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# INTEGRATED INFORMATION

International Conference on Integrated Information

Kos, Greece      September, 29 – October, 3 2011

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**All papers have been peer-reviewed**



**Piraeus, Greece, 2011**

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# **Preface: Proceedings of the International Conference on Integrated Information (IC-ININFO 2011)**

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## **Aims and Scope of the Conference**

The International Conference on Integrated Information 2011 took place in Kos Island, Greece, between September, 29 and October, 3, 2011. IC-ININFO is an international interdisciplinary conference covering research and development in the field of information management and integration.

The conference aims at creating a forum for further discussion for an Integrated Information Field incorporating a series of issues and/or related organizations that manage information in their everyday operations. Therefore, the call for papers is addressed to scholars and/ or professionals of the fields of Library and Archives Science (including digital libraries and electronic archives), Museum and Gallery Studies, Information Science, Documentation, Information Management, Records Management, Knowledge Management, Data management and Copyright experts the latter with an emphasis on Electronic Publications. Furthermore, papers focusing on issues of Cultural Heritage Management and Conservation Management are also be welcomed along with papers regarding the Management of Nonprofit Organizations such as libraries, archives and museums.

One of the primary objectives of the IC-ININFO will be the investigation of information-based managerial change in organizations. Driven by the fast-paced advances in the Information field, this change is characterized in terms of its impact on organizations that manage information in their everyday operations.

Grouping emerging technologies in the Information field together in a close examination of practices, problems and trends, IC-ININFO and its emphases on integration and management will present the state of the art in the field. Addressed jointly to the academic and practitioner, it will provide a forum for a number of perspectives based on either theoretical analyses or empirical case studies that will foster dialogue and exchange of ideas.

## **Topics of general Interest**

Library Science, Archives Science, Museum and Gallery Studies, Information Science, Documentation, Digital Libraries, Electronic Archives, Information Management, Records / Document Management, Knowledge Management, Data Management, Copyright, Electronic Publications, Cultural Heritage Management, Conservation Management, Management of Nonprofit Organizations, History of Information, History of Collections, Health Information

## **Symposia**

The Conference offered a number of sessions under its patronage, providing a concise overview of the most current issues and hands-on experience in information-related fields.

- Symposium on Integrated information: Theory, Policies, Tools
- 4th Symposium on Business and Management and Dynamic Simulation Models supporting management strategies

- Session on Open Access Repositories: Self-archiving, Metadata, Content policies, Usage
- Session on Evidence-Based Information in Clinical Practice
- Session on Business Management and Communication Strategies supporting Decision Making Process in Tourism Sector
- Session on Electronic Publishing: A Developing Landscape
- Session on Information and Knowledge Management
- Session on Information Content Preservation as Outcome of Conservation of Cultural Heritage: Ethics, Methodology and Tools
- Session on Advances Information for Strategic Management
- Session on Information History: Perspectives, Methods and Current Topics
- Session on Divergence and Convergence: Information Work in Digital Cultural Memory Institutions
- Session on Contemporary issues in Management: Organisational Behaviour, Information Technology, Education & Hospital leadership.

The wide range of aspects that the sessions covered, highlighted future trends in the Information Science.

### **Paper Peer Review**

More than 300 papers had been submitted for consideration in IC-ININFO 2011. From them, 91 were selected for presentation, after peer review in a double blind review process. The accepted papers were presented at IC-ININFO 2011.

### **Thanks**

We would like to thank all members that participated in any way in the IC-ININFO 2011 Conference and especially:

- The famous publishing house Emerald for its communication sponsorship.
- The co-organizing Universities and Institutes for their support and development of a high-quality Conference scientific level and profile.
- The members of the Scientific Committee that honored the Conference with their presence and provided a significant contribution to the review of papers as well as for their indications for the improvement of the Conference.
- All members of the Organizing Committee for their help, support and spirit participation before, during and after the Conference.
- The Session Organizers for their willing to organize sessions of high importance and for their editorial work, contributing in the development of valued services to the Conference.
- PhDC Marina Terzi for her excellent editorial work, contributing in the production of the Conference proceedings.

## CONFERENCE DETAILS

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Dimitris Kouis, Greek Ministry of Education, Lifelong Learning and Religious Affairs  
Dionysis Kokkinos, National Technical University of Athens

## KEYNOTE SPEAKER



Professor Amanda Spink

Professor Amanda Spink has published over 340 scholarly journal articles, refereed conference papers and book chapters, and 6 books. Many of her journal articles are published in the Journal of the American Society for Information Science and Technology, Information Processing and Management, and the Journal of Documentation. She is Editor of the Emerald journal Aslib Proceedings. Amanda's research has been published at many conferences including ASIST, IEEE ITCC, CAIS, Internet Computing, ACM SIGIR, and ISIC Conferences. Her recent books include Information Behavior: An Evolutionary Instinct and Web Search: Multidisciplinary Perspectives, both published by Springer. Amanda's research focuses on theoretical and empirical studies of information behavior, including the evolutionary and developmental foundations. The National Science Foundation, the American Library Association, Andrew R. Mellon Foundation, Amazon.com, Vivisimo. Com, Infospace.com, NEC, IBM, Excite.com, AlltheWeb.com, AltaVista.com, FAST, and Lockheed Martin have sponsored her research. In 2008 Professor Spink had the second highest H-index citation score in her field from 1998 to 2008 [Norris, M. (2008)]. Ranking Fellow Scholars and their H-Index: Preliminary Survey Results. Loughborough University, Dept of Information Science Report].

# The Effect of High Performance Working Systems on Informative Technology in Enterprises after Organisation Changes such as Mergers & Acquisitions

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**Abstract:** *This article aims to examine the effects of High performance Working Systems in organizations after a major change, like a merger or an acquisition, in the organization of a company that use Informative technology in manufacturing sector, in Greece. For this purpose this article is based on a theoretical research in the recent literature, and the results of a qualitative analysis as these revealed from the interview of some executive members of Greek companies with experience in high technology companies. Findings indicated that HPWS effect is a complex issue and the use of Informative Technology could affect positively the organization.*

**Keywords:** *High performance management working Practices, Merger & Acquisitions, Informative technology, Organisational change.*

## I. INTRODUCTION

Major goals of a merger or acquisition in manufacturing companies that use informative technology systems are synergies or scales economies and particularly the way will be installed in the new organization in order to achieve a competitive advantage.

The overall aim of performance management in the new organization, is to use High Performance Working Systems (HPWS) based on superior Informative Technology as an organizational system that it can fully allocate all kinds of resources, effectively meet market and customer needs and achieve high performance (Nadler & Gerstein, 1992), HPWS is an integrated system of Human Resource practices that enables high performance by enhancing employee skills, abilities and motivation (Wright and Boswell, 2002).

Lawler & Worley (2006) indicate “companies should seek a string of temporary competitive advantages through an approach to organization design that assumes change is normal.” Furthermore, they suggest that organizations should be built (designed) to change on the basis of improved human capital, knowledge creation, and designing organizations with the ability to constantly change. Same authors, further state that “There is a growing evidence that the way the organizations are organized can in fact provide a competitive advantage.”

The article aims to examine, what is the effect of High Performance Working Systems in enterprises after a major change, like a merger or an acquisition, in the

organization of a company that use Informative technology in manufacturing sector, in Greece. For this purpose this article is based on a theoretical research in the recent literature, and the results of a qualitative analysis as these revealed from the interview of some executive members of Greek companies with experience in high technology companies

## II. HPWS & ORGANIZATIONAL CHANGE FROM A LITERATURE REVIEW

Macy (2006), argue that organizations able to use HPWS should have the flexibility to adapt to constant change. For many authors (Wright and Boswell, 2002), (Macy et al, 2007), (Macy & Moore, 2004), (Collins, 2001) organizational design is a critical issue for competitive advantage.

It seems many organizational change interventions are unsuccessful or less well accepted. Most organizations are built for stability rather than adaptability and flexibility. Leaders have been coached and trained to create organizational stability. Many organizations, and particularly the big firms that use informative technology need to be constantly changing their structures, systems, and processes to have a competitive advantage. Also, organizational leaders, as well as rank and file employees, tend to resist change. They have been trained to design structures, systems, and processes for permanency (Garri, 2006). Lawler and Worley (2002) and Macy et al (2007) indicates that leaders and rank and file employees must be involved in designing organizations that will constantly evolve and be built for change.

The definition of an innovative HPWS (Lawler & Worley, 2006), is an organization that has successfully bundled and integrated specific sets of design features or action levers, which are comprised of macro- and micro-organizational structures, systems, processes, technologies, and information/knowledge-sharing mechanisms. Specifically, macrostructures consist of autonomous business units or centers that have been restructured from the front to the backend of the value chain. Microstructures consist of operations where team members perform formalized work tasks (not jobs) and formalized rotated leadership roles within and outside their respective teams. This mean teams that use coordinators, coaches, team leaders, or resource people instead of supervisors and managers.

Second, organizations that are built to change utilize critical supporting systems, such as multi-skilling,

job/task rotation and cross-training, information and knowledge sharing, and people development systems.

The third element in an organization that is built to change is its organizational processes. Such processes include employee involvement in decision-making, formalized and rotated leadership roles within the teams. Other processes include direct participation in the organization's design, direct work with suppliers and customers along the value chain, and TQM.

In summary, HPWSs is one that is intentionally designed to change and bring out the best in people, structures, systems, and processes thereby producing organization capability that delivers sustainable leadership and business results. In turn, these bundled design features or action-levers holistically "fit" together to be a competitive advantage and produce superior to exemplar performance. The difficult and complex aspect about designing PWSs to change is that there is no one design and no one way to do it!

Some authors have raised concerns about the identification and assessment of the fundamental factors required to implement successful organizational change efforts. For example, how do organizations unbundle the various design features and unveil the dynamic "processes and mechanisms responsible for initiating change" (Pettigrew, Woodman & Cameron, 2001). Moreover, "the question of "how" change emerges, develops, continues, and terminates over time remains largely unanswered" (Armenakis & Bedeian, 1999)). However, responsive to the urging demands from organizations, research studies have mainly reported on specific organizational design change efforts, such as quality circles, BPR, re-engineering, TQM, and six sigma, to name only a few of these design features.

### **III. HPWS & ORGANIZATIONAL PERFORMANCE FROM A LITERATURE REVIEW**

Although the majority of empirical findings concerning HPWS support that these systems lead to higher levels of organizational performance (Way, 2002).), there remain several issues that have not been fully explored.

The first unanswered issue pertains to the potential downsides of HPWS as pointed out by several scholars (Appelbaum, Bailey, Berg, Kalleberg, 2000), (Godard, 2004) & (Harley, 2002). From the economic cost perspective (Bryson, Forth and Kirby, 2005), higher costs related to sophisticated selection tools, based on the needs for a better informative technology system in the new organization, and to continuous investment in training programs, and competitive wages may offset the benefits of HPWS because of the cost-benefit trade-offs (Forth and Millward 2004). Moreover, given an inherent limit in the amount of performance that can be increased, diminishing returns of HPWS can occur when HPWS adoption exceeds its optimal level (Godard, 2004).

Another issue concerns the moderating effects of industrial environment. Based on the contingency theory perspective, the effects of HPWS on organizational performance vary under different industrial environments (Godard, 2004).). However, our understanding of the moderating effects of industry types on the HPWS-performance association remains underdeveloped. On the one hand, Kintana et al (2006) have found that HPWS execution is often advantageous for high-technology firms because of fierce competition and industrial dynamism. On the other hand, Chen et al. (2005) have suggested that the benefits of HPWS may be less apparent for traditional manufacturing firms owing to their relatively static external environments.

Nai -Wen Chi & Carol Yeh-Yun Lin (2011) conclude that HPWS is composed of the following nine HR practices: selective staffing, extensive training, competitive compensation, internal promotion, performance-contingent pay, results-oriented, appraisals, employee participation, formal complaint resolution systems and teamwork design. Similar to those practices are the ones from previous researchers (Sun, Aryee, and Law, 2007 ) & (Takeuchi, Lepak, Wang and Takeuchi, K. 2007).

### **IV. THE GREEK EXPERIENCE**

As a part of a survey for the performance management strategies after Merger & Acquisitions in Greek enterprises that use the high technology, the results of the interviews raised a number of parameters that influences the whole performance of the new organization.

Responses were submitted from a CEO and a manufacturing manager with service in manufacturing high tech companies before and after acquisitions. The key findings were:

- No matter the strategy and the techniques that the new company is using the main difference is the role of leadership and how active and focused on the employees is. All leaders from first to upper level should be trained for the successive organization of performance evaluation meetings. They have to support the effective performance and pass to all employees the appropriate messages for this purpose.
- Firms that use high technology in their systems (eg ERP systems, TQM, web based tools etc) applied the Performance management practices easier than manufacturing companies that still don't use Informative technology.
- Technology and web based tools can help people to understand and better to communicate more clear among teams.
- Clear roles and responsibilities after any change but also during normal operations is vital. In this way the passing from the data to the decision is fast and effective.

- The development of employees should also be the first priority to the leadership and the company targets should also be related with this.
- The daily activities should be performed in such way that should be an alignment between company targets and employees activities.
- The consideration of knowledge transfer at the individual and at the team or collective level. According the respondents when employees are assigned successively to different project teams, they can transfer their knowledge in high technology to other parts of the organization. This plays more important role in high technology companies.
- Human Resource Practices not always absorbed from the staff, particularly after a change where they feel suspicious and insecure.
- Performance Management practices should be implemented in a way that people understand the needs and their contribution via the implementation.
- The existence of robust and reliable Key Performance Indicators in order to trace and solve the bad performance issues that raised inevitably.
- Interpersonal Trust: Learning processes are facilitated by good interpersonal relations, that can improve feedback and communication which will facilitate individual learning, development and growth. If there is no trust, employees will not be cooperative and willingness to share their knowledge to their colleagues
- The diversity among the teams. This is vital in this type of business. Employees can be different in many aspects, like different skills, knowledge, personality characteristics. This diversity will be beneficial to the born of new ideas and consequently new knowledge.
- Organizational Culture: In this type of business this refers mainly to the dimensions of uncertainty avoidance and individualism. For example, coaching is important to overcome the obstacles of individualism for employees that are the competitive advantage of the company.
- Motivation & Reward: The performance process should be related with motivation and reward techniques. This also would be more efficient if there is only one central Human Resource department with uniformly management.

The detailed analysis of the above factors and the interpretation of the responses will be revealed in the full paper

### III. CONCLUSIONS

In conclusion, the effect of High Performance Working Systems in enterprises after a major organizational change such as a Merger & Acquisition, is a complex issue and the use of Informative technology can play a vital role for the positive outcome. Local enterprises after a change need to be flexible to adapt their structure

& systems accordingly but attention should be given to the extra cost for the adaptation of sophisticated tools.. This means that after a change what is needed is a combination of competent employees that can understand and adapt easily the requested working practices and Informative systems tested and accepted from employees to accelerate and act as a catalyst for the implementation of the relevant High Performance Working Systems

It is important to adhere to these “rules” so that the volume can be produced quickly, efficiently and in a fully appealing readable form.

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