

Optimization of Organizing Processes for Global Sustainable Development: A Proposed Strategy

Adli Abouzeedan

Breyer State University, USA

Michael Busler

The Richard Stockton College, USA

Abstract: To grant global sustainable and long lasting development of the world economies, the organizing processes and dynamics of today's organizations and enterprises has to match the nature of the external environment within which companies are operating. This external environment has been under alternation and conversion in the last two decades due to the impact of the IT revolution. In this paper, we looked at recently introduced models which can be good assets determining the necessary components of the external environment so that organizations would achieve the objectives toward global sustainable development. We concluded the article by proposing strategies to optimize the utilization for these models. The proposed strategies fell into four groups: management-focused strategies, operational-focused strategies, entrepreneurial-focused strategies, and legislative-focused strategies. We also discussed the expected outcome of each of these strategies. We found the management-focused strategies and the operational-focused strategies to be most multidimensional while the last two strategies were only growth-oriented.

Keywords: Innovation balance matrix, Global sustainable development, e-Globalization, United theory of internationalization of SMEs, United theory of internationalization of mindset, Actor-network theory, Entrepreneurial remedy model, Entrepreneurial re-cycling model

1 Introduction

The infusion of Information Technologies into world economies after the Second World War had a great impact on world economies. The real breakthroughs of the IT revolution came during the eighties by the commercialization commercial of personal computer and at the beginning of the 1990s by the invention a popular form of the Internet, i. e. World Wide Web (www). The new interface facilitated a wider use of the Internet by the ordinary people. The presence of the IT tools deemed the geography and physical distance as of less importance in relation to business activities. This is the result of the phenomenon of "globalization". In order to distinguish between globalization which is driven through traditional mechanisms from the globalization which is IT-driven, Abouzeedan and Leijon (2004) called the later "*e-globalization*". Organizations are structured in new ways in such an economy. Different concepts are brought in such a context. According to Robbins (1998, p. 516), organizations can be studied from different angles such as "task characteristics". The task characteristics approach began with the pioneering work of Turner and Lawrence in the mid-1960s (see Turner and Lawrence, 1965). The two researchers developed a theory to assess the effect of different kinds of jobs on employee satisfaction and absenteeism. Other perspectives are also used to analyze organizations.

The first section of this paper is an introduction to the topic. The second section looks at organizations and their structures. The third discusses the types of capital of significance to economy. The fourth section looks at the most recent models used in the analysis of organizations in the new context of e-globalization. In the fifth we look at strategies for promoting global sustainable development. In the last section, we close the article with our conclusion.

2 Organizations and Their Structures

2.1 Definitions of an Organization

Scholars have looked at organization from different perspectives to define them. Scott (2003) presented, on pages 25-30, three basic definitions of organizations. These definitions served to establish organizations as a distinctive field of study. They include:

2.1.1 Organization as a Rational System

The first definition of organization underpins the rational system perspective on organization. In general, the rational perspective looks at the logical, task-oriented mission of the organization. That is why there is more than one way to describe this perspective. Scott (2003), on page 26, presents four of the most influential definitions for the rational system perspective. These are exemplified by works of Barnard (1938, p. 4); March and Simon (1958, p. 4); Blau and Scott (1962, p. 5); and Etzioni (1964, p. 3). Scott (2003), on page 27, used the above definitions to extract his own definition of organization as a rational system. He defined the organization such that: “*Organizations are collectivities oriented to the pursuit of relatively specific goals and exhibiting relatively high formalized social structures.*”

2.1.2 Organization as a Natural System

In the natural view of organization, the observer is not merely concerned with the existing of tasks and objectives but rather how the individuals and participants perceive these tasks. The interaction between the participants and the formal structures within an organization is a focal point in the analysis which considers an organization as a natural system (see Scott, 2003, p.27-28).

2.1.3 Organization as an Open System

Referring to Scott (2003, p. 28), the previous two definitions of *rational* and *natural* systems tend to view the organization as a closed system, separated from its environment and encompassing a set of stable and easily identified participants. However, as Scott (2003), pointed out on p. 28, organizations are not closed systems, sealed off from their environments, but are open to and dependent on flows of personnel, resources, and information from outside. Thompson (1967) argued that the rational system perspective is most applicable at the technical level of the organization. The natural view emphasizes building upon tasks of organization, while also taking in consideration, the employees, their dreams, aspirations and involvement in that.

2.2 The Work Division

According to Scott (2003, p. 154), the most widely accepted and most compelling arguments concerning the origin of organizations tie their emergence to the division of labor. The rational systems version of the “division of labor” concept was first discussed and analyzed in depth by Adam Smith in 1776 in his milestone book *Wealth of Nation* (see Smith, 2003). As Scott (2003, p. 154), pointed out the miracle of productivity due to work design is accomplished primarily by the application of technology to the work process. This view of organization formation stresses that the need to divide the work task between workers is the driving force for organizing. There have been lively discussions about the driving force behind the organization activities.

Marglin (1974) argued that the social function of hierarchical work organization is not efficiency, but accumulation. Abouzeedan and Townsend (2005) stressed that it is vital for any scholar studying the process of organization formation to try to understand the processes and events that are taking place before looking at the actors behind the events. This view is a reflection of the new approach of Actor-Networks Theory (or ANT) in analysis of the macro organizational structures (see Czarniawska and Hernes, 2005). Understanding the relationship between the human and non-human components in organizations help us

to grasp how innovativeness is created at the macro-scale in societies. Such innovativeness is the outcome of the interaction between basic components expressed as “forms of capital”. In the next section we shall discuss the three components of the innovation capital.

3 The components of Innovation Capital

In their work, Abouzeedan and Busler (2005, 2006a) have argued that there is a combined concept which encompasses these three types of capital, i.e. *Human Capital*, *Financial Capital*, and *System Capital*. The two writers argued that the three types of capital are embedded in a new concept of capital, *Innovation Capital*. In the coming text we will be looking, in short, at each of these components of *Innovation Capital*.

3.1 Human Capital

The concept of “Human Capital” has been around for a while. The definition of *Human Capital* proposed by Abouzeedan and Busler (2005, 2006a) combines both the softer side of the concept, such as the cultural heritage, with the harder side of the terminology, such as education, work experience, and knowledge. Abouzeedan and Busler (2005, 2006a) have argued that, the first type of *Human Capital* is obtained via the environment in which the person has been living. The second sort is obtained through educational and training programs. It is worth to point out that the firms usually give much attention for the harder type of *Human Capital* when recruiting people, than the softer type. This is contrary to the more profitable strategy which emphasizes the cultural diversity of the working force (Abouzeedan and Leijon, 2004).

3.2 Financial Capital

The *Financial Capital* component of the *Innovation Capital* is the most visualized and focused upon when discussing issues of growth relative to the other components (see Abouzeedan and Busler, 2005 and 2006a). Already much has been said about the clear relationship between growth and availability of financial resources. The early studies assumed that growth in the short run was largely driven by capital investment, while long-run growth was due to exogenous technological change. Such idea was propagated for by, for example, Corley et al. (2002). Lichtenberg (1992) explained the productivity differences among countries using investment in physical, R&D and human capital. Lichtenberg’s view, however, is confined to the manufacturing sector and does not take into consideration cross-country effects. Other studies have shown that even when the tangible and intangible investment factors are taken in consideration there are still exists cross-country differences in productivity. Hall and Jones (1999) found that those factors of tangible and intangible factors can be institutional and relate to differences in social structure.

3.3 System Capital

System Capital represents a new contribution to the entrepreneurial knowledge. As pointed by Abouzeedan and Busler (2005, 2006a), this third type of capital is an indicator of the level of support that individual firms receive from the different institutions both governmental and non-governmental. The non-governmental institutions include: public establishments, private firms, unions, associations... etc. Abouzeedan and Busler (2005, 2006a) argued that, System Capital differs from the first two types, because it has both a macro and micro component. If one is concerned with the total effort of the system, both governmental and non-governmental, to support firms, then we are looking at the macroeconomic scale of the issue. On the other hand, if we look at the effort of individual institutions, and study them as separate entities, then we are more concerned with the microeconomic nature of that type of capital.

Government policies, as well as public and private institutions, do have an impact on the other two types of capital, i.e., *Human Capital* and *Financial Capital*. However, in the context of their original definition of the *System Capital*, Abouzeedan and Busler (2005, 2006a) were mainly concerned with the direct impact of these institutions and their policies, on a firm’s situation.

3.4 Innovation Balance Matrix

Abouzeedan and Busler (2005 and 2006a) theorized that when the components of *Innovation Capital* are in balance, and contributing in equal proportion to the total innovation input, the innovation of a society is optimized. That will lead to an environment with rich entrepreneurial and innovative activities. On the contrary another scenario is created when the components of *Innovation Capital* are not balanced. That occurs due to the expansion in proportion of one of the three components relative to the other two ones. The two researchers argued that, such a condition will lead to a poor innovation output and a non-entrepreneurial economy. Abouzeedan and Busler (2005, 2006a) incorporated the above logic in what they called the *Innovation Balance Matrix*.

In the next section we shall look at some models which can help us in understanding how to optimize organizational formation in an economy in order to facilitate a sustainable development.

4 Models for Organizational Structure in the e-Globalized Economy

Sustainable development is facilitated by an e-globalized environment which encourages new organizational forms testing. In seeking a sound sustainable development we need a more open type of organizational forms which are more responsive to the rapid dynamics of the e-globalized economy. There are a number of such models which were introduced recently to help scholars in analyzing and conceptualizing the alternations in the organizational forms and the environment surrounding them. Among such models are: *Internetization Management*, *Actor-Network Theory*, *The United Theory of Internationalization of SMEs*, *The United Theory of Internationalization of Mindset (of SMEs)*, *Innovation Balance Matrix*, *Entrepreneurial Remedy Model*, *Entrepreneurial Re-cycling Model*. These models were introduced recently in the years between 2004 and 2007.

In the next section we shall look at strategies where these models would be used to promote global sustainable development.

5 Strategies to Promote Global Sustainable Development

Promoting global sustainable development demands setting up strategies for that objective. Such strategies are facilitated by specific tools of analysis which we have introduced in the previous section. We suggest a couple of strategies which would utilize the models we referred to in the previous section. Generally, we can talk about four strategies which would lead to development under sustainable constraints. These strategies include: *Management-focused strategies*, *Operational-focused strategies*, *Entrepreneurial-focused strategies* and *Legislative-focused strategies*. In Table 1, I stated these models giving literature references for their appearance.

Table 1 Models for Facilitating New Organizational Structures in the E-globalized Economy

Theory/Model	Abbreviation	References to utilize
Internetisation Management	INM	Abouzeedan and Busler, 2006b, 2007
Actor-Network Theory	ANT	Czarniawska (2005) Czarniawska and Hernes (2005)
The United Theory of Internationalization of SMEs	UNITIS	Abouzeedan and Etemad, 2004
The United Theory of Internationalization of Mindset (of SMEs)	UNITIM	Abouzeedan and Lejion, 2005
Innovation Balance Matrix,	IBAM	Abouzeedan and Busler, 2005, 2006a
Entrepreneurial Re-cycling Model	EREC	Abouzeedan, 2005
Entrepreneurial Remedy Model,	EREM	Abouzeedan , 2007

5.1 Management-Focused Strategies

The management –focused strategies aim at promoting managerial policies of new approach and innovativeness at the micro-level. Models which would help in understanding, conceptualization, and achieving of such policies include: *Internetisation Management* and *Actor Network Theory*.

5.2 Operational-Focused Strategies

The operational-focused strategies aim at encouraging new thinking in the way we are operating the firms and organizations. Various models can assist in conceptualization and achieving such strategies. These include: *The United Theory of Internationalization of SMEs* and *the United Theory of Internationalization of Mindset (of SMEs)*. The previous are models which have in focus the issue of firm internationalization. These policies are also facilitated by encouraging the building up of ultra-modern form of organization such as *born-global firms*.

5.3 Entrepreneurial-Focused Strategies

The entrepreneurial-focused strategies promote the entrepreneurial aspects of organizational build up. Three models can be used for such purpose including: Innovation Balance Matrix, Entrepreneurial Recycling model, and Entrepreneurial Remedy Model. These models are concerned with the connection between the microenvironment and microenvironment of the economy. They confirm the prominent understanding between scholars that the entrepreneurial output off society is much related to the form of organizational structures prominent in it and how these are interconnected with the economic realities of a society.

5.4 Legislative-Focused Strategies

The last strategies are the legislative-focused ones. These strategies emphasize the role of the legislative activities in promoting an environment encouraging sustainable development policies. One such strategy is exemplified by encouraging global trade. The different types of strategies promoting global sustainable development are stated in Table 2. In the same Table we expose the reader to the expected outcome of utilizing the individual models within the various categories of the proposed strategies.

Table 2 Strategies for promoting sustainable development in societies

Proposed strategy	Expected outcome	Category
Encouraging Internetization Management practices	<ul style="list-style-type: none"> • Managerial efficiency • Saving of resources • Reducing in costs • Reduction in time waste 	Management-focused strategy
Encourage the ANT approach	<ul style="list-style-type: none"> • Managerial efficiency 	Management-focused strategy
Encouraging born-global type of firms	<ul style="list-style-type: none"> • More growth possibilities • Saving of resources • Reducing in costs • Reduction in time waste 	Operational-focused strategy
Encouraging the UNITIS , UNI-TIM approach	<ul style="list-style-type: none"> • More growth possibilities 	Operational-focused strategy
Encouraging The IBAM approach	<ul style="list-style-type: none"> • More growth possibilities 	Entrepreneurial-focused strategy
Encouraging The EREM, EREC approach	<ul style="list-style-type: none"> • More growth possibilities 	Entrepreneurial-focused strategy
Encouraging global trade	<ul style="list-style-type: none"> • More growth possibilities 	Legislative-focused strategy

6 Concluding Remarks

The microenvironments of societies are strongly related to their macro environment. Understanding this relationship is a significant policy ingredient which would facilitate the introduction of the conditions for a successful global sustainable development schemes. Researchers have introduced, recently, a number of models which can be used to understand the way the new organizations are shaped in the e-globalized world.

This helps us also to design strategies with the objective of promoting global development. These models include:

Internetization Management, Actor-Network Theory, The United Theory of Internationalization of SMEs, The United Theory of Internationalization of Mindset (of SMEs), Innovation Balance Matrix, Entrepreneurial Remedy Model, and Entrepreneurial Re-cycling Model. In this article we proposed four types of strategies which would utilize these models as tools of analysis and conceptualization. These strategies are classified into four categories: Management-focused strategies, Operational-focused strategies, Entrepreneurial-focused strategies, and Legislative-focused strategies.

We found the management-focused and the operational-focus strategies to be multidimensional affecting the sustainable development at multilevel. On the other hand the entrepreneurial-focused and the legislative-focused strategies are remedies within the growth outcome possibilities. The above said gives the management-focused and operational-focused strategies preference over the other two strategies.

Reference

- Abouzeedan, A. (2005). 'The entrepreneurial development in the Western contra Arabic counties: A conceptual analysis', Paper presented at the 6th Annual College of Business & Economics Conference, Jointly with World Association for Sustainable Development (WASD), Globalization, Technology, and Sustainable Development, November, Abu Dhabi – UAE.
- Abouzeedan, A. (2007). 'The 'Entrepreneurial remedy model': The tool to understand the entrepreneurial development in the Western contra Arabic counties', In: Allam Ahmed (ed.), *Business Excellence and Competitiveness in the Middle East and North Africa (GTSD – BECMENA)*, Vol. 7, No. 1, 2008
- Abouzeedan, A. & Busler, M. (2005). 'Innovation capital in the Arab countries', In: Allam Ahmed (ed.), *World Sustainable Development Outlook 2005, Global Competitiveness: A Common Goal in a Digital Society, Emerald Group Publishing Limited., Section IV, Information & Knowledge Management*, Chapter 21, pp. 317-328.
- Abouzeedan, A. & Busler, M. (2006a). 'Innovation balance matrix: An application in the Arab countries', *World Review of Entrepreneurship, Management and Sustainable Development* Vol. 2, No. 3, 270-280.
- Abouzeedan, A. & Busler, M. (2006b). 'Innovativeness in managing firms: Utilising internetisation management as the catalyst for development of the world economy', In: Allam Ahmed (ed.), *World Sustainable Development Outlook 2006, Global and Local Resources in Achieving Sustainable Development, Emerald Group Publishing Limited., Section II, Science, Technology and Innovation*, pp. 169-177.
- Abouzeedan, A. & Busler, M. (2007). 'Internetization management: The way to operate an international strategic alliances', *Global Business Review* Vol. 8, No. 2 (in press).
- Abouzeedan, A. & Etemad, H. (2004). 'SMEs Internationalization: Towards a unified theory', Presented at *The Fourth Biennial McGill Conference on International Entrepreneurship: Researchers New Frontier*, McGill University, Montreal, Canada, 17-20, September.
- Abouzeedan, A. & Leijon, S. (2004). 'Globalization and impact on entrepreneurial diversity management', in the *Proceedings of The Fourth Biennial McGill Conference on International Entrepreneurship: Researchers New Frontier*, McGill University, Montreal, Canada, 17-20 September.
- Adli Abouzeedan, A. & Leijon, S. (2005). 'SMEs mindset internationalization: towards a unified theory', In the *Uddevalla Symposium 2005 Anthology (Research Report 2006:1) Innovations and Entrepreneurship in Functional Regions*, University West, Uddevalla, Sweden, 15 - 17th of September, pp. 27-49.
- Abouzeedan, A. & Townsend, K.M. (2005). 'Organization Structure and Work Design in the New Economy', In the *Uddevalla Symposium 2005 Anthology (Research Report 2006:1) Innovations and Entrepreneurship in Functional Regions*, University West, Uddevalla, Sweden, 15 - 17th of September, 2005, p. 51-71.

- Barnard, C. (1938). *The Functions of the Executive*, Cambridge, MA: Harvard University Press.
- Blau, P.M. & Scott, W.R. (1962). 'Formal Organizations: A Comparative Approach', San Francisco: Chandler.
- Corely, M., Michie, J. & Oughton, C. (2002). 'Technology, growth and employment', *International Review of Applied Economics* Vol. 16, No. 3, pp. 265-276.
- Czarniawska, B. (1998). 'A Narrative Theory of the Firm', New York: Wiley.
- Czarniawska, B. & Hernes, T. (2005). 'Constructing macro actors according to ANT', In B. Czarniawska and Hernes, T. (eds.) *Theory and Organizing*, Liber.
- Etzioni, A. (1964). 'Modern Organizations', Upper Saddle River, NJ: Prentice Hall.
- Hall, R.E. & Jones, C.I. (1999). 'Why do some countries produce so much output per worker than others?' *Quarterly Journal of Economics* Vol. 114, No. 1, pp. 83-116.
- Lichtenberg, F. (1992). 'R&D Investment and international productivity differences', *NBER Working Paper* No. 4161.
- March, J.G. & Simon, H.A. (1958). 'Organizations', New York: John Wiley.
- Marglin, S. (1974). 'What do bosses do? The origins and functions of hierarchy in capitalist production', *Review of Radical Political Economics* Vol. 6 (summer), pp. 60-112.
- Robbins, S.P. (1998). 'Organizational Behavior, Concepts, Controversies and Application', Prentice-Hall International, Inc. New Jersey.
- Scott, W.R. (2003). 'Organizations, Rational, Natural, and Open Systems', Fifth Edition, Prentice Hall, Upper Saddle River, New Jersey 07458.
- Smith, A. (2003) (First published in 1776). 'Wealth of Nations', Dantam Bill, A Division of Random House, Inc., New York.
- Thompson, J.D. (1967). 'Organizations in Action', New York: McGraw-Hill.
- Turner, A.N. & Lawrence, P.R. (1965). 'Industrial Jobs and the Worker', Boston: Harvard University Press.