market it operates has huge potential growth both in cloud computing and in the software market.

4.5.4 4. Threats

- Competition
- Volatility in the market

The main threats that Cisco faces is actually the vast competition in the sector of networks and software by dozens of companies and the fact that the market is highly volatile with many turnarounds.

5. Cisco's Targeting Strategy

Cisco's targeting strategy is a differentiated one, in which it tries to reach the maximum level of products and services customization to reach the customer's needs. Moreover, it recently developed a new approach to social customer care, the SocialBridge. The SocialBridge was developed as a result of a cross functional, data-led, and customer-focused strategy. (Bhaskar, 2004).

5.1 Sustained Differentiation across Customer Segments and Geographies

Cisco's strategy is made upon four pillars:

To capture customer driven market changes by identifying, investing and positioning.

Innovation also plays a major role into this aim and must be continuous.

Cisco differentiated market approach with their ability to bind together both their business architectures and the technology.

Prioritization of initiatives and cross functional teamwork that drive execution across customer segments, products, geographic theaters and value added services.

Cisco's differentiated strategy has evolved through its communication with its customers, from who they learn what the current market needs are and they understand what the future needs will be, in order to be able to produce innovative products, ahead of the time and competition in order to buy a pioneer company. Cisco continues to evolve its products and services to new standards with more innovation included, to satisfy more customers, both to B2B or B2C markets. Moreover, the collaboration with business partners it promotes and through the wide use of internet nowadays, which helps this kind of collaboration to work in an effective manner. Cisco looks also to expand to new emerging markets and it was very pleased from the economic results from which it was obvious that it gained big market shares alongside traditional markets like Europe or US. Cisco looks closely the emerging markets like India or China in which there is a lot of growth potential and in which there are a lot of profit chances for it.

5.2 Cisco Channel Strategy

Cisco tries to collaborate with the best partners in order to be able to provide the best possible level of service to its customers. They take a good care of their partners, with whom they want to have long-term relationships based on mutual understanding and collaboration. Cisco is getting bigger through acquisitions of smaller competitors and through collaborations with business partners. In this way knowledge is diffused and exchanged between the partners and more ideas arise creating more and more innovation, which is much needed for a better product value offer. This kind of expansion is done worldwide as Cisco acquires technology companies from all over the world and collaborates with them through the internet. The criteria for the selection of business partners are mainly if they are doing well in their business and if they have a good level of IT knowledge.

5.3 The Next Market Segmentation for Cisco

Cisco has been targeting towards getting a two digit sales growth from the telecommunication sector for the year 2009. As a market leader for that year, they were very certain that they would achieve this goal. For Cisco, telecommunication sector is one of the massive market segmentations for their products, especially in the IP technology.

5.4 Cisco Key Success Factor

Cisco nowadays has become a giant in the telecommunications and networking industry. This company wasn't well known until the explosion of the internet market during the 1990s in which the whole industry racketeered and reached a very high level with Cisco gaining a big market share. Cisco gained good market share both to B2B market segment in which organizations asked for computer and network hardware and networking solutions. Additionally, there is the B2C market in which tech-saving customers ask for network equipment. Both these two market segments have added much to the level of sales and profitability of the company. Sales to small and medium sized enterprises account about to 30% percent of the total sales of the company. There was an explosion in demand for computer networks during the 2000s in which many companies upgraded their network infrastructure and on the following years there was also an extra demand for small networks due to the Wi-Fi technology.

5.5 Managing the Product Mix – Positioning and Repositioning

The target of Cisco, through brand positioning, is to increase the brand value which adds to the price. Cisco is very closely aligned with their corporate strategy and regular investments are made to maintain the brand value of the company, something that is very important to Cisco as they gain from this a lot of revenue.

By brand positioning Cisco has gained enormous benefits as shown below:

5.5.1 Brand Measure

The branding campaigns conducted by Cisco have lifted its brand equity and helped to gain shares and grow sales, as part of the price of the products includes its brand value. So, brand value is certainly a big asset for Cisco. Cisco's success brand repositioning depends much on the innovation added each time to their products which is something that customers value much and runs together with all the other functions and operations of the company.

5.5.2 Market Share

Cisco has a big market share and it has grown into 72% in switching and 80% in routers. It has also a big market share in messaging applications, in web conferencing and the video conferencing segments. The market share has been increased for the entire range of Cisco security products including their firewall applications, VPN and for secure routers. Jobber (2007: 405).

5.6 Cisco Ansoff Analysis

5.6.1 Market Penetration

Market penetration is defined as a strategy that will help a company to sell more of its current products (the so-called mature products) into more people or gain a bigger market share from an existing market. This kind of strategy can be implemented firstly by making product offers such as selling the products at a more competitive price with more innovation added in them. Secondly, if you want to capture more market share, this can be done through acquisitions of competitors, so that the joint market share is bigger.

Cisco is known for its innovative products and introduction of those products into the market before its competitors that helps in penetrating mature markets, as they are a pioneering company. Its products like Cisco Catalyst 6500 Series Network Analysis Module, Cisco 7600 Series routers, Cisco Catalyst 6500 Series Firewall Services Module and many other products have already captured the market (Cisco 2009). Market penetration campaigns are increasing the market share and customer loyalty through their offers.

5.6.2 Market Development

A good market development strategy is very basic if you want to enter successfully a new market. After the conclusion have been drawn from the PESTEL analysis and the Five Forces of Porter analysis for this market, the correct marketing mix must be chosen that must be tailored to this market's needs.

Market development strategies can be defined as those who help a company to enter a new market or introduce a new product to an existing market. This comes for Cisco much together with the customer-orientation they follow. After hearing the customers' needs and how they evolve over time, Cisco is able to produce and offer new innovative and pioneering products which incorporate a lot of R&D, through a customized and tailor-made product to fulfill the specific market needs therefore capturing a big share of the market. Cisco uniqueness and its main competitive advantage is derived not so much from the brand value of the company, which nevertheless is quite high, but more from the high level of innovation they incorporate. In other words, Cisco sells something that the competition does not and offers it in a good manner to the customer.

5.6.3 Product Development

Product development can be defined as a strategy where a business seeks to introduce new products into current markets. Again a PESTEL analysis of the macro-environment and a Five Forces of Porter analysis for the micro-environment is needed. The product development strategy requires the development of new products which must be attractive to the consumers. Additional products may be needed to be produced as new customer needs arise, with extra need for investing in R&D and innovation in order that these products are of cutting-edge technology. Cisco sets vision and then makes its strategies to achieve its targeted goals. Cisco's market-orientation capitalizes the current and future market situation and then provides customized business solutions according to meet these needs.

“Cisco has identified four key requirements to increase acceptance in the business world: security, availability, quality of service, and reliability” (Payataqool 2009).

5.7 Diversification

Diversification is a strategy which gives competitive advantage. This is a strategy containing the entrance into new markets and especially emerging markets like Russia, Middle East and Latin America. This requires some PESTEL and five forces of Porter analysis and this is some kind of a risky movement. These markets do not have advanced networking infrastructure despite the fact that they have gained much wealth in their territories. Also there have made some other improvements like the fact that they have minimized bureaucracy and these are countries that look to improve their IT facilities and network connections, so there is some important potential wealth for Cisco over there. Cisco does not only want to sell networking equipment in these countries to the private sector of the economy but also looks to do business with the public sector in order to drive forward the internet and networking revolution over there. Cisco has successfully initiated transformation projects in Chile, Turkey and South Africa as part of its diversification strategy (Deign 2009).

5.8 Managing product over time – Product Life Cycle

Cisco has followed this by moving from a traditional silicon based organization to a lifecycle business model. These changes are challenging for Cisco since they have more than 60,000 employees supported by their 46 data centers worldwide. This new life cycle consists of six separate stages:

<ul style="list-style-type: none">• During the Preparation phase it determines the business case and the project requirements.
<ul style="list-style-type: none">• During the Planning phase it develops the detailed project plan describing the resources and responsibilities.
<ul style="list-style-type: none">• During the Design phase it details the alignment of business goals and the technical needs.
<ul style="list-style-type: none">• During the Implementation phase it delivers the new capabilities with the integrations.

<ul style="list-style-type: none"> • During the Operation phase it monitors and reviews the implementations and
<ul style="list-style-type: none"> • Finally, during the Optimization phase it provides a continuous improvement activity of the existing processes.

Table 10. Product Life-Cycle in Cisco

So with this strategy Cisco has made a lot of cost-saving and is able to offer state-of-the art networking solutions to the highest customizable rate possible which address to the needs of its customers.

An important also part of Cisco's strategy is the fact that they have setup a campaign for communication with their customers and with use of advanced AI techniques this also works as a marketing too.

In that way Cisco, provides high-quality expert answers through a team of talented employees in the sectors of sales, engineering, customer experience, product teams, technical support etc. This is more than a typical standard customer service response.

Key program features include:

Care Tool – This new social care tool was launched on September 9, 2019. The implementation includes an Artificial Intelligence (AI) model which allows us to identify more customer engagement and sales opportunities, threading of messages into engagement cases, rule-based prioritization of incoming cases, deeper tracking of performance and optimization metrics, and more.

Artificial Intelligence – Cisco has built an AI model from which it can add to its knowledge base with every question that is answered. In this way, there are more opportunities for customer engagement than before.

Surge Alerts and Crisis Communication Workflow – Cisco has developed a social crisis resolution strategy through its new crisis communication strategy in which key stakeholders are informed when a crisis arises. The team then has the time needed to strategize its response and communicate it to their global social teams. These combined with the use of surge alert notifications and the use of crisis resolution plan, have minimized the impact of the crisis occurring.

Relationship Building – Cisco engages with customers on lighter touch posts and starts conversations in order to build relationships. These kind of personal communication with the customers, is favorable by them and can surely add to our volume of sales.

Process Mapping – The uses of workflows and process mapping have helped us to minimize the response time to 30 minutes. Cisco’s team is working for even quicker response rates.

Custom Tagging and Reporting – We have developed custom tags that allow us to watch customers’ conversations in the social medias regarding our products. So, this is a kind of feedback for us which help us to improve our offer.

Global Language Scaling – We currently support customers in English, Spanish, Portuguese, and Filipino and we want to add soon 6 more languages.

Intent Modelling & NPS – Through our unique listening capabilities we have been able to marry our intent modelling with social listening to enhance our SEO performance and provide deeper insights into our Net Promoter Scores

Command Center Station – Our core command center collaboration area is located in our San Jose headquarters with plans to scale across all regions.

5.9 The results

Since launching in September 2017, the SocialBridge network of experts has steadily grown and our collaboration has seen continued success, including:

- Listening across 47 million Cisco-related conversations, an average of 8 million per month.
- Over 2,000 direct customer interactions and issues resolved.
- 27% of our interactions and conversations are proactive and listening-based.
- We have driven a 45% sentiment change from negative/neutral to positive across all of our conversations which speaks directly to the impact we are having on the customer experience.
- We have driven a 49% increase in user interactions across @Cisco, our major Cisco handle.
- We have driven an increase in customer engagement through a 50x increase in messages exchanged with customers directly.
- Our efforts have resulted in a 5.3 ppt increase in net positive sentiment overall.

As it can be concluded from the above, Cisco's main target is nowadays, in order to maintain its position as a market leader, to be able to maintain high-level of customer satisfaction and service. The use of Artificial Intelligence techniques have helped a lot Cisco's teams to work better, boosted the sales and improved the level of customer service and satisfaction.

6. The Internet and e-commerce at Cisco

What started as an experimentation in 1990s, now it has become the core way of communication between Cisco and its customers, suppliers, third parties etc. Also, communication between Cisco employees is done through web-based platforms. Cisco, in other words has taken full advantage of the capabilities that internet can give to company and has based its whole function to be done through the internet. We will now refer to the main systems of communication that Cisco uses.

6.1 A. Cisco connection online (CCO) – Cisco’s website

For communication with customers, suppliers, resellers, business partners, investors and potential employees, Cisco has developed a website, Cisco connection online (CCO), in which all these groups can communicate with the company. First of all, it has its products (ERP systems, databases, legacy systems and client – server systems) and secondly, it also has a link to Cisco’s extranets for suppliers and partners. CCO has five key components.

- 1) Marketplace
- 2) Technical assistance and software library
- 3) Customer service
- 4) Internetworking product center and
- 5) Cisco supplier connection (CSC) (Kraemer and Dedrick, 1999)

6.1.1 1. Marketplace

The marketplace sector of the website is actually a virtual shopping center where consumers can place their orders. Also, it has a function for business partner’s orders and most of them are done electronically.

6.1.2 2. Technical assistance and software library

This section of the website helps the customers and the business partners to get online answers to technical issues and download the latest version of the software products.

6.1.3 3. Customer service

The customer service section of the website provides non-technical assistance on a self-help basis for customer requests such as product status, price lists, latest releases and service

order status. It uses intelligent agents and is available 24 hours per day and 7 days of the week.

6.1.4 4. Internetworking product center

Internetworking product center is a suite of application for order processing. They enable users to configure, price, route and submit electronic orders directly to Cisco (or to Cisco distributors, in the case of resellers).

6.1.5 5. Cisco supplier connection (CSC)

Cisco uses an extranet and Web-based EDI technologies to coordinate with its suppliers and CMs via the CSC, which is accessible to registered users from the Cisco website.

6.2 B. Intranet – Cisco’s Employee Communication

Cisco employee connection (CEC) is an intranet designed to provide information and services to meet the needs of Cisco’s employees, CEC provides information and about 80-100 interactive tools for facilities, travel arrangements and financial matters.

The reason that Cisco has decided to depend so much on the internet for its functions is firstly, the cost reduction which happens through this mean of communication, secondly, the expansion of its market reach, thirdly, to deliver products more quickly and fourthly, to improve customer service.

6.3 Benefits from the use of Internet and e-commerce for Cisco

Cisco claims to be the largest single user of e-commerce in the world with 90% of the 18.9 billion dollars sales to be done online. It also states that 82% of the customer inquiries are handled online and that 100% of the orders to its suppliers are also done online.

It is undeniable the fact that the use of internet has helped Cisco to reduce its costs and reach a bigger market share. Actually, this is not only about cost savings, but also for cost avoidance, because there is no hiring in some case where the bots can serve the customer.

In addition, through the online training, technical support and open forums in which engineers exchange opinions for Cisco’s products, there is a kind of training for them and Cisco eventually may try to hire them in the future. The cost of IT expenditures for Cisco

was estimated to be 6.5% of the revenues, double than its competitors (Kraemer and Dedrick, 2002).

7. Financial Performance of Cisco for the Fiscal Year 2020

By the end of fiscal 2020, Cisco said it achieved its goal of acquiring more than half of its revenue from software and services. Still, revenue decreased on 2020 compared to 2019 due to the economic crisis that occurred with the COVID-19 pandemic.

Cisco's fourth quarter net income came \$3.4 billion, or 80 cents per share. Total revenue was \$12.15 billion, a decrease of 9% from 2019. Analysts were expecting earnings of 74 cents per share on revenue of \$12.08 billion. So, this was a little better than the analysts expected. (Cisco's annual report, 2020).

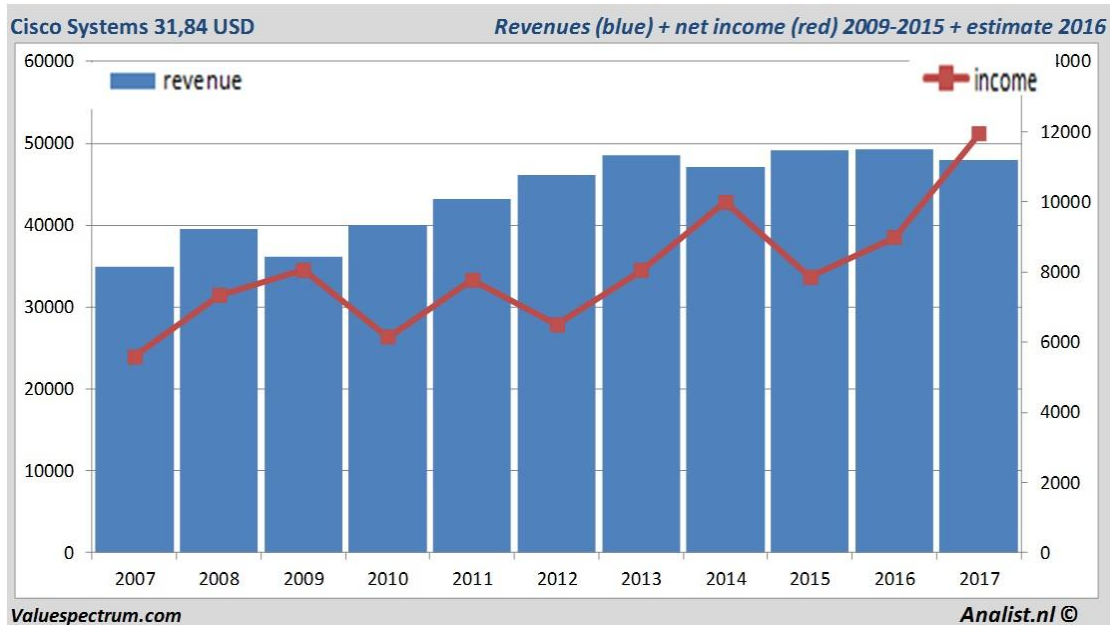
For the full 2020 fiscal year, Cisco's non-GAAP EPS came to \$3.21 on revenue of \$49.3 billion, a decrease of 5% from 2019. Product revenue in Q4 was down 13% to \$8.83 billion. Within this category, sales from infrastructure platforms was down 16% to \$6.6 billion. Infrastructure platforms took the biggest hit from the pandemic's economic crisis.

Application revenue was down 9% to \$1.36 billion. Sales of security products grew 10% to \$814 million. "Other Products," which brought in \$35 million, declined by 17%. Service revenue was flat year-over-year at \$3.32 billion.

As of Q4, software subscriptions make up 78% of Cisco's software revenue. Revenue was down across all customer segments, as well as geographic segments. In terms of customer segments, Cisco saw enterprise revenue decline by 7% and public sector revenue decline by 1%. Commercial revenue fell 23%, while service provider sales were down 5%.

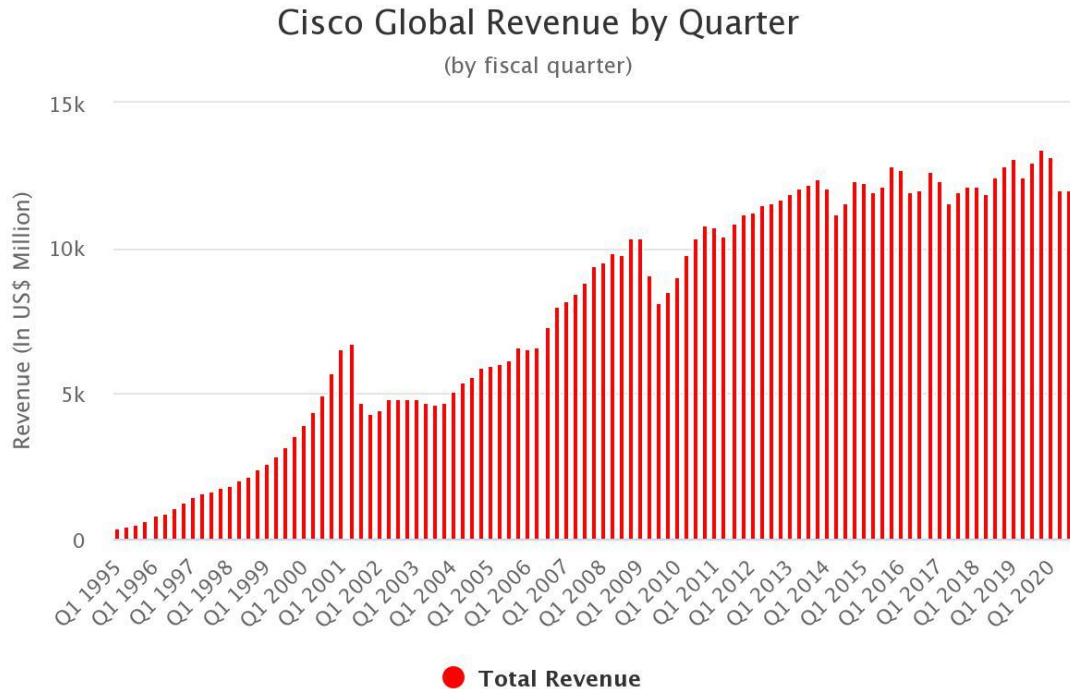
By region: In the Americas, sales declined by 12%, in EMEA by 6%, and in APJC revenue was down 7%. For the first quarter, Cisco expects a non-GAAP EPS between 69 cents and 71 cents. It expects revenue to decline between 9% and 11% year-over-year.

From the above-mentioned financial results of 2020, one can say that Cisco was hit by the economic crisis that arose world-wide due to the pandemic of coronavirus. Further decrease in profitability is expected for 2021, as the exodus from the pandemic crisis seems to be still far away.



Graph 3. Cisco Systems Revenue 2007-2017

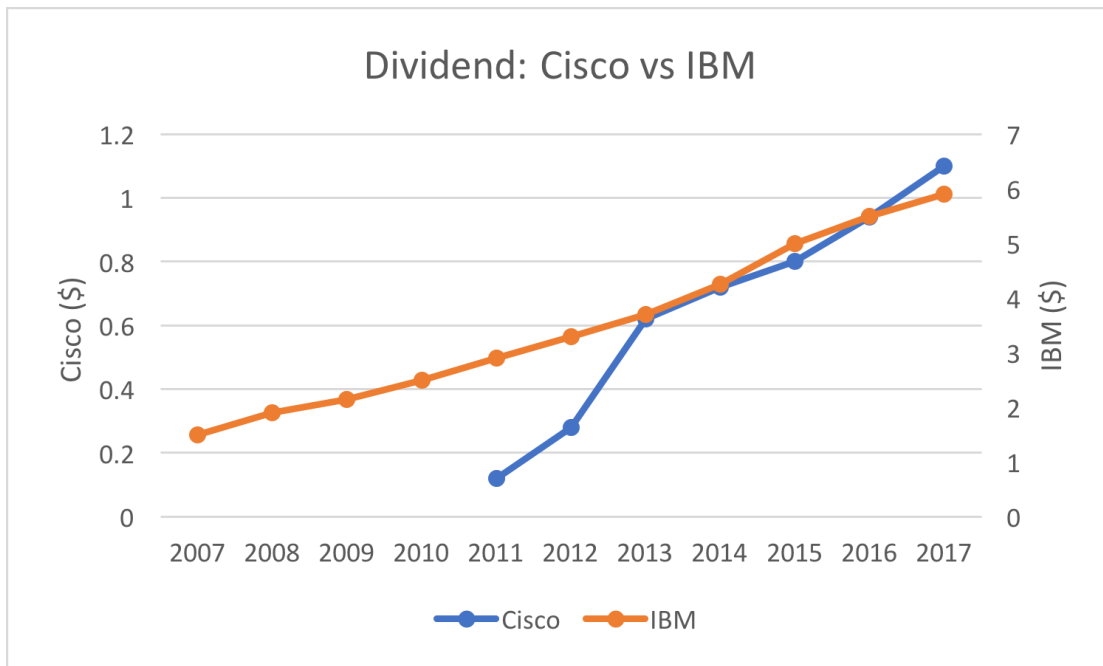
Source: www.valuespectrum.com



© Dazeinfo / Source: Cisco Systems, Inc.

Graph 4. Cisco Systems Revenue 1995 – 2020

Source: www.dazeinfo.com



Graph 5. Cisco vs IBM dividend policy

Source: www.seekingalpha.com

8. Conclusion

As a conclusion of our research we can say that Cisco is definitely a market leader in the telecommunications and network market. This result is mainly based on Cisco's spending much on R&D, to provide unique innovative products ahead of their time and grasp a big market share. The most intelligent part of its marketing strategy is actual the fact that Cisco depends much on hearing what the consumers have to say. With this mean of communication, which in many cases consists of employees watching and searching on social media to see the consumers comments on technology issues or with the use of artificial intelligence techniques, Cisco tries to unravel the mystery of what the future needs of the consumers will be in order to prepare itself and produce the products that address these needs ahead of the competition, with high innovativeness included in them. In this smart way, Cisco remains a market leader and can easily compare itself with other giants like Microsoft. we do not know what the future will bring but Cisco has already proven to us for decades now that is always ahead of its time. This is Cisco's main competitive advantage and what – we believe – will keep the company as a market leader in the future.

References

1. Al-Debei, M. M., El-Haddadeh, R., & Avison, D. (2008). Towards a business model for cellular network and telecommunication operators: a theoretical framework. School of Information Systems, Computing and Mathematics;.
2. Bhaskar, R. (2004). A customer relationship management system to target customers at Cisco. *Journal of Electronic Commerce in Organizations (JECO)*, 2(4), 64-74
3. Bhaskar, R., & Zhang, Y. (2005, October). CRM systems used for targeting market: A case at Cisco Systems. In *IEEE International Conference on e-Business Engineering (ICEBE'05)* (pp. 183-186). IEEE.
4. Cisco Annual Report Summary (2020), www.cisco.com
5. Chatman, J., O'Reilly, C., & Chang, V. (2005). Cisco Systems: Developing a human capital strategy. *California Management Review*, 47(2), 137-167.
6. David Jobber, J. F. (2007). *Fundamento de Mrketing*.
7. Greiner, L., & Schein, V. (1989). Power and organization development: Mobilizing power to implement change.
8. Groeger, L., Bruce, K., & Rolfe, I. (2019). Adapt fast or die slowly: Complex adaptive business models at Cisco Systems. *Industrial Marketing Management*, 77, 102-115.
9. Jaworski, B. J., & Kohli, A. K. (1996). Market orientation: review, refinement, and roadmap. *Journal of Market-Focused Management*, 1(2), 119-135.
10. Joo, Y. H., Jun, J. K., & Kim, B. D. (2002). Encouraging customers to pay less for mobile telecommunication services. *Journal of Database Marketing & Customer Strategy Management*, 9(4), 350-359.
11. Kollmann, T. (2000). The price/acceptance function: perspectives of a pricing policy in European telecommunication markets. *European journal of innovation management*.
12. Kotler, P. (2000). *Kotler on marketing: How to create, win and dominate markets*.
13. Kotler, P., & Armstrong, G. (2010). *Principles of marketing*. Pearson education.
14. Kotler, P., Armstrong, G., Ang, S. H., Leong, S. M., Tan, C. T., & Yau, O. (2009). *Principles of marketing: A global perspective*. Prentice-Hall.
15. Kotler, P., & Keller, K. L. (2006). *Marketing management* 12e. New Jersey, 143.
16. Kraemer, K. L., & Dedrick, J. (1999). Information technology and productivity: results and policy implications of cross-country studies.

17. Kraemer, K. L., & Dedrick, J. (2002). Strategic use of the Internet and e-commerce: Cisco Systems. *The Journal of Strategic Information Systems*, 11(1), 5-29.
18. Li, Y. R. (2009). The technological roadmap of Cisco's business ecosystem. *Technovation*, 29(5), 379-386.
19. Lymperopoulos, K., Janavaras, B., & Salamoura, M. (2015). INTERNATIONAL AND EXPORT MARKETING STRATEGIES.
20. Lysonski, S., Pecotich, A., & Zotos, Y. (1992). An Empirical Investigation of the Content and Imagery used in Alcohol Advertisements in Magazines. In *An Empirical Investigation of the Content and Imagery used in Alcohol Advertisements in Magazines* (pp. 1355-1359). European Marketing Academy.
21. Mihardjo, L. W. W., & Sasmoko, S. (2019). Digital Transformation: Digital Leadership Role in Developing Business Model Innovation Mediated by Co-Creation Strategy for Telecommunication Incumbent Firms. In *Strategy and Behaviors in the Digital Economy*. IntechOpen.
22. Mylonakis, J., Malliaris, P. G., & Siomkos, G. J. (1998). Marketing-driven factors influencing savers in the Hellenic bank market. *Journal of Applied Business Research (JABR)*, 14(2), 109-116.
23. Paulson, E. (2002). *Inside Cisco: The real story of sustained M&A growth*. John Wiley & Sons
24. Pelham, A. M. (2000). Market orientation and other potential influences on performance in small and medium-sized manufacturing firms. *Journal of small business management*, 38(1), 48-67.
25. Rao, V. R. (1984). Pricing research in marketing: The state of the art. *Journal of Business*, S39-S60.
26. Sabir, R. I., Irfan, M., Sarwar, M. A., Sarwar, B., & Akhtar, N. (2013). The impact of service quality, customer satisfaction and loyalty programs on customer's loyalty: an evidence from telecommunication sector. *Journal of Asian Business Strategy*, 3(11), 306-314.
27. Silverman, G. (2001). The power of word of mouth. *Direct Marketing*, 64(5), 47-52.
28. Toppenberg, G., Henningsson, S., & Shanks, G. (2015). How Cisco Systems used enterprise architecture capability to sustain acquisition-based growth. *MIS Quarterly Executive*, 14(4), 151-168.

29. Tripathi, D. (2020). Marketing Strategies for Branding and Interactive Advertising through Telecommunication. *Journal of Accounting, Finance & Marketing Technology*, 1(2), 6-17.
30. Wood, N. T., & Solomon, M. R. (2009). Virtual social identity and consumer behavior. ME Sharpe.
31. Viardot, E. (2004). Successful marketing strategy for high-tech firms. Artech House.

Author's Statement:

I hereby expressly declare that, according to the article 8 of Law 1559/1986, this dissertation is solely the product of my personal work, does not infringe any intellectual property, personality and personal data rights of third parties, does not contain works/contributions from third parties for which the permission of the authors/beneficiaries is required, is not the product of partial or total plagiarism, and that the sources used are limited to the literature references alone and meet the rules of scientific citations.