This Introduction incorporates some of the arguments put forward earlier in an article by Chesbrough and Spohrer (H. Chesbrough and J. Spohrer, “A Research Manifesto for Services Science”, Communications of the ACM, 49/7 (July 2006): 35-40). Support for this research came from the Center for Open Innovation at UC Berkeley and from Tekes in Finland.

Up until a century ago, most people in the U.S. and around the world worked on farms. When times were good, there was plenty of food. When times were hard, millions of people had to go without, resulting in periodic malnutrition. Prolonged difficult conditions led to mass starvation, such as the Irish potato famine.

Today, agricultural employment ranges between 0 and 5% in the advanced economies of the world. Despite these very low percentages, there is plenty of food: mass starvation today is a distant historical event in advanced economies.

The difference between those outcomes lies in innovations that generated incredible productivity increases in agriculture and, more recently, in manufacturing. The productivity of agriculture increased due to the shift of people out of agriculture into knowledge-intensive, specialized industries that support agricultural productivity, such as farm equipment manufacturing, fertilizers and pesticide manufacturing, seeds with superior genetic characteristics, land management practices, better price signaling markets for commodities, transportation systems, fuel supply systems, government and institutional support systems, and more. In sum, vast new bodies of knowledge embedded in new institutions, industries, businesses, professions, and technologies have emerged to support the productivity of a much smaller population who call themselves “farmers.” A similar transformation occurred in the manufacturing sector, which fueled tremendous increases in productivity.
Today we live in a “post manufacturing” world. A vast array of services today make up nearly 80% of US economic activity¹ and a similar magnitude of economic activity in other advanced economies.² Can we continue these productivity advances in a largely services-based economy? There are signs of hope, but also reasons to be worried.

A hopeful sign is in how we treat patients in a hospital, compared to how they were treated in the past. Up until 1910, a patient had about a 50/50 chance of improving his or her medical condition by visiting a hospital to treat a disease. Today, even with the concerns about health insurance and medical errors, patients’ health outcomes are enormously improved by seeking health care, instead of avoiding it. Patients enjoy much more accurate diagnoses. They are highly unlikely to contract new diseases in the hospital. They also have much more knowledge about the behaviors that they can adopt to improve their medical health status. A less hopeful sign is that the health care system now amounts to 1/7 of the GDP in the U.S., and health care costs are rising well above inflation in most of the advanced industrial economies. It remains to be seen whether health care innovation will be sustained under these economic pressures.

This “Innovation in Services” Special Section

The importance of services innovation prompts this special section of the California Management Review. Innovation in services is the next frontier for both managers and for policymakers as they utilize innovation to advance firms and economic growth. Services are today responsible for the main part of employment in the Western countries, and their portion of these economies is increasing. Our ability to advance our standard of living further depends crucially on innovating in the services sector of the economy. For many firms, services are a growing portion of their business and represent a challenge to traditional product-based business models. The role of the customer, the interaction between customer and supplier, and the design of the supply chain also require different perspectives in order to manage them successfully.

One example of a services innovation is the FedEx online package tracking system. Prior to this service, customers shipping parcels via FedEx often needed to verify that the packages had reached their arrival destination. When those parcels did not arrive, customers understandably were concerned and needed to know where the parcel was, and when it would in fact be delivered. By utilizing its online tracking system, FedEx was able to respond to customers’ needs very rapidly, without any human intervention on FedEx’s part. The customers, who entered in all of the information, did not mind the time that this took, because they got the latest, accurate, and authoritative information from FedEx.

Introduction

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The result is innovation that has delivered real bottom-line benefits. FedEx saves money on having to update and notify customers when packages will arrive, while customers are much more satisfied with highly accurate information whenever they need it.

As the FedEx example demonstrates, information plays a central role in the services sector, as it is both a primary input and a primary output of economic activity. Relatedly, information technology can play a vital role in accelerating or inhibiting innovation in services. Yet academia has not yet fully embraced the need to develop a robust research agenda for understanding innovation in services. Whether in academe, industry, or government, understanding the service economy requires a new mindset.

For these reasons, the Institute of Management, Organization and Innovation and its Center for Open Innovation at UC Berkeley’s Haas School of Business, and the Finnish Funding Agency for Technology and Innovation (Tekes), with additional support from the California Management Review, held a two-day conference on Services Innovation on April 27 and 28 of 2007 at the Haas School of Business. The aim was to discuss a rich, academically rigorous agenda to advance the knowledge of innovation and management in services.

The Articles in the Special Section

We have selected a few of the 16 papers presented at that conference to be included in this special section of the California Management Review. Each paper examines a different aspect of innovation in a services-led economy.

The article by Apte, Karmarkar, and Nath lays out the transition of the U.S. economy to a services led economy. It does so elegantly, exploring the impact of this shift over time and the resulting impact on the way that we work inside organizations in the economy. They introduce a “double dichotomy,” which incorporates a second shift as well: the shift from material-based goods to information-based goods.

As the article discusses at some length, our very measurement systems for the services economy (and the associated information-based economy) are rather obsolete in capturing the full extent of this double dichotomy. By weaving together a variety of data sources, the authors are able to decompose the U.S. economy into 4 sectors, and they provide a rough approximation of their relative size and growth.

One nice aspect of this decomposition is that management strategies for companies appear to vary with which sector they find themselves. The Information Services sector’s strategies differ from those of the Material Product sector and, indeed, even from those in the Information Product sector. The ability to industrialize knowledge, to gain scale, to pursue global strategies all vary depending on the sector for the firm’s business.

The article by Möller, Rajala, and Westerlund explores the challenges of services innovation within firms at a more detailed level. Echoing Ted Levitt’s
famous article on “Marketing Myopia,” they explore the idea that many companies that provide services fail to understand the real value they provide. Services can be thought of as “value co-creation” between customers and suppliers. Services providers who fail to engage the customer in the co-creation process may be myopic in their approach to their business.

A related insight in the article is that companies have different value creation strategies, which influence the types of value co-creation strategies in which they will engage. More distant, transactionally based strategies require different processes than do relationally based strategies. The former scale better with volume, while the latter create more customized solutions.

Finally, the article notes that understanding customers’ (and suppliers’) value creation strategies is not enough. To effectively engage with customers (suppliers), it is necessary to understand the processes and competences employed by the customer to achieve those strategies. For an effective co-creation strategy must interact at the process and competence level to gain traction and truly create value between the two parties.

Michel, Brown, and Gallan heartily second the value co-creation logic put forward by Möller and his colleagues. They contend in their article that product-service distinctions must give way to a new way of thinking, a new service logic. Value, they insist, is determined by the customer, period—as opposed to value in production, value in exchange, or some similar economic notion of value. A customer perceives value through feelings of satisfaction with a service (or, for that matter, from a product), not from some attribute of the product or service.

This implies the need for providers to become far more customer-focused in their pursuit of innovation, a notion that Möller et al. would quickly support. Once this understanding is achieved, it then becomes necessary to integrate value more effectively to address customers’ needs, reconfigure sets of value-creating activities so that they increase satisfaction, and develop new innovative value propositions that delight customers (because they satisfy needs that the customers themselves did not yet fully perceive).

The article also notes that customers play multiple roles in value co-creation activities, including the roles of user, buyer, and payer. There are subtle but important differences in these roles, and satisfaction with an offering will vary depending on the role played by the customer. Innovations, in turn, will also vary with the role played by the customer. “Outside in” innovation initiatives typically involve customers’ changing or adding roles to those they played previously (the FedEx example above shows this as well). “Inside out” innovation initiatives, by contrast, start by changing the firm’s value creation approach, which may then involve changes in the customers’ roles.

If this all sounds a bit abstract, even after the examples marshaled by each article to explain services innovation, then the Bitner, Ostrom, and Morgan article on services blueprinting provides a welcome grounding in reality. The article offers a very practical tool to help companies design, develop, and implement services that truly satisfy the needs of their customers. This is more subtle than it might seem. Designing offerings to meet customer needs seems like
Marketing 101, but services consist of intangible elements that are difficult to describe to customers, and customers’ expectations of services are similarly hard to articulate to suppliers of those services as well. This aspect of intangibility is a deep problem in services innovation. The corollary problem is that this intangibility requires close interaction between the supplier of the service and the customer of that service in order to innovate further.

The Bitner et al. article provides a very useful contribution by developing a tool, and an associated process, for addressing these challenging problems. By developing a “blueprint,” the many intangible aspects of services (particularly the process steps necessary to deliver the service) are made more visible and tangible. By adopting the customer’s perspective as the way to frame the construction of the blueprint, the article avoids a supplier-centric view that might fail to address customers’ needs. Indeed, the blueprint can be used by the supplier to do a better job of fulfilling customers’ needs.

The many examples of how the service blueprinting tool has been applied show that this tool has the potential to be widely applicable. It is difficult to think of a services business that would not benefit from utilizing this approach first to describe the service it currently provides, then concretely assess the impact of that service on customers, and finally develop ways to better serve those customers.

Conclusion

The four articles in this special section span a wide variety of perspectives, from analyses of national economic data in the Apte et al. article to the individual firms’ process blueprints found in the Bitner et al. article.

Notwithstanding the many differences among the articles, some clear themes emerge. The role of information in services businesses is of paramount importance in all of the articles. The ability to capture, codify, and then re-use information is at the core of productivity improvement in services activities. Advances in information technology are thus a vitally important enabling technology throughout the services sector.

The close, intertwined interactions between customers and suppliers in services figures prominently across the articles as well. It is clear that one cannot simply write complete contracts to address these problems. Instead, customers and suppliers must share information, adjust their roles, and co-evolve as they strive to jointly create value.

Lurking within this dance between the parties are the respective business models of each party. Strategies of value creation (and, as part of the business model, value capture) determine the types of value co-creation that can be sustained between customers and suppliers. It is hard enough to innovate one’s own business model. However, this is not enough. One must further align one’s business model with that of one’s co-creator in order to achieve the value co-creation necessary to realize services innovation.
Hopefully, the conference and these articles will help define a new research agenda to respond to the innovation needs of services-led economies. As the articles here suggest, this is not going to be a simple task. New approaches, new concepts, new roles, and new strategies will all be necessary to make real headway against the problem of how to deliver productivity advances in today’s advanced economies. Yet there is no obvious alternative option. We hope others will take up these issues in their own research and in their own companies. We will eagerly await the findings and experiences.

Notes
