Introduction

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Taking the Pulse of Economic Development – Service Trends

The MARS project – International Monitoring of Activities and Research in Services – has been studying developments in international services research for more than three years.[1] Wide-ranging interviews with experts from Europe, the United States, Australia and Asia have enabled project participants to anticipate future developments in the service economy, thereby determining which areas require additional research. In addition to providing a multifaceted picture of the diverse concepts, potential, research needs and development in the services area, the first series of interviews (2007) revealed that the experts shared a distinct focus on the challenges of the »service innovation«.[2] The second series of interviews, conducted in 2009, only reinforced this trend. The discussion in the international research community is lively, dynamic and – to some extent – controversial, but it does provide the initial framework for sustainable research in the services industry. Subject areas that have interdisciplinary content became apparent. The core aspects of these two developments are presented in the chapters of this volume. This glance into the future is intended to contribute to the formation

[1] The MARS project's mission is to analyze the state of research throughout the world, identify thematic developments in services research, determine what future research is needed, and plan the necessary steps to achieve these goals. The project, which was funded from 2006 to 2011 (subsidy ID 01FD0637), adopted a panel-monitoring approach as its methodology. During the project, participants conducted two series of surveys in which experts using guideline-based intensive interviewing techniques. The experts expressed their opinions about future research areas and topics and developments in the service economy, as well as developments in theory generation, institutionalization and research promotion. The project's team of scientists analyzed the findings and combined them with secondary analytical research information. This material was condensed and published in 2009 German and English in the first volume of *Die Zukunft der Dienstleistungswirtschaft* (The Future of the Service Economy).

[2] Refer to the articles in the volume published by Spath/Ganz (editors, 2009): *Die Zukunft der Dienstleistungswirtschaft*

of plausible conceptions about potential future developments, from which suitable options for action can be derived.

Contours of New Value Creation – Impulses from Services Research

Innovations have been and will continue to be the core drivers of economic development. This is actually not new. The quest for new ideas, their speedy implementation as attractive services, their successful placement in saturated or hungry markets and the constant effort to keep up with the pulse of time in ever-faster innovation cycles have been the guiding themes of economic activity for quite some time. In the midst of this »faster, better, more« environment, current research has developed a new focus, one that suggests the need to pause, so that the view of value creation as a whole can be revised or, at the least, readjusted. The questions are how value creation will take place in the future, by whom and for whom. »If current trends in population growth, resource depletion, climate change, terrorism, organized crime, and disease continue and converge over the next 50 to 100 years, it is easy to imagine an unstable world with catastrophic results. On the other hand, if current trends in self-organization through future Internets, transnational cooperation, materials science, alternative energy, cognitive science, interreligious dialogues, synthetic biology, and nanotechnology continue and converge over the next 50 to 100, years, it is easy to imagine a world that works for all« (2010 State of the Future, German Node of the Millennium Project).

Even without considering the increasing and frequently social-visionary international discussions about the future, more and more often it is pointed out that growth should not be measured in terms of money alone[3]. The claim for sustained prosperity calls for a shift in thinking from quantitative to qualitative growth. Not only should material wealth increase, but the quality of life and satisfaction with life should also grow. The

[3] The gross domestic product is increasingly challenged as the dominant parameter for measuring prosperity. For example, in 2008, French President Nicolas Sarkozy stated that measuring prosperity by the traditional GDP indicator neglects many factors, such as environmental protection and social services. As a result, he established a commission to develop suggestions for new or additional seasonal and future-oriented indicators (cf. *Report by the Commission on the Measurement of Economic Performance and Social Progress*). The EU Commission (2010) also criticized the use of GDP as the dominant criterion for prosperity and pointed out, for example, that only those activities that have a price are included in such calculations. This is to be changed in the future by developing supplementary »prosperity barometers«, such as an environmental index. The German Federal Statistical Office also presented a number of additional measures of prosperity for a national economy in its Indicator Report 2010. (Cf. for many other sources on this topic: Bastaroli, Susanna and Matthias Auer (2010): *Eine Formel für Wohlstand* (A Formula for Prosperity). In: *Die Presse*, printed edition, 19/08/2010;http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf, retrieved on 30/08/2010 German Federal Statistical Office (2010): *Nachhaltige Entwicklung in Deutschland: Indikatorenbericht 2010* (Sustainable Development in Germany: Indicator Report 2010)

goal of value-creation worlds is to simultaneously combine greater value with lower consumption of natural resources.

At this point, new thematic developments in services research can provide future-oriented impulses in the discussion about economic development. Specifically in the area of world of services, which is inherently intangible, answers to questions of »Who or what does create value?« and »What is worth something?« are of particular interest. Some potential answers will also reach beyond services into a discussion of tangible goods production and technology development (cf. e.g. Vargo 2007; 2009; Vargo/Akaka 2010; Vargo et al. 2008; Grönroos 2008; Grönroos/Helle 2010, Grönroos/Ravald i.E. 2011).

Inspired by the volume on »Service –Dominant Logic of Marketing« published by Lusch/Vargo in 2006 and reinforced by the thrust of the »Service Science, Management and Engineering« initiative by IBM for the development of a discrete service science, we observed that the various disciplines studying different aspects of services research in the international domain have a tendency to generate interdisciplinary theories and establish thematic profiles in large fields of research.

Both developments are driven by observations of real enterprises, which is a characteristic of services research. Researchers are interested in contributions to specific problem solutions, and they try to produce scientifically substantiated and socially robust knowledge. Their perspective extends beyond a limited focus on just services to include the larger contexts of value creation and economic development. Services are then understood not so much as a category of market offerings, but as representative of a modern and future-oriented perspective on value creation. In this way, they establish a new logic of business management (cf. Edvardsson et al. 2001:118). The core element of this service perspective as a corporate logic is the view of value creation as an economy of »value-in-use«.

This view implies a return to the fact that the value of a product – regardless of whether it is a tangible good or a service – is ultimately measured by whether it has a function (in the case of passive objects) or serves a purpose (in the case of active doing). »The value of an object is related to what individuals want objects to be and to do for them, i.e. which role they want goods, service activities and relationships to have in their lives«, as Grönroos/Ravald expressed it in their most recent thoughts about services as a corporate logic (Grönroos/Ravald 2011:10).

The value-in-exchange, which is the value imparted to a good or service by a traditional production process that creates added value, is no longer the focus of attention. Rather, attention is drawn to the value-in-use, which a good or a service, or a combination of both, provides when actually used by a customer in his or her own activities in a private or business context. »Goods and services may have exchange value in the short term, but in the long run no or low value-in-use means no or low value-in-exchange. Hence, value-in-use is the value concept to build upon, both theoretically and managerially« (Grönroos 2008:303f).

The current impulses from the service perspective are represented in the following framework of new value creation:

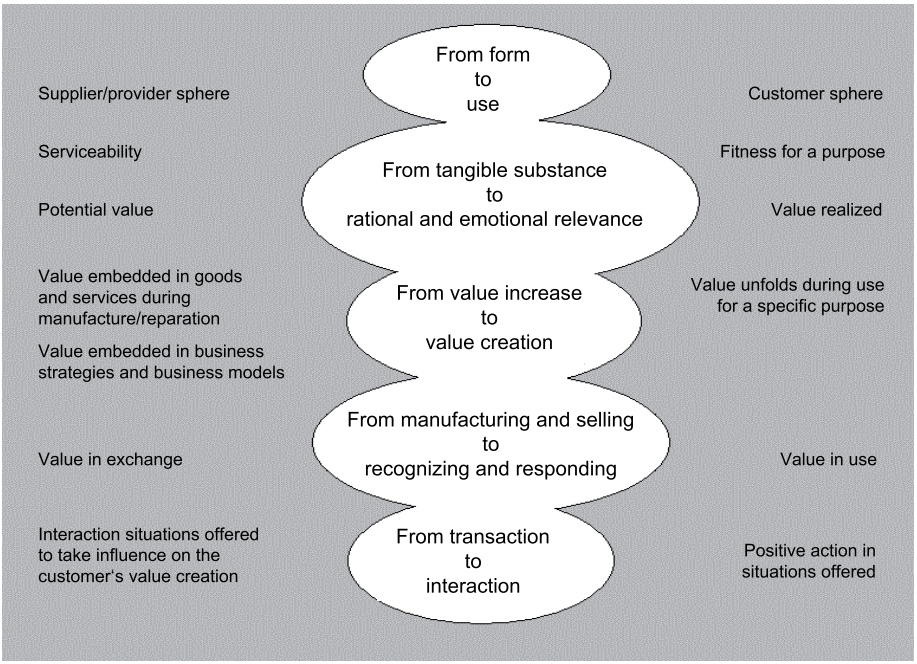

Fig. 1: Trends in services research for contours of new value creation

This flowchart of new value creation draws our attention to the interaction between suppliers/providers and customers. In addition to the serviceability of goods and services, their inherent benefit and fitness for a specific purpose is clearly illustrated. First, in the supplier‘s sphere, the potential value of a tangible substance that is created during the manufacturing processes is considered, along with the ambient design of services. Further, the rational and emotional relevance of the value of an offering is realized in the customer’s sphere. Within the emerging conceptions of new value creation, the value of economic items is created by more than the traditional addition of value alone, that is, an increase in value during production processes. Rather, it includes the value embedded in goods and services or in business strategies and business models. This does not reveal its value-addition effect until customers actually use the goods and services for a specific purpose. The relevance of the value-in-exchange is complemented by the relevance of the value-in-use. In addition to designing manufacturing and sales processes, the ability to recognize and respond to customer needs becomes a factor in determining successful entrepreneurial action in the new worlds of value creation. Business relationships are no longer limited to the preparation and realization of transactions; they have become more interactive in nature. In the supplier’s/provider’s sphere, transactional business relationships also need to become more interactive, so that they transcend the mere exchange of services and can influence the customer’s value creation process. In the customer’s sphere, one’s own behavior in interactive situations should be shaped so that the value of a good or service fulfills one’s own needs to the maximum degree possible.

We believe that this concept of a new perspective on value creation that is driven by services research is a promising and future-oriented step on the path towards sustained innovative power. Its essential quality lies in the fact that it is a comprehensive and integrative approach that addresses core elements of economic development and looks for new solutions. The perspective on the »value-in-use« of goods and services is especially suitable for bridging the gap between tangible goods production and service provision. It can open up new paths for integrated innovation strategies which draw their economic power from the combined view of the potentials of goods, technology and services and rely on the co-creation process of suppliers/providers and customers in the creation of value.

Service Trends – Impulses for a Research Agenda

Clearly, services research is turning towards further development of theoretical foundation concepts, but, in addition, the expert statements from the MARS project have profiled specific issues that reflect future developments in the service economy. As can already be deduced from the survey in 2007, service innovation is virtually the starting point for further differentiation of research areas and subjects. Special attention should be drawn to the assessment clearly stated by the MARS experts that future research and development activities should aim at advancing an integrated view of goods and service innovation. It is assumed that future economic success is no longer determined by growth strategies focusing only on »more and more«. Rather, the demand is for value creation strategies which focus on »better and better«. Output from technological development, from production and from the management of sociotechnological service systems is linked in new kinds of value creation constellations.

The traditional »either – or«, with its clear-cut delimitation, specialization, severance, separation and disintegration of goods/services and their manufacture or preparation, is replaced by the integrative »both – and« (cf. the recourse of Minx to Kandinsky in Minx 2009). The focus changes towards recognition of interrelationships that combine the mode of an offering with the unfolding of its benefit in actual use as a future-oriented process. The »both – and« approach relies on hybridity, i.e., the joining different elements, each of which has its distinct function, but which can only unfold a new benefit with added value by their interaction (cf. Bienzeisler/ Ganz 2010). At the same time, the concept of »hybridity« captures new constellations of distributed action, as Rammert stated. »Action is distributed to different instances such as people, machines or programs which have different degrees of autonomy of action and may be involved in the creation of the act in differently balanced relations« (Rammert 2007 I: 17). In this context, services research can make valuable contributions to the concept of interactivity as an important element of new value creation. In a narrower sense, interactivity is then

understood as the interaction of two or more value creation parties who are in contact either directly or through technology and whose action influences the processes and actions of the other parties in their own performance processes.

Innovations have been and will continue to be the core drivers for economic development. Hybridity and interactivity as motivators from services research and the service economy become drivers for innovation in an economy which increasingly tunes its value creation approach to the value-in-use of offerings that are collaboratively realized. The merging of goods- and service-oriented development paths, along with new role allocations between suppliers/providers and customers, establishes new momentum for future economic development. In specifically examining the background of an integrative approach in the corporate strategy, it is important not to lose sight of the limitations and differences among the various areas participating in the design and implementation of solutions for business practice. Successful activities in a world of value creation with multiple perspectives, the decisions on the priority (i.e., for the dominant part of one's own service component) must be based on established and specific business operations. Choosing the appropriate priority perspective and making the associated decisions on the suitable instruments and processes is of decisive importance for successful management (cf. Stauss 2007: also Glushko 2009).

With this background, four topics can be extrapolated from the views of the MARS experts. This is in addition to the more general topic of new value addition that was already discussed and can be expected to play an important role in future services research and the service economy. Moreover, it will establish momentum for the future of economic development.

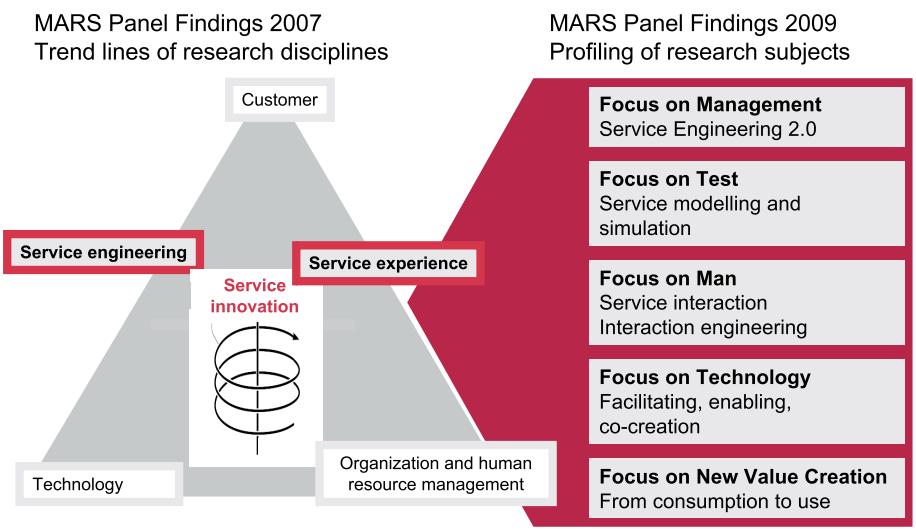

Fig. 2: Trends in agenda of services research

Focus on Management

In the future, the successful management of services will mean to conceive services not only as an economic item, but as a factor in the value creation processes of both suppliers/providers and customers. Management competency now requires consideration of both the strategic design and the operative delivery of services. Managers must answer the question: »Which abilities of an organization can be combined with which goods and services to offer definite benefits?« The guiding theme of »Service Engineering 2.0« can be used to further develop a management concept that focuses on structures, processes, instruments and competencies for systematic service innovation and productive service delivery. According to the MARS experts, the leading subjects of future research are collaboration in innovative value-creation constellations, customer integration in the development of new services and delivery of existing services, as well as methods and instruments for the management of soft aspects of interaction – e.g. communicative and emotional ones – in service-type value creation processes.

Focus on Test

Management of services needs to be successful as both an economic item and a perspective of value creation. To achieve this, it must become possible to advance the creation of robust models for planning and for simulation, as well as for verification of the service-type components of value creation. According to the MARS experts, services research and, therefore, service practice, currently lack any kind of model building. Systemic models are needed to represent the nature of the service explanatory models to reflect core reciprocal effects in service systems and mathematical models for planning and verification. Trend-setting contributions to model building need to be made under the guiding theme of »service modelling and simulation«, which will make simulations possible. In this regard, a special challenge lies in answering the question of how human behaviour, communication and emotions can be reflected appropriately in the service interaction and simulated in a useful way.

Focus on Man

A core subject of services research will continue to be people - their working capacity, their consumer behaviour, their competencies, skills and abilities, their needs and their emotions. Our experts agreed that current and future research and development activities must include studies of the management of performance capacity, including both the willingness of people to perform and the perception of performance of people in their roles as suppliers/providers (employees) and as co-creating customers. Under the guiding theme of »service interaction – interaction engineering«, methods should be developed for the professional design of both direct and technological interaction among employees, collaboration partners outside of the enterprise and customers. They are all actors in the socio-technological networks of goods/service delivery. Relevant fields of study are highly complex and knowledge-intensive. They may be close-to-business or business-to-business services, person-related or business-to-consumer services and service work at a lower level of qualification, which one of the MARS panelists referred to as »less noble services«.

Focus on Technology

When trying to find new possibilities for value-creating goods/service development, one's attention turns more and more towards recognizing, adapting and utilizing technological innovations from the service perspective. Combining the potential of technological and service innovation at an early stage, including considerations about the use of the potential of mutual reinforcement of both, is an large area of study. In the opinion of the MARS experts, this need for research and development will go beyond studying how information and communication technologies interact with service innovations, although this interaction is still very important. Under the guiding theme of »facilitating and enabling, co-creation«, more attention will have to be given to how natural-science research disciplines, such as bionics, genomics or the neurosciences, can influence service innovations and, inversely, which needs for services or supplies can accelerate new developments through innovations at the points where these various fields of research interface. Among the leading future topics of study are benefit-focused innovation paths, orientation towards aspects of technology adaptation and the commitment to the development of an integrative innovation theory which considers aspects of both technological innovation and service innovation.

A Glance at Potentiality Spaces

The present volume summarizes the analyses of the core statements from the international MARS Expert Panel Survey 2009 in each of the five subject areas presented, places them into the context of core specialty-related developments and highlights predominant trends. The articles from the rich reservoir of expert opinions are supplemented with a guest article on each subject area.

Bo Edvardsson, Anders Gustafsson and Lars Witell illustrate the relevance of customer integration in service development. They show the new role of customers in the development of new services. An understanding of the everyday issues of customers and continuous collection and processing of this information within the structures and processes of a business organization become critical success factors. Hence, the task of research and management is to develop and provide suitable instruments and apply them like tools from a well-equipped tool box to generate and use customer knowledge.

Martin Böttcher's article on a potential concept of service system modelling provides an insight into the challenges and potentials of the research and development subject of modelling and simulation for service testing, a subject that has not yet received much attention in the research. It shows the importance of modelling as a precise description for the development of new services in order to achieve the progress desirable for both efficiency and effectiveness in a planned and structured development process. A metamodel for service modelling is presented, which is in turn composed of a component model, a resource model, a product model and a process model. The component model

permits a precise specification of functional and nonfunctional properties; the resource model provides the specifications for classifying the individual properties of required or resulting resources, the product model makes it possible to map the individual customer's configuration of overall offers and the process model eventually suggests a declarative dependency description of service components. The meta-model presented provides a possible entry into clearly structured and holistic service modelling. For widespread application and utilization, software-based support tools will need to be developed and made available.

Margret Borchert discusses the role of human resource management in service processes in general and in service innovation in particular. The article focuses on the concept of »integrated human resource management«. It highlights the necessity of attaching not only strategic importance to the management of human assets for successful service innovation, but also to facilitating the integratation of human resource management in enterprises with other relevant fields of decision management. Based on an analysis of the state of HRM research for service innovation, the characteristics, requirements and considerations for implementing an integrated human resource management for service innovation are outlined, and priorities for research are identified.

Anette Weisbecker illustrates the multiple touch points between technologies and services in her article. Cloud-Computing and the Internet serve as examples of how innovation benefits can be achieved by combining the development potential in both areas at an early stage. The relevance of the technological innovative ability is complemented by the significance of customer-focused and customer-integrating innovation. Along with this, new business models that are suitable for translating technologically feasible products into marketable useful products become an important success factor in the competitive development of new markets.

Stephen L. Vargo, Robert F. Lusch, Chris Horbel and Heiko Wieland round off the set of guest articles with a chapter that offers an entirely new perspective on the future of value creation in terms of creating tradable value-in-use. A insightful analysis of the predominant economic paradigm of a goods-dominant logic ultimately leads to the dissolution of a separate perception of goods and services. With the service-dominant logic, a concept is presented which presents the value-in-use of an offering, which unfolds in the relevant environment of actual use by a customer,as a core element of economic exchange processes. The authors believe that the great benefit of this new paradigmatic perspective on value creation lies in the fact that it can open one's eyes to substantially larger innovations for the creation of entirely new markets.

We do not know what the future will bring. Any prediction about future conditions is – more or less – uncertain, regardless of whether it takes the form of a story, an image or mathematical calculations. However, we can collect and interpret knowledge, identify areas of potential development, and consider options for action. According to Sir Karl R. Popper's maxim »It is better to be vaguely right than to be precisely wrong«, the views of the near future of economic development gathered in this volume cannot offer certainty. Nevertheless, they can make us more confident in understanding more about our options for decision and action.

References

Ariely, Dan (2009): The End of Rational Economics. In: Harvard Business Review, 01/07/2009.

Bammé, Arno (1998): Technologische Zivilisation. In: Haberl, Helmut; Kotzmann, Ernst and Helga Weisz (ed.): Technologische Zivilisation und Kolonisierung von Natur. Wien: Springer, 1998.

BDI – Bundesverband der Deutschen Industrie e.V. (2008): Systemkopf Deutschland Plus: Die Zukunft der Wertschöpfung am Standort Deutschland. Management Summary. Druckcenter Meckenheim, 01.2008.

Beinhocker, Eric D. (2006): Die Entstehung des Wohlstandes: Wie Evolution die Wirtschaft antreibt. Landsberg am Lech: mi-Fachverlag, Redline GmbH, 2007.

Bienzeisler, Bernd and Walter Ganz (2010): Management hybrider Wertschöpfung: Einführung in die Problemstellung. In: Bienzeisler, Bernd and Walter Ganz (ed.): Management hybrider Wertschöpfung. Stuttgart: Fraunhofer IAO, 2010.

Bitner, Mary Jo and Stephen W. Brown (2007): Forthcoming Business Horizons 50th Anniversary Issue. The Service Imperative. 04/06/2007.

Bryson, Anke (2009): Hybride Wertschöpfung – Produkte verändern ihren Charakter. In: Manufacturing Now, 24-27, 01/11/2009.

Bundesministerium für Bildung und Forschung (2009): Zukunft gestalten mit Dienstleistungen. Aktionsplan DL 2020. Rheinbach: Druckpartner Moser, Druck + Verlag GmbH, 2009.

Center for Services Leadership (2010): Research Priorities for the Science of Service. CSL Business Report 2010.

Chase, Richard B. and Sriram Dasu (2007): Psychology of the Experience: The Missing Link in Service Science. Cambridge Service Science, Management and Engineering Symposium. Cambridge: Møller Centre, Churchill College, 07.2007.

Cuhls, Kerstin; Ganz, Walter and Philine Warnke (2009): Der BMBF-Foresight-Prozess. Bericht: Zukunftsfelder neuen Zuschnitts. Karlsruhe/Stuttgart, Fraunhofer ISI/Fraunhofer IAO, 2009.

Djellal, Faridah and Faiz Gallouj (2008): Innovation in services and entrepreneurship: beyond industrialist and technologist concepts of sustainable development. XVIII RESER International Conference:

Edvardsson, Bo (2007): Understanding the nature of services – a prerequisite for successful innovations. Presentation in Helsinki, 13/11/2007 in the CTF Service Research Center, Karlstad University, Sweden.

Ernst, Gerhard (2010): Interaktionsarbeit als zentrales Element der Dienstleistungsinnovation. Publication on DL2100.de, 23/02/2010.

Fueglistaller, Urs (2002): Dienstleistungskompetenz: Strategische Differenzierung durch konsequente Kundenorientierung. Zürich: Versus Verlag AG, 2008.

Gaddis, Paul O. (2000): Book Review: Adaptive Enterprise – Creating and Leading Sense-and-Respond Organizations. By Stephan H. Haeckel. In: Long Range Planning, edition 33(2), 2000.

Ganz, Walter and Bernd Bienzeisler (2010): Management hybrider Wertschöpfung: Potenziale , Perspektiven und praxisorientierte Beispiele. Stuttgart: Fraunhofer Verlag, 2010.

Glushko, Robert J. (2010): Seven Contexts for Service System Design. In: Maglio, Paul P.; Kieliszewski, Cheryl A. and James C. Spohrer (ed.): Handbook of Service Science. New York: Springer, 2010.

Grönroos, Christian (2008): Service logic revisited: who creates value? And who co-creates? In: European Business Review, edition 20(4), 298-314, 2008.

Grönroos, Christian (2010): Reciprocal Value Creation Trough Service. From an Inside-Out To an Outside-In Approach. Karlstad University: Frontiers in Service Conference, 10-13/06/2010.

Grönroos, Christian and Annika Ravald (2011): Service as Business Logic: Implications for Value Creation and Marketing. I.E.: Journal of Service Management edition 22(1), 2011.

Grönroos, Christian and Pekka Helle (2010): Adopting a Service Logic in Manufacturing: Conceptual Foundation and Metrics for Mutual Value Creation. In: Journal of Service Management, edition 21(5), 2010.

Hackel, Stephan H. (2004): Peripheral Vision: Sensing and Acting on Weak Signals: Making Meaning out of Apparent Noise: The Need for a New Managerial Framework. In: Long Range Planning, edition 37(2), 181-189, 04.2004.

Hareli, Shlomo; Rafaeli, Anat and Brian Parkinson (2008): Emotions as social entities: interpersonal functions and effects of emotion in organizations. In: Ashkanasy, N.M. and C. L. Cooper (ed.): Research Companion to Emotion in Organizations. Edward Elgar Publishing, 2008.

Homburg, Christian (2009): Management von Dienstleistungen: Stand, Perspektiven und Implikationen für die betriebswirtschaftliche Forschung. Erlangen-Nürnberg: Speech at the 71st annual convention at the Friedrich Alexander University, 04/06/2009.

Jackson, Tim (2009): Prosperity without Growth: Economics for a finite planet. London: Earthscan Publications Ltd., 30/11/2009.

Kinkel, Steffen; et al. (2008): Arbeiten in der Zukunft. Strukturen und Trends der Industriearbeit. Berlin: Paperback Edition Sigma, 09.2008.

Kippenberger, t: (1997): Do Value Constellations Supersede Value Chains? In: The Antidote, edition 2(5), 29-32, 1997.

Leberecht, Tim (2009): A New Era of Meaning. An introduction. In: design mind, 18/09/2009.

Lünendonk, Thomas and Jörg Hossenfelder (2009): Dienstleistungen Vision 2020: Herkunft und Zukunft wichtiger Service-Branchen in Deutschland. Leipzig: Messedruck Leipzig GmbH, 2009.

Minx, Eckard (2009): Zukunft: Was es zu bedenken gilt. In: vdw magazin, 02.2009.

Minx, Eckard and Harald Preissler (2005): Zukunft denken und gestalten: Vom Weg abkommen oder auf der Strecke bleiben. In: Internationale Politik, 06.2005.

Norman, R. and R. Ramírez (1993): From Value Chain to Value Constellation: Designing Interactive Strategy. In: Harvard Business Review, edition 71(4), 65-77, 1993.

Opaschowski, Horst W. (2009): Was ist Wohlstand im 21. Jahrhundert? Berlin : Speech at the conference of the *Denkwerk Zukunft*, 30/11/2009.

Ostrom, Amy L. et al. (2010): Moving Forward and Making a Difference: Research Priorities for the Science of Service. In: Journal of Service Research, edition 20(10), 1-33, 2010.

Rammert, Werner (2007): Die Techniken der Gesellschaft: in Aktion, in Interaktivität und in hybriden Konstellationen. Working Paper 04.2007. Order no.: TUTS-WP-4-2007.

Rammert, Werner (2007): Technologie trifft Theorie: Forschungsperspektiven eine Soziologie der Technik. Working Paper 01.2007. Order no.: TUTS-WP1-2007.

Satzger, Gerhard; Ganz, Walter and Anja Kremer (2008): Service Science: Hype or Cornerstone for Future Success? – A Five-Step Roadmap to Clarity. Stuttgart: RESER 2008.

Stauss Bernd (2005): A Pyrrhic victory: The implications of an unlimited broadening of the concept of services. In: Managing Service Quality, edition 15(3), 219-229, 2005.

Stiglitz, Joseph E.; Sen, Amartya and Jean-Paul Fitoussi (2009): Report by the commission on the measurement of economic performance and social progress. CMEPSP, 14/09/2009.

Vargo, Stephen L. and Melissa Archpru Akaka (2009): Service-Dominant Logic as a Foundation for Service Science: Clarifications. In: Service Science, edition 1(1), 32-41, 2009.

Vargo, Stephen L.; Maglio, Paul P. and Melissa Archpru Akaka (2008): On value and value co-creation: A service systems and service logic perspective. In: European Management Journal, edition 26(3), 145-152, 2008.

Viitamo, Esa (2007): Productivity of Business Services – Towards A New Taxonomy. In: Tutkimusraportti-Research Report 188, 2007.

Viitamo, Esa (2008): On Service Productivity – Strategic Management Perspectives. In: Tutkimusraportti-Research Report 205, 2008.