



Organization Theory Review (OTR)

Volume No. 2, Issue No. 1, Spring 2018

ISSN(P): 2221-2876

Journal DOI: <https://doi.org/10.32350/OTR>

Issue DOI: <https://doi.org/10.32350/OTR/0201>

Homepage: <https://spa.umt.edu.pk/otr/home.aspx>

Journal QR Code:



Article: **Dynamic Transformational Organization: A New Organizational Form**

Author(s): Khalil Ahmed Arbi

**Online
Published:** Spring 2018

**Article
DOI:** <https://doi.org/10.32350/OTR.0201.05>

**Article QR
Code:**



Khalil A Arbi

**To Cite this
Article:** Arbi, K. A. (2018). Dynamic transformational organization: A new organizational form. *Organization Theory Review*, 2(1), 75–97.

[Crossref](#)



A publication of the
School of Professional Advancement
University of Management and Technology
Lahore, Pakistan.

Dynamic Transformational Organization: A New Organizational Form

Khalil Ahmed Arbi

School of Professional Advancement
University of Management and Technology Lahore

Abstract

This article suggests a new organizational form labelled as Dynamic Transformational Organization (DTO) which is a blend of concepts from Nonaka, Kodama, Hirose and Kohlbacher (2014) and Teece (2007). The article borrows insights from David Teece's (2007) premise that innovation alone is not sufficient for an organization to be competitive. Other than innovation (the result of knowledge creation), an organization also needs a specific set of capabilities which makes firms more competitive. DTOs are equally capable of generating knowledge and also have the specific capabilities necessary for firms to perform in a competitive environment. This article outlines the organizational structure of DTOs and the factors which constitute DTOs. Major antecedents of DTOs include organizational phronesis, Dynamic Fractal Teams (DFTs), Distributed Leadership (DL), Hypertext Organizations (HTO) and environmental fitness.

Keywords: dynamic transformational organization (DTO), dynamic fractal teams (DFTs), organizational phronesis, hypertext organizations (HTOs), distributed leadership (DL), environmental fitness

Introduction

The article by Nonaka et al. (2014) about Dynamic Fractal Organizations (DFOs) gives a new form of organization with focuses on sustainable innovation. Nonaka juxtaposes the theory of knowledge creation with the practical use of knowledge creation process. He enters into the domain of organization theory by inventing a new position about organizational structure. He suggests the DFO model as a new paradigm for sustainable innovation leading to organizational competitiveness. According to Nonaka et al. (2014), sustainable innovation is the key to organizational success and competitiveness. Additionally, we voice the opinion that the phenomenon of sustainable innovation is a necessary but not a sufficient condition for organizational competitiveness. Pfeffer and Veiga (1999)

explains organizational competitiveness as a multi-headed phenomenon which cannot be explained only through one factor, that is, sustainable innovation. Nonaka et al. (2014) presents a model for organization through knowledge creation in multi-layered networks of *ba*, which ensures more knowledge creation in the company at various levels and hence more innovation as a result. Nonaka talks about innovation as an outcome of the knowledge creation process which then enhances the competitiveness of the firm.

In the competitive advantage theory of firms we have two predominant schools of thoughts, that is, the IO perspective and the RBV perspective. Barney's (1991) resource based view of the firm locates the competitive advantage of the firm within its internal environment, whereas the IO perspective tries to locate the competitive advantage outside of the firm through better strategy development (Porter, 1990). To our understanding, the essence of Nonaka's knowledge triad theory resides in the RBV domain where it talks about the generation of a knowledge triad relationship and phronesis, an internal resource. However, we hold the view that neither one of these two perspectives (RBV and IO) has the capacity to completely explain the phenomenon of competitive advantage.

The unique concept of Nonaka et al. (2014) is the generation of phronesis through knowledge triad relationship and constant exploration and exploitation of knowledge inside the organization through strong linkages with the outside world. They further highlighted that the relationship of an organization with its environment exists in a non-tangible form, whereas the organization responds to the environment in a tangible way as well by producing products and services. It is important to know that whatever the level of knowledge generation an organization has achieved, it nonetheless is transformed and communicated to the outer world in shape of significant output (product or service) which generates feelings or experience in the minds of the customers. The organization then, through the exchange process of products or services, earns revenue and reputation in the marketplace. On the basis of these experiences, the faith of organizational competitiveness is determined.

This leads to the fact that it is not only the inside view of the organization, that is, innovation which leads towards competitiveness; rather a specific set of capabilities is also required to sense, seize, foresee and transform ideas in a competitive organization. Teece, Pisano and

Shuen (1997), in this regard give some evidence from history when there were organizations who were continuously innovating and were the forerunners in new product development but could not survive in the market place just because their managers lacked the capability to sense the market potential and bring forth right innovation at the right place and time. Nonaka et al. (2014) suggests that *“Ba means shared context in motion, the interactions of circumstances, structures and actors in a “here and now” relationship in a time and space nexus. Part of the capability to create ba and to share and create new knowledge within them can also be seen as the organizations absorptive capacity”*. This gives the essence of the concept of phronesis given by Nonaka. He adds practical wisdom, value judgment and context in motion as sources of competitive advantage to his knowledge creation theory.

In this article, we have further added a concept to the practical wisdom concept. We have given the concept of a new form of organization namely Dynamic Transformational Organization (DTO), which has some added features as compared to DFO. We have laid the foundational link between practical wisdom and organizational capacities to perform competitively in the market place through Dynamic Fractal Teams (DFTs). This article sheds light on questions such as how practical wisdom comes into action, how value judgment is made in an organization and what capabilities are required to make value judgment? Nonaka et al. (2014) lead us towards the concept of shared Ba in motion and we have gone one step ahead to the functioning of this Ba in team perspective and to find the characteristics of DFTs. By using concepts like DFT, Distributed Leadership (DL) and Hypertext Organization (HTO) in peoples’ management perspective, we actually intend to develop a workable model of DTO. It will be based on the phronesis concept of Nonaka and with added features of DFT and DL along with a certain set of capabilities given by Teece (2007). This article tries to develop a new organizational form which comes into existence through the interplay of organizational phronesis, DFT, DL, hypertext structure and environmental fitness.

The article is divided into four sections. After introduction, literature review is presented below to highlight the needs of the new organizational model. The third section will discuss the proposed organizational model and the last section will highlight its applications and conclusion.

2. Literature Review

Teece et al. (1997) addressed the issues about organizational capabilities which help organizations to enjoy sustainable competitive advantage. Dynamic capabilities are learned processes and activities of a firm which help it to achieve the desired outcomes. Sustainable competitive advantage requires more than the mere ownership of difficult-to-replicate (knowledge) assets. Organizations where unique and difficult-to-replicate assets are needed, unique and difficult to imitate dynamic capabilities are also required. They further highlighted that three types of activities of managers constitute dynamic capabilities of firms. These three types of activities include sensing, seizing and transforming. Sensing means the ability to assess opportunities and threats outside the company. Similarly, seizing means thorough and efficient use of available resources while capturing the sensed opportunity or avoiding an impending threat. Transforming focuses on maintaining the organizational competitiveness by continuous improvements in the business processes and assuring efficient reconfiguration of the enterprise's tangible and non-tangible assets. Continuous sensing and seizing can be explained through the concept of dynamic occurrence of exploration and exploitation of knowledge discussed by Nonaka et al. (2014), while the transforming capability of an organization is explained by a concept like dynamic ba. However, the functioning of transforming capability needs to be explained in the context of phronesis.

Teece (2007) pointed out that only being innovative is not sufficient to be competitive in business since organizations must have the capabilities to transform the generated knowledge into dynamic capabilities which will produce competitive advantage for them. Keeping in view Teece's discussion, we have developed an extension to the Nonaka's fractal organization model. We believe that fractal organization model explains in detail the soft side of business operations that is knowledge creation through multiple layers of dynamic ba. However, to perform in a competitive environment, organizations must have a set of dynamic capabilities needed to transform the acquired knowledge into tangible and non-tangible assets. This transformation needs the induction of the development of human capabilities and capacities in the fractal organization model.

Organizational success and the role of dynamic capabilities stress the continuous revival of resources which are valuable, rare, inimitable and non-substitutable (VRIN approach). The question then arises that what are the capabilities and internal framework required to retain the status of VRIN resources. Operational capabilities of a firm along with its dynamic capabilities together form the organizational capabilities (Helfat & Peteraf, [2003](#)). We have renamed the organizational capabilities as organizational phronesis.

Rindova and Kotha ([2001](#)) while discussing the continuous morphing of organization in a hyper-competitive environment make an argument for continuous refurbishing of dynamic capabilities. They raise the issue of the best dynamic fit of capabilities which help organizations to build a long lasting competitive advantage. What could this best fit be; we have tried to explore the components of the best fit dynamic capabilities by using the concepts of phronesis, DFTs, and hypertext structure.

2.1. Proposed New Organizational Form

On the basis of the ideas of Teece et al. ([1997](#)) and Wilden, Gudergan and Lings ([2007](#)), we argue that Nonaka's DFO model is a necessary but not a sufficient condition for establishing a sustainable competitive organization. Competitiveness of the organization does not depend only on the softer side of organization (Knowledge Creation). It also depends upon certain skill sets and involvement of people in decision making at each hierarchical level. Dynamic Transformational Organization (DTO) is a new form of organization which is a blend of the thoughts of both Nonaka and Teece. DTOs possess the properties of DFOs and they also possess dynamic capabilities. We have proposed the following five contributory factors which make an organization a DTO.

DTO *f* (OP, DFTs, DL, HTO, EF)

1. Organizational Phronesis (OP)
2. Dynamic Fractal Teams (DFTs)
3. Distributed Leadership (DL)
4. Hypertext Organization (HTO)
5. Environmental Fitness (EF)

In this model, we have taken DTO as our focal point and it adds a few variables to the traditional premise of sustainable innovation model by Nonaka et al. ([2014](#)). In this view, the ultimate objective of an

organization should be to attain sustainable competitiveness and in that concept innovation is inbuilt. Our proposed DTO will be explained through the concepts of organizational phronesis, DFT, DL, HTO and environmental fitness. These factors can be categorized as contributory factors as well as the outcome of the proposed DTO. Figure 1 gives the details of the DTO model and its constituents. The following section covers the details of these contributory factors.

2.2. Organizational Phronesis

This is an important characteristic of DTOs. This is a strategic level outcome of DTOs which bestows the best strategy to the organizations. Organizational phronesis is a combination of two concepts, one is phronesis given by Nonaka and the other is the concept of dynamic capabilities given by Teece. Organizational phronesis is the set of capabilities exhibited by an organization in the shape of sensing, seizing, judging, foreseeing and transforming. It is an outcome as well as a necessary condition for DTOs. Organizational phronesis is the outcome of collective teleology, common good, value judgment, and transformational capabilities of organizational members. It is superior in terms of its collective nature and transformational capabilities. It is the outcome of knowledge quadrilateral relationship between explicit and implicit knowledge, phronesis and transformation. This is again similar to the spiral concept (Pisano, [1997](#)). When one round of this quadrilateral relationship is completed, an organization is elevated one step upwards in terms of knowledge creation, human capabilities, product development and profitability.

2.3. Hypertext Organizations (HTOs)

DTOs can only work through hypertext organizational structure. Hypertext structure enables organizations to achieve the highest level of coordination among the departments and teams working in the organization. It ensures coordinated efforts to generate new knowledge and capabilities needed to improve organizational performance (Nonaka & Takeuchi, [1995](#)). Management literature highlights a variety of organizational structures and designs such as bureaucracy, task orientation, organic structure, flat organization and matrix structures. Much has been written about the cost and benefits of each structure and design. However, only bureaucratic and task oriented structures have been

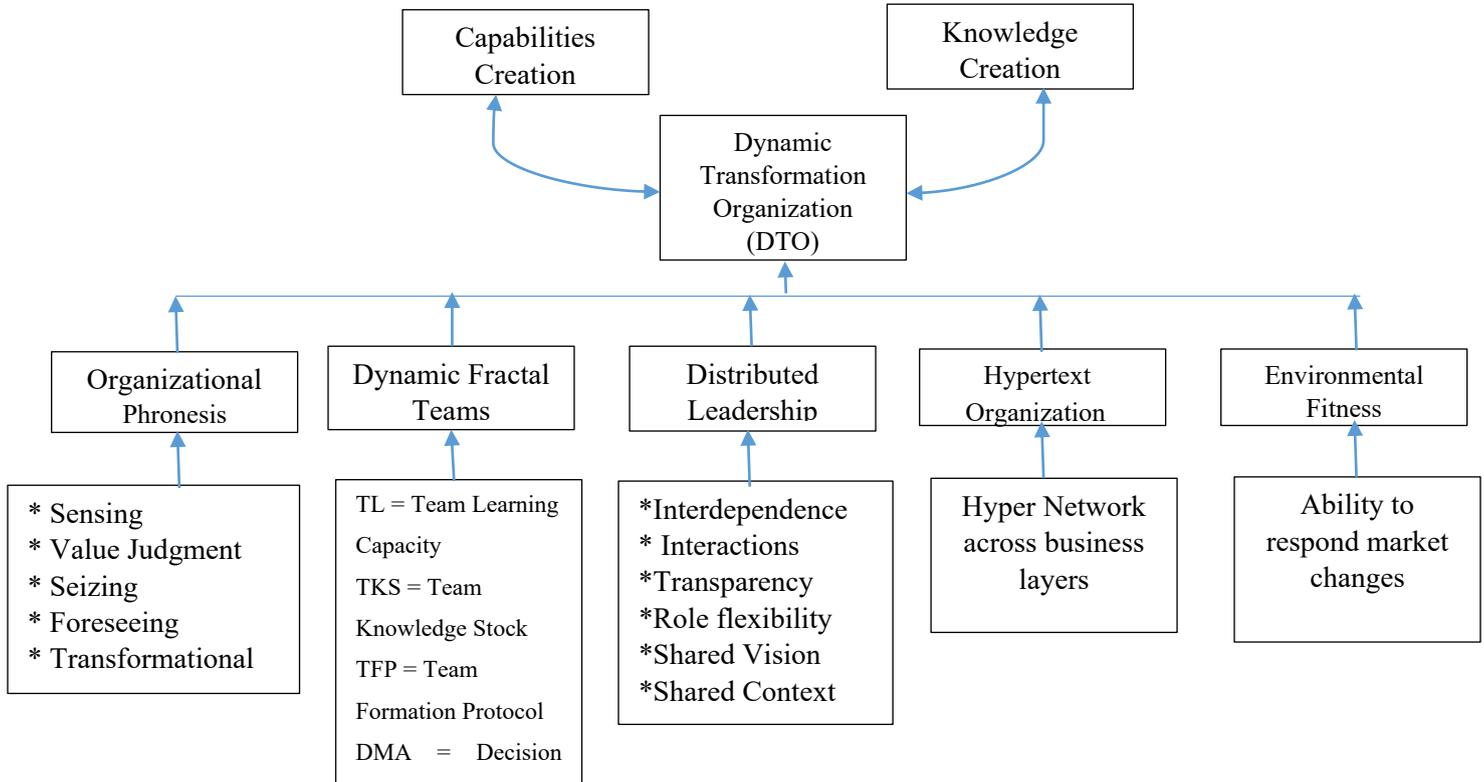


Figure 1. Dynamic Transformational Organization Model

widely discussed while other structures remain the modified forms of these two major structures.

The concept of HTO concept has been borrowed from computer science where hypertext is the type of computer displayed text containing references (hyperlinks) to other texts which can be immediately accessed by readers, or where text can be revealed progressively at multiple levels of detail. These hyperlinks can be termed as different layers or different degrees of information readily available to the reader. Following diagram helps better to explain the concept of an HTO. According to this diagram, the central layer is known as the “business-system” layer which carries the normal routine chores. The top layer is the “project team” layer where multiple project teams engage in the knowledge creation process. In a project, team members from different backgrounds are brought together to share their knowledge and to execute the project. The bottom layer is called the “knowledge-base” layer. This layer helps to re-categorize and re-contextualize the knowledge gained from the top two layers. The bottom layer is the result of the common thinking of the organization, its culture, its visions and mission and value judgment system of its members. Important characteristic of an HTO is the ability of its members to move along and across the three contexts or layers. An HTO provides freedom of transformation over the three contexts in an organization. This property of an HTO makes it an important antecedent of a DTO.

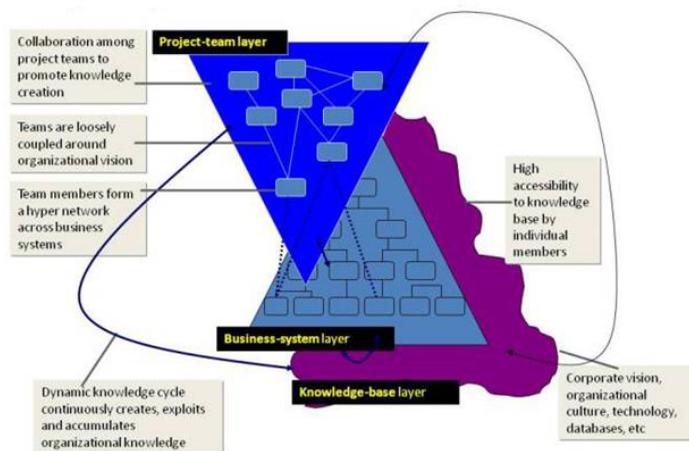


Figure 2. Hypertext organization. Source: Nonaka (1994)

2.4. Environmental Fitness

Miller (1992) emphasizes that organizations need to develop best environmental fit and internal fit to achieve sustainability. From internal fit he means organizational structures, procedures and processes. He demonstrates that organizations must pursue for best internal and external fit. Firms operating in a highly volatile industry or in a low competition industry must always be in a position to find the best strategic fit for themselves (Yamakawa, Yang & Lin, 2011). Looking at the importance of the environmental fitness of a firm in a wider strategic perspective, we have induced the term “environmental fitness” as an important ingredient of DTOs. Environmental fitness means how DTOs develop adaptability and resistance to the outer environment. A DTO has a unique set of capabilities which ensure the best environmental fit for itself. DTOs are resilient organizations which possess the abilities to survive in chaos and a turbulent environment.

2.5. Dynamic Fractal Teams (DFTs)

DFTs are the major element of DTOs. DFTs are different than common teams in their makeup, procedures, learning capabilities, roles and responsibilities of team members (fractal members). The fractal members in a team share equal responsibility for any given task. Each fractal member is an important knowledge partner and exploiter of given resources. S/he has the capacity to perform at any position assigned to him in the team and is the ear, nose, eyes and hands of the organization. Each fractal team member is an equal contributor to organizational phronesis and transformation of the organization.

There is considerable literature available on team formation and performance. Teams are formed to perform specific tasks. A team is a small number of people with complementary skills who are committed to a common purpose, performance goals and an approach for which they hold themselves mutually accountable (Katzenbach & Smith, 2015). Teams provide a platform for discussion, brainstorming, combined analysis and actions to achieve the desired goals. Best teams are those which have a high level of desired skills set, coordination, common objectives and shared vision. Team members, when working together, develop synergy in their actions to pursue a common goal. The performance of team becomes manifold when each member explores and

exploits the strengths of other team members.

Team formation can take place at any level of the organization. Teams can exist in lower, middle and top tiers of the organization. However, the success of teams mainly lies in team formation, synergy in action and shared vision (Edmondson, Bohmer & Pisano, [2001](#)). Teams at lower levels are mainly responsible for functional performance, whereas teams at middle level have a dual role and they bridge the gap between lower and top level teams. The middle level teams possess and generate knowledge which helps the organization to innovate and perform better (Nonaka & Takeuchi, [1995](#)). Many scholars like Nadler ([1996](#)) and Bauman, Jackson and Lawrence ([1997](#)) have argued that teamwork at top management level promotes the generation of ideas and informs the alternatives available for the organization. Top management teams develop certain strategies and capabilities which help organizations to streamline their efforts and to cope with the complexity of outer world and perform better (Edmondson, Roberto & Watkins, [2003](#)).

The concept of team capabilities is derived from the strategic literature of organizational capabilities. It highlights the importance of knowledge generation for developing organizational capabilities. According to Dosi, Nelson and Winter ([2000](#)), to be capable of something normally means a reliable capacity to bring that thing about as a result of intended action. Haas ([2006](#)), in his seminal work about teams' capabilities, argues that teams can perform better through accumulation of knowledge (knowledge stock) and better knowledge processing, sense-making and buffering capabilities. Extending his argument he explains that processing, sense-making, and buffering capabilities will be enhanced if teams have certain conditions like slack time, work experience and decision making autonomy.

Teece et al. ([1997](#)) have made a clear distinction between team learning and team capabilities. However, they make the point that team capabilities are deeply rooted in the team learning phenomenon. They take knowledge as a resource and dynamic capabilities as the exploiter of that resource. Knowledge accumulation and generation will be more beneficial if an organization has dynamic capabilities which are different from an individual's capabilities. Dynamic capabilities relate to an enterprise's ability to sense, seize and adapt in order to generate and exploit internal and external enterprise-specific competencies and to address the

enterprise's changing environment. It is used as a collective term and is exhibited through teams. To utilize, enhance and sharpen dynamic capabilities, an organization needs a networked team structure which we call Dynamic Fractal Teams (DFTs).

Both Teece et al. (1997) and Haas (2006) talk about the capabilities which are reflected in groups or teams. Haas, in his seminal work, has elaborated the conditions which enhance teams' capabilities. These conditions are slack time, work experience and decision making autonomy. We, however, in our own model of DFTs, have induced four variables as antecedents of DFTs. The model is given below.

DFT *f* TLC, TKS, TFP, DMA

TC = Team Learning Capacity

TKS = Team Knowledge Stock

TFP = Team Formation Protocol

DMA = Decision Making autonomy

2.5.1. Team learning. Senge and Suzuki (1994) have identified the failure of many organizations due to deficiencies in their learning platforms. They argued that organizations who fail to perform well in competitive environment actually lack some learning abilities. They further proposed a 'learning organization' model to cope up with such failures in organizational life cycle. The source of competitive advantage lays in an organization's generative and adaptive learning and a 'learning organization' has both the capacities. It exhibits generative learning when its processes, rules and regulations are followed by others and it shows adaptive learning when it assimilates and absorbs the best practices from other organizations.

Senge (1990) delineates certain activities by managers to transform an organization into a 'learning organization'. These activities include adopting 'system thinking', encouraging 'personal mastery', exploring and challenging the 'mental models', building 'shared vision' and facilitating 'team learning'. System thinking, due to its holistic approach, is closed to the knowledge creation theory of (Nonaka & Takeuchi, 1995). The argument made from the system thinking theory given by Senge (1990), when contextualized within the mental model, shared vision and team

learning, suggests the contour of ‘learning organization’ as an organization which has a strong knowledge orientation.

In any organization, the presence of formal and informal teams is an inevitable phenomenon. There exists multiple teams within an organization, sometimes within a department and sometimes across multiple departments. These teams are given specific tasks to complete. The formation of teams is always need based and the management has high expectations from them.

According to Senge (1990), team learning has three significant dimensions which highlight the ways teams can perform and learn. In the first dimension, team learning plays the role of a think tank which has the capacity and capability to undertake complex issues and make deliberations on these issues. This collective thinking is the manifestation of the fact that teams can have a better intelligence level as compared to the intelligence of an individual. Thus, fostering a culture of team work enhances the collective wisdom of the organization and raises its chances of success. The second important dimension of team learning is team coordinated action. When team members work in coordination with each other and their efforts are aligned with their predefined objectives, then team performance and organizational success improves significantly. The actions of team members are complementary to each other, thus they increase the mutual trust level within an organization. The third dimension of team learning is intra team coordination for knowledge creation and action. In an organization multiple teams are working at various levels and coordination among these teams encourages harmony, dialogue, collective wisdom and organizational performance. Mastering team learning at all levels of an organization helps to develop the learning organization.

DFTs are categorized as the most efficient teams in terms of learning, generating knowledge, capabilities, coordination, and practical wisdom. Each team member is known as a fractal member and shares equal responsibility in team performance.

2.5.2. Team knowledge stock. Team Knowledge Stock (TKS) is the measure of team experience and tasks related knowledge. Fractal teams are formed while keeping in view the already acquired knowledge and experience of team members. We propose that a high level knowledge stock of fractal members on the subject matter will produce more

discussion and more efficient brain storming sessions about the given topic. Team experience may include the experience of fractal members within the organization and within the team as well. Team members with more experience will yield better results as their individual learning curve will be higher than those who have less experience (Argote, [1999](#)). Greater fractal team experience will increase the sense making capabilities of teams.

2.5.3. Team formation protocol. Team Formation Protocol (TFP) means how fractal teams are made and what is the makeup of the skills set in a specific team. In DTOs, the role of fractal team is very significant in organizational performance. For any given project or performing day to day

Table 1

Key differences between traditional teams and virtuoso teams. Source: Fischer and Boynton ([2005](#))

Team Characteristics	Traditional Teams	Virtuoso Teams
Membership	Members are chosen based on who is available at a given time	Members are chosen based on their relevant expertise
Culture	Collective	Collective and individual
Focus	Tight project management on time and on budget. Performance more important than content	Ideas, understanding and breakthrough thinking. Content is King
Clients	Mundane	Sophisticated
Intensity	High/medium	High
Stakes	Low/medium	High

routine, organizations pay full attention to careful formation of fractal teams. Fischer and Boynton ([2005](#)) classify teams in two types, that is, the ordinary teams and virtuoso teams. When big change and high performance are required, a virtuoso team is far more likely to deliver outstanding and innovative results. Virtuoso team concept is very much similar to our fractal team concept, however, fractal teams are far better performers than virtuoso teams due to the reason that

they constitute a network and each fractal member has shared responsibility and vision. The following table compares the formation, structure and outcome of both types of teams suggested by (Fischer & Boynton, [2005](#)).

For the formation of fractal teams, we will consider all the given variables of virtuoso teams plus some added variables like the networked nature of fractal teams and measures of shared responsibility and vision of each fractal member.

2.5.4. Decision Making Autonomy (DMA). This is an important antecedent of fractal team capacities as it is directly related to the decision of fractal members for taking a position on a particular issue. It means how much team members are empowered to gather knowledge about the given topic and to implement the strategies and the action plan discussed for a certain issue. Autonomy gives confidence to team members and allows them to independently analyze the situation and make the best possible recommendations in the light of discussion (Lawler, [1992](#)). As fractal teams are loaded with responsibility, so DMA empowers them to produce better results.

2.6. Distributed Leadership (DL)

It is an emerging concept and often interchangeably used for ‘shared leadership’. It is more than a theory of leadership. It focuses on the leadership practice, including leaders and their functions, roles and responsibilities (Spillane, [2005](#)). Leadership practice means the product of interactions between organizational leaders, followers, and the situation in which they find themselves. DL does not focus solely on the skill set of leaders and their capability to perform. Instead, it encircles the whole phenomenon in which it is operational. It watches the interactions, capabilities and activities of all members involved in a specific situation.

Nonaka ([2008](#)) takes the position that in knowledge creating companies, leadership is not defined as strict control over the activities of team members. Rather, it is flexible and exhibits DL. In this situation, leader is not assigned by the authority. Instead, leader is determined by context. This argument supports our main premise for fractal teams when we claim that each fractal member has an equal responsibility for results. In fractal teams, leader is defined by context. Nonaka ([2008](#)) argues that in knowledge creating companies every individual has value and every individual can perform the role of leader in specific situations.

Knowledge creation is a process in which phronesis is exercised by DL at all levels of the organization.

We can infer from this discussion that by empowering and trusting each employee for their analytical capabilities, organizations can build a huge resource for knowledge creation and capabilities. Teece et al. (1997), while discussing the role of DL in dynamically competitive knowledge-based organizations, explain it as leadership which is exercised by people at all levels. The common leadership skills include taking the lead to act, accepting responsibility, planning, solving problems, and maintaining communication at all levels of management. In DL, we expect all these characteristics from all the team members or all members of an organization. DL is not about one person, it is about the whole team and the environment in which the team operates. In DL, vision, responsibility and consequences are shared by every member of the organization.

Harris (2013) gives a profound overview of DL and highlights it as the process of learning together and constructing meaning and knowledge, collectively and collaboratively. It is the process of developing common meanings, beliefs, perceptions, assumptions, and the common process of arriving at conclusions. In DL, people make common decisions while understanding the common context and information using their own phronesis or practical wisdom to draw a strategy which best suits the environment.

Keeping in view Bolden's (2011) DL framework, this article proposes a comprehensive conceptual model which can be used to define DL and its scope in an organizational setup. According to this conceptual model, DL seems to operate when an organization has a shared vision and promotes transparent and open interactions among all its members, flexible role defining among team members, clarity in objectives for each member, and the understanding of context by each member. These five points can provide us a good measure of DL being practiced in an organization. This list can be extended but nonetheless these points are central to the measurement of DL in any organization. Based on the above literature review, the following section highlights the key component of DTOs.

2.7. Properties of Dynamic Transformational Organizations

1. DTOs possess a specific set of capabilities (knowledge creating, sensing, seizing, foreseeing, and transforming) which helps them to remain sustainably competitive and innovative.

2. DTOs are capable of generating both knowledge and the capabilities necessary to keep the organization at the forefront.
3. DTOs' organizational structure is middle-up-down, where most of knowledge creation and capabilities are found in the middle tier.
4. DTOs are capable of generating knowledge which is important for creating new products, new strategies, and new organizational structure which help DTOs to remain competitive throughout their life cycle.
5. DTOs are also capable of generating organizational and human capabilities necessary for competition.
6. DTOs always strive to enhance their current arsenal of capabilities and sharpen the existing capabilities for better performance.
7. DTOs are capable of sensing environmental challenges and are flexible enough to redesign, reform and regenerate an entire organization or its selected parts for the sake of competition.
8. DTOs, due to their flexible competitive structure (morphogenesis structure), are capable of attaining sustainable growth in knowledge, wisdom, intellectual output, profits and welfare of stakeholders.
9. DTOs are equipped with the ability of transforming existing skills and potentials into need based current and futuristic organizational positioning.
10. DTOs are vigilant organizations which have a strong hold on their current activities and the external environment. Their vigilant character enables them to align their activities to meet their overarching objectives.
11. DTOs promote DFT culture in which each member of a team acts as a fractal member, working and thinking for the best interest of the entire organization.
12. DTOs promote organizational phronesis at all levels of management and record the insights of each fractal member working in the organization.
13. DTOs put equal responsibility on each and every fractal member for the accumulation of knowledge, capabilities, welfare and wealth of all stakeholders.

2.8. Consulting Firms as DTOs

Global management consulting companies are commonly discussed as

the archetype of knowledge-intensive firms. Consulting firms are regarded as knowledge creating institutions where knowledge workers work in teams to generate new knowledge. Knowledge, ideas and intellectual output are the core commodities offered by consulting firms. The mechanism of knowledge creation in consulting firms is also similar to the knowledge creating process described by Nonaka in knowledge creating companies. Before we explain how consulting firms can be developed into DTOs, we must first understand the business processes of consulting firms.

Werr and Stjernberj (2003) have analyzed in detail the business processes of consulting firms from a knowledge management perspective. Management consulting firms are considered as knowledge intensive companies and therefore they can be a good source of knowledge management practices. Management consulting firms usually develop their own knowledge repositories in the shape of documents, case studies and experienced human resource as consultants. Werr and Stjernberj (2003) have taken the view that an understanding of the organizational knowledge system may instead require the recognition of the relationship of articulated knowledge (codified knowledge in shape of case studies, books etc.) and tacit knowledge (knowledge in the brains of consultants). They have presented a model which identifies three interrelated knowledge elements. The first one is common methods and tools (for the excavation of knowledge), the second is the repository of case studies and the third is experience in the shape of individual consultants in the case of consulting firms.

Best consulting firms require a unique blend of these three elements of knowledge for a powerful execution of performance. The use and dissemination of the experiences of individual consultants is largely enabled by organizational structures, such as competence-based hierarchical organization, team-based work in projects etc. The efficient use of these three organizational elements generates organizational competence for management consulting firms. Action by consultants is to a large extent described as intuitive and is largely based on tacit knowledge of the researchers; the articulated forms of knowledge (methods and tools) play the role of facilitators for consulting organizations to develop a common language for knowledge excavation and exchange. The competence of a consulting organization is largely based on the ways in which tacit and articulated knowledge are blended

with each other.

Consulting firms carry dual responsibility for development. They not only have to prove themselves intellectually superior to their clients but they also have to bring positive developments in the business processes of their clients as well. At the back of many successful companies, their remains a competent consulting firm which plays the role of knowledge hub for these companies. Due to this dual developmental role, consulting firms must always come up with better techniques for knowledge creation and capability enhancement. This dual role of consulting firms requires dynamism in their transformational position of self and for their clients.

Consulting firms are the ideal organizations which can be developed into DTOs because of the scope and nature of their work. The important characteristics of DTOs is their ability to generate knowledge and capabilities for transformation best fit to consulting firms. Consulting firms are good examples of organizational phronesis where each consultant contributes in the process of knowledge creation through value judgment and sensing capabilities. Normally, the personnel of consulting firms work in teams and the working of these teams can be transformed into the working of DFTs. Each team member acts as a fractal member and contributes equally to organizational phronesis.

DTO consulting firms will be more competitive in terms of knowledge creation and capabilities generation. These firms will have two unique characteristics. Firstly, they will be dynamic in their approach to problem solving and knowledge excavation and will possess the ability to transform themselves into a more prudent and result oriented organizations. Secondly, they will also possess the ability to transform their clients into DTOs. In this view, DTOs possess the fractal nature of replicating the self into others and same will be true for DTO consulting firms.

3. Conclusion

In this article, we have discussed the concept of a new organizational form labelled Dynamic Transformational Organization (DTO) which possesses better capabilities to compete and grow in a sustainable way by generating more knowledge and other capabilities through organizational phronesis and Dynamic Fractal Teams (DFTs). The new organizational form DTO is an advance version of Nonaka's Dynamic Fractal Organization (DFO)

model in which we have incorporated the concept of dynamic capabilities given by David Teece. We have proposed that DTOs possess the set of capabilities like knowledge creation, sensing, seizing, foreseeing and transformation. In the conception of DTO, we have blended the ideas of both Nonaka and Teece and have made the concept more expressive in terms of its abilities to generate knowledge and capabilities. We have elaborated the working environment of DTOs and have given the complete structure of DTOs. We have referred to consulting firms as ideal DTO firms which can produce more intellectual output and thus are able to elevate themselves and their clients. We have viewed this dual-development approach of consulting firms through the lens of the DTO organizational model.

DTO is a new organizational form and is open for discussion with experts in the domain of knowledge management and organizational behavior. We, however, have a strong conviction that there is a need for a more acceptable organizational model which takes input from Nonaka et al. (2014) Dynamic Fractal Organization model and Teece's (2007) model of dynamic capabilities. DTOs, because of their flexible organizational structure together with DFTs, provide a better solution for organizations working in highly competitive environments. By following DTO structure, organizations can achieve long lasting innovative and competitive capabilities which will enable them to enjoy sustainable competitiveness.

References

- Argote, L. (1999). *Organizational learning: Creating, retaining, and transferring knowledge*. Norwell, MA: Kluwer Academic Publishers.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. doi: 10.1177/014920639101700108.
- Bauman, R., Jackson, P., & Lawrence, J. (1997). *From promise to performance: A journey of transformation at SmithKline Beecham*. Boston, MA: Harvard Business School Press.
- Bolden, R. (2011). Distributed leadership in organizations: A review of theory and research. *International Journal of Management Reviews*, 13(3), 251–269. doi: 10.1111/j.1468-2370.2011.00306.x.
- Dosi, G., Nelson, R. R., & Winter, S. G. (Eds.). (2000). *The nature and*

dynamics of organizational capabilities. Oxford: Oxford University Press.

Edmondson, A. C., Roberto, M. A., & Watkins, M. D. (2003). A dynamic model of top management team effectiveness: Managing unstructured task streams. *The Leadership Quarterly*, 14(3), 297–325. doi: [10.1016/S1048-9843\(03\)00021-3](https://doi.org/10.1016/S1048-9843(03)00021-3).

Edmondson, A. C., Bohmer, R. M., & Pisano, G. P. (2001). Disrupted routines: Team learning and new technology implementation in hospitals. *Administrative Science Quarterly*, 46(4), 685–716. doi: [10.2307/3094828](https://doi.org/10.2307/3094828)

Fischer, B., & Boynton, A. (2005). Virtuoso teams. *Harvard Business Review*, 83(7), 116–123.

Haas, M. R. (2006). Knowledge gathering, team capabilities, and project performance in challenging work environments. *Management Science*, 52(8), 1170–1184. doi: [10.1287/mnsc.1060.0530](https://doi.org/10.1287/mnsc.1060.0530)

Harris, A. (2013). *Distributed school leadership: Developing tomorrow's leaders*. London, UK: Routledge.

Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24(10), 997–1010. doi: [10.1002/smj.332](https://doi.org/10.1002/smj.332)

Katzenbach, J. R., & Smith, D. K. (2015). *The wisdom of teams: Creating the high-performance organization*. Brighton, MA: Harvard Business Review Press.

Lawler, E. J. (1992). Affective attachments to nested groups: A choice-process theory. *American Sociological Review*, 57(3), 327–339. doi: [10.2307/2096239](https://doi.org/10.2307/2096239).

Miller, D. (1992). Environmental fit versus internal fit. *Organization Science*, 3(2), 159–178. doi: [10.1287/orsc.3.2.159](https://doi.org/10.1287/orsc.3.2.159)

Nadler, D. A. (1996). Managing the team at the top. *Strategy and Business*, 2: 42–51.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14–37. doi: [10.1287/orsc.5.1.14](https://doi.org/10.1287/orsc.5.1.14)

- Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford: Oxford University press.
- Nonaka, I. (2008). *The knowledge-creating company*. USA: Harvard Business School Publishing.
- Nonaka, I., Kodama, M., Hirose, A., & Kohlbacher, F. (2014). Dynamic fractal organizations for promoting knowledge-based transformation—A new paradigm for organizational theory. *European Management Journal*, 32(1), 137–146. doi: [10.1016/j.emj.2013.02.003](https://doi.org/10.1016/j.emj.2013.02.003)
- Pfeffer, J., & Veiga, J. F. (1999). Putting people first for organizational success. *Academy of Management Perspectives*, 13(2), 37–48. doi: [10.5465/AME.1999.1899547](https://doi.org/10.5465/AME.1999.1899547)
- Pisano, G. P. (1997). *The development factory: Unlocking the potential of process innovation*. Boston: Harvard Business Press.
- Porter, M. E. (1990). New global strategies for competitive advantage. *Planning Review*, 18(3), 4–14. doi: [10.1108/eb054287](https://doi.org/10.1108/eb054287).
- Rindova, V. P., & Kotha, S. (2001). Continuous “morphing”: Competing through dynamic capabilities, form, and function. *Academy of Management Journal*, 44(6), 1263–1280. doi: [10.5465/3069400](https://doi.org/10.5465/3069400)
- Senge, P. M. (1990). *The learning organization*. New Mexico: The Doubleday.
- Senge, P. M., & Suzuki, J. (1994). *The fifth discipline: The art and practice of the learning organization* (p. 14). New York: Doubleday/Currency.
- Spillane, J. P. (2005). Distributed leadership. *The Educational Forum*, 69(2), 143–150. doi: [10.1080/00131720508984678](https://doi.org/10.1080/00131720508984678).
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. Doi: [10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z).
- Teece, D. J. (2007). Explicating dynamic capabilities: the nature and micro foundations of (sustainable) enterprise performance. *Strategic*

Werr, A., & Stjernberg, T. (2003). Exploring management consulting firms as knowledge systems. *Organization Studies*, 24(6), 881–908.

doi: 10.1177/0170840603024006004.

Wilden, R. M., Gudergan, S., & Lings, I. N. (2007). Dynamic capabilities and organizational performance. *Proceedings of the 2007 Australia New Zealand Marketing Academy Conference*, 572–579. Retrieved from <https://opus.lib.uts.edu.au/handle/10453/3131>

Yamakawa, Y., Yang, H., & Lin, Z. J. (2011). Exploration versus exploitation in alliance portfolio: Performance implications of organizational, strategic, and environmental fit. *Research Policy*, 40(2), 287–296. doi: [10.1016/j.respol.2010.10.006](https://doi.org/10.1016/j.respol.2010.10.006).



Organization
Theory Review
Volume 2 Issue 1, 2018



University of Management
and Technology

School of Professional Advancement
UMT Road, C-II Johar Town
Lahore- 54770, Pakistan
UAN: +92 42 11 300 200
<http://spa.umt.edu.pk/>
www.umt.edu.pk