

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
TERNOPIL IVAN PULUJ NATIONAL TECHNICAL UNIVERSITY

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**AN INVESTIGATION OF OPERATIONAL MANAGEMENT IN THE
ORGANIZATION, ON THE EXAMPLE OF THE APPLE COMPUTER, INC.**

Specialty 073 – Management

ABSTRACT
for educational qualification “Master” degree

Ternopil – 2019

Master's research paper has been done at the management and administration department of the Ternopil Ivan Puluj National Technical University.

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GENERAL DESCRIPTION

Theme actuality. Operations Management plays a vital role to ensure the effective functioning of the organization. It involves similar management for every industry or business irrespective of their nature of the operation. Planning, organizing, staffing, monitoring controlling, directing and motivating are its significant elements. Operation management is obligatory for organizations to manage the daily activities seamlessly. With its help, an organization is able to make good use of its resources like labor, raw material, money and other resources.

Operation Management is important to improve the overall productivity. The ratio of input to output is termed as productivity. It gives a measure of the efficiency of the manager as well as the employees. Since the discipline focuses on using the available resources in the best possible way to achieve end goals, so it improves the overall productivity.

Operation management is the management of the various business activities that take place within an organization and contributes in making the products to align with customer's requirements. Operation management is the heart of an organization as it controls the entire operation. If the products are made catering to the needs of the customers then, they'll be sold at a rapid rate. Under operation management, there is the optimum utilization of resources leading to enormous profits of the organization. The efforts of the employees and the various raw materials are efficiently utilized and converted into the services and goods required by the organization. Operation management plays a crucial role in an organization as it handles issues like design, operations, and maintenance of the system used for the production of goods. The manufacturing of raw materials to make the goods and selling them along with management of sales is necessary, and this is done efficiently by managing the operations.

The main **aim** of this research paper is to investigate system of Operations Management of the Apple Inc. and to formulate theoretical approaches and to develop practical recommendations on directions of improvement of operating management at the organization.

The main **tasks** of master research paper are the following:

- to consider the theoretical framework of operational management;
- to determine the environmental factors that influences the Operational Management at the Apple Inc.;
- to conduct the analysis of operation management at Apple Inc.;
- to give recommendations for improvement of Operational Management at the Apple Inc.

The **object of study** of the master's work is the process of managing the operational activity, and the **subject** is the directions of improving the operational management at the company.

Research methods cover methods of analysis, synthesis, comparison, detailing, system approach.

The information base of the investigation are materials of scientific research in the sphere of Operational Management, operating data of the Apple Inc. and other information sources.

Structure of master's thesis. The master's thesis consists of an introduction, seven chapters, conclusions, a references and applications.

MAIN CONTENTS

The introduction clearly Theme actuality, the aim, main tasks, objectives and the research methods, the information base of the investigation, structure of master's thesis.

Theoretical section contains meanings and definition of operational management, its principles and methods, factors affecting the Operations activity of Apple Inc. company.

Operations management is the administration of business practices to create the highest level of efficiency possible within an organization. It is concerned with converting materials and labor into goods and services as efficiently as possible to maximize the profit of an organization. Operations management involves utilizing resources from staff, materials, equipment, and technology. Operations managers acquire, develop, and deliver goods to clients based on client needs and the abilities of the company.

Operation management is a process that involves planning, organizing, managing, controlling and supervising the production and manufacturing processes. The major aim of an operation manager is to ensure timely delivery of the products and to successfully turn the raw materials into the finished products (input to output). Operations management handles various strategic issues, including determining the size of manufacturing plants and project management methods and implementing the structure of information technology networks. Other operational issues include the management of inventory levels, including work-in-process levels and raw materials acquisition, quality control, materials handling, and maintenance policies.

When operations management is implemented, there are key adjustments that are made to help support the company in reaching strategic goals. These strategic goals are met through understanding the most important principles of operations management and provide thorough visibility into the operation.

The main principles operations management are: reality, organization, processes, fundamentals, accountability, variance, causality, managed passion, humility, success, change, research and analysis section.

In Apple's external analysis case, the following technological external factors are the most significant:

- 1) Growing cloud computing demand (opportunity);

- 2) Increasing technological integration in businesses (opportunity);
- 3) Growing mobile market (opportunity).

Apple Inc.'s high performance is linked to effectiveness in addressing external factors in the company's remote or macro-environment. The corporation's success is a result of strategic management that exploits opportunities and protects the business from threats in the consumer electronics and information technology services industries. PESTEL/PESTLE analysis of Apple Inc. identifies the most significant external factors that the company must strategically address in its industry environment. The PESTEL/PESTLE analysis framework evaluates the political, economic, sociocultural, technological, ecological, and legal factors relevant to the business.

The political external factors:

1. Improving free trade policies (opportunity);
2. Stable politics in developed countries (opportunity);
3. Trade disputes, especially between the U.S. and China (threat).

Economic Factors Important to Apple Inc.:

1. Stable economies of developed countries (opportunity);
2. Rapid growth of developing countries (opportunity);
3. Increasing disposable incomes among target customers (opportunity).

Social/Sociocultural Factors in Apple's Industry Environment:

1. Rising use of mobile access (opportunity);
2. Increasing dependence on digital systems (opportunity);
3. International anti-Apple sentiments (threat).

Technological Factors in Apple's Business Environment:

1. Growing cloud computing demand (opportunity);
2. Increasing technological integration in businesses (opportunity);
3. Growing mobile market (opportunity);
4. Growing technological capabilities of other firms (threat).

Ecological/Environmental Factors

1. Business sustainability trend (opportunity);
2. Energy efficiency trend (opportunity).

Legal Factors that Limit Apple

1. Increasing privacy regulations (opportunity & threat);
2. Legal challenges against Apple's policies and practices (threat).

Research and analysis section contains the Company introduction, SWOT - analysis and analysis of operation management at Apple Inc.

The Apple Inc. designs, manufactures and markets mobile communication and media

devices and personal computers, and sells a variety of related software, services, accessories and third-party digital content and applications. The Company is committed to bringing the best user experience to its customers through its innovative hardware, software and services. The Company's business strategy leverages its unique ability to design and develop its own operating systems, hardware, application software and services to provide its customers products and solutions with innovative design, superior ease-of-use and seamless integration. Apple Inc. Mission is to bringing the best user experience to its customers through its innovative hardware, software, and services.

The following is a SWOT- analysis of Apple Inc.:

Strengths: Strong brand image, high profit margins, effective rapid innovation processes.

Weaknesses: limited distribution network, high selling prices, dependence of sales on high-end market segments.

Opportunities: expansion of the distribution network, higher sales volumes based on rising demand, development of new product lines.

Threats: aggressive competition, imitation, rising labor cost in various countries.

Main Decision Areas of Operations Management of Apple are:

1. Design of Goods and Services.
2. Quality Management.
3. Process and Capacity Design.
4. Location Strategy.
5. Layout Design and Strategy.
6. Job Design and Human Resources.
7. Supply Chain Management.
8. Inventory Management.
9. Scheduling.
10. Maintenance.

The Company evaluates the performance of its reportable segments based on net sales and operating income.

The following are the main characteristics of Apple's corporate structure:

- 1) Spoke-and-wheel hierarchy;
- 2) Product-based divisions;
- 3) Weak functional matrix.

Because the industries in which the Company competes are characterized by rapid technological advances, the Company's ability to compete successfully depends heavily upon its ability to ensure a continual and timely flow of competitive products, services and technologies to the marketplace. The Company continues to develop new technologies to enhance existing products

and services, and to expand the range of its offerings through R&D, licensing of intellectual property and acquisition of third-party businesses and technology.

Apple's revenue dynamics were characterized by a slight decline in the value of this indicator in 2016, then it grew in 2017 and 2018. In 2019, the company's revenue declined by \$ 5.84 billion from the previous year. iPhones accounted for the largest share of Apple's revenue in Q4 2018 (59%). The share of services was equal 16%, Mac - 12%, iPad - 7%, other Products - 6%.

In 2016-2018 the company received the largest share of sales and operating income from the US segment and the smallest - from Rest of Asia Pacific. At the same time, Net sales and Operating income grew in all segments, except Greater China in 2017.

Main Decision Areas of Operations Management of Apple are: design of Goods and Services, Quality Management, Process and Capacity Design, Location Strategy, Layout Design and Strategy, Job Design and Human Resources, Supply Chain Management, Inventory Management, Scheduling, Maintenance.

Recommendation section includes the recommendations concerning improvement of operational management at the Apple, Inc.

There are multiple challenges that Apple's operations managers face on a daily basis including the following five: globalization, sustainability, ethical conduct, ineffective communication, and system design.

The company can use its strengths to expansion of its distribution network. The Company's customers are primarily in the consumer, small and mid-sized business, education, enterprise and government markets. The Company sells its products and resells third-party products in most of its major markets directly to consumers and small and mid-sized businesses through its retail and online stores and its direct sales force. The Company also employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers. During 2018, the Company's net sales through its direct and indirect distribution channels accounted for 29% and 71%, respectively, of total net sales.

To ensure a high-quality buying experience for its products in which service and education are emphasized, the Company needs to build and improve its distribution capabilities by expanding the number of its own retail stores worldwide. The Company's retail stores are typically located at high-traffic locations in quality shopping malls and urban shopping districts. By operating its own stores and locating them in desirable high-traffic locations the Company is better positioned to ensure a high-quality customer buying experience and attract new customers. The stores are designed to simplify and enhance the presentation and marketing of the Company's products and related solutions. The retail stores it is advisable to involve experienced and knowledgeable personnel who can provide product advice, service and training, and offer a wide selection of third-

party hardware, software and other accessories that complement the Company's products.

Conclusion includes a summary of an investigation of operational management at the Apple Computer, Inc.

SUMMARY

Magwizi Christina Nyaradzai. An investigation of operational management in the organization, on the example of the Apple Computer, Inc. [Manuscript]: a comprehensive thesis for obtaining the qualification of master's degree 073 / Magwizi Christina Nyaradzai; TNTU. – Ternopil, 2019. – 102 p.

Master degree thesis consists: 102 pages, 6 figures, 5 tables, 1 appendice, 72 references.

The object of investigation is the process of managing of operating activities of Apple, Inc.

The aim of the work is to formulate theoretical approaches and to develop practical recommendations on directions of improvement of operating management at the organization.

Research methods cover methods of analysis, synthesis, comparison, detailing, system approach.

This master's research paper analyzes the operational management of Apple, Inc. and provides recommendations for its improvement. In particular, the main directions of solving the problems of operational management of the company have been outlined, the proposals on improvement of expansion distribution network and organization of innovative activity of the Apple Inc. have been made.

Keywords: operational management, operational activity, SWOT – analysis, competitive advantages of the organization.

АНОТАЦІЯ

Магвізі Крістіна Ньярадзаї. Дослідження системи операційного менеджменту організації, на прикладі Apple Computer, Inc. [Рукопис]: Комплексна дипломна робота на здобуття кваліфікації магістра за спеціальністю 073 / Магвізі Крістіна Ньярадзаї; ТНТУ. — Тернопіль: [б. в.], 2019. — 102 с.

Магістерська робота: 102 с., 6 рис., 5 табл., 1 додаток, 72 літературних джерела.

Об'єкт дослідження – процес управління операційною діяльністю компанії Apple, Inc.

Мета дослідження - формування теоретичних підходів та розробка практичних рекомендацій щодо напрямів вдосконалення системи операційного менеджменту компанії Apple, Inc.

Методи дослідження: методи аналізу, синтезу, порівняння, деталізації, системний підхід.

У роботі проведено аналіз операційного менеджменту Apple, Inc., а також викладені рекомендації щодо його вдосконалення. Зокрема, окреслено основні напрями вирішення проблем операційного менеджменту компанії, внесено пропозиції щодо розширення дистриб'юторської мережі, а також вдосконалення організації інноваційної діяльності Apple Inc.

Ключові слова: операційний менеджмент, операційна діяльність, SWOT – аналіз, конкурентні переваги організації.