Exploration and research of management theory

Guanjun Xiao¹, *, #, Liqing Huang¹, #, Jialu Li¹, #, Lian Xue¹, #, Haining Sun², #, Hongyi Jiang³, #

¹School of Financial Technology, Shanghai Lixin University of Accounting and Finance, Shanghai, China, 201209
²School of Foreign Languages, Shanghai Lixin University of Accounting and Finance, Shanghai, China, 201620
³School of International Trade and Economics, Shanghai Lixin University of Accounting and Finance, Shanghai, China, 201209

*Corresponding author: 2687326828@qq.com

Abstract. In this paper, we review the historical changes in the development of four management disciplines, including classical management theory, behavioral science theory and management theory, and modern management theory. Management is then compared and analyzed with other disciplines at the micro and macro levels.

Keywords: Management, Subjects, Science.

1. Introduction

The evolution of management to date, his evolution can be divided into four stages: classical management theory, the classical management theory stage from the early 19th century to the 1930s, behavioral science theory and management theory in the 1930s and 1960s, modern management theory proposed in the 1960s and 1980s after World War II, and from the 1980s to the present, providing modern management theory. Management is a comprehensive discipline that distinguishes between anthropology, sociology, behavior and management, which includes organization, marketing and psychology.

2. The evolution of management from its emergence to today

2.1. Changes in management concepts

The concept of management was first evolved from early Chinese and Western management ideas, and the need for collaborative cooperation has existed since human beings began contract labor. However, due to the ultimate purpose of people's actions, the main objective conditions and the prevalence of ideological hierarchies and oppositions between people, it is difficult to spontaneously achieve a perfect state of cooperation and collaboration in joint labor. On the question of how to effectively improve the efficiency of work and daily work, people in constant practice have discovered that directing others and manipulating the entire work process is a management activity.

Early management concepts in China and the West can be divided into those that emerged in ancient China and those that emerged in the early days of the quadripartite factory system. In ancient China, Taoism had the idea of "obedience and inaction", Confucian scholars advocated the idea of "people" as the main focus of management, military schools emphasized the idea of premeditated and prudent warfare, and Legalists pointed out the idea of governance according to law, focusing on the principle of "clear development" and "common law". The early quadripartite factory system was proposed by Robert Owen, the founder of modern personnel management, Adam Smith, the famous classical economist, and Charles Babbage, the researcher of the work compensation system. Charles Babbage, the founder of modern personnel management - Robert Owen, the famous classical economist - Adam Smith, and the researcher of the work compensation system - Charles Babbage. Adam Smith's theory of "division of labor" increased the
productivity of people, saved time in division of labor, and facilitated the creation of new tools and improved equipment. Although the early management ideas were fragmented, the accumulation of these ideas laid a strong and solid foundation for the systematic formation of management concepts.

The evolution of management concepts can be divided into four stages. The first stage is the classical management theory, which was proposed in the stage of classical management theory from the early 19th century to 1930s; the second stage is the behavioral science theory and management theory in 1930s and 1960s, which provided the theory of human relations and behavioral science; the third stage is the modern management theory proposed in 1960s and 1980s after World War II; the fourth stage is from 1980s to present, which provides modern management theories.

2.1.1 Classical Management Theory

At the beginning of the 19th century, against the background that people were all focused on labor-intensive production, F.W. Taylor, the "father of scientific management," H. Fayol, the "father of management theory," and M. Weber, the father of organization theory, systematically discussed economic management issues from different directions, forming the more representative schools of scientific management theory and organization management.

The representative of the school of scientific management theory is Frederick Taylor, who advocates that management should go to science and that the main goal of scientific management is to maximize efficiency, which requires replacing empirical management with scientific and normative management methods. Beyond this, many people believe that the basic interests of labor and management are in opposition to each other, but believe that the interests of both parties are aligned and that only by cooperation between labor and management can a higher level of performance be achieved, which is called the psychological revolution between labor and management.

The organizational management school is represented by Fayol and Weber. Fayol introduced the principle of universality of management and proposed the theory of management function for all organizations suitable for human nature, which is valid not only for public and private enterprises, but also for military and political institutions and religious organizations, and proposed the idea of establishing management courses in colleges and universities. Weber proposed the "theory of bureaucratic organization" (the ideal theory of administrative organization system). The study of scientific management thinking focused on how to improve efficiency, Taylor focused on improving the efficiency of workers' labor and managers' efficiency - standardization and exception management, etc., Fayol focused on improving the efficiency of management - the five functions of management and the fourteen principles of management, while Weber focused on the overall efficiency of the organization. Scientific management thinking supports replacing experience with science, forming a series of scientific management principles and methods, proposing general management theories and basic management principles, and proposing the most effective form of organizational structure from a scientific point of view. Scientific management thinking is professional, advocates the separation of managers and operators, special professional education in management, and professionalization of management work.

2.1.2 Behavior Management Research

At the beginning of the twentieth century, economic crises broke out in capitalist countries, and labor-management conflicts were further intensified as a result. Although the classical management theories founded by Taylor, Fayol, Weber and others effectively achieved a significant increase in labor productivity, the classical management theories, which focused on the institutional level, ignored the influence of human subjective emotions and showed their limitations.

The theory of behavioral science was born, which focuses on human emotions, thoughts and subjective motivation. The emergence of behavioral science has raised the status of the "human" element, and its predecessor is the theory of human relations, which emerged in the late 1920s. The interpersonal theory was developed by Mayo, who is particularly famous for his experiment called
the Hawthorne experiment. He claimed that workers are not passive, isolated individuals and that interpersonal relationships in the workplace, rather than job treatment and working conditions, are what matters most. It is usually the most critical factor affecting worker productivity. Based on this, Mayo proposed that the most important element of human relations theory is that workers are "social people" rather than "economic people" and that informal organizations (i.e., organizations that are bound together by interpersonal relationships governed by emotional logic) exist within firms. Thus,[1] in order to manage employees, managers should carefully analyze the needs of employees, distinguish between facts and feelings, and maintain a balance between the economic needs of formal organizations (organizations governed by the logic of efficiency, i.e., ordinary work relationships) and the social needs of informal organizations.

Behavioral science is a complex discipline that studies the laws of human behavior, using theories and methods from psychology, sociology, anthropology, education, and management, to achieve the study of human behavior. It emphasizes the concept of "human-centered" management, and attaches importance to initiative and creativity, and advocates that human needs should be met from the work itself. The emergence of behavioral science is the inevitable result of the development of productivity to a certain stage, is a conversion of empirical research to empirical research, and is also the improvement and transcendence of classical management theory in human nature.

2.1.3 Modern Management Research

After World War II, Harold Koontz published "The Jungle of Management Theory" in 1960, in which he divided and summarized six major representative schools of management theory, and in 1980 he rewrote "On the Jungle of Management Theory", dividing the current popular schools of management theory into 11 university schools and analyzing the reasons for the establishment of each school. In this way, Harold Koontz became known as the "Ranger in the Jungle of Management". This marked the formation of modern management theory.

The representative figure of the systematization of management thought and the study of power change is Fred Lucans, who is the founder of the theory of power change management systems. Systems thinking and power-change thinking are the main ways of influencing managers to think about management issues. The most important representative of the systems concept of management thinking is Barnard. Chester Barnard published The Broker's Function in 1938, which is regarded as a monument of management thinking. In the book, Barnard proposed three basic functions that a broker should have, which are (1) establishing and maintaining an information exchange system (2) obtaining needed services (3) advising and goal setting, and also suggested that the leader's leadership behaviors include in (1) setting action goals (2) demonstrating organizational leadership (3) using organizational structures well (4) actively motivating all members of the organization. [2]For this reason, he has been called "the founder of the social system school" and "the father of modern management theory". The main idea is that organizational management must adapt to the conditions outside of Niger, nothing is set in stone, applicable to everyone, the best techniques and methods are the best techniques and methods, the ultimate core is the relationship between the organization and the environment.

The next study analyzes the nature of management decisions and coordination. The representative of the study of the nature of management decisions is Herbert Simon, who first proposed the role of management decisions in management. Before Simon Fayol's first theoretical delineation of management functions, although decision making was then part of the planning function, later management scholars did not continue to question and challenge it until 1940, when Simon proposed that decision making was the main function of management, organized by management scientists. Decision-making was based on "choice" and the principle of "optimality" was replaced by "satisfaction criteria". The representative of organizational coordination mechanism is Mintzberg, whose main problem of organizational management is the separation of workers and negotiations. According to him, the essence of organizational structure is the sum of different ways of workers' negotiation.
2.1.4 Contemporary Management Theory

Studying the emergence of contemporary management theory we can examine two perspectives. First, the institutional perspective of this study is the theory of organizational integration. Selznick represents the case of organizational integration by subjectively organizing an institutionalized organization, understood as the process by which the external institutional environment penetrates into the organization and influences the internal organizational behavior. Among others, anthropologist Mary Douglas pioneered the legitimacy mechanism in her book How Institutions Think. Ultimately, it is possible to derive the connotation of legitimacy mechanisms: operational mechanisms by which the institutional environment encourages or forces organizations to adopt externally sanctioned organizational structures and behaviors. Second, a technical aspect of the study is the theory of business innovation.

2.2. Changes in management research methods

According to the above, it is evident that the development of management science is characterized by the close integration of the development of productivity with the development of management theory and changes in the mode of production. It is these factors that determine the development and changes in the concept of management science. Modern management science grew up in step-by-step practice, developed in practice, recorded the whole process of practice and guided it.

At the earliest, in the early stage of management thought in the Middle West, Charles Babbage already started to study how to manage employees with the study of operations and compensation system, which is undoubtedly the most avant-garde management research method. Next, we look at the changes in management research methods in four periods of management change.

In the period of classical management theory, the research method of scientific management research is the experimental method, Taylor through continuous experiments, improve the working methods, improve the distribution system, improve the production organization, the introduction of scientific management in the field of management, the development of specific management methods to promote the development of production, so that enterprise productivity increased by 2 to 3 times.

In the period of behavioral management research, Mayo also used the experimental method when implementing the doctrine of human relations the most famous of which is the Hawthorne experiment. The experiment was designed to solve the problem of labor disputes and strikes and to study what exactly depends on the efficiency of workers. In a four-stage experiment, Hawthorne's experiment gave birth to the book The Human Problem in Industrial Civilization. The publication of this book was a rejection of traditional management theory's assumptions about people and made clear the importance of human relations.

Behavioral science theories are most predominantly studied through inductive methods, and their research results exist in four areas: 1. The study of human needs, motivation and encouragement mechanisms, and scientists have summarized many theories, such as Malos and his hierarchy of needs theory, McClellan's achievement need theory, Frum's expectancy theory, Adams' equity theory, etc.; 2. The study of business management-related " The study of "human nature" related to business management has led to McGregor's X-Y theory, Shain's human nature hypothesis and Argyris' "immaturity-maturity" theory, etc.; 3. "4. from the perspective of corporate management issues, we can get Likert's management style theory, Black and Morton's "management square theory", Tambau and Schmidt's "leadership continuum theory "The power change model of effective leadership" by Fiedler, etc.

In the modern period of management research, the main focus of coordination research on the nature of management is on organizations. There are six main techniques of organizational coordination. Mutual adjustment; direct supervision; direct supervision of work processes; standardization of results; standardization of firepower; standardization of technology (skills) and standardization of standards. The main components of the organization are the main layer of work (i.e., the base department), the strategic upper layer (the senior management team), the front-line middle layer (the middle layer of line managers or senior staff), the technical officers (functional
staff), the support staff (support services), and the ideology or culture (traditions and beliefs). The basic forms of group organizational structure are corporate and industrial organizations (with a high degree of specialization and an important role of technical specialists), multiparty organizations, professional organizations (technical and complex tasks), innovative organizations (consisting of professional knowledge and skills) innovative organizations (consisting of specialists and skills), mission-based organizations, and political organizations.

The period of contemporary management theory has seen significant changes from management theory to practice. DiMaggio and Powell jointly proposed three different systems of organizational integration, namely, coercive technology, simulation systems, and social modeling machines. 1990s Hammer and Champy used experimental methods to explore the reasons for the backwardness of U.S. cycling technology to propose the principles of process reengineering, containing seven points: 1. organize results, not tasks 2. involve people who use the end product of the process in the process 3. integrate information processing into the actual generation of information The work of 4, geographically distributed resources for clustering considerations and processing 5, link parallel activities rather than integrated tasks 6, decisions are made where the work is completed and control is included in the process 7, and then timely capture of information sources. [3].

In summary, the basic research methods in management, as in many other disciplines, are inductive, experimental and deductive. The inductive method is by reasoning that certain items of a certain class of things have certain properties, and all items that produce this food have these properties. Since the management process is very complex, and there are many factors affecting management activities and interactions, and what we observe is often the result of a combination, more and more management problems then need to be studied by inductive methods. However, the inductive approach is not fully able to adapt to modern economic development with the progress of the times. The inductive summaries of the past cannot show what is happening in modern society. The experimental method is more objective than the inductive method, but at the same time more complex and cumbersome, and in many practices it is not possible to use the experimental method for research. The deductive method is a simplified approach to finding general laws by building models that reflect specific logical connections and throwing the facts away.

In recent decades, with the development of research methods in systems theory, information theory, cybernetics, mathematics, philosophy, economics, statistics, psychology and natural sciences, management has also adopted their principles and methods, which has greatly enriched the content of management research methods. [4].

3. Management is a comprehensive discipline

3.1. Macro Analysis

3.1.1 The difference between anthropology and management

Anthropology is the study of people and their cultures. Humans have created different social, political, and economic systems and religious systems in different environments, and anthropologists seek the essence of human existence by identifying the similarities and differences between these cultural systems through comparative studies. Management science, as a discipline that studies the laws of management in order to obtain the maximum management efficiency, has as its object of study the groups composed of human beings, so the objects of study of these two disciplines are the same. Based on the above discussion, the two disciplines are interrelated because they both study human beings as the object of research and study behavior patterns to achieve the purpose of their respective disciplines. However, it should be noted that anthropology and management, as two separate disciplines, have different purposes of research.

The purpose of anthropology is to rationally analyze how human cultures and societies have changed in the past history and according to what changes, and to summarize the laws by giving rational analysis to these dramatic processes. Management science, on the other hand, is to analyze
various cases in order to improve management efficiency, and to achieve more efficient management results by summarizing various types of management laws and thinking about new management methods with the help of logical thinking from other disciplines. The difference between anthropology and management is that their purposes are different. Therefore, even though the research objects are the same, the differences in research processes and purposes make these two disciplines parallel to each other and sometimes partially intersecting.

Based on the above ideas, the intersection and parallelism between anthropology and management evolved into business anthropology. Business anthropology is the study of people and their cultures. Humans have created different social, political, and economic systems and religious systems in different contexts, and anthropologists seek the essence of human existence by identifying the similarities and differences between these cultural systems through comparative studies. The emergence of business management has filled a gap in the study of management by drawing on anthropological ideas.

3.1.2 The difference between sociology and management

Sociology is a social science that systematically studies social behavior and human groups, mainly involving the quantitative approach of scientistic empiricism and the humanistic approach of understanding, which are mutually opposed and interrelated, and together develop and improve a body of knowledge about human social structures and activities, with the main goal of using this knowledge to seek or improve social welfare. Although management science is the search for greater efficiency by summarizing laws based on the results of feedback from groups, it is extremely similar to sociology in its research direction and purpose. However, sociology and management are studied in different ways. Sociologists adopt an accepting attitude toward sociological research, and take an accepting approach to any social phenomenon without excluding any unexpected or serious deviations from standard values. Management scientists' research dismantles individual surprises and large variances, and selects statistically significant cases for analysis and summarization.

3.1.3 The difference between behavioral science and management science

The object of behavioral science is the behavior of animals, it has a complete theoretical system, is a sub-discipline of zoology; behavioral science studies human behavior in the work environment, its theoretical basis includes anthropology, sociology, psychology, ethics, political science, history, physiology, biology, social psychology, etc., so it is a comprehensive discipline. The difference between behavioral science and management science is that the purpose is different. The purpose of behavioral research is to analyze the motivation and behavior in various ways, but the research pastor of management is to summarize the law by analyzing the results of behavioral feedback, and then propose more efficient management methods and then apply them to the cycle of behavior.

3.2. Micro Analysis

3.2.1 Organization contained in management science

As an interdisciplinary discipline, management has a wide range of self-generated fields, among which there is a subdiscipline of organization management. As an emerging discipline in recent years, organization management has not yet formed a complete and independent disciplinary system, but the emergence of this disciplinary concept is sufficient to reflect the large proportion of the concept of organization in management. In this paper, organization science refers to the study of the benefits and impacts of social entities formed by several individuals or groups with common goals and certain boundaries, a concept that overlaps to some extent with the definition of management.

In the process of building and managing a team, the selection and organization of the team members is the first step to achieve the team's goals, thus laying the foundation for good team management later on. A good organizational structure enables team members to communicate, interact and exchange their work effectively, so that the team can be improved and enhanced quickly and efficiently when managed later.
3.2.2 Marketing included in management

In marketing there is the concept of management marketing, which refers to the analysis, design, implementation and control of marketing programs to establish, develop and improve exchange relationships with target customers in order to achieve business objectives. Marketing management is a dynamic and systematic management process in which an enterprise plans and implements marketing concepts, develops a marketing mix, and creates exchange opportunities to meet the needs of target customers and the interests of the enterprise. It is an important part of business management and is the main function of the marketing department of the enterprise. [5]

It can be seen that the big concept of management includes the part of marketing, and the rational use of marketing can make the management more rational and efficient. To make the management’s ideas and thoughts permeate the minds of everyone in the team, it is inevitable that knowledge and practices related to marketing are involved. Ideas are only in the minds of individuals, but to make all team members understand and make changes at the same time is not achievable in the short term, so the marketing approach to change or improve the ideas of team members to achieve the purpose of management, which can avoid conflicts, but also enable team members to better understand and make changes.

3.2.3 Group psychology included in management

Management is the core course of business administration, and as an interdisciplinary subject, it involves the knowledge of many disciplines and is comprehensive, general, practical, historical and developmental in nature. [6] Among them, psychology, mathematics and economics are the basis of the major discipline of management, and among them, psychology is divided into comparative psychology, social psychology, group psychology and so on. Among the many classifications, group psychology is more closely related to management.

Group psychology, as a branch of psychology, focuses on the psychological activities of people who form groups, and management is also the management of a team or a company, which is a team of people who form a group because of a certain goal. When the number of people in this environment gradually increases, there will be managers and managers to maintain the stability of this environment. According to the conclusion of the article [7] "Organizational Support and Group Separation in Work Groups", the stronger the sense of organizational support felt by the work group, the stronger their psychological security and sense of identity and belonging to the organization (department), and the stronger their desire to stay in the organization and support its development with practical actions. In a department, a good management system and the ability of the management staff largely affects the sense of belonging of the staff to the organization or the department, the sense of belonging, the sense of the whole and the sense of exclusivity as the basic attributes of people in the group, the rational use of this can also achieve the purpose of efficient management, which is also part of the study of group psychology.

4. Conclusions

Since management is a comprehensive discipline, it includes organization, marketing and psychology. In order to analyze management further, we need to study the various branches under management in more depth.

References

