

Enterprise Organization Structure Driven by Network Upgrade Research on Flattening Mechanism

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Abstract

The continuous development of information network technology provides a new way for the organization of enterprises. It is different from the previous flattening of organizational structure. This article analyzes the disadvantages and flattening advantages of hierarchical systems from the three dimensions of information communication, management costs, and employee innovation. Put forward the necessity of flat enterprise organization structure. At the same time, the brain dysfunction factor is regarded as the main influencing factor of the manager's management range, and the manager's brain ability is enhanced through technology to realize the expansion of the management range and promote the flattening of the organizational structure. The current technical level provides opportunities for the flattening of the organization.

Keywords

Hierarchical system; Flattening; Management range; Brain.

1. Introduction

Information technology, especially information network intelligent technology represented by 5G and artificial intelligence, will have a violent impact on the organization of enterprises. As for the manager's brain ability, the use of enterprise cloud services to enable memorization, holographic projection to enable communication, artificial intelligence to enable decision-making, and big data to enable monitoring and other technical empowerment methods, enhance the manager's brain capabilities and direct management. The number of subordinates has increased, and the scope of management has been expanded, providing a good technical foundation for the flattened organizational structure. The flattening trend of future corporate organizational structure reforms does not refer to changes and adjustments in the appearance of the organizational structure, but refers to the changes in the corporate operating mechanism and the resulting changes in the organizational structure. In fact, within the effective time, ability and energy of managers, appropriately expanding the scope of management to reduce the management level will help reduce management expenses, improve the efficiency of information communication, and enhance the control capabilities of the top.

2. The Basic Logic of Flat Organizational Structure

Any organization has a flat demand. From the perspective of organizational cost, its components are mainly management costs and transaction costs. Among them, management costs are related to the scale of the organization and the number of levels, because the greater the number of levels, the more severely the communication and decision-making efficiency is affected by the levels; and the transaction costs are mainly combined. The size of the organization is related, and the impact of the number of levels is negligible. Therefore, it may be assumed that the shape of the transaction cost curve remains unchanged under different

organizational structures. Under this assumption, the change trend of the management cost and the total cost of the organization is shown in the figure:

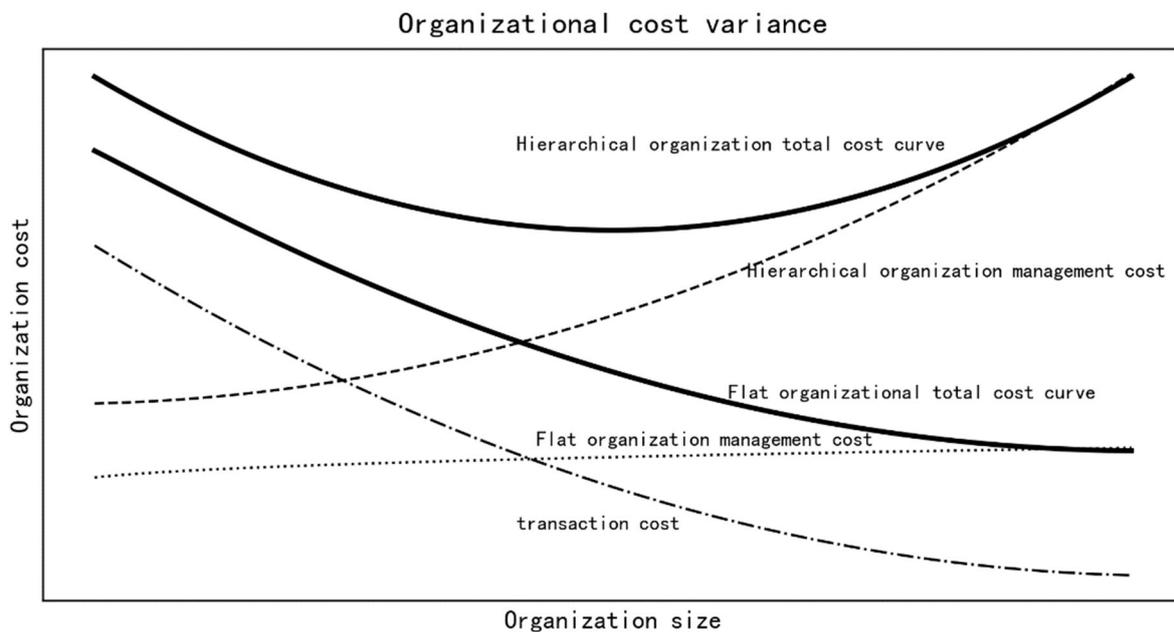


Figure 1. Organizational cost comparison chart

With the expansion of the scale of the organization, the transaction cost of any organizational structure has a clear downward trend. However, different organizational structures have different management cost trends. Although management costs will rise as the scale of the organization expands, the rising trend of management costs in flat organizations is significantly less than that of hierarchical organizations. The reasons are mentioned in the research review. It is because the flat organization has a natural advantage in the communication of organization members and the transmission of decision-making instructions.

The total cost of an organization has several components. In order to facilitate analysis, the total cost of the organization is simplified as the sum of transaction cost and management cost. Therefore, at any organizational scale, there are:

$$TotalCost = TransactionCost + ManagementCost$$

And

$$TotalCost_{Hierarchical} > TotalCost_{Flat}$$

The analysis of the total cost of the organization shows that as the scale of the organization increases, the total cost of a flat organization is always less than the total cost of a hierarchical organization. Both state-owned enterprises and Internet companies have the above characteristics, so any organization has a flat demand. This article only discusses the possibility and theoretical basis of technology empowerment. The reasons why some companies do not choose flattening are not part of the research scope of this article, so just try it.

2.1. The Root Cause of Hierarchical Organization-the Contradiction between Management Level and Management Range

Management range and management level are important concepts in organization management theory. The management range refers to the number of subordinates or institutions that an organization or individual can directly manage, also known as the control range. Classical organization management theory points out that there is an upper limit on the scope of

management. When the number of directly managed subordinates exceeds the upper limit, the efficiency of management will directly decrease. With the expansion of the scale of the organization, the number of organization members has increased. In order to be able to effectively manage all organization members, the only way to reduce the burden is to reduce the burden by increasing the level, assigning work and dividing into superior supervisors, and thus the organizational structure has levels.

The scope of management at different levels is not the same. High-level managers need to formulate strategies, plan goals, and provide decision-making suggestions for the operation of the company. They cannot allocate limited energy to most middle-level management. The management range is relatively small, usually 3-5 people; and there are more middle-level managers. The function of information transmission is divided into the issuance of strategic decision-making recommendations and the reporting of production and operation conditions. Its management range is generally 5-10 people. When the manager is at a higher level, the manager cannot distribute his energy to too many departments, because the senior level often plays the role of decision maker in the organization, only when the management ability is concentrated and the subordinate department is familiar with the work content and workflow of the subordinate department. , In order to make reasonable and accurate decisions, and for grassroots managers, the narrow management range does not take advantage of the implementation of organizational decision-making. At the front-line grassroots, the focus of management is more on the implementation of organizational decision-making, so a larger management scope must be given to the grassroots staff to schedule and achieve the overall advancement of organizational goals.

Suppose the manager’s level is l_i , and the management range is s , where l_i is the independent variable, and s is the dependent variable. As the level increases, the management range decreases. The mathematical relationship is:

$$For \forall l \in (0, R); \begin{cases} \frac{ds}{dl_i} < 0 \\ \frac{d^2s}{dl_i^2} < 0 \end{cases} \tag{1}$$

The function image is similar to $y = \log_a(x), a \in (0,1)$:

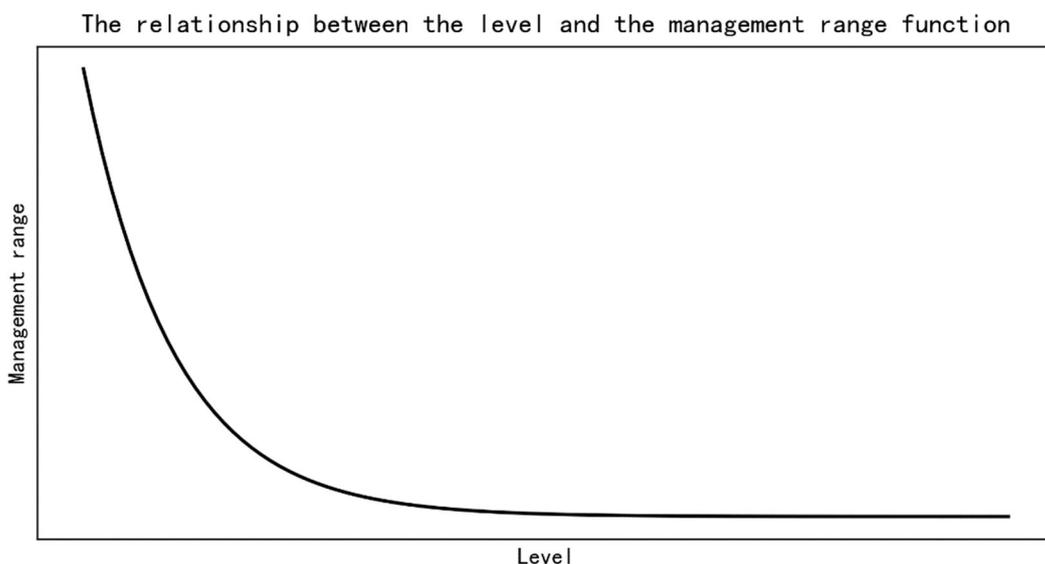


Figure 2. Position and management amplitude function graph

Under the condition that the total number of people in the organization remains unchanged, by establishing the management range, the number of levels of the organization can be confirmed, and the number of levels can indicate the degree of flattening of the organization to a certain extent. In order to facilitate the understanding, the management range is regarded as the average management range of all managers and expressed by s , the organization size is set to c , and the number of management levels is I , so there is a mathematical relationship:

$$c = s \cdot i \quad (2)$$

Under the condition that the organizational scale c remains unchanged, if we want to promote organizational flattening, that is, to reduce the number of levels I , we can only increase the management scope s . The above process is the process of organizational flattening. The function image is similar to that of the proportional function $y = \frac{a}{x}$:

The relationship between the number of levels and the management range function

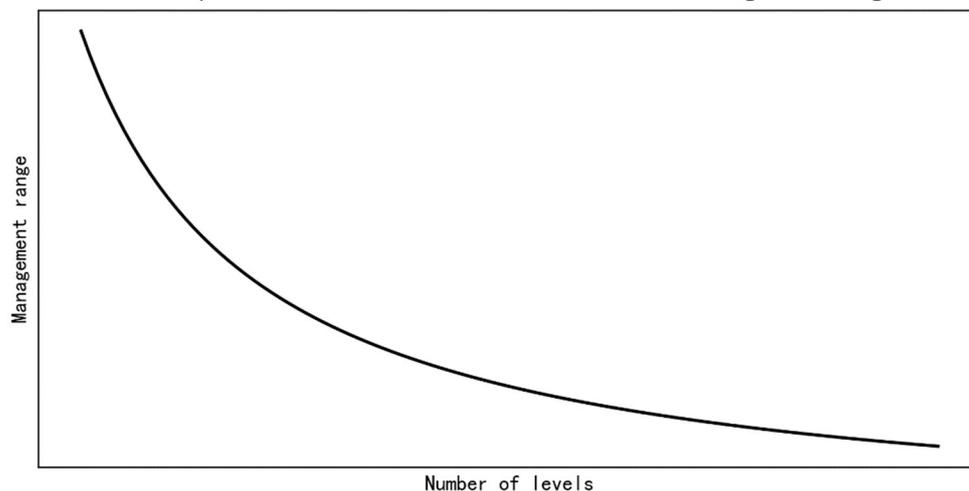


Figure 3. The number of levels and the management range function graph

With the development of technology, the managerial ability of managers has been strengthened. Under the condition of a certain organization scale, broadening the scope of management can reduce the management level, and vice versa. Therefore, there is a functional relationship between management range and management level.

As mentioned in the previous article, the business differentiation and the increase of organizational members caused by the expansion of the scale of enterprise organizations are the background of organizational hierarchical management. At the stage when information technology has not yet fully developed and matured, due to the lack of effective methods and means to improve the management range, only by increasing the management level to cope with the increasing organizational scale, a huge pyramid hierarchy system has been formed. Equation (2) can be used to explain the reasons for the increase in levels. The organization scale c increases, that is, the product of the management range s and the number of levels I increases. However, due to the immaturity of information technology, the management range s cannot be effectively expanded (it can be regarded as a constant). At this time, the only way to increase the value of I is to increase management. Hierarchy, so the organization has a hierarchical structure, and as the scale of the organization expands, the hierarchical structure becomes more apparent.

3. Disadvantages of Hierarchical Organization

Li Bin (2003) believes that hierarchical organization emphasizes hierarchical management, and that multiple management levels require high-level management to coordinate tasks, internal information transmission is blocked, resulting in information distortion and omission, and management costs are greatly increased due to excessive middle management; Stebbins and other scholars (1999) In a case study on American companies, it was found that many senior managers of companies believed that traditional hierarchical organization had seriously hindered the development of the company, and they were preparing or had begun to make organizational changes in the company. The traditional hierarchical organization comes from the classic "management range" theory, and the management range is limited by leadership energy, time and entrepreneurial talent. Excessive management margins can easily lead to excessive burdens on leaders and even management confusion. On the contrary, it will cause redundant management levels and reduce work efficiency. In order to achieve the good operation of the organization and unify the organizational goals, the senior leaders divide the organization into several levels to ensure that the employees managed by the middle-level leaders do not exceed their limited management range, to achieve the maximum display of their management talents, and due to the emphasis on traditional organizational theories The characteristics of centralized power, so the organization controls the managers' subordinates in a certain range, so the management range is small, there are many intermediate layers, and the existence of redundant intermediate layers seriously affects the internal information flow of the organization and inhibits employee innovation. .

In summary, the problems of hierarchical organization can be summarized as: poor communication of information, increased management costs, and suppression of employee innovation.

3.1. Distorted Information Communication

The main form of information communication in hierarchical organizations is vertical communication, and information transmission includes two directions, "top-down" and "bottom-up". The "bullwhip effect" will be produced in the process of high-level information transmission to the lower level. When information flows to the grassroots management, there are too many organizational levels and the information cannot be shared in real time, resulting in information distortion, distortion and gradual variation; on the other hand, In the process of reporting information to the upper level, it needs to pass through the middle level, which seriously affects the effectiveness of information feedback. Some middle level may even intercept effective information based on personal interests, resulting in "information interception phenomenon", which ultimately leads to the implementation of high-level decisions. Misleading behavior occurs in the process, decision-making is out of reality, and it is in a weak position in the competition in the same industry. It is difficult to effectively solve the needs of users that require rapid response. The transmission of hierarchical information will delay the timely delivery of information to the grassroots managers, making hierarchical organizational decisions lagging behind market changes most of the time. The ability of hierarchical organizations to process information is difficult to adapt to the decision-making environment of information explosion. Faced with the changing needs of the user market, slow and inaccurate decision-making will make traditional single-level organizations into trouble. Poor communication within the organization can easily lead to confrontations between colleagues and even between departments. The organization is full of rejection and mistrust. The low morale of the organizational environment may have more destructive consequences.

3.2. Increased Management Costs

In the discussion of management cost, Li Yuanxu (1999) divided management cost into four types: internal organization cost, opportunity cost of manager's time, agency cost and external transaction cost. The cost of internal organization includes the cost of signing a "contract" for the implementation of the internal management of the enterprise. The purpose of the contract is to unify the goals of the organization and its members, such as labor contracts or the authority system of functional departments. The implementation of the internal contract is directly related to the internal resource allocation of the enterprise, and a good allocation strategy can improve management performance. Too many levels and too large an organization will directly affect the formulation and implementation of allocation strategies. In order to optimize the allocation of resources within the organization, more management costs will inevitably be paid. The cost of internal coordination in an organization is also an internal organization cost. Corporate decision-making is a type of corporate internal resources. The process of decision-making from formulation to implementation is also the process of internal resource flow. If too many levels cause the flow of information resources to be slow or blocked, the company must pay the price to promote the effective sharing of internal resources. The size of the organization expands, the frequency of internal transactions increases, the cost of internal resource coordination will increase, and the management cost will increase.

3.3. Employee Innovation Inhibition

Different organizational structures have differentiated organizational cultures. Hierarchical organizations represented by the doctrine of the mean emphasize interpersonal harmony and balance benefits in all dimensions, focusing on stability and harmony. Therefore, when the innovative behavior is risky to the organization or others, the members of the organization will not choose to innovate, so the hierarchical organizational culture affects the employees' pursuit of innovation. Under normal circumstances, most state-owned enterprises adopt a hierarchical organizational structure, and employees of state-owned enterprises show more organizational citizenship behavior. Rather than innovation, its purpose is to maintain the corporate image, so employee creativity is also inhibited and restricted.

Because of the need for unified management, hierarchical organizations have a high degree of formalization and centralization. These characteristics inhibit employee innovation. In a hierarchical organization, the organizational goal is supreme and inviolable. All tasks are executed around this goal. Organization members cannot fully exert their subjective initiative in the business development process, and their business execution results must be based on the organizational goals. In addition, the organization does not pay attention to internal incentives but relies on external material rewards, ignoring the high-level spiritual needs of the organization members; complicated written constitutions and rules prevent employees from completely innovating in the business process, and result-oriented personnel. The system restricts employees' passion for innovation and weakens their motivation for innovation.

4. Advantages of A Flat Organization

Hierarchical organization information communication is not smooth, and the problem of excessive management costs needs to be resolved through flat organization. The organization flattening here is a process, not a result. It does not mean that the organization of enterprises, whether it is a manufacturing industry dominated by economies of scale or an Internet enterprise dominated by innovation cooperation, is directly flattened into a flat organization with only a few levels, but it means that the nature of the enterprise and its tasks are not changed. On the basis of attributes, through the use of technical means to empower management, cancel or directly replace redundant intermediate levels with technology, smooth

internal information communication, reduce management costs, stimulate employee innovation, and promote corporate benefits from three aspects.

4.1. Reduce the Distortion of Information Communication

Since the information transmission within the enterprise organization is a "two-way" flow, the information absorbed by the company's senior management must come from the grassroots and the front line in order to make the company's strategic goals actually implemented; and the strategic goals formulated require the grassroots employees to understand, absorb and implement. Reflect on the operation of the enterprise. This requires a smooth delivery and communication mechanism within the enterprise organization. In a flat organizational structure, a large number of unnecessary intermediate levels will be replaced with the introduction of technology. Information transmission is no longer transmitted through the management, and the use of technical means to replace the middle management has become a general trend. The network age requires organizations to remove redundant middle layers, and enterprises will transform into flat organizations without middle layers. The information distance between the top of the enterprise organization and the front-line employees is shortened, and the intermediate level that information needs to pass through is reduced, which eases the situation of information distortion and avoids the "bullwhip effect".

4.2. Stabilize the Cost of Organization and Management

In the information network era, the development of enterprise organizations needs to transform the previous highly centralized central decision-making model into a decentralized multi-center decision-making model. The establishment of multi-centers is also derived from the division of organizational goals and organizational tasks. While fully achieving organizational goals, the leaders of each center are empowered, and the sense of responsibility and participation of employees is enhanced through the decentralization of decision-making. In addition, the scope of management can be enhanced through the use of information technology. The hierarchical organizational structure of the enterprise is limited by the limited mechanical management scope. Through the penetration of information technology in the work process, the division of work and task progress can all be carried out through the internal system of the organization. Quick and accurate feedback strengthens the effective control of superiors over subordinates, and realizes the broadening of management scope through technical means. As managers have more direct subordinates, the efficiency of internal transactions between subordinates and the same level is improved, and the internal transaction costs of the enterprise organization decrease, and management costs also decrease.

4.3. Release the Innovative Vitality of Employees

The innovation ability of employees is closely related to the organizational environment. Work factors, interpersonal and group factors, cultural and policy factors, and resource abundance factors will all have an important impact on employee innovation behavior. Among them, interpersonal factors and policy factors are closely related to the research content of this article. The first is the interpersonal factor. In a flat organization, the superior level of control over direct subordinates is much lower than that of the hierarchical system. As mentioned above, the hierarchical organization has strict control over the work content and working methods of the subordinates in order to ensure a highly unified operation. Therefore, there is strict control over subordinates, and employee innovation is negatively related to the strict degree of control. In other words, due to relatively loose control strategies in flat organizations, the innovative behavior of employees will be released. In terms of policy factors, the organizational structure that promotes open communication is positively related to employee innovation. Hierarchical organizations often do not have a high degree of tolerance for employees to use innovative methods to solve problems due to their high bureaucratic nature. The flat organizational

structure provides a good communication platform for employee innovation, so it is beneficial to inspire corporate members. Inter-communication and frequent work exchanges have led to the emergence of more innovative ways to solve problems. The advantages of architecture also provide institutional guarantees for the above behaviors.

5. The Fundamental Obstacle to the Flattening of the Organizational Structure

The large-scale industrial production brought about by the industrial revolution in the 20th century made people think about effective management and organization forms to promote the orderly progress of industrial practice. Affected by Taylor's scientific management, Fayol's general management theory, and Weber's bureaucracy during the same period, manufacturing factories have established a bureaucratic hierarchical vertical structure with the goal of improving production efficiency. This structure is called traditional hierarchical system or linear function system. The hierarchical organization referred to in this article not only refers to the traditional hierarchical organization, but also includes the business department system and matrix system in the modern organizational structure mentioned above, and the network organization in the post-modern organizational structure. The above organizational structures that are hierarchically managed in the organizational structure are regarded as hierarchical organizations in this article.

Then why is there a hierarchical organization structure? The traditional hierarchical organization was born during the first industrial revolution. The factory produced products on a large scale by using expensive professional equipment, and the main way to make money was to reduce costs through economies of scale. And for grassroots workers, there is no need for a high level of specialization in the production system. Therefore, in order to ensure the good operation of production and operation, the factory owner builds a highly unified power system from top to bottom to strictly control the production process. Because once the factory slows down or ceases to operate, it will waste manpower and material resources and increase internal transaction costs.

Based on the organizational stratification of the linear functional system, the reasons for the formation of the division system and the matrix system can be summarized in the division of functions and diversification of business caused by the expansion of the organization. The development of industrial technology continues to mature, and information network technology is gradually integrated with the production and operation of enterprises. The communication distance between enterprises and between enterprises and users has been shortened, and communication costs have been reduced. This has promoted enterprise businesses to cross fields and face users across regions. Obviously, a high degree of centralization cannot control and order the diversified business after the expansion of the scale of the enterprise. It is necessary to establish a specialized production and operation unit. Each business unit has differentiated products and markets, and the development of the business unit is independently planned to respond flexibly Changes in the market.

To sum up, the reason for the hierarchical management of the corporate organizational structure is the business differentiation and the increase in personnel caused by the increase in the scale of the organization. The business differentiation requires the establishment of new branches to cater to the market and customer needs, and the increase in organizational members requires more managers to come. Coordinate scheduling. But the fundamental reason is limited by the manager's management scope. Management is the mental work of directing subordinates. The fundamental reason for the inability to effectively expand the management scope is that there is an upper limit on the manager's brain ability, which has functions such as memory, language, attention, and vision. The direct impact on managers' communication,

coordination, and decision-making abilities determines that they cannot directly manage more subordinates. They must achieve unified leadership through functional division and decentralization.

Management is the brain activity of directing subordinates. Senior managers plan the strategy of the entire enterprise and provide decision-making for the development of the enterprise just like the role of the human brain in human behavior. The middle-level managers are responsible for the downward implementation of superior instructions and management of their subordinates. Therefore, the upper level is the absolute brain of the organization, and the middle level is the relative brain. The two work together to ensure the efficient operation of the organization. Therefore, obstacles to the management range come from the biological limitations of the human brain, including the following: remembering, forgetting, rest, and random errors. The brain cannot store an infinite amount of information. In the process of storing new information, it will inevitably forget the old information; the brain needs to rest after working continuously for a period of time. Continuous working will reduce the efficiency of the brain and even generate random errors. Random errors refer to sudden and accidental errors that the brain produces during its work. The above three points are all obstacles to the expansion of the management range based on the biological limitations of the brain. These factors have an effect on the core functions of the brain and thus have an impact on the expansion of the management range.

The core function of the brain is the cognitive function, which mainly includes memory, attention, language and execution. The above cognitive functions are mapped to the management scene respectively: memory function, mutual cognition between the brains; empathy function, emotions between the brains Contact; communication function, direct communication between the brain; instruction function, task transmission between the brain; and monitoring function, the brain's perception of the effect of task execution. The specific management scenario is divided into three steps:

Step 1: familiarize yourself with subordinates and emotional connections, and have nothing to do with business. It belongs to the construction of interpersonal relationships, mainly for the memorization function.

Step 2: It is directly related to the business and belongs to the execution of business tasks, including communication functions and decision-making functions.

Step 3: the management effect guarantee, which belongs to the implementation effect guarantee, and is mainly the monitoring function.

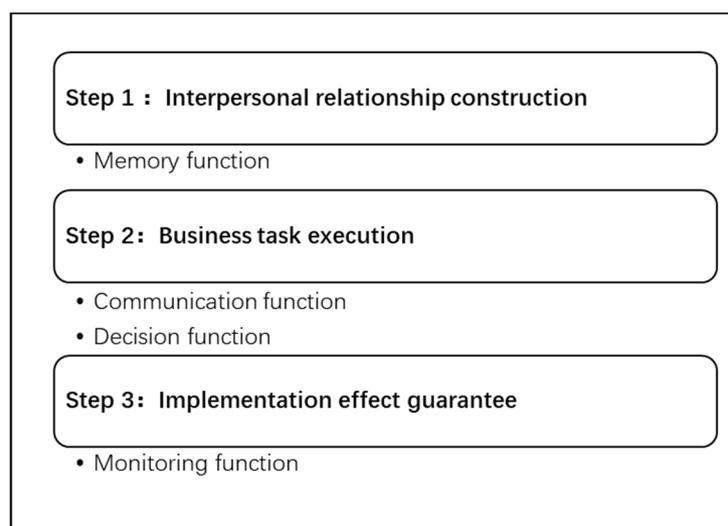


Figure 4. Brain dysfunction factors

The memorization function is a complex process that allows us to encode, store and restore information. In daily management, the management needs to encode and store information such as subordinates' work tasks, work progress, and work status. Have a general understanding of the work of all subordinates, which is the first step of coding. Then the information is stored in the brain, as the information basis for the next work plan and task assignment, and provides the basis for the periodic assessment. The excessive number of subordinates leads to chaotic task assignment and unclear task completion status, which are all caused by insufficient memory function. Therefore, memory can be regarded as a biological obstacle factor for the expansion of management.

The communication function is a symbolic communication system, which is not only important for communicating with others, but also important for constructing our internal thoughts. Language communication must play an important role in the entire management process. The establishment and decomposition of goals requires downward communication. The execution of tasks requires communication to carry out division of labor and collaboration. In the incentive link, communication must be conducted to understand the needs of subordinates, and to provide feedback based on the completion of tasks. And rewards. Therefore, the stronger the communication ability, the stronger the management ability, which assists them to directly manage more subordinates, so language communication is also a biological obstacle to the expansion of management.

Decision-making function is the most complex cognitive function, including setting goals, formulating strategies to reach goals, skills used in performing behaviors, and attitudes to effectively launching behaviors or activities. The first and most important step in management is to establish goals. Managers need to lay the tone, set standards, and determine the company's long-term goals for a period of time in the future. On this basis, the cycle is limited and the completion is regularly inspected. Finally, It is the result assessment. If there is an upper limit on the executive function of the brain, then managers cannot complete the corporate strategy setting under complicated circumstances, leading to problems in corporate planning, so the decision-making function industry is one of the biological obstacles to the expansion of management.

The monitoring function is a complex psychological process. Attention is the cognitive or brain function we use to choose between the external and internal stimuli that reach our brain at the same time. It is used for mental or motor activities. It can be divided into attention and continuous attention. , Selective attention, alternative attention, and attention distribution. Attention distribution refers to the ability to reply to multiple tasks at once, or to perform two operations at the same time. In enterprise management, managers cannot effectively manage multiple subordinates at the same time. Or it is impossible to conduct performance appraisal while making organizational decisions. Therefore, the insufficiency of attention allocation as the core ability of attention function can also be regarded as a biological obstacle factor for the expansion of management.

To sum up, because management is the mental work of directing subordinates, the upper limit of the manager's brain ability determines the upper limit of the number of direct management subordinates, that is, the management range is limited. Managers in the organization cannot have sufficiently comprehensive and powerful brain capabilities, so as managers, their management scope can only be expanded within a certain range. Only through the use of technical means to establish external brains to assist their comprehensive brain capabilities. Broaden the scope of management.

6. Flat Opportunities Brought by Network Upgrades

There are two important parameters in the organizational structure theory, one is the management level of the organization, and the other is the management range of the manager. Different combinations of parameters form a variety of organizational structures, including linear system, matrix system, division system, and so on. Due to factors such as the task attributes of different companies and the characteristics of high-level leaders, different companies choose more suitable for their own organizational structure. However, with the continuous development of the enterprise, the scale of the organization increases, the business is divided, and at the same time, it is limited by the limitation of the management range, resulting in too many levels and reduced organizational efficiency. The empowerment of information network technology for managers' brain capabilities can broaden the scope of managerial management from a technical level. With the continuous evolution of network information technology, the penetration of technology in enterprises has become more and more deep, managers' ability in information processing has been greatly strengthened, and the liberation of processes in the entire organization has greatly improved management efficiency. As a result, the scope of management has been broadened, and the management level has been reduced accordingly, so that the organizational structure has a flat technical foundation. Network technology not only has an impact on the organizational structure of a company, but also has a positive effect on company performance. Resources enable enterprises to operate, while unique resources enable enterprises to fundamentally gain competitive advantages, and advanced technical resources enable enterprises to increase their performance index. Obtaining data through technical resources and transforming it into decision-making information and cultivating the core competitiveness of enterprises are conducive to the long-term healthy development of enterprises.

Take cloud technology, artificial intelligence and big data technology as examples. All three technologies have an impact on the management and organization of enterprises. The first is cloud technology. Cloud technology has penetrated widely in all areas of social life and has become a general trend of social development. Cloud technology environment is a new type of ecological environment based on cloud computing technology that reconfigures network environment resources and guides the rational sharing of information network resources. The cloud technology environment enriches the technical support of enterprises and promotes the innovation of enterprise management models. Enterprises reduce corporate costs by optimizing organizational structure, and adjust and innovate corporate management models; through business process optimization, they can achieve seamless connection of corporate business links and free sharing of information resources, so that communication between members of the organization is smooth, work efficiency is improved, and corporate benefits Also gradually increased.

The second is artificial intelligence. Artificial intelligence is an important form of technology that guides social progress, and it is also a technological product of social development. The integration of traditional industry business models with business processes and artificial intelligence technology provides a source of power for enterprise development, especially in terms of optimizing the decision-making environment and improving management efficiency. Introducing data analysis, neural network and knowledge expression technology, knowledge-based information systems can enable marketers to make scientific decisions in complex situations; artificial intelligence can also analyze employee e-mail information in real time to identify abnormal employee behaviors; use algorithmic game theory to Managers decide to conduct stress tests to prevent fraud and other improper behaviors.

Finally, big data. Based on the data-driven decision-making method, the decision-making environment under big data is different from the past. Abundant data and knowledge enhance

the decision-makers' decision-making ability, change the role of decision-making participants, and then have an impact on the organizational structure of the enterprise. The development of information network technology has made the traditional hierarchical organization transition to a flat organization. Decision-making power under big data is proportional to the information resources that employees have. The redistribution of decision-making power will inevitably affect the organizational structure. Ordinary employees who have information resources also Decision-making power, on this basis, the advantages of a flat organizational structure will become more and more obvious. Mining the knowledge contained in big data, empowering the efficiency and ability of enterprise management decision-making.

7. Summary

From a theoretical analysis point of view, after the organizational structure is changed from a hierarchical system to a flattened structure, the distortion of information communication is reduced, the management of the organization is controlled, and the vitality of employees is released. The basis for its change comes from the empowerment of managers' brain abilities by information network technology, which breaks through the limitations of brain barriers, allowing managers to broaden the management range. From the formula in the basic logic, it can be seen that the broadening of the management range promotes the flattening of the organizational structure. . Therefore, the continuous development of technology has provided the feasibility of flattening the organizational structure, and the realization of flattening has solved some of the problems in the organization. The shortcoming of this article is that after obtaining the advantages of flattening, it has not yet launched effective discussions on new problems that may arise.

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