

E-BOOK OF ABSTRACTS FIFTH BUSINESS SYSTEMS LABORATORY INTERNATIONAL SYMPOSIUM

COCREATING RESPONSIBLE FUTURES IN THE DIGITAL AGE: EXPLORING NEW PATHS TOWARDS ECONOMIC, SOCIAL AND ENVIRONMENTAL SUSTAINABILITY

> UNIVERSITY "FEDERICO II" OF NAPLES JANUARY 22–24, 2018



EDITOR GANDOLFO DOMINICI

ONLINE FREE VERSION

Business Systems B.S.LAB E-book Series

COCREATING RESPONSIBLE FUTURES IN THE DIGITAL AGE:

Exploring new paths towards economic, social and environmental Sustainability

5th Business Systems Laboratory International Symposium Università di Napoli ''Federico II'', Napoli - January 22-24, 2018 BOOK OF ABSTRACTS Editor: Gandolfo Dominici

Copyright © 2018 Business Systems Laboratory

All rights reserved.

ISBN 9788890824265



BUSINESS SYSTEMS BOOK SERIES

The book series "Business Systems" publishes research and essays, coming from the scientific and consulting activity of the members of the nonprofit scientific organization Business Systems Laboratory (Italy) as well as from invited well-known scientists in the business systems field.

The book series aims to attract the cutting edge research at international level and to make it available for academics and practitioners.

The official languages of the Business Systems books series are: English, Spanish and Italian.

The main topics include, but not are limited to, the following areas of knowledge: Systems Theory; Systemic Approach for Business; Complex Systems Theory; Managerial Cybernetics; Economic and Social Systems; Business Communication Systems; Innovation Systems; Action Research; Financial Systems; Service Science; Sustainability; Corporate Social Responsibility; Knowledge Management; Supply Chain Management; Strategic Management; Consumer Behavior; Marketing; Corporate Finance; Banking; e-Business; e-Learning; Business Process Management.

The book proposals will be evaluated by the Scientific Board on the basis of double blind peer review.

SCIENTIFIC BOARD

Scientific Director:

Gandolfo Dominici – Scientific Director Business Systems Laboratory

Editorial Director:

Mauro Sciarelli - Univ. "Federico II", Naples, Italy

Board members:

- Gianpaolo Basile Presidente B.S.Lab- Univ. of Salerno (Italy)
- Gerhard Chroust J. Kepler University Linz (Austria)
- Valeria Delgado GESI (Argentina)
- Primiano Di Nauta Univ. of Foggia (Italy)
- Raul Espejo Director-General the World Organization for Systems and Cybernetics (UK)
- José Rodolfo Hernández-Carrión Univ. of Valencia (Spain)
- Ignacio Martinez de Lejarza Univ. of Valencia (Spain)
- Matjaz Mulej Univ. of Maribor (Slovenia)
- Piero Mella Univ. of Pavia (Italy)
- Maurice Yolles Centre for Creating Coherent Change and Knowledge (UK).

SYMPOSIUM SCOPE

The Business Systems Laboratory International Symposia aim to address the global economic and social challenges of our times by systemic perspective; shedding the light to the several interactions between natural social and economic systems.

The criticalities and the opportunities of our times are faced according to the cutting edge research and practice in social science. This multidisciplinary perspective includes: management, psychology, economics, engineering and sociology.

The symposium is thought to create a friendly atmosphere among senior scholars, PhD students, researchers and business practitioners.

In particular, the Symposium 2016 focuses on the epistemological, theoretical, methodological, technical and practical contributions that can represent advancements in the theory and practice for governing business systems to address the present and future challenges in the global economic and social scenarios.

While focusing on the Systemic perspective the Symposium is also open to all the scientific approaches in order to foster constructive debates and confrontations to create new perspective of research and practice in the field of business.

TABLE OF CONTENTS

LEADERSHIP AND SYSTEMIC INNOVATION			
рр.1-22	- Inter, Intra, and Multi-Disciplinary Teams That Really Succeed	1	
	- Generativity Space: A paradigm shift in collective value generation	4	
	- Platform Innovation: From Technology to Leadership Platforms	6	
	- Service innovation within service system networks: a business transformation		
	perspective	12	
	- Collective Reflexive Capacity: The Highest Level of Capacity, or Challenge, to		
	Leaders of Human Systems in the Context of Civilization Evolution	14	
	- Innovation and tradition-based firms: the case of the fashion industry	21	
	KNOWLEDGE MANAGEMENT SYSTEMS		
	Online academic networks as knowledge brokers. The mediating role of		
	organizational support	24	
••• • •	- Mapping digital co-creation for urban communities and public places	26	
pp.23-37	- Early warning systems in managements	28	
	- On the Efficiency and Optimality of Innovation Cluster Structure	30	
	- Open Innovation for Accessibility in Museum Organizations: The case of Museo		
	Archeologico Nazionale di Napoli	33	
	RESPONSIBILITY OF CORPORATIONS		
	- Shareholder ecology. A Luhmannian framework	39	
	- Non-Profit Institutions: a delicate balance between values, business orientation		
	and accountability. Evidence from Italy.	40	
	- The autopoietics of sustainability reporting	46	
	Awareness and application of corporate code of conduct – status and further		
29.77	development	52	
рр. 38-66	- Responsibility in a food company: the case of Pomi	53	
	- The implementation of the Directive 2014/95/EU in Polish banks and his		
	influence on the environmental responsibility this institutions	57	
	- The Ethical approach in Investment Management Institution Self-Presentation. A		
	Content Analysis on UK and Italian IMIs	60	
	- Nurturing a Corporate Culture of Change as the Key to Organizational		
	Sustainability	65	
SYSTEM DYNAMICS MODELING			
	- System dynamics of interacting populations	68	
	- A template to visualize sustainability data with Resource Mapping: insights from		
	Integrated Reporting practices	75	
	- Understanding the root causes of water scarcity through System Dynamics: the		
	Italian case of the Bracciano Lake	79	
pp. 67- 98	- International strategies and declusterization: A simulation-based dynamic theory		
	of Italian clusters' international sustainability	84	
	- City Logistics Policy Evaluation with System Dynamics	88	
	- Toward a General Theory of Societal Collapse. A Biophysical Examination of		
	Joseph Tainter's Theory of «Diminishing Returns of Complexity»	91	
	- A model-based framework for cybersecurity analysis of cross-border and cross-		
	domain digital platforms.	94	

MARKET-ING SYSTEMS			
	- Branding Successful Start-ups: Insights from the Romanian Coffee Shop Industry	100	
	- Experiment on Information Stickiness in Word-of-Mouth Transmission	102	
	- Value co-creation and co-production in the interaction between citizens and Public		
	Administration. A Systematic Literature Review	104	
	- Using Active FSVM Learning Method to Elicit Individual Tacit Knowledge of		
	Brand Consideration	106	
	- Specifics of marketing activities in scientific organization of the humanitarian		
	profile	109	
pp. 99-118	- Marketing Analysis on the Water Production Sector in Kosovo. Case Study "Dea		
	Water"	112	
	- The role of social network advertising telegram in ensuring readers to purchase		
	goods	113	
	- The Effect of Social Networking Facebook on increasing the Social capital in		
	Society.	114	
	- Marketing Analysis on the Energy Drink Production Sector in Kosovo. Case		
	Study "Frutex – Golden Eagle"	115	
	- The New Dimension of Digital Market Development and Cooperation. The		
	European Union regulation policy new approach and economic perspectives.	117	
	SMALL AND MEDIUM SIZED ENTERPRISES		
	- Firm's reputation, people's support and online networking: findings from		
	methodological triangulation	120	
	- Family Business Model Canvas	123	
	- The integration of sustainable development in business as a driver for SMEs		
	growth	124	
	- Changes in the world of work and skills for the future	126	
	- Intellectual Capital and Firm Performance in SMEs: a Systematic Literature		
	Review	131	
рр. 119-147	- Self-perceived employability in SMEs: Investigating the response of generation Z		
	students	133	
	- Evaluation Model for Microcredits granted to SMEs	135	
	- Sustainable outsourcing in Italian SMEs	137	
	- Towards sustainable digital ecosystems	140	
	- Employability and SMEs. Evidence from Romania	142	
	- The impact of business simulation in changing attitudes towards launching		
	innovation by SME's	144	
	- Individual characteristics and environmental factors as predictors of SMEs		
	employees' self-assessed health	146	
	SUSTAINABLE DEVELOPMENT		
	- Product Life Cycle: Coverage and Invariability	149	
	- Big Data, Nonlinear Entropy Production Accounting and the Balance Sheet of		
	Entropy Efficiency in the emergent Digital Age	151	
	- Co-learning for Climate Protection through Systems Thinking – Use of an		
рр. 148-161	Interactive Computer-Based Simulation Game & Systems Analysis	152	
	- Considering ICT Development in Digital Cutting Edge as Freedom. Perspective		
	on Iranian Northern Disadvantaged area	155	
	- Asymmetric Impact of Operational Risk on Stock Returns in Supply Chain		
	between Upstream and Downstream Firms	156	
	- Co-creating sustainable supply chains: which engagement?	157	

	ADVANCEMENTS IN SYSTEMIC THEORIES			
pp. 162- 186	Managing the growth addiction. A systems therapy approach to capitalism	163		
	- Blurred binary codes for a systemic resilience	164		
	- Oscillate Wildly or Business as Usual? A systems perspective on governance and			
	partnership in the UK shared transport sector.	168		
	Three Extensions to Original Self-Organization Theories	171		
	- Integration of Science, Engineering and Systems	173		
	Unlearning of What? Using Agency Theory Modelling to Define Levels of			
	Unlearning in Organizations	179		
	- Paradox of the perception of the mafia in the populations of the northern Italy in			
	comparison to the reality. A change in the visions and perceptions	184		
	EDUCATIONAL SYSTEMS			
	- Education, Tranformation and Learning: An Enactive Management View	188		
	- Evolutionary Universities: Designing for Parallel Experimentation	191		
	- Contribution of the Knowledge Competitions in Education related to Systems			
рр. 187- 211	Science	196		
••	- From Digital Citizen to Digital Professional	198		
	- Pedagogical mentoring and transformation of teaching practices in universities	200		
	- Education and entrepreneurship. Mapping the territory towards an action plan	205		
	- Rethinking university system: toward entrepreneurial university	210		
	ECONOMIC AND FINANCIAL SYSTEMS			
	- Measuring causes and effects of firms deleveraging process	213		
рр. 212- 225	- Forecasting Housing Prices: Model Instability and Speculative Bubbles Early			
	Detection	216		
	- Innovative Clusters – A Model for Rising International Competitiveness	219		
	The Complexity of the Anomaly Detection in Finance	222		
	- Theoretical Aspects of Using Cost-Benefit Analysis in Implementation of			
	Competition Policy	225		
POSTER SESSION				
	- Tendencies and perspectives of internet-economic development in Georgia	227		
	- The Image of the Region and Marketing Strategies for its Formation	231		
	- Higher Education Marketing Development Prospects in Georgia	235		
	- A contribution to the sustainable management of supply chain using fuzzy logic	238		
	- Possibilities of Improvement of Green Economy Policymaking	246		
	- A Systemic Model of Coevolution in AI	252		
pp. 226-274	- Re-engineering engineering education for the digital age	253		
PP	Small and Medium Enterprise Perspective in the Development of Digital			
	Economy	255		
	- A Conflict – Eternal and Inevitable Process of Society's Development	258		
	- Challenges and Problems of E-Customs in Developing Countries: the Case of	262		
		263		
	High tech networked SMEs: a matter of performance	268		
	Firms insolvency and recession: a spatial analysis of effects on Italian	071		
	manufacturing firms	271		



Open Innovation for Accessibility in Museum Organizations: The case of Museo Archeologico Nazionale di Napoli

Ludovico Solima

Associate Professor of Management of Cultural Organizations, University of Campania Luigi Vanvitelli, Italy.

> Mauro Sciarelli Full Professor of Management, University of Naples Federico II, Italy

Mario Tani Lecturer of Management, University of Naples Federico II, Italy

Pasquale Sasso *Ph.D. in Entrepreneurship and Innovation, University of Campania Luigi Vanvitelli, Italy.*

Fabiana SepePh.D Student in Management, University of Naples Federico II, Italy

ABSTRACT

The role of museums in the society has changed over the years. These organizations were initially created as a way for private collectors to store the various artifacts that they had previously gathered and they were not supposed to be visited by other people even if they, in some cases, came to occupy entire buildings (Simpson, 2007). Today these institutions are expected to be open to everyone and attract all sorts of people (Martins, 2012).

Actually the International Council of Museum (ICOM) defines a museum organization as a "nonprofit, permanent institution in the service of society and its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment for the purposes of education, study and enjoyment".

Solima (1998, 2000) holds that the ICOM definition gives equal dignity to the various activities each museum have to carry on in order to fulfill their social function in the modern society, that is to contribute to the cultural development of the community as a whole creating and communicating a whole body of knowledge. Several authors (Gilmore & Rentschler, 2002; Ballantyne & Uzzel, 2011) have highlighted that these definition has just registered an evolution

in the museum social function. Today these organizations are moving away from the idea of an institution entrusted with the purpose of storing, caring for, and exhibiting heritages to reach a new function built around a broader concept as a non-formal educational institution engaging visitors with findings and experiences.

The direct consequence of giving an educational social function to museum is to acknowledge that they have to become attractive to a broaders set of visitors (Hein, 2006). At the same time Walters (2009) hold that visitors in a museum can fully access the cultural heritage only if the management of the museum is able to become more accessible, i.e. they must be able to overcome some specific barriers limiting these institutions in fully accomplish their social functions.

Several authors consider the accessibility topic as one of the main concern museum management should be able to address in order to fully accomplish their educational function in the society (De Luca, 2007; Walters, 2009; Solima, 2012; Rappolt-Schlichtmann and Daley, 2013). The museum accessibility can be limited by a broad range of factors as the architectonic barriers (Vescovo, 2002); several other authors highlight more subtle accessibility barriers - those related to the visitor knowledge resources (Addis, 2002; Rovidotti, 2004) - that can be more relevant as their impacts cannot be easily solved.

In a more general approach the report from Dodd and Sandell (1998) was able to identify eight different classes of "access" that museum management should address in their path toward getting an accessible organization. They hold that a museum cannot be considered really accessible only when it tackle the physical access to the exhibition but, instead, it will become really accessible only if, leveraging the local area culture and improving its educational level, it is able to create stable relationships with its stakeholders and engage them in creating new, context-oriented, programs. For example, they urge managers to take into account the "sensorial" access as a way to help impaired visitors to get the full museum experience using a diverse set of media, such as hearing induction loops, audio guides, touch tours, information in Braille or large print, in organizing to have the audiovisual materials subtitled and/or using sign languages.

Solima (2012), identify four main dimensions of accessibility: physical, cognitive, economic, and digital accessibility.

The first dimension attains to all the physical barriers that can hinder some of the visitors from experiencing these organizations' services. Some of these barriers are internal to the organization's building (f.e. ramps) both some other are external ones (f.e. parking lots) and asks management to leverage a dense network of relationships in order to overcome them at the urban area level. The cognitive accessibility, ask the managers to design educational processes, to satisfy the various visitors with different set of knowledges engaging them in a learning process without making them feel ignorant as that would risk alienating them (Presta, 2010). It follows that the a museum not able to overcome the cognitive barriers will not be able to fulfill the educational function.

Third form of barriers are the economic ones. Museums should consider that the "ticket" is not the full visitor cost of attending an exhibition but they should take into consideration the opportunity costs, even those linked to the information gathering processes needed to fully understand the piece of arts that will be shown.

Finally the fourth dimension is the digital one needed to follow the evolution of the society and to increase the level of audience engagement (Prahalad & Ramaswamy, 2004).

The many, different, types of accessibility that a museum organization has to tackle at the same time requires them to get access to a broad set of competences that they do not traditionally have but that they can reach, or develop, using their network of relationships with external stakeholders (Sciarelli & Tani, 2013). Leveraging their network of relationships the museum can attain the strategic ambidexterity needed to really innovate their services, using the external knowledge, while keeping the focus on their core competences (March, 1991; O'Reilly & Tushman, 2008). These processes can help them in becoming more effective at successfully innovate their services as, according to Sammara and Biggerio (2008), the effectiveness of an innovative process depends mostly on the heterogeneity of the knowledges and competences it can leverage. According to the resource-based view of the firm (Barney, 1984) the positive effect of enlarging the knowledge base of the organization using the relationship with external actors depends more on the knowledge complementarity rather than their similarity (Harrison et al., 2001). It follows that the organizations should can enhance their innovations performance adopting an open innovation model (Chesbrough, 2003), leveraging inter-firm cooperation (Belussi et al., 2010; Teirlinck and Spithoven, 2008) to create two processes: the "inbound, open innovation", referring to the acquisition of and use of external knowledge internally; and "outbound innovation", referring to the external use of internal knowledge (Huizingh, 2011; Dahlander and Gann, 2010).

In this paper we focus on a specific example of innovative process that the Museo Archeologico Nazionale di Napoli (MANN) has carried on to answer the needs of a particular type of visitors: the children with autism.

Tackling this specific class of visitors can be seen as a daunting process for a museum organization as this visitors can fully enjoy the museum experience only when several accessibility barriers are overcome, both physical, economical and, above all, cognitive ones. (Langa, *et al.* 2013; Mulligan, *et al.*, 2013).

In particular, in order to help these young visitor affected by a neurobehavioral disorder, the museum organization must be able to provide a specific way to interact with the piece of art, they must be able to provide a specialized assistance to overcome the children issues with verbal and non/verbal communication and, above all, to prevent the negative effects linked by their problematic social interaction.

In order to offer this set of services the museum has to leverage a set of knowledges and competences that, often, its employees do not have. So the MANN management has chosen to

create a new relationship with a local association specialized in dealing with impaired children, and leverage it since the first stages of designing the activities in the project: Argo Association, one of the partners in the project of the FOQUS Charity.

Moreover the management has decided to turn this partnership in a real learning process targeted to increase the internal resource endowment of MANN while innovating the museum services in order to accommodate the specific needs of children with autism

In this paper we propose to analyze the first stages of these learning process in order to highlight how they have managed the knowledge flows between the two main partners and how the interaction between the two in the new project, a classic example of knowledge exploration, has helped them to become more effective in exploiting their main competences and, consequently, to adopt an ambidextrous strategy.

Keywords: Museum, Accessibility, Open Innovation, Autism, Learning.

REFERENCES

- Addis, M. (2002). Nuove tecnologie e consumo di prodotti artistici e culturali: verso l'edutainment. Micro & Macro Marketing, 11(Aprile), 33-59.
- Ballantyne, R., & Uzzell, D. (2011). Looking Back and Looking Forward: The Rise of the Visitor- centered Museum. Curator: The Museum Journal, 54(1), 85-92.
- Chesbrough, H. W. (2003). Open Innovation. Harvard Business School Press.

Dahlander, L., & Gann, D. M. (2010). How open is innovation?. Research policy, 39(6), 699-709.

De Luca, M. (2007). Comunicazione ed educazione museale. Milano: Franco Angeli.

- Dodd, J., Sandell, R., & Coles, A. (1998). *Building bridges: Guidance for museums and galleries on developing new audiences*. Museums & Galleries Commission.
- Gilmore, A., & Rentschler, R. (2002). Changes in museum management: A custodial or marketing emphasis?. Journal of management development, 21(10), 745-760.
- Hein, G. E. (2006). Museum education. in McDonald, S. (ed), A companion to museum studies, JOhn Wiley & Sons, 340-352.
- Huizingh, E. K. (2011). Open innovation: State of the art and future perspectives. Technovation, 31(1), 2-9.
- Langa, L. A., Monaco, P., Subramaniam, M., Jaeger, P. T., Shanahan, K., & Ziebarth, B. (2013).
 Improving the Museum Experiences of Children with Autism Spectrum Disorders and Their Families: An Exploratory Examination of Their Motivations and Needs and Using Web- based Resources to Meet Them. Curator: The Museum Journal, 56(3), 323-335.
- March, J. G. (1991). Exploration and exploitation in organizational learning. Organization science, 2(1), 71-87.
- Martins, C. S. N. (2012). Museum audio guides as an accessibility enhancer. Accesibilidad en la nueva era de las comunicaciones Profesionales y universidad: un diálogo imprescindible, 101-115.

- Mulligan, S., Rais, P., Steele-Driscoll, J., & Townsend, S. (2013). Examination of a museum program for children with autism. Journal of Museum Education, 38(3), 308-319.
- O'Reilly, C. A., & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. Research in organizational behavior, 28, 185-206.
- Prahalad, C. K., & Ramaswamy, V. (2004). The future of competition: Co-creating unique value with customers. Harvard Business Press.
- Presta, I. (2010). Non-visitors: who are they, why is it important to know them?. Cadmo, 49-61.
- Rappolt- Schlichtmann, G., & Daley, S. G. (2013). Providing access to engagement in learning: The potential of Universal Design for Learning in museum design. Curator: The Museum Journal, 56(3), 307-321.
- Rovidotti, T. (2004). Multisensorialità come chiave di accesso al museo per persone con limitazione visiva. Tiflologia per l'integrazione, 11(4), 24-27.
- Sammarra, A., & Biggiero, L. (2008). Heterogeneity and specificity of Inter- Firm knowledge flows in innovation networks. Journal of Management Studies, 45(4), 800-829.
- Sciarelli, M., & Tani, M. (2013). Network approach and stakeholder management. *Business* Systems Review, 2(2),175-190.
- Simpson, M. G. (2007). Charting the boundaries: indigenous models and parallel practices in the development of the post-museum. In Knell, S.J., MacLeod, S. and S Watson (eds), *Museum Revolutions: How Museums Change and are Changed*. Routledge, 235-249
- Solima, L. (1998), La gestione imprenditoriale dei musei, Cedam, Padova.
- Solima, L. (2000), Il pubblico dei musei. Indagine sulla comunicazione nei musei statali italiani, Gangemi, Roma.
- Solima, L. (2012). Il museo in ascolto. Nuove strategie di comunicazione per i musei statali (pp. 1-189). Rubbettino Editore.
- Teirlinck, P., Dumont, M., & Spithoven, A. (2010). Corporate decision-making in R&D outsourcing and the impact on internal R&D employment intensity. Industrial and Corporate Change, 19(6), 1741-1768.
- Walters, D. (2009). Approaches in museums towards disability in the United Kingdom and the United States. Museum Management and Curatorship, 24(1), 29-46.