Abstract

The world is becoming increasingly digital, interconnected, fast, and complex. Industries and business models have become ephemeral and non-linear. Opportunities and risks have intensified. Margins of error have narrowed. Impacts of even isolated decisions quickly ripple and surge through industries and landscapes with reverberating cross impacts. Yet, a great deal of how we view and think about ourselves, organizations, and the world around us use singular cause and linear thinking. Many of our prevailing consulting and managerial metaphors and models were inherited from a world which was simple and disparate. The changing nature and dynamics of management in the fourth industrial revolution is transorganizational. It requires a new perspective appropriate for complexities of our unpredictable fast moving world of disruptions. This paper features aspects of transorganization systems, their development and management. It provides a transorganizational approach to evolving managerial and consulting thinking and practice.

Key Words: Transorganization Consulting, Networks, Dynamic Complexity, Development, Change

INTRODUCTION

We are facing the fourth industrial revolution, a profound and systemic change (Schwab, 2016, 9). Aside from speed and breadth, the fourth industrial revolution is unique because of the global harmonization and integration of so many disciplines and discoveries. Tangible innovations that result from interdependencies among different technologies….for example, digital fabrication of technologies can interact with the biological world…

We are embedded in a new emerging transorganizational world. Transorganizations are composed of multitudes of interacting organizations, technologies, interest groups, disciplines, and social clusters. Transorganization complexes pursue implicit or explicit common, symbiotic, interdependent, or competitive and conflicting goals of their members. They influence and impact local as well as global trends. You might think of the multitude of recent and emerging technological enterprises as transorganization forces disrupting and fast reshaping the world. Examples abound as transorganizations stretch across such dissimilar entities as smart cities, the real time interconnected global financial systems, big data informative health care systems, etc. They are comprised of
clusters of members, resources, interactions, and activities that form to pursue opportunities and evolve through life cycle of changes. Transorganizations are situated on ecological platforms that are often shifting and changing. Transorganization movements can be fast, innovative, high impact, and once their goals are achieved can dissipate. Managing in such a transorganizational complex and uncertain world (Motamedi, 2015) requires different ways of thinking, analyses, and action choice-making. This paper introduces concepts relating to transorganizations, their many features, and ways to understand and work with them.

**Transorganizations**

Events of the last decade provide ample evidence that the world is becoming increasingly more interdependent, faster, digitized, interconnected, virtual, and less predictable as it evolves. Relatively small events such as a security breach in one institution can spread quickly and unchecked, and can bring about breakdowns and escalated chaos (Ford, 2015) through the rise of robots mushrooming their complaints via social networks across the globe. The emergence of virtual and augmented reality, artificial intelligence along with smart machines, are fast elevating (Boudreau, Loch & Robey, 2018) the need for transorganization thinking and action. The emerging dynamics of transorganization systems require new thinking.

Google search engines are tapped billions of times each week across the globe. A Facebook security breach can impact election results. Along with these changes come new paradigms of management and change. The relationships among organizations and institutions are impactful, powerful, real, and pervasive. The U.S. Federal Reserve Board, European Central Banks and World Health Organization are just scant examples of organizations which attempt to manage transorganizational systems that are comprised of a multitude of interdependent organizations and technologies across arrays of industries, nations, and cultures.

Take the example of the development processes of a new software application for a smart machine in an emerging world of internet of things (IoT), artificial intelligence (AI) and the cloud. This software would be required to run on operating systems of multiple platforms across many organizations. There are lead and lag factors and dynamic innovations. The software application can best be developed by anticipating and recognizing future hardware advances, emerging software innovations (e.g., networks, systems, devices, semiconductor memory chip, etc.), short- and long-term user needs, interfaces, and capabilities. The processes may stretch across value and block chains backing from the potential customers to manufacturers and large systems that would determine the characteristics of evolving interactions and transformations toward achieving desirable shifting results. Such transorganizational efforts would involve many different communities of interests including visionaries, scientists, device manufacturers, network designers, software developers, and inclusion of inputs for desirable preferences of a plethora of users.

When conceiving a digital or virtual system, no one entity (virtual or real) has a clear idea of all information and design requirements that are needed to be
developed and produced. The features, performance, and characteristics of the application are to be used by many under almost undetermined conditions. Designing, developing manufacturing, marketing, and serving applications running on a new machine such as an iPhone requires transorganizational thinking, competencies, skills, and aptitude. It requires elevating understanding and collaboration of a vast number of entities across many fields and disciplines to visualize, innovate, and create a device that can function beyond any one entity’s capabilities. Autonomous car technologies have major societal, economic, technological, and environmental impact, which will have a powerful impact on how cities are designed and how people will commute and live. Designing and putting in operation vehicles that are capable of sensing the driving environment and mobility with little or no human input requires a combined variety of vehicular information, sensors to perceive surroundings, such as radar, computer vision, sonar, odometer, GPS, plus internal measurements. This reflects a confluence of advanced technologies, control systems interpreting sensory information, identifying appropriate navigation paths, speed, maneuverability around obstacles, and relevant signage. Its social, economic, technological evolution will facilitate transorganizational advancement of a sharing economy and smart cities with enormous further transorganizational consequences.

Merging old and new technologies and knowledge could not be dominated by single cause thinking. The many transorganizational decisions, transactions, and uses are often unforeseen by their designers and innovators. The evolving and discontinuous impacts are felt across a broad range of industries and transorganizational entities. We have seen breathtaking successes of innovations such as internet of things, cloud technology, and social media, and advances such as transorganizational technologies developed and offered by such transorganizational minded companies such as Amazon, Google, and Apple. We have also faced destructive failures of transorganizations such as more visible financial contagion of the late 2000s, decades of Middle East wars, and mass migrations of refugees. Policymakers and designers could not see and prevent these transorganizational failures and neither could they anticipate complex sets of causalities underlying such transorganizational failures. The rugged individualistic approach created a myopic view of situations and false over-confidence resulting in wrong-headed models, decisions, and actions. Transorganizational successes and failures are beyond control of any one organization. They emerge out of transorganizational efforts interwoven and produced within transorganizational complexes.

Transorganization successes are outcomes of powerful strategic advantages (Motamedi and Wasilewski, 2004, 2006a, 2006b) created through integration, synthesis, synergies of the members’ unique and special set of competencies, capabilities, and resources. They lead to valuable policies, products, and services. However, viewing transorganizations as single organizations, as in the old world single causal thinking and management style, is risky and short sighted. The converse view of transorganizations is also revealing. On a more micro level, whenever we buy a product or service chances are we are engaged in transacting at a transorganization level. The simple on-line transaction may involve credit card companies interlinked with multitudes of complexes (institutions): Financial, technological, logistical, and regulatory (e.g., product safety, security, identity protection), governmental, legal, and others all the way to manufacturing,
inventory, and en-route transportation of materials. Yet, we see it as a simple and singular bilateral interaction – “a purchase transaction.” Refocusing thinking and attention to massive and dynamic underpinning of systems that provide successful single transaction to large-scale thinking is challenging for the individual users. When such limited views are elevated and applied at a transorganization level, they could lead to decision mistakes and failures.

The recent (2008) global financial crises were outcomes of dysfunctional transorganization thinking where some segments pursued their own goals while competing within transorganization clusters with similar distorted transorganization views of industry and myopic competition. Collective myopic thinking and view of industry collateral debt obligations (CDOs) and inability or unwillingness to scan the environment as a single self-protected entity eventually led to the breakdown of the transorganization system and its ability to function. The post failure emergent coordination of efforts and interventions of multiple governmental, regulatory, and private sector systems were in themselves transorganizational helping re-configure the situation and turn it around resulting in a decade of rebuilding and prosperity. The collective interventions were beyond any one organization’s dominance or control. They involved a multitude of interactions of collectives pursuing both common and self-interested goals. Transorganizations are built on ecological and social platforms and when they stretch beyond their limits may face failure of not one entity but usually the transorganizational collective.

Organizations as Transorganizations

It is imperative to recognize that as organizations become large complexes, they shift toward becoming transorganizations. For example, Alphabet (Google) and Amazon, among many other companies, are examples of organizations that are transorganizational internally and navigating in dynamic transorganizational external settings. They operate globally and manage across multitude sets of collectives (markets, industries, customers, technologies, etc.). The command and control management techniques pervasive in small simple form firms are limited and do not function well in such large organizational complexes. These complexes are made of many interacting sizable businesses, divisions, functions, cultures, global operations, and moving parts. In an attempt to deal with and manage the level of complexity of these large enterprises, stakeholders and managers are developing keen interest in transorganizational thinking and management. For example, matrix organizational forms of functions, projects, products, geographies, and customer groups interlaced and overlaid across the organization are simple transorganizations designed to deal with the complexity of an environment that a single form organization thinking would be incapable of dealing with.

Transorganization thinking, strategies, and management are becoming increasingly fashionable in the emerging fourth generation of change impacting humanity. Large transorganizational systems thinking would enable humanity to address the opportunities and challenges that often accompany complex system changes. It provides astute understanding of the opportunities to capitalize on and
to build a prosperous, innovative (state of art), and sustainable global effort. Mistakes happen and failures result when transorganizations resort to an old-fashioned command and control model of thinking and action driven by policy makers and consultants socialized in single entity thinking. Frustrations of dealing with complexities may drive transorganizational members to take on unilateral self-centered and short sighted action increasing risks of costly myopic decisions resulting in organizational failures, if not failure for all in transorganization system. To innovate, develop, and build value, large organized complexes need to harness resources and ideas, build new core competencies of alliances (Doz & Hamel, 1998) and joint ventures (Inkpen & Li, 1999) to enhance their strategic advantage through transorganizational thinking methods (Boje and Rosile, 2003) and actions.

Transorganization resources are often spread across multiple related and unrelated entities, industries, businesses, communities of practice, thought leaders, and distributed systems locally and globally. The traditional management and leadership concepts and practices fall short of reaching and succeeding within ever-changing dynamic transorganizations. For example, some distinguishing features of transorganizational thinking and practice involve innovating and building communities of interests and practices breaking away from and free of traditional hierarchies and command and control styles. New forms drive, reward, and encourage entrepreneurial risk taking and initiatives inviting open innovation across and beyond any one single organization’s boundaries. Transorganizational thinking and innovations open opportunities and spaces beyond capabilities of traditional management action and thinking.

Transorganization Development

The Patient Protection and Affordable Care Act (PPACA) legislation of 2010 is an example of transorganization – vast and titanic complex transorganizational clusters. It addressed a national issue embracing public healthcare needs, numerous agencies, and diverse interested stakeholders. It entailed strategizing, designing, resourcing, legislating, and implementing a national health policy and program across the U.S. and layers of diverse transorganizations clusters in 50 states and populations within them. This massive transorganization change effort stretched across such plethora of transorganizations as the pharmaceutical industry, healthcare providers, insurance providers, a multitude of government organizations and agencies, pro and con citizen movements, political, legislative and regulatory systems, and beyond. The conflicting goals, priorities, ideologies, resources, and preferences added to the complexities of the transorganization efforts and hampered its progress. No single entity, including the U.S. President or leadership of the parties and Congress, could alone determine and control the outcome. The efforts were overwhelmed by conflicting ideologies, arguments, and needs. Proposed options, plans, budgets, and levels of care were not satisfactory to all stakeholders. The health care legislation transorganization faced stalemate among its many diverse stakeholders. The final outcome was eventually decided by legislation and a thin approval margin. It was a game changing
transorganization development effort not unlike what is seen in current U.S. immigration issues and border control initiatives. Similar transorganization development efforts are used across industries, governments, and NGOs. I-Phone is an outcome of exhaustive transorganizational efforts reaching across technologies, components manufacturers, software developers, applications providers, a multitude of users, and needs in the global competitive smart phone industry. It required and continues to require transorganizational efforts across service providers (Verizon, ATT, etc.), FCC, FTC, government regulators, applications, and much more. Such breathtaking innovations require vast transorganizational development of efforts and in learning.

Transorganization development includes mapping the transorganizational setting, clusters of stakeholders’ boundaries, breadth, size, and its membership populations attributes, identifying key players, and understanding and appropriately addressing the range and intensity of the needs and opportunities for development and change. Transorganization domains, goals, structures, and processes can often be ambiguous and perplexing. Adroit transorganizational development practitioners are capable of building shared understanding of members’ realities and their needs. Transorganization thinkers and planners seek opportunities by identifying, recognizing, and understanding discontinuities and characteristics of multiple stakeholder realities, resources, and needs. They engage in robust dialogue to explore opportunities, to plan and to implement transorganizational change efforts. Stakeholders’ goals and approaches to change could be tacit or explicit and in support or conflict with one another and the prevailing transorganization direction. Transorganization development helps elevate the understanding of the existing and emerging needs, directional movements, interests, resources, competencies, and capabilities. Members’ styles and patterns of behavior may include competition, collaboration, accommodation, passivity, symbiosis, etc., with one another and the whole. For example, industry or institutional lobbyists may operate in transorganization settings where the member organizations are competing with one another. Transorganization development expertise is critical to building and paving the road toward transorganization effectiveness. It helps to develop deeper and broader understanding of the situation and provide appropriate courses of action. The assessment of the stakeholders’ competencies and their resources can provide insightful ways to build, use, and synergize transorganizational resources, innovations, and synergy vital to collective transorganization success.

Through facilitation and positive engagement with the collectives and their members, the consultants are enabled to help determine overarching goals and success requirements for achieving positive tangible and intangible outcomes. They can help illuminate the transorganization opportunities which may have gone unnoticed or ignored. Effective transorganization consultants facilitate exploring technological advancements across multiple platforms unleashing new innovations impacting a host of offerings, products, applications, and services which would have been beyond any one transorganization member’s level of capabilities or reach. For a new technology to succeed, the derivative products need to meet market requirements consistent with desirable performance metrics and specific applications benefitting stakeholders and assuring transorganizational outcome success. The development efforts necessitates transorganization
consultants to help stakeholders develop mutually beneficial goals to navigate the way to achieve opportunities in spite of obstacles. They help create dynamic synergetic forward planning process, dialogue, understanding, and action. It is an involved cross-organizational and industrial process of sharing and aligning and realigning visions, paradigms, resources, and capabilities to meet mutually desirable goals and needs. Such efforts elevate understanding of possibilities that stretch beyond any single entity’s perspective and can only be actualized through transorganizational planning and collaborative action. For example, transorganization sustainability planning efforts must consider alternative views, paradigms, opportunities, and challenges. They facilitate developing clever courses of action balancing the self-interests of disparate transorganization members and clusters vying to pursue their own self-interested agendas while pursuing overarching goals of the transorganization collective. Left alone, the disparate collective members’ efforts may not produce benefits of collaborative transorganizational development efforts nor create a robust worthy plan and design embodying the diverse transorganizational capabilities and resources for the joint and collective benefits of the transorganization stakeholders.

**Transorganization Consulting**

Transorganization development consultancy (Motamedi, 2010) takes place within and across a cluster of organizations facing change and attempting to manage their affairs. It entails identifying and engaging the client stakeholders, mapping the domain, and the assessing of client transorganization stakeholders’ needs, goals, and expectations. The planning effort impetus is toward emerging transorganizational issues impacting the client transorganization and member organizations. It involves identifying and engaging key stakeholders; generating valid information about transorganizational issues, opportunities, and threats; re-conceptualizing the realities of the situation; direction setting and planning; implementing change plans; and controlling and evaluating outcomes. The transorganization consultant’s effectiveness (Greiner, Motamedi, Jamieson, 2011) requires scoping and understanding the transorganization as a whole, its underlying driving ecological, technological, social, economic, political, resource and environmental drivers, and change consequences. The consultant role can be normative and educative providing insights into the realities of the situation, decision choices, and action consequences. The strategic choices and their consequences are considered at multiple levels of analyses raging across impacts on member organizations, clusters, and emergent industry and global dynamics. Often the execution requires coordination of multilevel planning and action across loosely and/or tightly linked entities using shared or complementary capabilities and resources. The aim is to bring about favorable change (e.g., technological, governmental, etc.) which would benefit client transorganization. Transorganization consulting process is much more complex than working with a single entity where the management of change processes is clearer, simpler, and less cumbersome. The following delineates aspects of the transorganization consulting approach.
General Typology of Transorganizations

There are a multitude of transorganization types and each transorganization form is unique comprising of history and stories (Boje, Motamedi, Rosile, 2010) and requires careful study. Some dimensions that are helpful for categorizing transorganizations include the relationships and interactions (Butler, Hall, Hanna, 1997) of stakeholders, directness and intensity of cross impacts and dynamism of interdependencies. The extent of coordination of stakeholders, processes, and activities is also important dimension (Motamedi, 2012).

In this article, the analytical focus is on two dimensions comprising of transorganizational cross impacts (effects) and nature of transorganizational governance. Governance constitutes establishing common goals, policies, plans, interventions and monitoring of their proper implementation by the members of the transorganization bodies. It includes required mechanisms to moderate and balance the interactions and transactions of the members and their accountabilities and duties of enhancing the viability and success of the transorganization. It is the way in which plans and policies are formulated, implemented, and regulated. Governance processes imply accountability, transparency, participation, openness, and the rule of law. High level of governance is characterized by predictable, open and enlightened policy-making, and proper implementation impacting stakeholders. Depicted in Table 1 is the classification of transorganizations along the two dimensions: Cross Impacts and Governance.

Table 1 - Typology of Transorganization Systems

<table>
<thead>
<tr>
<th>Cross Impacts</th>
<th>High</th>
<th>Low</th>
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<tbody>
<tr>
<td>Governance</td>
<td>High</td>
<td>Type I</td>
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<td>Low</td>
<td>Type III</td>
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*Type I* transorganization forms resemble a tight network that cross impacts stakeholder clusters. Relations are direct and governed through proper governing processes for direction setting and managing resources and hierarchies of policies, agreements, regulations, laws, or mandates. Members’ relations, interactions, and transactions are managed through governance (central) bodies.
according to plans, policies, laws, protocol, established authority, set patterns of resource allocation (budgeting), and rules. For example, embedded (Granovetter, 1985) relations among healthcare providers, users, and third parties (insurance companies, government agencies, etc.) are governed by a plethora of governmental, professional healthcare providers, regulatory bodies, and users’ advocacy groups. When members deviate from the established procedures and rules, they may be disciplined, and all or part of their privileges of membership be removed.

**Type II** transorganization forms are comprised of loosely interacting clusters of organizations and some that interact indirectly through intermediaries. They comply with procedures and processes that are determined by the governance bodies. Both the U.S. Federal Reserve and the International Monetary Fund are examples of Type II transorganizational governance bodies. Historically, they have assumed the roles of promoting economic growth and stability through directing and regulating members’ activities. They infuse funds among transorganization member organizations, and monitor transorganization operations and expenditures. Type II transorganizations are prevalent in many regulated industries and environments.

Organization for Petroleum Exporting Countries (OPEC) is another example of this type of transorganization. Through a central representative body, activities of members are directed and coordinated. The level of oil output, price, and members’ monetary receipts are regulated. Countries in this case do not directly interact, but rely on intermediaries, such as shipping organizations and foreign oil companies, for information regarding production schedules and deliveries.

**Type III** transorganizations have direct relationships and impact one another’s performance, but are not highly governed and their efforts are not well coordinated. Relations among multinational enterprises doing business with one another fall into this category. Many new and emerging technology clusters fall in this category. These organizations freely interact to achieve individualistic but complementary purposes without established coordinating bodies. For example, in the global personal computer industry clusters of microcomputer and personal device manufacturers, software producers, vendors, and users interact directly to enhance members’ satisfaction. They attempt to manage change, growth, and maintain a dynamic equilibrium through mutual adjustment involving trade, publications, education, and a host of vertical and horizontal transorganization activities.

**Type IV** consists of loosely connected member relationships that are not centrally governed. Competitors in a new and evolving domain may work toward similar concerns, but may not interact directly or coordinate their relationships through central governance. Transorganization members in similar industries may also pursue individually held purposes unilaterally. For example, many technological companies may pursue similar market strategies and innovate new applications and services. Their operations are uncoordinated. The efforts of independent multinational disparate organizations responding to societal concerns, such as global warming, are loosely formed and are not governed. In
economics, the pure competitive environment in which each firm independently produces products (for independent global or domestic consumers) can be construed as Type IV transorganizations.

The collective performance of any type of transorganization depends on complex sets of variables and processes. Introduced earlier, the type of transorganizations is determined by two critical variables: the directness and intensity of cross impacting relations and the centrality and level of governance and coordination. The success of planned change efforts in transorganizations will depend on the selection of appropriate strategies and interventions consistent with each transorganization type. In the following section, two approaches to planned change in transorganization systems are outlined and their uses discussed.

**Transorganization Planned Change**

A transorganization planned change is a conscious, deliberate effort to build and improve the operations of a transorganizational entity in its setting. It has a similarity with organization development (OD) approaches frequently directed at helping a single organization to develop and achieve its desirable goals through appropriate alliances (Doz & Hamel, 1998), policies, structures, processes, and performance. The application of OD change strategies can be expanded and elevated for a higher level of analysis specific to transorganization settings. However, OD oriented change focus is on a single organization or its subparts and may not suffice for working with complex transorganizations.

The four types of transorganizations described above represent a continuum ranging from tightly governed and highly interactive Type I to loosely related and ungoverned Type IV. The kinds of developmental issues facing transorganizations can be expected to vary depending on the present and future preferred levels of the transorganization clustering, interdependence, and governance. The appropriate form of planned change approach will vary accordingly. Type I transorganizations with tightly governed relationships among members (stakeholders) that have become overly bureaucratic and lost effectiveness are likely to exhibit developmental problems of bureaucracies and rigid adherence to rules and procedures, formal hierarchical relationships, and communication. For example, given the resemblance between Type I transorganizations and bureaucratic organizations and institutions, Lewin’s well-known model of unfreezing, moving, and re-freezing of a planned change approach may be useful and useable in Type I transorganizations. However, interdependence and governance of member organizations in a global setting may accompany greater complexity and heterogeneity of technologies, economies, cultures, languages, customs, local/global factors such as trade practices, law, taxes, and other factors that may require the application of more advanced and complex transorganization development thinking and approaches.

As relationships among transorganization members become more indirect or uncoordinated, such as those found in Types II, III, and IV transorganizations, additional developmental challenges may emerge. The change model of unfreezing, changing, and re-freezing may not be appropriate and may be too
simplistic. For one thing, the unformed relationships or loosely connected systems of the global economy do not necessarily render themselves to unfreezing interventions that may be useful for Type I transorganizations with traditional hierarchical structures and tight member relations. Clearly, transorganization change issues are more elevated for the loosely coupled and low governance members’ relations. Transorganization change efforts are more challenging in transorganizations with diverse cultures, shifting technologies, ambiguous directional goals, and poor coordination of members’ behaviors, frequent disagreements on ends and means, and scarcity of resources, etc.

Under-organization in loosely connected transorganizations may add blocks to identifying who the client or clients might be, as well as pursuing the process of entry, contracting, data collection, analysis, feedback, diagnosis, interventions, controls, evaluation, and re-cycling of the developmental efforts. Generally, the less organized the transorganization is, the greater are the possibilities of conflict among transorganization members and the inability to collectively plan for success. Without the help of astute and influential transorganization governing bodies and tighter coupling of transorganization membership, it would be difficult to engage a transorganization in typical OD change effort. Successful planned change in the under-organized transorganization requires specialized knowledge, skills, competencies, and resources.

**Transorganization Development Consulting Stages**

In general, transorganization development efforts serve three purposes. First, is to improve collective transorganization performance in the broader global environment beyond any organizations and boundaries. Second, transorganization development efforts are aimed to increase members’ satisfaction and goal fulfillment. Third, they attempt to accomplish the previous two purposes through generation and utilization of relevant and valid and reliable knowledge of the situation. Contextual intelligence (Motamedi, 2018) is an important dimension of understanding transorganizations and taking appropriate, competent action. Effective transorganization practitioners can educate transorganization members and facilitate planning, design, and implementation of perhaps the governing process when helpful. The seven stages of transorganization development consulting comprised of entry, mapping, assembling, planning and designing, implementing and control, evaluation, and termination as depicted in Table 2.

**1 - ENTRY**

The first stage in transorganization development involves entry and contracting with a client system within and outside of the target transorganization. The entry could be called by a sponsoring organization or a cluster of organizations within the collective. Along the entry comes understanding the needs and contracting the scope of the project, level of complexities, and anticipated desired outcomes. The scope could entail a broad intervention ranging across the target transorganization or narrow within any of the cluster organizations’ members.
<table>
<thead>
<tr>
<th>Phases</th>
<th>Purpose</th>
<th>Processes</th>
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<tbody>
<tr>
<td>1. Entry</td>
<td>Scope the field</td>
<td>Identify existing and potential members</td>
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<td>Determine needs, assess the situation</td>
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<td>Enter into change contract with sponsoring member(s)</td>
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<td>2. Mapping</td>
<td>Partition membership</td>
<td>Identify existing and potential members</td>
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<td>from the environment</td>
<td>Determine and map membership and relationships</td>
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<td>Assess ideologies, goals, and aspirations</td>
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<td>Analyze strategies and actions</td>
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<td>Verify abilities, resourcefulness, significant contributions, and risks</td>
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<td></td>
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<td>Classify membership in relevant groupings</td>
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<tr>
<td>3. Assembling and need</td>
<td>Develop commitment to solving transorganization problems</td>
<td>Create opportunities for members to interact</td>
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<tr>
<td>assessment</td>
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<td>Share ideas and information</td>
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<td>Assess present needs, future desired outcomes, and possible change</td>
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<td></td>
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<td>methodologies and processes</td>
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<td>Surface assumptions regarding problems and solutions</td>
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<td>Reach consensus for delving into the planning process</td>
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<td>4. Planning and designing</td>
<td>Design mechanisms to accomplish desired ends</td>
<td>Develop plans to jointly optimize members’ needs, market characteristics,</td>
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<td>and environmental requirements</td>
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<td>Allow freedom for members to pursue their own goals while implementing</td>
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<td>effectively transorganization purposes</td>
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<tr>
<td>5. Implementing</td>
<td>Design mechanisms to accomplish desired ends</td>
<td>Carry forth the implementation of plans through designated design and</td>
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<td>according to specified performance criteria (i.e., budgets, timeliness,</td>
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<td></td>
<td></td>
<td>quality and quantity)</td>
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<tr>
<td>6. Evaluating and</td>
<td>Monitor and evaluate change process and take</td>
<td>Collect data on ongoing change</td>
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<td>Controlling outcomes</td>
<td>corrective action</td>
<td>Analyze the data</td>
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<td>Feedback and feedforward the data to relevant transorganization members.</td>
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<td>Jointly diagnose and take corrective actions to remedy the situation.</td>
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</table>
2 - MAPPING

The second stage in transorganization development involves the identification of both existing and potential members or clusters that might be involved in influencing transorganization outcomes specific to a member organization or cluster. It proceeds by mapping the collectives and the organizations and boundaries based on key factors of relating to the purpose of transorganization efforts. The clusters could be mapped based on the level of interactions, type of interactions: competition/collaboration, resources, joint optimization of processes, or end results. In under-organized transorganizations along with ambiguous purposes, the criteria for membership may be vague. As a result, the identification and mapping process might be subjective and arbitrary. Care must be taken not to exclude potentially relevant members. The challenge is increased with the large size of the membership and increased confusion about the nature of relations and their efficacy.

There are a number of tasks that gain importance during the mapping process, foremost, the criteria used for mapping. The mapping criteria may include members’ goals, resources, and relations: their ideologies, aspirations, strategies, actions orientation; and their abilities, resourcefulness, significance of their contributions along with liabilities. These activities help map and classify the membership clusters in accordance with similarity and diversity of goals, intensity, and frequency of relations, governing roles, and other factors.

3 - ASSEMBLING AND NEED ASSESSMENT

Once the transorganization identification and mapping process has reached a good enough level of completion, relevant participants/stakeholders are assembled. The assembly process provides a dedicated, opportune occasion for members to interact, share concerns, reach consensus on the nature of problems, and formulate strategies to resolve or deal with transorganizational opportunities and challenges facing them. The primary purpose is to enable members to share information and ideas within a set time regarding (a) the current state of needs; potential opportunities, challenges, and risks; (b) the individual’s and collective’s future desired outcomes; and (c) scope, breadth, depth, and time of interventions for bringing about desirable change. The change is aimed at reducing the disparities in the existing state of affairs and future desired states. Members’ concerns and motivations are assessed in view of the desired outcomes and common purpose, and commitment to change processes. Transorganization change agents can alleviate some of the motivational barriers by elevating the awareness of the
membership of their needs and potential benefits of transorganization and collectives enrichments.

There are a number of practical assembly challenges that require attention by transorganization change agents. First, the sponsorship, identity, and role of the organization (or organizations) that initiates the assembly process may arouse concerns or hopes (Gricar, 1981). The legitimacy, credibility, and authority often faces the transorganization change agents who are conducting the assembly process. They are sometimes drawn from institutions of higher learning and research to maximize neutrality, objectivity, and expertise. In situations of strong transorganizational differences and adversities, transorganization change agents could be pressured to take sides. For example, to reduce polarization, developing transnational teams (of members representing different transorganization factions will help globalization and transorganizational efforts (Snow, Davidson, Snell, 1996).

Second, the size of assembly is another issue of concern. Williams (1980) proposes that 30 to 35 members are a sufficient size to represent the range of interest of most members in any search conference. The assembly process to be effective and efficient may require creating proportional equal representations of transorganizations along with accurate member data and dialogue to reach a balance between size and fair representation.

Third, the outcome of the assembly process is much influenced by kinds of interventions used and their impact on the unique needs of transorganization members. The convention design must facilitate surfacing of transorganization members’ needs, assumptions, and solutions. Ends and means are surfaced and discussed. A successful assembly process will result in commitment of members to goals and outcomes enlightened by mutual self-interests. Care must be taken to minimize undesirable side effects. Unnecessary confusion, unproductive behavior, and domination of the process by a few members should be minimized. The impact of the convention design on members’ contributions must be seriously considered. Neither a rigid design nor a loose and unfocused design is helpful. Efforts must be made to develop a balanced design that enhances members’ contributions and the effective outcome.

A successful assembly process outcome is a requisite to facilitate transorganization development of efforts. Once the required and desired transorganization development consulting outcomes are determined, the planned change efforts focus on the design and structure of activities and tasks to be accomplished within a desirable time framework.

4 - PLANNING AND DESIGNING

The planning and designing phase involves the development of strategy, planning of actions, design of key roles (scope of contributions) and relationships, determination of procedures and protocols to move forward, and resource commitments. It is comprised of structuring and developing mechanisms and processes that enhance, regulate and help governance of members’ relations for the common good. It directs transorganization members’ efforts to accomplish desired ends.
Design deserves special attention in transorganization settings. In order to increase acceptance of change efforts and member commitment, members may participate in the design process. Trist (1976) and many scholars have discussed the need for designs that are based on socio-technical-ecological principles. Effective designs provide developing technology-enhanced platforms for sharing of information and resources through proper real-time governance processes for problem solving, robust planning, and implementation. It is important to tailor the design and implementation to jointly optimize members’ needs and task environment requirements. Survey feedback of implementation design data among member organizations (Taber, Walsh, Cooke, 1979) has been helpful in the development of effectiveness of transorganizations. It is desirable to develop designs that allow members freedom to pursue individualistic goals while contributing effectively to the collective purposes. Care is needed to encourage diversity of views while addressing dysfunctional dynamics.

5 - Implementing

Implementation of plans is carried out by employing talent with requisite transorganization competencies and know-how. Implementation is carried forth through the designed jobs and processes to achieve designated outcomes consistent with budgeted resources and measurable performance goals and objectives.

6 - Controlling

Controls help track change results view of the intended changes and outcomes, and avenues for taking corrective action when there is discrepancy between the results and what was intended. Evaluation processes help monitor and assess the anticipated and unanticipated impacts of transorganization change for timely decisions to minimize negative unintended results and their consequences. To prevent and eliminate undesirable transorganization change efforts and outcomes, processes and outcomes need to be periodically evaluated. Effective evaluation helps to identify present and future potential problems leading to taking timely, proactive, effective action. The process may include data collection before, after, and frequently during the transorganization change effort. Three sets of variables deserve attention:

a. The global environmental receptivity of outcomes determines the level of collective performance and its desirability in the environment.
b. Members’ need fulfillment as measured by the internal effectiveness of transorganization.
c. The availability and adoptability of innovation and key resources within the global environment to manage resource dependencies and control of the environment.

Evaluation results provide insights into the above seven stages of change. The results provide subsequent choices for terminating transorganization efforts or for reassessing and continuing them. Given the loosely coupled nature of many
transorganizations, evaluation can be helpful to identify important emerging issues and concerns and opportunistic innovations, and initiatives for better management of the transorganization. The evaluation of the end results provides an additional opportunity to recycle the above change processes for the next round of improvements.

7 - EVALUATING AND CONTROLLING

In the final phase of transorganization change consultancy, the consulting efforts are evaluated. It involves evaluating the consulting process (Motamedi, 2014, 2015), assessing the final outcomes, and reviewing the change consulting events. It helps to capture and to understand through the evaluation research (Davidson, Motamedi, Raia, 2009), the consulting effort, lessons learned to improve the consulting process, and the client transorganization competencies for self-diagnosis and action. The final step is to plan future anticipated emerging change and plan future interventions. The post mortem process provides valuable information about a plethora of possibilities and an opportunity to reflect and improve both the consulting knowledge and processes and also client transorganization’s style and abilities to bring about change in view of emerging trends, changes, and disruptions.

To assure effective change, the above seven stages of transorganization consulting would be customized to meet the transorganization client’s evolving situation and anticipated needs.

Transorganization Challenge and Promise

Societies are increasingly impacted by intense and rapid change dominated by smart technologies, environmental challenges, and social trends. Facing rapid social-technological-environmental shifts, transorganizations becomes more paramount and impactful. In such circumstances the laws of requisite variety (Ashby, 1957) prevails and single organizations responding to external complexities will find it critical to develop competencies to enable them to adapt and to cope with the external changes. Consequently, organizations subject to laws of requisite variety will take on characteristics and features of their shifting environments and will find it imperative to develop skills and competencies to adapt and cope with emerging complexities of the fast-moving world around them. They shift to become more transorganizational internally as well. At the center of such requisite skill sets is transorganizational development competencies.

Transorganization thinking requires appreciation of the complexities of the interwoven, changing and emerging relations and their cross impacts. The temporal orientation is both immediate and long; the spatial appreciation is multifaceted including geographic, cultural, social, and technological. The governance processes in such environments is dominated by spheres of influences, ambiguity, seeking to capitalizing on emerging opportunities, and deflecting threats and risks. Such dynamics are the necessary attributes of effective transorganization thinkers who must deal with the evolution and development of emerging complexities and their characteristics for generating creative solutions.
and approaches toward optimizing future outcomes. The strategic transorganization thinkers are attuned with tentative revelations of extraordinary novel events and their consequences. As fast learners and flexible nonlinear thinkers they are capable of taking prudent and calculated action in view of unknowns in such complex cross-impacting fluid settings. The future complex transorganizations pose opportunities for a new breed of decision makers and practitioners. And, our future societies would be better served if managed and led using transorganization thinking, strategies, and practices. Working with transorganizations is more complex, unpredictable, involved, and demanding.

Summary and Conclusion

Knowledge of transorganizations and their design and development is critical to sustaining effectiveness in the complex changing global setting facing the fourth industrial revolution. In such complex and changing environments, transorganizations comprised of clusters of organizations strive to peruse their self-interested goals. Two dimensions, the extent of governance and cross impacts of organizations clustered in a transorganization setting provide opportunity for advancements and risks of setbacks. The seven stages of transorganization development provide a blueprint on how to work and advance transorganization clustered to go beyond the individualistic thinking toward collective transorganization thinking and action.

Effective transorganization change efforts embody identifying, mapping, assembling, planning, organizing, implementing, controlling and evaluating outcomes, and making necessary changes for success. Transorganization development extends beyond current OD practices and includes competencies in (1) the macro organizational field involving organization theory and design, inter-organization theory, and global and environmental analysis; (2) policy sciences and strategic planning; and (3) affiliated macro fields including economics, sociology, anthropology, marketing, political behavior, social movements, social ecology, research methods, and the like. These requirements help to prepare the transorganization development practitioner to respond appropriately to the needs of transorganization and their global changes and transformation.

Transorganizational development can make a significant contribution to the design and development of needed transorganization in the presence of globalization efforts. It can contribute to the development of relations among organizations, interfacing diverse global groups of organizations for the effective pursuit of common or complementary purposes. In a rapidly changing and diverse global environment, transorganizational development has many opportunities for making important institutional contributions. Transorganizational development needs further conceptual and practical refinement to fulfill its current potential. This article is an attempt in that direction.
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