International Journal of Computer Systems (ISSN: 2394-1065), Volume 02– Issue 10, October, 2015 Available at http://www.ijcsonline.com/

From Assimilation to Acclimatization of Social Digital Technology in Organizations

Dr. Alon A. Hagsall

Department of Information Studies, Bar Ilan University, Israel; Sarnat School of Business Administration, the Center for Academic Studies, Israel

Abstract

Assimilating new technologies in organizations is considered an awkward process, rife with obstacles. Digital technology products, which continually develop at a rapid pace, are used through an ongoing, independent, and utilitarian process of acclimatization. This study aims to examine whether a transition to the use of social digital technologies within the organization will effect a transition from the complex organizational assimilation process to a process of acclimatization. The study's results indicate that there is a distinct connection between the quality of use of digital technology by the employee and his willingness to participate in a quick and independent acclimatization process that bypasses the formal assimilation. Studies have found that employees prefer the continued trial and error use of social digital technologies, if the functionality is maximized. This finding is potentially of great significance to organizations; the transformation from assimilation technology to an acclimated process in organizations, effects work processes and organizational efficiency.

Keywords: Assimilation, Social digital Technology, Organizations, Individualized acclimatization process, Technology acceptance.

I. INTRODUCTION

A. Technology assimilation in organizations

Assimilation is a term borrowed from biology, where it denotes an ongoing process in which an organism's body and behavior adapt to its environment. The goal of this process is to permit the organism to survive in the changing living conditions to which it is exposed [11]. Acclimatization to the environment cannot occur instantly, but must instead occur over an extended period in a process dubbed evolution. In this process, small changes occur in the environment, the organism physically detects these changes, and begins altering its habits and physical abilities accordingly. These changes and adaptations may occur quickly, in which case the organism's lifestyle undergoes massive programmed assimilative and adaptive processes. Alternately, the change may come slowly and at length, in which case acclimatization processes are required to enable the organism to variably and progressively adjust its lifestyle to the environment. In human beings, many such adaptations occur on the level of consciousness and perception, but sociocultural changes are no less worthy of note. Critically, adaptations on the human social plane have multiple aspects, and therefore demand awareness, planning, and general agreement -- especially when the change required is one of assimilation [22].

According to the *theory of reasoned action*, the process of assimilating technology —especially social digital technology — into an organization (or any human environment) influences an employee's behavior because it changes his position regarding the personal benefit he stands to gain from the introduction of a new technology or other development. Thus, assimilation of new technology brings with it organizational and personal change, which may be expressed through changes in position, authority, and place in the organizational hierarchy, or — especially — in work and management methods. The human desire to meet the challenges of dynamic, complex situations eases understanding of the assimilation of computerized information systems, as well as legitimacy for the process. However, every change is also accompanied by an assimilation process that may be perceived as a personal threat with potential to worsen conditions and lead to the jettisoning of familiar work methods [13].

According to the *technology acceptance model*, one of the conditions for assimilation is that the user adopt a positive attitude toward use of the new technology. This model seeks to explain the combination of factors that affect employees' degree of willingness to assimilate new technological solutions, as well as the likelihood of their doing so. It postulates that a positive attitude results from an understanding that the given technology will in fact contribute to functions, learning, and completion of assignments [5]. In the short term, the efficiency of work processes may decline, potentially resulting in a reduced ability to contend with market forces, competitiveness, and capacity to muster resources as necessary. Further, the cyclical process of assimilating up-to-date information systems is prolonged, a processes whose execution is further complicated by the fact that by the time one cycle has ended, the technology assimilated may no longer be entirely up-to-date. This being the case, an organization's managers and employees must be conscious of the critical and temporary nature of both the required change and the gap [19]. All concerned must willingly collaborate to

accomplish the change successfully and reach the point of upgraded competitive execution as quickly as possible [2].

Successful assimilation of information technology requires effective integration of managerial abilities and leadership. A leader is defined as a person who spearheads a social process of problem resolution, whereas a manager is a person who is expert in conceiving solutions and top-down assimilation processes. managing The technology with social information processing at its core calls for integration of the two. This combination facilitates team-based decision-making processes and conflict resolution, even when those engaged in these actions are separated by space and time. Further, positive reinforcement must be provided for delivering up-to-date, cohesive information, and highly rated solutions must be given precedence over personal solutions.

B. Information technology in organizations

The twenty-first century is characterized by the great intensity of the changes taking place and by considerable information overload. It has brought with it the awareness of how difficult it is to keep pace with such an overload, and the accompanying challenges of retrieving, collecting, and analyzing relevant data [2]. These difficulties have brought to the fore the need for a more efficient, up-to-date. and helpful manner of organizing and managing personal and organizational information [9]. Studies conducted in the European Union have demonstrated a significant increase in efforts to contend with information overload, vague work processes, and exacting demands for data analysis [10]. The research makes clear that to successfully meet these challenges, organizations upgraded their technologies and information systems developed integrated, continuous, and systematic processes for collecting and analyzing data on individual, organizational, and systemic levels. This development permitted the information to become practical, relevant knowledge in accordance with dynamic environmental requirements [4]. That period saw the development of centralized information management systems, such as those used for enterprise resource planning (ERP) and customer relationship management (CRM), as well as smaller accounting, inventory, and procurement management applications. However, it soon became apparent that these intra-organizational information systems were themselves perpetuating traditional hierarchies and administrative processes, while precluding performance of the high-speed processes required for real-time data analysis [1].

New technology may be perceived as a nuisance or an undesirable distraction, especially by experts who have already attained mastery of their present responsibilities and have previously seen failed technologies come and go. Such individuals are likely to view new technological solutions negatively, even if these solutions actually have the potential to benefit them and ease their work. This is because new technology is not immediately perceived as providing a more efficient and effective solution than the technology previously in use, or processes that proved themselves in the past. The requirement to master the new learning and work processes that accompany the advent of new technologies may be met with opposition, especially when the reasons for the change have not been made clear. Similarly, changes in organizational culture and climate have repercussions for employees' ability and desire to assimilate technology.

C. The transition to social digital technology in organizations

From its onset, the need to rapidly transform information into knowledge affected the direction of digital technological development, which it pushed toward the development of information technologies — or, one might say, knowledge technology - supported by social networks. This second generation of network technologies, which were administered by the users themselves, using their own content and in a manner dictated by their own discretion, were dubbed by O'Reilly [17] as Web 2.0. The new applications first gathered steam on the internet, and subsequently found their way into organizations as communications, learning, and knowledge management systems. The trend in which social technologies were assimilated in organizations was eponymously named Enterprise 2.0. Second-generation applications, which developed in parallel with social applications based on digital technologies, aimed to harness the wisdom of those who actually consumed content. These applications are intended to facilitate the compilation of information from a variety of sources and people in a single, accessible location. This period thus was characterized by constant, rapid development of novel applications, sophisticated information systems, and progressively more advanced methods for exploiting information systems.

One of the most definitive social digital technologies of the 21st century is social networking. A *social network* is a collection of people who have direct relationships with each other or with the group, and whose members each have a collection of personal data. A social network includes various means of communication, search tools, and links to information, both formal (such as that hosted by professional institutions) and informal (such as that found in public wikis). Also included is unstructured information [9] delivered in the form of folksonomy (public discourse), which is characterized by written discourse: free writing that represents the ideas of the author without regard for formal rules of syntax and style.

As noted, information sharing is a central aspect of digital technologies, and *social networks* are a prime example of such sharing. Social networks make it possible for users to save statuses and links, and tag them according to subject. The website or application can then locate additional sites that match the user's tagging definitions in lists made by other users. All this activity takes place on the user's *profile* page.

The *profile*, which is customized for each user, is another significant application used in social networks. Such pages display personal details, links, a list of contacts, and links to means of communication. Interaction between groups or knowledge communities is accomplished in a straightforward, user-friendly manner employing any of these various communication tools. The principle advantage of these networks is that they permit rapid even instant — updates, in which users share their current activities, express themselves regarding personal issues, give expert opinions on matters of substance, or translate professional jargon into the language of everyday pursuits. The capacity of these technologies advanced significantly with the appearance of real-time communication (RTC), delivered by applications whose function is to allow users to communicate instantly regarding not only formal events, but also life's tiny details whose significance may not be apparent outside of context. The first of these tools were fora that developed into instant-messaging networks permitting users to connect instantly with content, people, situation-relevant events, and information concerning specific topics. Thus began the second generation of Internet technology: the information revolution of the active, connected community networks. This sociotechnological revolution was accompanied by accelerated technological development in the field of hardware as well.

Integration of sophisticated operating systems with simple hardware permits any person to be a part of a social network, of a continuous, unending process of updates and gradual acclimatization to innovation and change. Those for whom social sharing and continuous updates are a way of life, for whom social processes are inherently characterized by ongoing change, are spared the need for specific, planned, lengthy, and tiresome assimilation processes. Yet, these technologies require exposure and transparency, which are liable to cause discomfort to managers and employees who are accustomed to having control over the flow of information in an organization.

The ability to evaluate this information is predicated on understanding and developing proficiency in the use of social assessment tools, which themselves develop and change on an ongoing basis. A lifestyle of perpetual acclimatization and updates demands awareness, behavioral and social adaptation, and constant attention to change, while in their own right, these abilities require adaptation and both personal and social adjustment.

All of the above implies that second generation social digital applications and networks allow users and employees to interact in real time with a wide range of other users. These applications make it possible for the user or employee to receive instantaneous social approval of his/her actions from a superior and, just as importantly, from colleagues within and without of the organization - as part of the "wisdom of the crowd" [21]. Crowd wisdom apparently makes it possible to transition from locating information to using solutions arrived at through new connections and collective learning, as well as improve the employee's effectiveness and his/her ability to function autonomously in work and in life [8]. Using such technology makes possible the dissemination of up-to-date knowledge quickly and to a wide range of significant audiences. The technology allows for updating and adapting information to current needs, while employing individual and group evaluations of content. Research on this topic reveals, however, that the successful assimilation of social digital technology by an organization's employees and within the organization's systems requires an understanding of the processes of social legitimation, the acquisition of behavioral autonomy, a transformation in perceptions of time and space, the ability to brand oneself, the ability to contribute information to one's surroundings,

the use of multiple applications according to needs, and much more [8; 9].

If social information is to be of value, an effective solution must be found for the public goods dilemma, such that the desire to give is made commensurate with the desire for solutions by social advantages pertaining to experts and contributors in the digital sharing era [3]. Social advantages are expressed by a person's designation as a significant expert or employee within an organization, which occurs almost instantly after that user uploads documents, shares relevant links, or provides answers to queries.

Being designated an expert allows an individual to influence systemic changes and adaptations, to contend more successfully with resistance, and to develop into a more significant actor in the system assimilation process. Such an expert user becomes a significant part of the wise crowd of employees that determines the limits of organizational capability and the most appropriate type of solution for a given point in time [6].

Organizational research indicates a number of variables that predict a successful process of introducing and upgrading social digital technologies (such as organizational digital networks) in organizations. These variables are the usage, usability and utility of the system. They may be defined as the degree to which each employee is capable of adapting to the product independently and using it in the course of work for the purpose of attaining specific goals [15].

It follows, then, that when provided by the organization with the optimal conditions, both in terms of work methods and in terms of the digital application environment, employees must still invest working time, contribute content, participate in the communications network, and be part of social processing and evaluation methods. They must learn to retrieve information in real time, disseminate knowledge, keep up-to-date with changes in goals, requirements, or relevant resources, and control a flexible technical platform that changes and adapts itself to users' needs [14] and requires activity in a flexible work environment that updates itself regularly and facilitates ongoing improvement [23]. A study conducted in the United Arab Emirates found that employees who are contributors accumulate positive credit and receive positive support and encouragement for their application of highquality solutions. The study further found a correlation between high-quality solutions and an employee's influence over work processes and the organization's adaptation to its environment [18]. The study thus suggests the existence of a relationship between the process and pace of social technology adoption, the nature of the work environment. and their influence on high-quality employees who contribute to work processes. Logically, then, such an organization develops a work environment characterized by flexibility, transparency and support — one that allows employees to function autonomously, with constant use of the social network and adept exploitation of social solutions in environmental adjustment; an environment that rejects the traditional, top-down approach to organizational assimilation of technological systems.

The importance of the usage, usability and utility variables in developing web-based systems in the age of *Web 2.0* is manifested in the need to use these systems independently of close ongoing support.

This study illustrates the changes that have taken place in processes of adopting new digital technologies in organizations. The use of digital applications, social networks, or any other digital technology product by an organization's employees no longer involves formal assimilation processes, but rather, *processes of acclimatization*: These are processes involving immediate deployment of the digital technology through individual adaptation that does not entail formal assimilation processes.

D. Acclimatization of social digital technologies in contrast to assimilation

The development of social digital technology and the changing ways of using it raise the question whether it is possible for organizations to also transition from the long, expensive, and complicated process of assimilating information technology - a process which requires constant interventions by management and formal training procedures - to ongoing processes of acclimatization to the organization's social digital information systems.

A given employee's individual process of adapting effective use of social digital technology is predicated upon free, open, dynamic and communicative distribution of knowledge amongst employees; upon crowd wisdom; and upon self-advancement in place of rigid hierarchy, control from above and decision-making processes controlled by managers with the assistance of experts. Such a process is founded upon an approach that is completely different from the assimilation process employed in formal bureaucratic organizations and controllable from above. The process of acclimatization, which implies immediate independent use, has the potential to almost instantaneously improve an employee's performance, as well as the effectiveness of that employee's use of social networks and applications as part of work.

This paper examines whether such a transformation in the processes of adaptation to new digital technologies will affect the positions of employees towards the introduction of digital applications into their work. Do employees believe formal and complex organizational processes of assimilation are necessary? Or are they inclined to adapt independently and individually to the ever evolving digital technology products in the course of their work?

Our research hypothesis is that we will find a significant positive correlation between employees' successful deployment of digital technology in their work, and their positive perception of the independent process of acclimatization to digital technology in contrast to a formal organization-wide process of assimilation.

II. METHODS

This research approaches the subject by attempting to identify a connection between the way a given employee uses knowledge technologies and social digital applications as part of his/her work for the organization and that employee's positive attitude towards the transition to ongoing processes of acclimatization to the use of digital applications.

In order to test this connection, an independent variable – "the employee's attitude towards the acclimatization process" – was defined. This variable was set in accordance with the "technology acceptance model" and refers to the employee's attitude towards carrying out an independent long-term process of acclimatization to the social digital technologies being brought into the organization or being upgraded while working in the organization.

This independent variable was divided into the following indexes:

- User's involvement in using the application.
- User's positive attitude towards ongoing acclimatization to organizational change.
- User's understanding of the digital application's utility.

The dependent variable was defined as the "quality of the employee's usage of social digital technology." In accordance with the theory of reasoned action, this variable measures the employee's perception of the utility of digital transformation, the benefits of using digital applications, and the extent to which they are current and relevant to the employee's work.

This variable was also divided into three indexes:

- Quality of use/access does the employee have access to digital applications in the organization?
- Quality of use/continuity of use does the employee use the application on an ongoing basis as part of his/her work in the organization?
- Quality of use/variation does the employee use a variety of applications in accordance with the requirements of his/her work?

The study used a stratified sample of roughly 300 respondents in a range of professions (about 8 professions), from a variety of organizations (approximately 8 organizations). The findings were collected and tested for correlations and regressions. This study tested the connections between each variable's components separately. It also tested the overall contribution and the separate contributions of the three variables measuring employee attitudes towards assimilation and the quality of use of digital applications, using multivariate linear regression, where the predictor variables were the three measures of employee attitudes towards acclimatization to digital applications, for each of the three quality of use indexes.

The study's hypothesis is that there will be a correlation between employees' positive perceptions of ongoing acclimatization to digital applications and the quality of use of digital applications within the organization.

III. RESULTS

A test of the hypotheses revealed a correlation between positive attitudes towards acclimatization to digital applications and the use quality/access index (degree of access to digital applications): The model including the three predictor variables was found to be significant: p = 0.007. The variance percentage explained by the model is about 3.5%, Adjusted R square = 0.037. Furthermore, the index's unique contribution – a positive perception of ongoing acclimatization - was the most pronounced: Beta = 0.227, p = 0.001.

We also found a connection between positive attitudes towards acclimatization to using digital applications and the use quality/continuity of use index (level of usage of digital applications): The connection is significant p =0.004, and the variance percentage explained by the model was about 5.0%, adjusted R square = 0.049. Furthermore, the index's unique contribution – a positive perception of ongoing acclimatization - was the most pronounced: Beta = 0.232, p = 0.001.

A significant connection between positive attitudes towards acclimatization to using digital applications and the use quality/variety index (the variety of applications being used) was also found: P = 0.007. The variance percentage explained by the model stood at about 4.0%, adjusted R square = 0.039. Furthermore, we found that two indexes have a pronounced unique contribution to predicting quality of use/variety: a positive perception of ongoing acclimatization: Beta = 0.195, p = 0.004; and the user's perception of utility: Beta = 0.181, p = 0.035.

General results: An analysis of the hypotheses revealed that the independent variable "the user's attitude towards acclimatization" to using digital applications in the course of work was positively and distinctly linked to each of the three indexes of the "quality of use" variable.

We also found that the unique contribution of the index "user's positive attitude towards ongoing acclimatization to organizational change" in the "employee's attitude" variable was the most significant of the various indexes (usability and involvement).

IV. DISCUSSION

The use of social digital networks in an organization poses a challenge to managerial command-and-control processes [12], since it is the management that formulates an organization's vision and determines what goals are to be met, as well as sets down procedures, work methods, and reward systems for every change that occurs [13]. Yet, when social digital networks are adapted effectively, the center of gravity becomes those significant employees, labeled as experts, who have established positions of social authority even greater than that of the manager.

Instead of top-down process control and management style, social norms that give legitimacy to the wisdom of crowds have begun to develop. This development facilitates the integration of many types of information, as well as the evaluation of its relevance to the individual user using both qualitative measures and quantitative feedback (ratings). These are not yesterday's centralized information systems (albeit, these continue to play a consequential and important role in the organizational information technology arsenal), but systems predicated on the notion of a social, professional, and organizational network. The role of these network systems is to permit mutual updates, provide information transparency, and empower every employee with whatever information he requires. Because these systems run on real-time technology, they also allow users to obtain rapid, even instant, updates regarding others' activities.

Digital technology based on digital age social information processing represent a new approach to the integration of new technologies in organizations. In contrast to traditional assimilation processes, in which management, formalization and influence through interactions with the employee have a significant weight [16], this study demonstrates that there is a significant positive correlation between the quality of an employee's of use digital technologies such as applications, social networks, etc., and a positive perception of the independent ongoing process of acclimatization to those products. We found a positive correlation for access to digital technologies, for ongoing usage of applications and for the variety of applications used by the employee. This correlation demonstrates that it is precisely an ongoing and independent process of acclimatization which affords better exposure to variety and a more continuous pattern of use than would be possible if the organization were to deploy a formal, complex and cumbersome process of assimilation that severs the employee from the continuum of work. Thus, digital technologies require individual and immediate acclimatization by employees. This process is quicker, cheaper and more independent than the complex and formal process of assimilating technology in the organization. The acclimatization to social digital technology may require more employee autonomy, involvement, and exposure to both internal and external immediate information, but it reduces the complex and organizational investments in expensive ongoing assimilation processes. Usability and utility that are built into the application will enable the employee to use it more effectively [15]. In order to reach such a state, both the manager and the employee need to approach organizational digital applications in the same way that they deal with the global internet in general.

Downloading such an application for personal use within the organization requires the same sort of actions and activities as those of any global internet user. The process of making ongoing and up-to-date social contributions enables an immediate, autonomous and speedy process of adaption to digital applications as part of work in the organization for both the employee and the manger: and it makes it possible to forego the complicated and expensive assimilation process. Using digital technology has many additional proven advantages - for example, solution sharing, social status updating, and organizational upgrading and adapting to and environmental changes by the organization on an ongoing basis - thereby making social digital information valuable.

A. Acclimatization to social digital technology in organizational work processes

Digital technology has social-behavioral ramifications. It permits not only astute processing of information using social evaluation, but also mobility, personalized learning, continuous and regular updates regarding social changes independent of external means [8], and more. These capabilities found in social networks can be a pertinent source of updates regarding cultural, social, and scientific changes in society. Equally, a social network, like other digital applications, can engender changes in the broad order of things, even in formal organizations.

It was noted in the introduction that we find ourselves in an environment that changes constantly, developing with a speed to which we were previously unaccustomed. It stands to reason, then, that effectiveness in organizations operating in such a tumultuous environment is dependent upon acclimatization to the ongoing state of change and upon ongoing adaptation to internal and external environmental conditions [6]. Indeed, research shows that organizations that produced effective work processes under uncertain, variable conditions did so with the aid of technological support, in a climate of autonomous, ongoing acclimatization over the long term [4].

This study has found that the greatest proven advantage of social digital technology is that it enables an independent process of acclimatization, which takes place during the course of work through individual, immediate, inexpensive and highly effective acclimatization by employees. All this is true on the condition that the employee is able to achieve an effective level of usage of the digital application. This level of usage is expressed within the organization in access to applications, the varied acclimatization of applications to personal use in the process of work, and the ability to use the applications on an ongoing and uninterrupted basis. Other studies [15] point to the required investments in the usability and utility of such applications, but if the use of digital technology within the organization is similar to their use throughout the global internet, we find that improvements in accessibility and usability of digital applications are achieved through the wisdom of the crowd, through recommendations and mutual support as part of ongoing use in work.

Thus, to draw a conclusion on the basis of the dataprocessing model, the technology acceptance model, and the rational behavior model, it is, in fact, wholly undesirable to conduct a complicated process of assimilating social digital technology. Rather, what is called for is a long-term process in which every individual employee and manager acclimatizes to the technology and uses it to acquire the required digital literacy; and then proceeds to a personalized process of integration with the organization's work processes. Studies show that digital technology's effectiveness is based on disagreement among members of an organization and on individual coping with the uncertainty and need to find practical solutions using networks and social connections. High-level integration of employees' personal knowledge brings about a greater ability to contend with a dynamic environment [20].

Thus, it is most logical to assume that over the course of the long-term, individualized acclimatization process, every employee will be able to find the solutions needed and the information required for his work, as well as a social network to help him – without, of course, losing his place in the hierarchy. This process will facilitate faster realization of the advantages of social digital technology, a more efficient use thereof, and a better connection between the employee's needs and those of the organization [7].

REFERENCES

- Bennet, A., and Bennet, D. Characterizing the next generation knowledge organization. Knowledge & Innovation: Journal of the KMCI, 1, 1 (2000), 28-30.
- [2] Chin, C. The effect of organizational change readiness on organizational learning and business management performers. The Business Review, 8, 2 (2007), 68-74.
- [3] Cremer, D. Trust and fear of exploitation in a public goods dilemma. Current Psychology, 2, 18 (1999), 153-163.
- [4] Davenport, T., Thomas, H., and Prusak, L. Working Knowledge: How Organizations Manage What They Know. Boston, MA: Harvard Business School Press, 2000.
- [5] Davis, F., Bagozzi, R., and Warshaw, P. User acceptance of computer technology: A comparison of two theoretical models. Management Science, 35, 8 (1989), 982-1003.
- [6] Dooleby, K. Organizational complexity. In M. Warner (ed.), International Encyclopedia of Business and Management. London: Thompson Learning, 2002, pp. 5013-5022.
- [7] Dotan, A. Challenges to assimilation of new technology in an organizational environment [in Hebrew], 2008. Retrieved Feb. 21, 2008. http://www.amirdotan.com/blog/?p=142.
- [8] Hasgall, A. The effectiveness of social networks in complex adaptive working environments. Journal of Systems and Information Technology, 14, 3 (2012), 220 – 235.
- [9] Hasgall, A., and Shoham S. Effective use of digital applications promotes professional self-efficacy. VINE, 45 2 (2015), 279 – 291.
- [10] Jackson, M. Social and Economic Networks. Princeton, NJ: Princeton University Press, 2008.
- [11] Huxley, J. Evolution: The modern synthesis. London: Allen & Unwin, 1942.
- [12] Knight, T.M. Change, Challenge and Strategic Leadership. London: Pearson Custom, 2006.
- [13] Levy, A. Managing organizational change: Approaches, methods and processes [in Hebrew]. Tel-Aviv: Tcherikover, 2000.
- [14] Malhotra., Y. Integrating knowledge management technology in organizational business processes: Getting real time enterprises to deliver real time performance. Journal of Knowledge Management, 9, 1 (2005), 7-28.
- [15] Nielsen, J. Usability 101: Introduction to Usability, 2009. Retrieved 2009. http://www.useit.com/alertbox/20030825.html.
- [16] Oliveira, T., and Martins, M.F. Literature review of information technology adoption models at firm level. The Electronic Journal of Information Systems Evaluation: 14, 1 (2011), 110-121.
- [17] O'Reilly, T. What is Web 2.0: Design Patterns and Business Models for the Next Generation of Software, 2005. Retrieved May 30, 2010. http://oreilly.com/web2/archive/what-is-web-20.html
- [18] Politis J. The relationship of various leadership styles to knowledge management. Leadership & Organization Development Journal, 22, 8 (2001), 354-364
- [19] Samuel, I. Organizations: Characteristics, structures, processes [in Hebrew]. Haifa & Tel-Aviv: Haifa University Press and Zmora Bitan, 1996.
- [20] Stacey, R.D., Griffin, D., and Shaw, P. Complexity and Management: Fad or Radical Challenge to Systems Thinking? London: Rutledge, 2000.
- [21] Surowiecki, J. The Wisdom of Crowds: Why the Many are Smarter than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations. London: Little, Brown & Co, 2004.
- [22] Thorndike, R.L., and Hagen, E. Measurement and Evaluation in Psychology and Education. New York: Wiley, 1961.
- [23] Wood, M. Mind the gap? A processual reconsideration of organizational knowledge. Knowledge Organization, 19, 1 (2002), 151-171.