

Journal of
Social and Administrative Sciences

www.kspjournals.org

Volume 6

June 2019

Issue 2

**Exploring change management and innovation in
Strategy-Technology-Management
(Stra.Tech.Man) terms**

By Charis VLADOS ^a
& Dimos CHATZINIKOLAOU ^{b†}

Abstract. The present article explores how the concept of change management evolves within the context of the current restructuring of globalization and, more specifically, how a new approach to the phenomenon of organizational change is built in terms of the Stra.Tech.Man evolutionary triangle (Strategy-Technology-Management). Change management in Stra.Tech.Man terms is a process which can synthesize adaptively the different perspectives of organizational change in order for an organization to innovate effectively. In conclusion, organizational success is articulated in a continuous cycle of five consecutive Stra.Tech.Man steps, where every step has its own conditions of successful innovation and evolution.

Keywords. Change management, Organizational change, Evolutionary Stra.Tech.Man triangle, Innovation.

JEL. L20, L22, O32.

1. Introduction

Capitalism has never been characterized by stability or absolute certainty. Nowadays, however, it is obvious that the “status quo” is significantly different than that of the past. This “state of things” has deeply and irreversibly changed.

This state of affairs we call the current restructuring phase of globalization (Bhattacharya, Khanna, Schweizer, & Bijapurkar, 2017; Bremmer, 2014; Laudicina & Peterson, 2016; Rodrik, 2011) has overturned everything we used to consider as given, at every level. There is nothing constantly secured, nothing absolutely prescribed, nothing by definition certain. And this applies everywhere: in businesses, in sectors of economic activity, in national policies, in the life of firms, in our individual courses, everywhere.

It seems that to overcome the present crisis and the restructuring of the global system, an innovative leap forward is absolutely necessary, a leap

^a Department of Economics, Democritus University of Thrace, Komotini, Greece.

☎. +302531039824 ✉. vlad.coop@gmail.com

^{b†} Department of Economics, Democritus University of Thrace, Komotini, Greece.

☎. +302531039824 ✉. dimos.chatzinikolaou@gmail.com

arrayed and implemented at all levels in order for our world to manage to enter a trajectory of a new stable overall model of global development. Behind this drastic innovative leap, the problem of how to establish the required change management mechanisms that can make this innovation possible inevitably emerges.

But, in a deeper sense, what does change mean?

Change is every transformation process of the way a person, a group or an organization or an ecosystem of organizations act, moving from one set of ways of action and behavior to another (Battilana & Casciaro, 2012; Choi & Ruona, 2011; Jaros, 2010; Robert, Yoguel, & Lerena, 2017; Scazzieri, 2018; Valentinov, 2015; van Witteloostuijn, Jacobs, & Christe-Zeyse, 2013).

The change and the overall change process (Ates & Bititci, 2011; Brenner & Holten, 2015; Dahl, 2014; Whelan-Berry & Somerville, 2010) that is being triggered gives birth and reproduces, inevitably, resistance and conflicts. Every change creates in a multiplying way, to a greater or lesser extent, waves of deriving changes and at the same time carries in the background thoughts and actions that incubated this change in the past.

The change management processes (Ashkenas, 2013; By, Burnes, & Oswick, 2011, 2012; Hechanova & Cementina-Olpoc, 2013; Küçüközkan, 2015; Kuipers *et al.*, 2014; Raineri, 2011; Steigenberger, 2015; Stensaker & Langley, 2010; Suddaby & Foster, 2017; Tsai, Huang, & Tai, 2017; Vora, 2013; Worley & Mohrman, 2014) are the sum of the forms and ways utilized for the design, implementation, control and assimilation of changes. More specifically, a change process can be imposed by a higher hierarchical level or can come from the bottom, be centralized or participatory, be superficial or structural, according always to the particular physiology of the organization (Geus, 1997; Hodgson, 2013; Meyer & Davis, 2003; Moore, 1993; Penrose, 1952) that receives and faces this change.

By tracking the roots of the theoretical approach of change management (Beckhard, 1969; Bridges, 1980; Conner, 1993; Gennep, 1909; Jick, 1993; Kotter, 1996; LaMarsh, 1995; Lewin, 1948; Phillips, 1983; Rogers, 2003) we distinguish, specifically, three basic perspectives / schools of thought:

I. The school of individual approach (Arthur, Inkson, & Pringle, 1999; Brower & Nurius, 1993; Lifton & Zimpfer, 1972; Sanford, 1969; Sundel, 1985).

II. The school of group dynamics (Forsyth, 2019; Friedkin & Johnsen, 2014; Levi, 2017; Reichert, 1970).

III. The school of open systems (Freeman, 2014; Scott & Davis, 2017; Wagner, 2007; Warmington, Lupton, & Gribbin, 2014).

By studying these three main schools of thought that establish analytically the change management theory, the following main observations can be made:

- These three approaches to change focus on different aspects of organizational life (person – group – organization) and, therefore, they have different impact on the type of change and the way of managing the change.

Journal of Social and Administrative Sciences

- All the emerging contemporary organizational models and approaches are directly related to the aforementioned approaches that focus, respectively, on the persons, the groups and the organizations, while being directly opposed to the mechanistic perception of the Classical School.

- Although every perspective / school of thought “believes” it is the most comprehensive and effective approach to change, these are in reality neither mutually exclusive nor are in conflict conceptually. In our view they are rather complementary instead of contradictory.

Eventually, whatever route an organization might follow to manage its change, what definitely is going to change is also the behaviors.

With these introductory clarifications in mind, we can now articulate the particular research question of this article: we explore, precisely, whether the process and management of change can be perceived as an outcome of synthesis between the organizational strategy, technology and management, by combining the internal and external organizational dynamics and through the production/reproduction of the organization’s innovative potential.

2. Methodology and structure of the paper

In order to understand how this synthesis in terms of change management can be achieved, the article is structured as follows:

- (i) It investigates the basic dimensions of change management in the relevant contemporary literature;
- (ii) It proposes the integrated Stra.Tech.Man methodology to change management (synthesis of Strategy-Technology-Management);
- (iii) It reaches to specific conclusions and implications.

3. The fundamental dimensions under study in contemporary change management literature

In the related literature, there are two basic forms of change that are usually mentioned within an organization: the incremental and the radical change (Brown & Eisenhardt, 1997; Carter, Armenakis, Feild, & Mossholder, 2013; Collins & Hill, 1998; Edelman & Benning, 1999; Jain, 2013; McAdam, 2003; Romanelli & Tushman, 1994). The incremental change expresses a series of constant changes and developments within the organization that manage to preserve the organization’s general structural equilibrium and appear to influence directly and drastically only a portion of the organization every time. On the contrary, when the radical change occurs, this seems that it manages to disrupt and rearrange fundamentally the overall organizational frame of reference, transforming completely the organization, to all its dimensions.

In a similar analytic orientation, the changes can be distinguished in three discrete models:

- a) In the incremental model of change

C. Vlado, & D. Chatzinikolaou, JSAS, 6(2), 2019, p.66-81.

b) In the punctuated equilibrium model of organizational transformation

c) In the continuous transformation model of change

Not all organizations are to the same degree ready to welcome change and proceed successfully to the organizational change.

Based on the empirical data, on a global scale, there is no doubt that there are times when organizations have increased chances to change effectively and successfully and other times when it is generally considered less possible for this to happen (Burnes, 2009). In general, the main trend of change realization is when the people involved believe that the projected benefits will outweigh the costs. In this process, when a new idea is developed, the “idea champions” promote this change actively and, therefore, create the necessary organizational support, overcome the resistance and secure the implementation of change. Eventually, however, an organizational change is going to happen—successfully or not—within an organization. The way the organizational change is perceived by the people involved in terms of expected benefits and costs is also critical.

The resistance to change (Georgalis, Samaratunge, Kimberley, & Lu, 2015; Matos & Esposito, 2014; Thomas, Sargent, & Hardy, 2010) is the power of individuals, groups or organizations that tends to deny, prevent, restrict or cancel completely the extent of the necessary changes.

The resistance to change is not, of course, a painless procedure—it is exactly the opposite, for any organization. In practice, very often, the inability to monitor, to respond or to assimilate change causes and deepens the organizational crisis, while this worsening crisis—in every organization, of every size and reach—manifests itself through chain reactions, since each successive problem creates conditions for relating problems to occur.

An interesting approach to why human resources resist change is offered by Paul Streber (1996), who investigates the causes of employees resisting to change. He assumes that all failures have a single root, since the business executives perceive change differently than the business personnel. He proposes to substitute the conservative culture of avoiding risk with a culture where all employees are fully devoted to pursuit change.

In practice, conflicts always bear a particular content in terms of personal, group, departmental, cross-departmental and overall organizational and cross-organizational dimensions (see Figure 1).

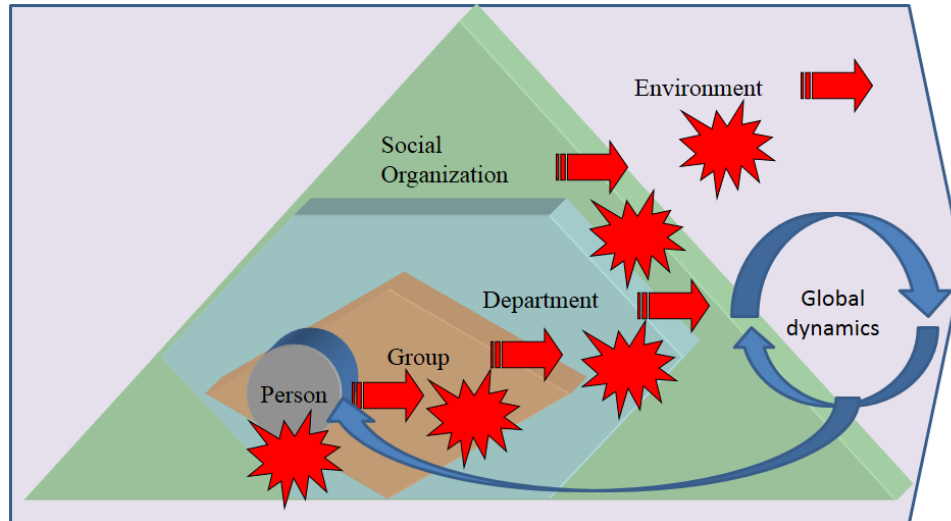


Figure 1. *The necessity of handling conflicts, at all organizational levels*

The changes that global dynamics cause are diffused in all organizational levels, thus creating conditions for the emergence of new conflicts and new ways of overcoming them. In this sense, the organizational crisis (Alvintzi & Eder, 2010; Brockner & James, 2008; Kash & Darling, 1998; Mitroff, 2001; Ponis & Koronis, 2012) is perceived as a phase of persistent insufficiency in implementing change, something which increases conflicts, while the only long-term exit from this crisis is the effective overall organizational innovation (Aghion, Van Reenen, & Zingales, 2013; Drucker, 1986; Schumpeter, 1942; Wolfe, 1994). However, the only way to effectively and for a long time innovate is to achieve to manage efficiently the change; therefore the organization should unceasingly care for organizational development and evolution.

4. The Stra.Tech.Man approach to change management

Overall, we think that if change management theory gets enriched with a “biological” type of perception of the social organizations under study, then more clear answers can be given.

The Stra.Tech.Man approach is moving to this direction. This approach assimilates an evolutionary and “biological” perception to business dynamics analysis: more specifically, the main basis for this research orientation was built according to multiple perspectives from the field of evolutionary economics (Boulding, 1981; Boyer & Saillard, 2002; Coriat & Dosi, 2002; Coriat & Weinstein, 1995; Euroconsult, 1984; Lordon, 1993; Nelson & Winter, 1982; Zeleny, 1980).

The main findings of the Stra.Tech.Man approach, which derives from multiannual field research (Vlados, Katimertzopoulos, & Blatsos, 2019; Vlados, 2004, 2005; Βλάχος, 2006) can be summarized as follows:

A. All firms, even those with even those with similar size and sectorial focus, as living organisms (Ben Letaifa, Gratacap, Isckia, & Pesqueux, 2013;

Wolfe, 2012), belong to different physiological species; they are different “animals”.

B. Every firm has its own “DNA”; We can argue that this biological identity (Kennedy, Miller, & Niewiarowski, 2018; Reeves, Levin, & Ueda, 2016) contains all the genetic information that determine the potential of its biological development. In particular, the biological core of every living firm is located and determined evolutionarily always within three fundamental and interconnected analytical spheres: within strategy, technology and management. Every organization produces and reproduces its innovative evolutionary Stra.Tech.Man potential (Ahrweiler, 2010; Anderson, Potočnik, & Zhou, 2014), aiming to its competitive survival and development, within the constantly evolving environment (see Figure 2).

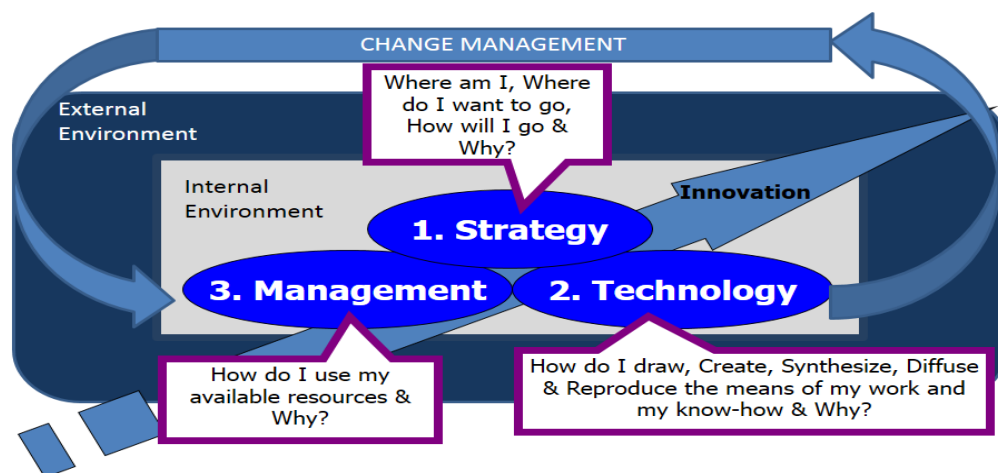


Figure 2. The evolutionary Stra.Tech.Man core and the change management of the organization. Adapted from Βλάδος (2006)

C. Within every organization, the emerging innovations are “organically relevant” to each other. Whether they are born from the same combination of functions, or applied to the same functional firm segments. Organizational innovations are usually aggregated in groups (bunches) of innovation. In practice, one innovation lays the ground for the birth of related innovations, within the overall change management framework of the organization (see Figure 3).

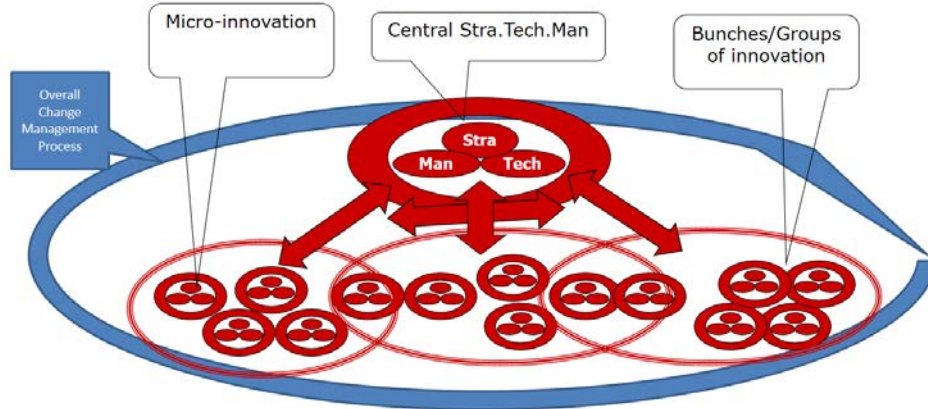


Figure 3. Organizational structure of innovation and the overall change management process. Adapted from Vlados et al., (2019)

D. Firm strategy, technology and management, even though are independent spheres in analytical terms, they are combined and co-determined in practice. Firm success never results from a single sphere; it is the result of all three spheres together and the particular way their synthesis manages to give effective answers to the changing environment they are facing. In this way, in order to survive and develop, within a constantly changing environment, every organization has to synthesize effectively—with a unique way and according to its particular physiology—the strategic, technological and managerial dynamics, aiming to the effective innovation that would allow the competitive advantage of the organization and sustain its profitability. Otherwise, if this cannot be achieved, then sooner or later the firm collapses, dies and dissolves. In reality, the answer to one Stra.Tech.Man triangle sphere (namely on the level of strategy, technology, or management) prescribes to a great extent the other two answers. One answer, to a significant extent, gives birth to the other: this happens because at the inner organizational level there is a deeper physiological unity (Vlados, 2012; Vlados, Deniozos, Chatzinikolaou, & Demertzis, 2018).

E. The organization's specific potential defines its species, and not its pure desire. According to its potential, the organization:

- Builds and develops its particular physiology as synthesis of entrepreneurial philosophy and entrepreneurial processes that implements
 - Constructs the mechanisms of understanding the surrounding environments
 - Synthesizes its actions and initiatives (see Figure 4).

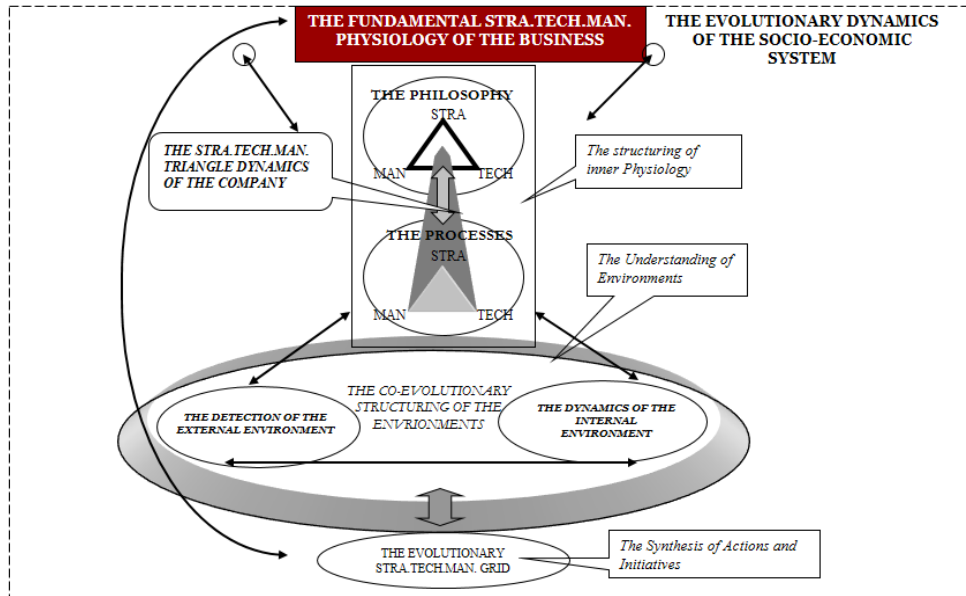


Figure 4. The evolutionary socioeconomic gameplay and the Stra.Tech.Man perception of the organization. Adapted from Βλάχος (2016)

F. The evolutionary physiology drives a firm to successful Stra.Tech.Man syntheses and re-syntheses. Therefore, it implements its particular and idiosyncratic business rationality and, in this way, reproduces evolutionarily its unique heterogeneity. In the background, every successful firm does not cease to get reshaped over its evolutionary trajectory (Andreoni & Scazzieri, 2014; Dosi, 1982); and, in fact, the organization does not cease to adaptively reshape its trajectory within the environments (socioeconomic and industrial) in which it operates, as long as it reshapes its Stra.Tech.Man triangle (see Figure 5).

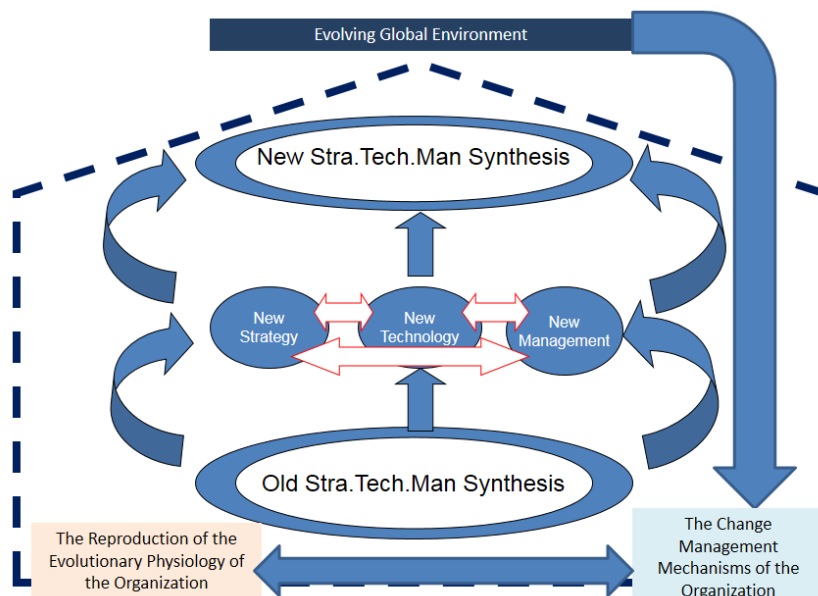


Figure 5. The reproduction of the evolutionary physiology of the organization in Stra.Tech.Man terms. Adapted from Βλάχος (2006)

Journal of Social and Administrative Sciences

In the background, the evolution of every organization in Stra.Tech.Man terms is path dependent (Jakobsen *et al.*, 2012; Thrane, Blaabjerg, & Møller, 2010) and therefore we should always recognize that its particular physiological history is important; also, the organizational strategy, the technological and managerial choices for the future are determined to a great extent from past decisions.

Based on empirical data from the field (Vlados, 2004), we find that the most critical organizational problems that also prevent the effective management of change are located, eventually, to the organization's physiological core. That is, they are born and reproduced within the organization's evolutionary dimensions:

- From its overall strategy
- From its overall technology
- From its overall management

Specifically, we propose five steps of managing change in the Stra.Tech.Man perspective, as a continuous cycle with five perpetually repeating steps.

This approach to managing change is composed by five consecutive steps, with eight points each, defining a continuous evolutionary process for the successful action of the organization, which must never stop.

I. The successful strategic evolution

1. Crystallize and deepen the vision and mission of your firm: First of all, understand yourself better
2. Question your strategic certainties and ring the warning bell: Come closer to your allies and partners
3. Build mechanisms for a timely and comprehensive perception of the changes of your external environment: Come closer to your customer, supplier and competitor
4. Develop the understanding of your internal business environment: Come closer to your employee and give him or her voice and participation to the strategic process
5. Build a truly comparative and evolutionary SWOT analysis
6. Build carefully your alternatives and evaluate them open-mindedly: Ask questions also to the people surrounding you and understand that you are not always right
7. Choose the strategy that suits you, not only with ambition but also with realism
8. Analyze comprehensively your tactics and policies

II. The successful technological evolution

1. Understand more deeply the technological nature of your firm
2. Get a full comparative image of your technological capabilities
3. Develop even more your mechanisms of technological alertness and collection of new technical data / information
4. Cultivate your internal potential for creating new technical capabilities

Journal of Social and Administrative Sciences

5. Stimulate mechanisms for new technology diffusion within your organization
6. Strengthen your mechanisms of assimilating new technological data
7. Support in practice the integration of new technology. Do not be afraid of experimentation; mistakes are also allowed as long as they give substantial lessons
8. Reward the successful implementation of new technology

III. The successful managerial evolution

1. Experiment in new programming methods
2. Make your organization chart lighter
3. Build a really meritocratic way to place the right person in the right position, in the right time
4. Give your people the leaders who fit with them and can inspire them
5. Make your business a school
6. Give extra motives, more flexible and more specialized
7. Measure and evaluate with a fair enough and comparative spirit
8. Open new communication channels and build new ways of coordinating the action

IV. The successful innovative synthesis

1. Crystallize the successful transformations in terms of strategy, technology and management and prepare, with caution, the new Stra.Tech.Man synthesis
2. Weigh, balance and adjust the innovative Stra.Tech.Man triangle to all sides
3. Spread the revolutionary message and build a dynamic guiding group
4. Remove the obstacles, assign roles and give courage with your example
5. Maintain the balance during the operation
6. Try having fast wins and celebrate them in moderation
7. Define control and evaluation points of your overall effort
8. In the end, do not forget to reward those who fought for this change

V. The successful assimilation of change and the continuous change

1. Protect the actions that brought results and unify them into a cohesive logic: Deepen and develop your business physiology
2. Do not punish those that experimented honestly but failed, but those that proved faint-hearted during the change
3. Refresh the hierarchy with new faces
4. Make yesterday's success a goal to overcome and not a conservation monument
5. Place external reviewers within your firm and tolerate them
6. Build a firm that can be loved
7. Chase down complacency and do not rest on your laurels
8. Start over, always, from the beginning

5. Conclusions and implications

We suggest that the Stra.Tech.Man approach gives a useful and explanatory analytical framework. This can combine effectively the analytical dimensions of organizational strategy, technology and management, in the effort of generating innovation and managing more effectively the change. We think that this approach gives the possibility for a unified perception of the organizational physiological evolution, within the contemporary highly-demanding and fluid global environment.

In terms of research limitations, we suggest that this approach can be strengthened in the future, to a direction of greater systematization and operational enrichment. With the required implementation and operationalization it can acquire more practical usefulness in order to be applied within different organizations.

Acknowledgement

We would like to show our gratitude to Dr. Andreas Andrikopoulos, Associate Professor at the Department of Business Administration of the University of the Aegean, who provided useful comments during the writing of this manuscript.

References

- Aghion, P., Van Reenen, J., & Zingales, L. (2013). Innovation and institutional ownership. *American Economic Review*, 103(1), 277–304. doi. [10.1257/aer.103.1.277](https://doi.org/10.1257/aer.103.1.277)
- Ahrweiler, P. (2010). *Innovation in Complex Social Systems*. New York: Routledge.
- Alvintzi, P., & Eder, H. (2010). *Crisis Management*. New York: Nova Science Publishers.
- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40(5), 1297–1333. doi. [10.1177/0149206314527128](https://doi.org/10.1177/0149206314527128)
- Andreoni, A., & Scazzieri, R. (2014). Triggers of change: Structural trajectories and production dynamics. *Cambridge Journal of Economics*, 38(6), 1391–1408. doi. [10.1093/cje/bet034](https://doi.org/10.1093/cje/bet034)
- Arthur, M.B., Inkson, K., & Pringle, J.K. (1999). *The New Careers: Individual Action and Economic Change*. Thousand Oaks, Ca: Sage.
- Ashkenas, R. (2013). Change management needs to change. *Harvard Business Review*, 3.
- Ates, A., & Bititci, U. (2011). Change process: A key enabler for building resilient SMEs. *International Journal of Production Research*, 49(18), 5601–5618. doi. [10.1080/00207543.2011.563825](https://doi.org/10.1080/00207543.2011.563825)
- Battilana, J., & Casciaro, T. (2012). Change agents, networks, and institutions: A contingency theory of organizational change. *Academy of Management Journal*, 55(2), 381–398. doi. [10.5465/amj.2009.0891](https://doi.org/10.5465/amj.2009.0891)
- Beckhard, R. (1969). *Organization Development: Strategies and Models*. Reading, MA: Addison-Wesley.
- Ben Letaifa, S., Gratacap, A., Isckia, T., & Pesqueux, Y. (2013). *Understanding Business Ecosystems: How Firms Succeed in the New World of Convergence?* Bruxelles: De Boeck.
- Bhattacharya, A., Khanna, D., Schweizer, C., & Bijapurkar, A. (2017). The New Globalization: Going Beyond the Rhetoric. Access: September 26, 2018, from BCG Henderson Insitute. [Retrieved from].
- Boulding, K.E. (1981). *Evolutionary Economics*. London: Sage Publications.
- Boyer, R., & Saillard, Y. (2002). *Théorie de la Régulation: L'état des Savoirs*. Paris: Découverte.
- Bremmer, I. (2014). The new rules of globalization. *Harvard Business Review: International Business*, (January-February Issue).
- Brenner, S.O., & Holten, A.-L. (2015). Leadership style and the process of organizational change. *Leadership & Organization Development Journal*, 36(1), 2–16. doi. [10.1108/LODJ-11-2012-0155](https://doi.org/10.1108/LODJ-11-2012-0155)
- Bridges, W. (1980). *Transitions: Making Sense of Life's Changes*. Reading, Mass.; Don Mills, Ont.: Addison-Wesley.
- Brockner, J., & James, E.H. (2008). Toward an understanding of when executives see crisis as opportunity. *The Journal of Applied Behavioral Science*, 44(1), 94–115. doi. [10.1177/0021886307313824](https://doi.org/10.1177/0021886307313824)
- Brower, A.M., & Nurius, P. (1993). *Social Cognition and Individual Change: Current Theory and Counseling Guidelines*. Newbury Park, Calif.: Sage Publications.
- Brown, S.L., & Eisenhardt, K.M. (1997). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 42(1), 1–34. doi. [10.2307/2393807](https://doi.org/10.2307/2393807)
- Burnes, B. (2009). *Managing Change: A Strategic Approach to Organisational Dynamics*. Harlow, England; New York: Prentice Hall/Financial Times.
- By, R.T., Burnes, B., & Oswick, C. (2011). Change management: The road ahead. *Journal of Change Management*, 11(1), 1–6. doi. [10.1080/14697017.2011.548936](https://doi.org/10.1080/14697017.2011.548936)
- By, R.T., Burnes, B., & Oswick, C. (2012). Change management: Leadership, values and ethics. *Journal of Change Management*, 12(1), 1–5. doi. [10.1080/14697017.2011.652371](https://doi.org/10.1080/14697017.2011.652371)
- Carter, M.Z., Armenakis, A.A., Feild, H.S., & Mossholder, K.W. (2013). Transformational leadership, relationship quality, and employee performance during continuous incremental organizational change. *Journal of Organizational Behavior*, 34(7), 942–958. doi. [10.1002/job.1824](https://doi.org/10.1002/job.1824)
- Choi, M., & Ruona, W.E.A. (2011). Individual readiness for organizational change and its implications for human resource and organization development. *Human Resource*

Journal of Social and Administrative Sciences

- Development Review*, 10(1), 46–73. doi. [10.1177/1534484310384957](https://doi.org/10.1177/1534484310384957)
- Collins, L.K., & Hill, F.M. (1998). Leveraging organizational transformation through incremental and radical approaches to change: Three case studies. *Total Quality Management*, 9(4–5), 30–34. doi. [10.1080/0954412988505](https://doi.org/10.1080/0954412988505)
- Conner, D. (1993). *Managing at the Speed of Change: Guidelines for Resilience in Turbulent Times*. New York: Villard Books.
- Coriat, B., & Dosi, G. (2002). The institutional embeddedness of economic change: An appraisal of the “evolutionary” and “regulationist” research programmes. In G. Hodgson, *A Modern Reader in Institutional and Evolutionary Economics*. Cheltenham: Edward Elgar. doi. [10.4337/9781843765554.00015](https://doi.org/10.4337/9781843765554.00015)
- Coriat, B., & Weinstein, O. (1995). *Les Nouvelles Théories de l'entreprise*. Paris: LGF - Livre de Poche.
- Dahl, J. (2014). Conceptualizing co-competition as a process: An outline of change in cooperative and competitive interactions. *Industrial Marketing Management*, 43(2), 272–279. doi. [10.1016/j.indmarman.2013.12.002](https://doi.org/10.1016/j.indmarman.2013.12.002)
- Dosi, G. (1982). Technological paradigms and technological trajectories. *Research Policy*, 11(3), 147–162. doi. [10.1016/0048-7333\(82\)90016-6](https://doi.org/10.1016/0048-7333(82)90016-6)
- Drucker, P.F. (1986). *Innovation and Entrepreneurship*. New York, NY: Harper & Row.
- Edelman, L.F., & Benning, A.L. (1999). Incremental revolution: Organizational change in highly turbulent environments. *Organization Development Journal; Chesterland*, 17(4), 79.
- Euroconsult. (1984). *Les bonzaide l'industrie Japonaise: Éléments de réflexion sur l'intégration de la technologie dans la fonction stratégique des entreprises Japonaises: Étude réalisée*. Paris: Ministère de l'industrie et de la recherche.
- Forsyth, D.R. (2019). *Group Dynamics* (7th Edition). Australia ; Boston, MA: Cengage.
- Freeman, R. (2014). *Managing Open Systems*. London ; New York: Routledge.
- Friedkin, N.E., & Johnsen, E.C. (2014). *Social Influence Network Theory: A Sociological Examination of Small Group Dynamics*. Cambridge: Cambridge University Press.
- Gennep, A. van. (1909). *Les Rites de Passage. Étude Systématique des Rites*. Paris.
- Georgalis, J., Samaratunge, R., Kimberley, N., & Lu, Y. (2015). Change process characteristics and resistance to organisational change: The role of employee perceptions of justice. *Australian Journal of Management*, 40(1), 89–113. doi. [10.1177/0312896214526212](https://doi.org/10.1177/0312896214526212)
- Geus, A. de. (1997). The living company. *Harvard Business Review*, March–April 1997.
- Hechanova, R.M., & Cementina-Olpoc, R. (2013). Transformational leadership, change management, and commitment to change: A comparison of academic and business organizations. *The Asia-Pacific Education Researcher*, 22(1), 11–19. doi. [10.1007/s40299-012-0019-z](https://doi.org/10.1007/s40299-012-0019-z)
- Hodgson, G.M. (2013). Understanding organizational evolution: Toward a research agenda using generalized Darwinism. *Organization Studies*, 34(7), 973–992. doi. [10.1177/0170840613485855](https://doi.org/10.1177/0170840613485855)
- Jain, A. (2013). Radical change to organizational knowledge Through the accumulation of incremental changes. *Academy of Management Proceedings*, 2013(1), 12144. doi. [10.5465/ambpp.2013.12144abstract](https://doi.org/10.5465/ambpp.2013.12144abstract)
- Jakobsen, S.-E., Byrkjeland, M., Båtevik, F.O., Pettersen, I.B., Skogseid, I., & Yttredal, E.R. (2012). Continuity and change in path-dependent regional policy development: The regional implementation of the Norwegian VRI programme. *Norsk Geografisk Tidsskrift - Norwegian Journal of Geography*, 66(3), 133–143. doi. [10.1080/00291951.2012.681686](https://doi.org/10.1080/00291951.2012.681686)
- Jaros, S. (2010). Commitment to organizational change: A critical review. *Journal of Change Management*, 10(1), 79–108. doi. [10.1080/14697010903549457](https://doi.org/10.1080/14697010903549457)
- Jick, T. (1993). *Managing Change: Cases and Concepts*. Homewood: Irwin.
- Kash, T.J., & Darling, J.R. (1998). Crisis management: Prevention, diagnosis and intervention. *Leadership & Organization Development Journal*, 19(4), 179–186. doi. [10.1108/01437739810217151](https://doi.org/10.1108/01437739810217151)
- Kennedy, E.B., Miller, D.J., & Niewiarowski, P.H. (2018). Industrial and biological analogies used creatively by business professionals. *Creativity Research Journal*, 30(1), 54–66. doi. [10.1080/10400419.2017.1411631](https://doi.org/10.1080/10400419.2017.1411631)
- Kotter, J.P. (1996). *Leading Change*. Boston, Mass: Harvard Business School Press.

Journal of Social and Administrative Sciences

- Küçüközkan, Y. (2015). Change management: A theoretical framework. *Journal of Social and Administrative Sciences*, 2(2), 83–92. doi. [10.1453/jsas.v2i2.257](https://doi.org/10.1453/jsas.v2i2.257)
- Kuipers, B.S., Higgs, M., Kickert, W., Tummers, L., Grandia, J., & Voet, J.V.D. (2014). The management of change in public organizations: A literature review. *Public Administration*, 92(1), 1–20. doi. [10.1111/padm.12040](https://doi.org/10.1111/padm.12040)
- LaMarsh, J. (1995). *Changing the Way we Change: Gaining Control of Major Operational Change*. Reading, Mass.: Addison-Wesley.
- Laudicina, P.A., & Peterson, E.R. (2016). From Globalization to Islandization (p.26). ATKearney. [Retrieved from].
- Levi, D. (2017). *Group Dynamics for Teams* (5th Edition). Los Angeles: Sage.
- Lewin, K. (1948). *Resolving Social Conflicts: Selected Papers on Group Dynamics*. New York: Harper and Row.
- Lifton, W.M., & Zimpfer, D.G. (1972). *Groups: Facilitating Individual Growth and Societal Change*. New York; Chichester: Wiley.
- Lordon, F. (1993). *Irrégularités des Trajectoires de Croissance Evolutions et Dynamique Non-linéaire: Vers une Schématisation de l'endométabolisme*. EHESS, Paris.
- Matos, M.S.P., & Esposito, M. (2014). Improving change management: How communication nature influences resistance to change. *Journal of Management Development*, 33(4), 324–341. doi. [10.1108/JMD-05-2012-0058](https://doi.org/10.1108/JMD-05-2012-0058)
- McAdam, R. (2003). Radical change: A conceptual model for research agendas. *Leadership & Organization Development Journal*, 24(4), 226–235. doi. [10.1108/01437730310478093](https://doi.org/10.1108/01437730310478093)
- Meyer, C., & Davis, S.M. (2003). *It's Alive: The Coming Convergence of Information, Biology, and Business*. New York: Crown Business.
- Mitroff, I.I. (2001). *Managing Crises before they Happen: What Every Executive and Manager Needs to Know about Crisis Management*. New York: AMACOM.
- Moore, J. (1993). Predators and prey: A new ecology of competition. *Harvard Business Review*, 71(3), 75–86.
- Nelson, R.R., & Winter, S.G. (1982). *An Evolutionary Theory of Economic Change*. Cambridge; London: The Belknap Press of Harvard University Press.
- Penrose, E.T. (1952). Biological analogies in the theory of the firm. *The American Economic Review*, 42(5), 804–819.
- Phillips, J.R. (1983). Enhancing the effectiveness of organizational change management. *Human Resource Management*, 22(1–2), 183–199. doi. [10.1002/hrm.3930220125](https://doi.org/10.1002/hrm.3930220125)
- Ponis, S.T., & Koronis, E. (2012). A knowledge management process-based approach to support corporate crisis management. *Knowledge and Process Management*, 19(3), 148–159. doi. [10.1002/kpm.1390](https://doi.org/10.1002/kpm.1390)
- Raineri, A.B. (2011). Change management practices: Impact on perceived change results. *Journal of Business Research*, 64(3), 266–272. doi. [10.1016/j.jbusres.2009.11.011](https://doi.org/10.1016/j.jbusres.2009.11.011)
- Reeves, M., Levin, S., & Ueda, D. (2016). The biology of corporate survival. *Harvard Business Review*, 94(1), 2.
- Reichert, R. (1970). *Self-awareness Through Group Dynamics*. Fairfield, N.J.: Cebco Standard Pub.
- Robert, V., Yoguel, G., & Lerena, O. (2017). The ontology of complexity and the neo-Schumpeterian evolutionary theory of economic change. *Journal of Evolutionary Economics*, 27(4), 761–793. doi. [10.1007/s00191-017-0512-x](https://doi.org/10.1007/s00191-017-0512-x)
- Rodrik, D. (2011). *The Globalization Paradox: Democracy and the Future of the World Economy*. New York: W.W Norton & Company.
- Rogers, E.M. (2003). *Diffusion of Innovations* (5th edition). New York: Free Press.
- Romanelli, E., & Tushman, M.L. (1994). Organizational transformation as punctuated equilibrium: An empirical test. *The Academy of Management Journal*, 37(5), 1141–1166. doi. [10.2307/256669](https://doi.org/10.2307/256669)
- Sanford, N. (1969). *Self [and] Society: Social Change and Individual Development*. New York: Atherton Press.
- Scazzieri, R. (2018). Structural dynamics and evolutionary change. *Structural Change and Economic Dynamics*, 46, 52–58. doi. [10.1016/j.strueco.2018.03.007](https://doi.org/10.1016/j.strueco.2018.03.007)
- Schumpeter, J. (1942). *Capitalism, Socialism, and Democracy*. New York; London: Harper &

Journal of Social and Administrative Sciences

- Brothers.
- Scott, W.R., & Davis, G.F. (2017). *Organizations and Organizing: Rational, Natural and Open Systems Perspectives*. New York ; London: Routledge.
- Steigenberger, N. (2015). Emotions in sensemaking: A change management perspective. *Journal of Organizational Change Management*, 28(3), 432–451. doi. [10.1108/JOCM-05-2014-0095](https://doi.org/10.1108/JOCM-05-2014-0095)
- Stensaker, I.G., & Langley, A. (2010). Change management choices and trajectories in a multidivisional firm. *British Journal of Management*, 21(1), 7–27. doi. [10.1111/j.1467-8551.2009.00657.x](https://doi.org/10.1111/j.1467-8551.2009.00657.x)
- Strebel, P. (1996). Why do employees resist change? *Harvard Business Review*, May–June 1996.
- Suddaby, R., & Foster, W.M. (2017). History and organizational change. *Journal of Management*, 43(1), 19–38. doi. [10.1177/0149206316675031](https://doi.org/10.1177/0149206316675031)
- Sundel, M. (1985). *Individual Change Through Small Groups*. New York; London: Free Press ; Collier Macmillan.
- Thomas, R., Sargent, L.D., & Hardy, C. (2010). Managing organizational change: Negotiating meaning and power-resistance relations. *Organization Science*, 22(1), 22–41. doi. [10.1287/orsc.1090.0520](https://doi.org/10.1287/orsc.1090.0520)
- Thrane, S., Blaabjerg, S., & Møller, R.H. (2010). Innovative path dependence: Making sense of product and service innovation in path dependent innovation processes. *Research Policy*, 39(7), 932–944. doi. [10.1016/j.respol.2010.04.003](https://doi.org/10.1016/j.respol.2010.04.003)
- Tsai, F.-S., Huang, W., & Tai, C.-T. (2017). Change pressure on organizational commitment and identification: Knowledge and decision-making competencies in government units. *Journal of Social and Administrative Sciences*, 4(1), 38–47. doi. [10.1453/jsas.v4i1.1244](https://doi.org/10.1453/jsas.v4i1.1244)
- Valentinov, V. (2015). Kenneth Boulding's theories of evolutionary economics and organizational change: A reconstruction. *Journal of Economic Issues*, 49(1), 71–88. doi. [10.1080/00213624.2015.1013880](https://doi.org/10.1080/00213624.2015.1013880)
- van Witteloostuijn, A., Jacobs, G., & Christe-Zeyse, J. (2013). A theoretical framework of organizational change. *Journal of Organizational Change Management*, 26(5), 772–792. doi. [10.1108/JOCM-09-2012-0137](https://doi.org/10.1108/JOCM-09-2012-0137)
- Vlados, Ch. (2012). The search of competitiveness and the entrepreneurial evolution in a global environment: Toward a new approach of development dynamics based on the case of Greek productive system. *Journal of Management Sciences and Regional Development*, 8, 91–116.
- Vlados, Ch., Deniozos, N., Chatzinikolaou, D., & Demertzis, M. (2018). Perceiving competitiveness under the restructuring process of globalization. *International Journal of Business and Management*, 13(8), 135–153. doi. [10.5539/ijbm.v13n8p135](https://doi.org/10.5539/ijbm.v13n8p135)
- Vlados, Ch., Katimertzopoulos, F., & Blatsos, I. (2019). Innovation in Stra.Tech.Man (Strategy-Technology-Management) terms. *Journal of Entrepreneurship and Business Innovation*, 5(2), 1–26. doi. [10.5296/jebi.v5i2.13477](https://doi.org/10.5296/jebi.v5i2.13477)
- Vlados, Ch. (2004). *La Dynamique du Triangle Stratégie, Technologie et Management: l'insertion des Entreprises Grecques dans la Globalisation*. Thèse de doctorat, Paris 10. [Retrieved from].
- Vlados, Ch. (2005). The insertion of Greek firms into globalization: The dynamics of the triangle of strategy, technology and management. Presented at the *Managing Global Trends and Challenges in a Turbulent Economy*, University of the Aegean, Department of Business Administration.
- Vora, M. (2013). Business excellence through sustainable change management. *The TQM Journal*, 25(6), 625–640. doi. [10.1108/TQM-07-2013-0080](https://doi.org/10.1108/TQM-07-2013-0080)
- Wagner, A. (2007). *Robustness and Evolvability in Living Systems*. Princeton: Princeton University Press.
- Warmington, A., Lupton, T., & Gribbin, C. (2014). *Organizational Behaviour and Performance: An Open Systems Approach to Change*. London: Palgrave Macmillan. doi. [10.1007/978-1-349-03088-0](https://doi.org/10.1007/978-1-349-03088-0)
- Whelan-Berry, K.S., & Somerville, K.A. (2010). Linking change drivers and the organizational change process: A review and synthesis. *Journal of Change Management*, 10(2), 175–193. doi. [10.1080/14697011003795651](https://doi.org/10.1080/14697011003795651)
- Wolfe, N.S. (2012). The evolving corporate model—From machine to living organization.

C. Vlados, & D. Chatzinikolaou, JSAS, 6(2), 2019, p.66-81.

Journal of Social and Administrative Sciences

- Employment Relations Today*, 39(1), 23–30. doi. [10.1002/ert.21351](https://doi.org/10.1002/ert.21351)
- Wolfe, R.A. (1994). Organizational innovation: Review, critique and suggested research directions. *Journal of Management Studies*, 31(3), 405–431. doi. [10.1111/j.1467-6486.1994.tb00624.x](https://doi.org/10.1111/j.1467-6486.1994.tb00624.x)
- Worley, C.G., & Mohrman, S.A. (2014). Is change management obsolete? *Organizational Dynamics*, 43(3), 214–224. doi. [10.1016/j.orgdyn.2014.08.008](https://doi.org/10.1016/j.orgdyn.2014.08.008)
- Zeleny, M. (1980). *Autopoiesis: A Theory of Living Organizations*. New York, N.Y: Elsevier Science Ltd.
- Βλάδος, Χ.Μ. (2006α). *Η δυναμική της παγκοσμιοποίησης και οι επιχειρήσεις στην Ελλάδα*. Αθήνα: Εκδόσεις Κριτική.
- Βλάδος, Χ.Μ. (2016β). *Στρατηγική μικρομεσαίων επιχειρήσεων σε συνθήκες κρίσης: Η προσέγγιση STRA.TECH.MAN*. Αθήνα: Εκδόσεις Κριτική.



Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by-nc/4.0>).

