

Title **Organizational Design for the effective Business Performance**

ชื่อเรื่อง **การออกแบบองค์กรเพื่อผลดำเนินงานที่มีประสิทธิภาพ**

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Abstract

Nowadays, the business environment rapidly changes and affects to the organizational operations and financial performances. Therefore, top management team needs to design or redesign the optimal organizational structure in order to compete in the market. Organizations are designed based on objectives of the firm, available technology, current products and market. According to the evolution of organizational model, it has been emerged in three forms which are Unitary or U-Form, Multi-divisional or M-Form and Innovational form. Each form has the different kind of structures, such as functional and divisional structure, matrix structure and network structure. The objectives of this paper are to review the organizational forms and the major concepts underlying the proper designs of an organizational structure for high performance and to understand the impacts of organizational design on performance.

Keywords : Organizational Design, Effective Performance

บทคัดย่อ

ปัจจุบันการเปลี่ยนแปลงอย่างรวดเร็วของสภาพแวดล้อมทางธุรกิจส่งผลกระทบต่อรูปแบบการบริหารและผลการดำเนินงานขององค์กรเป็นอย่างมาก โดยเฉพาะการแข่งขันที่สูงขึ้นทั้งในตลาดท้องถิ่นและตลาดระหว่างประเทศ ดังนั้นเจ้าของกิจการรวมตลอดจนผู้บริหารในระดับสูง จำเป็นต้องให้ความสำคัญกับการออกแบบโครงสร้างองค์กรใหม่รวมถึงการปรับโครงสร้างเดิมให้เหมาะสมต่อการดำเนินธุรกิจของตนเอง โดยคำนึงถึงวัตถุประสงค์ขององค์กร ความก้าวหน้าทางเทคโนโลยี ประเภทของผลิตภัณฑ์ และรูปแบบตลาดสินค้าในปัจจุบัน

วิวัฒนาการโครงสร้างองค์กรจากอดีตจนถึงปัจจุบันสามารถสรุปได้ 3 รูปแบบ ได้แก่ 1) รูปแบบเดี่ยวหรือรูปแบบยู (Unitary or U-Form) เป็นการควบคุมดูแลด้วยหน่วยงานหลักและผลิตผลิตภัณฑ์ประเภทเดียว ซึ่งเป็นการรวมอำนาจและตัดสินใจจากส่วนกลางโดยเน้นที่ปริมาณผลผลิต 2) รูปแบบหลายหน่วยงานหรือรูปแบบเอ็ม (Multi-divisional or M-Form) เป็นรูปแบบการทำงานร่วมกันของหลายหน่วยงานที่มีโครงสร้างหน้าที่การทำงานที่ซับซ้อน ทั้งการทำงานระหว่างหน้าที่การเงิน การผลิต การจัดซื้อ การจัดหาทรัพยากร และการขาย ซึ่งเหมาะกับองค์กรที่มีผลิตภัณฑ์หลากหลายรูปแบบ โดยเน้นที่ผลการปฏิบัติงานของ

องค์กร 3) รูปแบบนวัตกรรม (Innovational form) เป็นการรองรับรูปแบบองค์กรและผลิตภัณฑ์ที่มีลักษณะพิเศษที่ต้องอาศัยความรู้เฉพาะด้าน และการนำเทคโนโลยีมาสร้างโอกาสในการแข่งขัน โดยเน้นที่ความต้องการของลูกค้าและการสื่อสารข้อมูล ซึ่งรูปแบบองค์กรที่ต่างกันย่อมให้ประสิทธิผลของการปฏิบัติงานขององค์กรไม่เหมือนกัน โดยจะขึ้นกับการบรรลุตามเป้าหมายขององค์กรภายใต้สภาวะแวดล้อมในช่วงเวลาต่างๆ วัตถุประสงค์ของบทความนี้เพื่อทบทวนและรายงานรูปแบบองค์กรประเภทต่างๆ และหลักการสำคัญในการออกแบบโครงสร้างองค์กรสู่ผลการดำเนินงานที่มีประสิทธิภาพ นอกจากนี้เพื่อให้เกิดความเข้าใจผลกระทบของการออกแบบองค์กรที่มีต่อประสิทธิผลการปฏิบัติงานขององค์กร

คำสำคัญ: การออกแบบองค์กร ผลการดำเนินงาน ประสิทธิภาพ

Introduction

The organizations are formed whenever the pursuit of an objective requires the realization of a task that calls for the joint efforts of two or more individuals (Arnolodo & Nicolas, 1984; Galbraith J.R., 1977). There are five major components for the definition of an organization as following:

1. Organizations are composed of individuals and groups of people.
2. Seeking the achievement of shared objective.
3. Through division of labor.
4. Integrated by information-bound decision process.
5. Continuously through time.

In the history, an organization can be broken down in *activities* such as functional and divisional, *social and intellectual domains* such as chemistry or supervision, and *events* (Hedberg, Nystrom, & Starbuck, 1976). The organizational structure constructs of the planning system, the management control system, the information and communication system and the evaluation and reward system as figure 1 (Arnolodo & Nicolas, 1984). The proper organizational structure has been balanced between the relationship and mutual condition of these systems. Furthermore, the combination of these systems are the fundamental of six dimensions of organization structure, which are defined (Hining, 2002) as Specialization, standardization, formalization, centralization, configuration and flexibility.



Figure 1: The management system, structure and process (Arnolodo & Nicolas, 1984)

In previous study, the organization structure has three distinct archetype forms: functional, divisional and matrix (Arnolodo & Nicolas, 1984). In addition, most of organizations have presented the combination of these three archetypes based on their type of business which is called a hybrid organization or a network organization.

The *functional form* designs the structure around the functions or specialties required to perform the tasks of organization such as: finance, marketing, engineering, research and development, and human resources. The *division form* is structured according to the delivered products, services or projects required to perform the tasks of the organization. The *matrix form* (Strikwerda & Stoelhorst, 2009) is structured and combined around two or more functions or divisions required to perform the organization such as a business unit.

However, these archetypes forms are a straightforward task, if the external environment is stable. In case of increasing of complex environment and rapid change due to the international trading, worldwide communication and high technology, the task of organizational design becomes a challenge (Gina, 2009). Top management team has the responsibility to design the optimal organizational structure for high business performance. Thus, the paper has the objectives to review the organizational forms and the major concepts underlying the proper designs of an organizational structure for high business performance and to understand the impacts of organizational design on performance

Organizational Design

The organizational design is a creative process for designing and aligning elements of an organization to efficiently and effectively deliver the purpose of an organization (Gina, 2009). The organizational design should respond to the change of internal and external environment. In equilibrium of these Internal and External factors, the structure of firm should be designed to match with key contingencies from contingency theory (George, Warren, & Marco, 2006; Lawrence, P, R., & Lorsch, J, W., 1967) that the designed structures will expose the individual characteristic which are different. The most effective organization design approach in particular situation (Richard B., 1983). The major sets of contingency variables are organization's environment, technology and size.

The contingency theory states that there is no single principle to shape the structure of an organization. On the contrary, each organization should develop its structure in turn with its internal characteristics, and the relationships with its environment (Arnolodo & Nicolas, 1984).

As the proper organizational design needed to match with the complex environment, the elements of design have been studied and delineated by Galbraith J.R. (1973). named "star model" as figure 2. The model is one of the most influential organizational design frameworks available (Mobrman, 2007). These elements should be configured to fit with each other in supporting of the strategy of the firm.

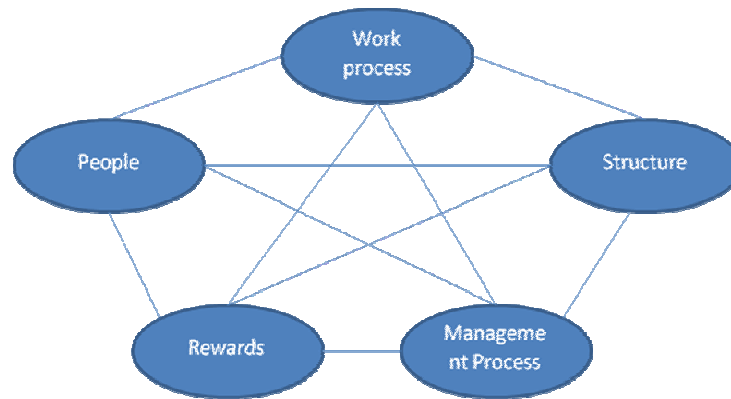


Figure 2: Galbraith's star model (Mabrman, 2007)

The organizational design theorists used these elements of the star model to support new capabilities for growth and agility of firm. However, these elements cannot be designed out of context of other design elements. Also, each firm must design and implement features that support its strategy that it cannot copy from others. Furthermore, the organizational design theorists had suggested that there are the six dimensions to be considered in designing an organization as following (Sara, 2009)

1. Strategy or goals, which determine direction a number of authors suggest that organization design is the result of a series of strategic choices (Alan & Gregory, 1984; Chandler, 1962; Child, 1972)

2. Policies related to people, or human resource management policies, which influence and define the mindsets and skills of the employees.

3. *Roles and responsibilities*, which designate where in the organization work will be allocated;

4. *Communication or information networks*, which describe the flow of information that may be supported by either information technology or organizational structure

5. *Structure*, which determines the location of decision-making power;

6. *Compensation or reward systems*, which influence people to perform and address the organizational strategy or goals.

In addition, the other dimensions, which are influence the design of organization, are discussed as *Customer contact*, which is a major variable affecting performance system and advocate restructure of the service organization (Richard B. Chase., & David A. Tansik., 1983), *Life-cycle*, which influence firm to adapt its characteristic fit with situation (Tuzzolino, 1982). Beside these dimensions, the dimensions of personalities, politics, pragmatism and chance have been used to design or redesign the organizational (Kimberly J.R., 1984).

According to previous organizational design studies, they are not sufficiently developed to offer the set of theoretical principal, prove in practice and applicable to a wide variety of situation. At least four important design theories have been proposed in the literature, and each one of them

offers some variable insights. They are the classical theory, the human relations theory, the decision-making theory, and the contingency theory. Lawrence, P. R., & Lorsch, J. W., (1967) consolidate emerging contingency notions in the concepts of differentiation and integration. Further study of this paper will use the key variables of contingency theory, like organization's environment, technology and size, to examine how to design the organization structure fit in the innovation era and to interpret the impact of it on business performance.

The development of organizational model

In 19th and early 20th century, most firms tried to produce a single product or service as efficiently and cheaply as possible in order to capture as large a share of a single market as possible. The organizational structure, which is constructed in functional and divisional, ordinarily has been interpreted as the one-boss rule under the "unity of command" principle. It often called the Unitary or **U-Form** organizational model that groups the similar task into specialized units creating the economies of scale and the familiar functional silos.

Across the middle of the 20th century, larger firms sought the related products and services specifically for differing segments of a broader market. This new business model was accompanied by the development of the Multi-division or **M-form** organizational model. This structure is formed around complementary tasks and it focused around a specific product, process, or market. This structure organizes their activities in separated business units and delegate control over resources. M-form creates high employee costs, internal battles over resources, lack of standardization, lack of cooperation and loss of market opportunities (Strikwerda & Stoelhorst, 2009). The other forms, which are constructed base on the multi-division concept, are Matrix organization and Hybrid organization.

Today, firms struggle to find ways to rapidly adapt emerging technologies to a broader variety of related markets in a highly dynamic global marketplace. Many firms are responding by refocusing on their core areas of competence and linking themselves more closely to their up- and down-stream partners. There are multiple organizational models that are being developed in real time as companies respond to the changes in the business environment. A new organizational form is called the Innovation-form or **I-form** (Raymond, Charies, & Kirsimarja, 2009). An I-form organization can be especially valuable in countries and industries where the knowledge base on which business opportunities rest is constantly changing and growing. The new age organizations focus on the technology power, not only as a competitive capability, but also as an agent changes in the organization forms (Francisco, & Ana, 2008). Early experiments with the I-form organization started in the 1970s when firms were led in various industries that they began to focus only on their core business activities and to outsource non-core activities to external providers. The previous independent and vertical integrated firms began to be replaced by groups of firms, that they organized the provider firms along the industry value chain (Raymond, Charies, & Kirsimarja, 2009). The important innovative firm characteristics are;

- Collaborative values and business philosophies widely held among managers
- Experience and competence in collaborative innovation processes
- Reputation as a trustworthy and fair partner

Since firms have started using high technology, sharing information, expanding in global market, the organizations are designed in different innovative forms. (Francisco, & Ana, 2008) summarized the most relevant organization forms during this innovation period are:

1. *Adhocracy Form*. It is characterized by the horizontal differentiation and a great deal organization form decentralization. The adhocracy is a business's way of living, which goes beyond the existence of internal small groups. This form is prompt and flexible in a complex and changing environment.

2. *Hypertext form*. It is a network organization based on the organizational knowledge and learning, which can create some relationship forms and interactions through both internal and external networks. Goal of this organization form is made to serve as a structural base for the creation of organizational knowledge. Just as in a software application, "the hypertext allows the user to access several layers" (Nonaka, I., & Takeuchi H., 1995). These layers are: the project teams, knowledge base and the business system.

3. *Hypertrebol form*. This organization form modified the Nonaka, I., & Takeuchi H. (1995). Hypertext form. This form focused on team work, which is strengthened in order to promote the innovation process through the establishment of projects.

4. *Network form*. Its' characteristic is a flat structure since authority is based on knowledge and not on hierarchical levels. Both internal and external relationships are of paramount importance; through these, constant information flows, allowing the organizational inter and intra communication (Miles, R., & Snow, C., & Mathews, J., & Miles, G. & Coleman, H., 1997).

5. *Work Teams*. The organization form described above may constitute a work team. However, this firm has been considered as taking this organizational form, it needs to meet certain requirements and principles: a culture based on the collective commitment, the continuity of the social interactions, the creation of a reciprocal awareness, the stability of relationships in time and the structure of roles.

Table 1: Economic and Organizational Evolution

Organizational Model		U-Form (Centralized, Vertically Integrated Structures)	M-Form (Multi-Divisional and Matrix Structures)	I-Form (Multi-Firm Networks And Community-Based Structures)
Economic Era		Standardization	Customization	Innovation
Principal Business Model		Market Penetration	Market Segmentation	Market Exploration
Core Organizational Capabilities		Planning and Controlling	Delegating	Collaborating
Growth Drivers		Achieving Scale Economies	Expanding into New Market Segments	Developing and Commercializing Products for Complementary Markets
Key Assets		Tangible Assets	Information	Knowledge

Source: (Raymond, Charies, & Kirsimarja, 2009)

In previous studies, the comparable organization model between the three economics shown in table 1. The key asset of I-Form is the knowledge sharing that it means this structure has relationship with learning organizational. Moreover, the willingness to share knowledge, it has a benefit to increase the collaboration and motivation and improve the organization's performance later. The new business requires new organizational structure and process, which are fit to their strategies to achieve the high performance organization in the global economy. However, organization designs have evolved over time as a need of business have changed (Sara 2009; Raymond, & Charles, & Kirsimarja, 2009).

The Effect of Organizational Design on the Effectiveness of Business Performance

Organizational theories have been concerned with the impact of organizational design on performance (Michael & Niran, 2005; John & Fred, 1983) The two traditional approaches to studying the design-performance relationship in organizations are a Neo-Weberian research and contingency research (Michael & Niran, 2005). The Neo-Weberian research has studied the relationship between individual performance and organizational size, complexity, formalization, and centralization. On the other hand, the contingency research has examined the relationship between individual performance and organizational environment and technology.

As many scholars have argued, the technologies and structures of organizations, as well as their environments, are constantly evolving. Technology is defined as the application of knowledge to perform work. In particular, this model proposes that the congruence between environment and technology and the congruence between technology and structure are important. This matching process relates to the strategic choices of technology and structure (Alan & Gregory 1984)

Table 2: Mechanistic Versus Organic Organizational Factors

Mechanistic	Organic
Closed	Function driven
Top down—hierarchical control	Parts
Departmentalized	Centralized
Stability	Sameness
Open	Purpose driven
Local focus & empowered	Whole
Connected	Distributed/Networked
Growth/Change	Diversity

Source: (Gina, 2009)

Organizational design is defined on the mechanistic-organic (Burns & Stalker, 1961) In general; mechanistic designs are characterized by highly specific and delimiting job descriptors, highly formalized procedures, and centralization. Organic designs are defined as characterized by the direct opposites (Leifer & Huber, 1977). The more appropriate organic approach focuses on growth and sustainability for the organization. The organic design concept, the “Organic”, which is the new approach for effective organization in future, is adapted from the traditional approaches in organizational design operate from concepts that were effective in the “Mechanistic” as table 2 (Gina, 2009).

According to the principal elements of organization or the Star’s components, these factors are the interrelationship and create the social network which affects the productivity and maintenance of the system (John, A. P, 1983). Social network analysis takes an approach by addressing the causes, natures, and consequences of alternative interaction patterns over time. It principally involves the study of both information exchange and influence relationships. It involves the comparison of prescribed group structures and emergent group structures. Finally, it facilitates the characterization of groups in terms of the number and types of individual role players and the frequency, direction, and compatibility of intra group communications. The group structural properties that have been studied most frequently in prior research can be categorized as descriptive of the group or descriptive of individuals within a group. Properties that are descriptive of the group include as figure 3 (John & Fred, 1983).

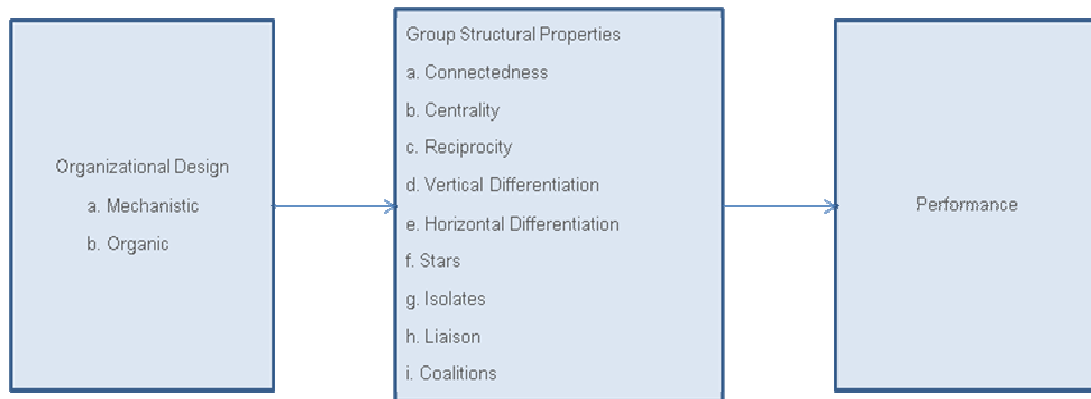


Figure 3: A conceptualization of the design performance relationship (John, A. P, 1983)

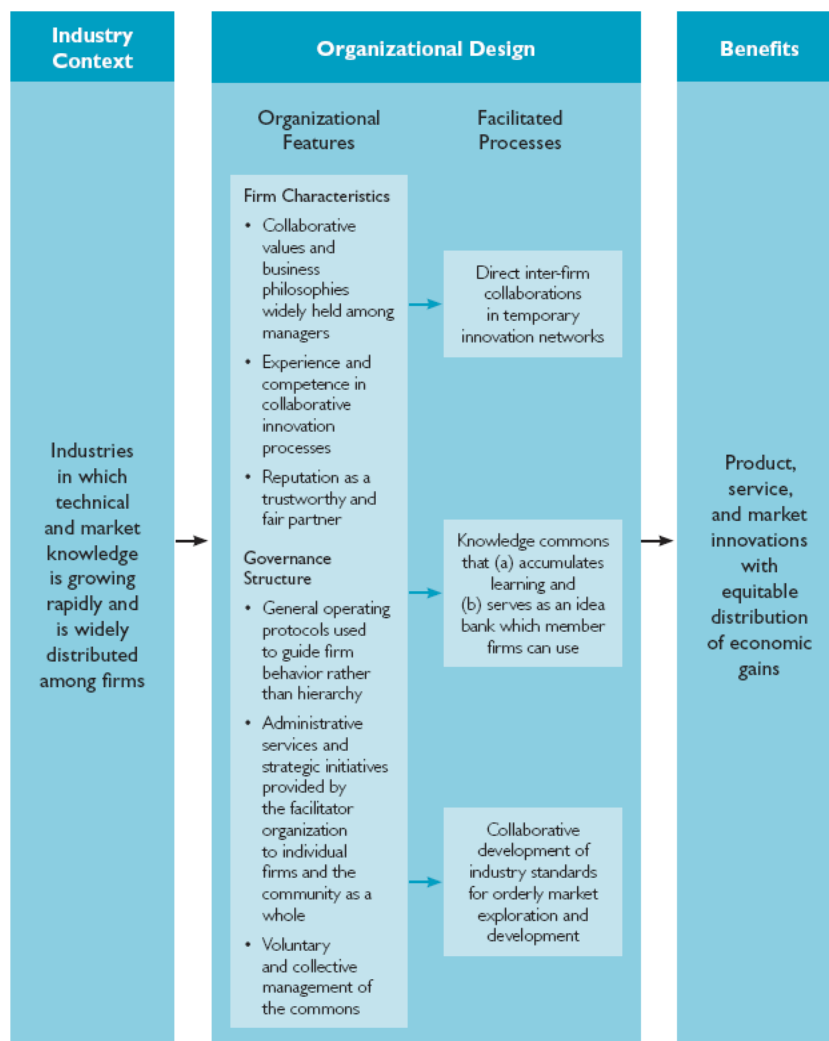
1. Connectedness—the extent to which group members identify with the goals of other members of their groups; it is a measure of group cohesiveness (O'Reilly & Roberts, 1977).
2. Centrality—the degree to which relations are guided by the formal hierarchy (Tichy et al., 1979).
3. Reciprocity—the degree to which there is two-way communication in a workgroup (Newcomb, 1979).
4. Vertical differentiation—the degree to which different organizational hierarchy levels are represented in a given work group network (O'Reilly & Roberts, 1977).
5. Horizontal differentiation—the degree to which different job areas are represented in a given work group network (Mohr, 1979).
6. Coalitions—perceived linkages among several individuals who can dominate organizational relationships in group more than individuals (Thibaut & Kelley, 1959).
7. Stars—individuals who are seen as having a great deal of influence on the jobs of most group members and who are the focus of most communication within the group (Tichy & Fombrun, 1979).
8. Isolates—individuals who are seen as involved in almost no communication within the group and as being encoupled from the network (Tichy et al., 1979).
9. Liaisons—individuals who serve as intermediaries among various emergent work groups within a department (Schwartz & Jacobson, 1977).

These types of social network have been studied to understand which one is fit or properly used in the organic and mechanistic organization by giving the positive performance of organization. Referring to the result, the mechanistic concept needs to be implemented in centrality and vertical differentiation network because it will create the high performance of organization. These two kinds of social network relate to the hierarchy levels that it fit with the stable environment.

Beside the social network factors, the facilitated processes as figure 4, which are used to implement in the I-Form, also can impact the benefits of organization, such as new product, market innovation and increasing the collaboration. As show in figure 4, I-Form organizational has been designed from organizational features and facilitated process based on the key asset, the knowledge sharing. The organizational feature has two factors, firm characteristics which reflect the concept of

collaboration and knowledge sharing, and government structure which reflects the concept of the facilitation and self-management. Thus, the variables of these two factors and the processes are important to understand how these variables will be fit with these processes and give the high performance. Moreover, the unsuccessful factors or concerns in the designing I-Form organization will be identified and resolved.

Figure 4: The I-Form Organization: Industry Context, Design Features, and Benefits (Raymond, Charles, & Kirsimarja, 2009)



Conclusion

The organizational design needs to be clarified in the major components, which will impact to the organization's performance. Today, the innovative organization form is the most interested and importance for the business to survive in the uncertainly economy and the rapid change of business environment. There is a various researches support that the more creating the additional value, the higher performance. The top management has the responsibility to design the optimal

organization structures in order to build more competitive advantage and strong organization in both local and global market. In addition, the proper organizational design will help the firm to retain the employees and finally to sustain the high business performance.

According to the above information, the organizational design process can be summarized by merging all related dimensions and components of organization design, organization structure that this model will illustrated for further study.

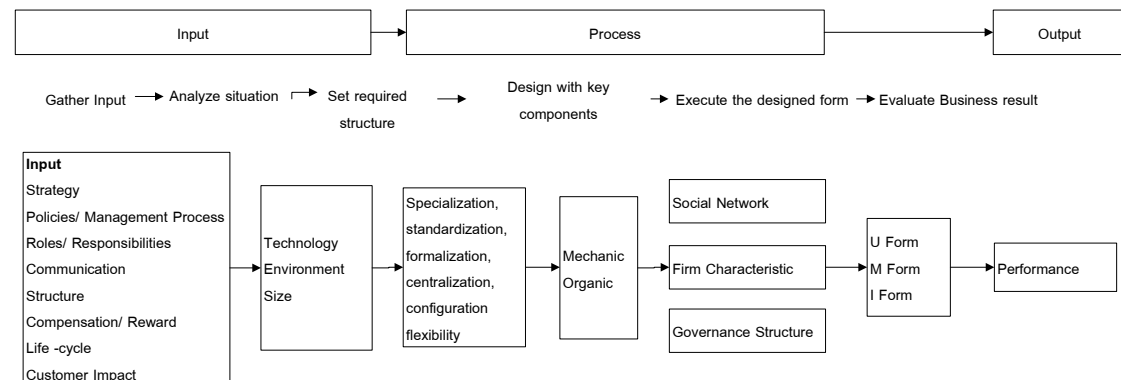


Figure 5: The summary of organizational design process

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