

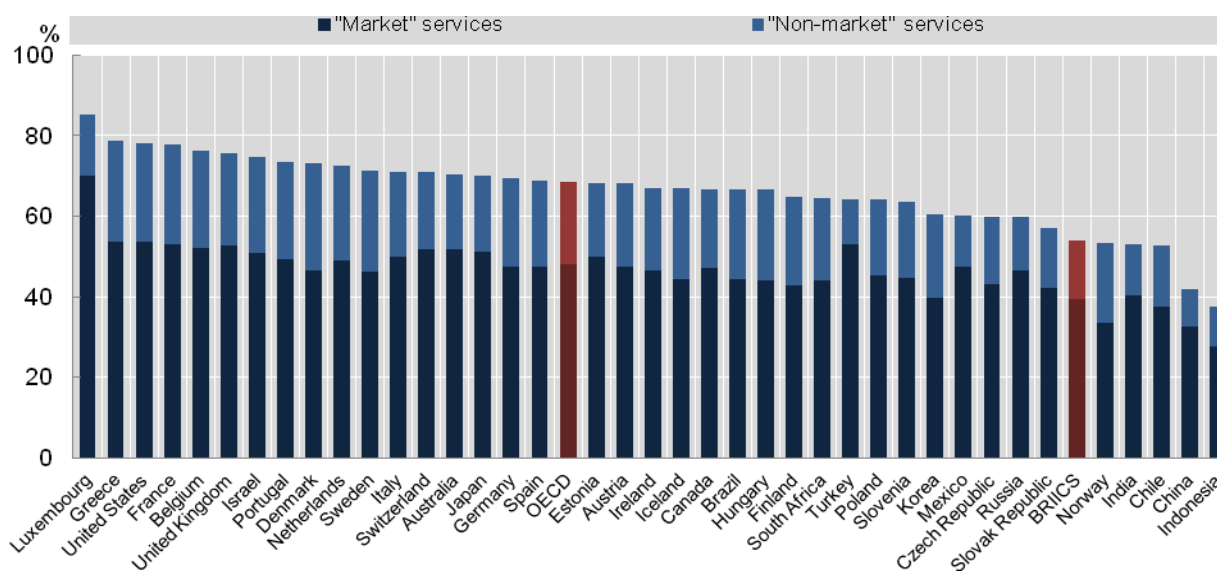
## R&D and innovation in services

Research has established the growing role of services in modern economies, accounting in some cases for more than 70 percent of GDP, while empirical studies have also shown the development of services as a major source of productivity growth across countries. Although many service sectors are traditionally viewed as less innovative, more recent analysis suggests both R&D and other innovation activities play a key role in services, and that *service innovation* occurs throughout the economy. Intensified global competition and the economic crisis have amplified the importance of service-based R&D and innovation activities as a new source of growth for firms, industries and national economies. The importance of service innovation is well-established but many firms are seeking new ways to develop the type of service innovation necessary for success in global value chains. Likewise, there is a need for a better and more thorough understanding of the quantitative evidence on recent trends regarding R&D and innovation in services as well as service innovation, in order to develop appropriate policy recommendations.

### What are services?

According to the United Nations System of National Accounts (SNA), services are “the result of a production activity that changes the conditions of the consuming units, or facilitates the exchange of products or financial assets.” Services can result in (a) changes in the condition of the consumer’s goods, in which the producer works directly on goods owned by the consumer by transporting, cleaning, repairing or transforming them; (b) changes in the physical condition of persons, in which the producer transports the persons, provides them with accommodation, provides them with medical or surgical treatments, improves their appearance, etc.; and (c) changes in the mental condition of persons: the producer provides education, information, advice, entertainment or similar services in a face to face manner.

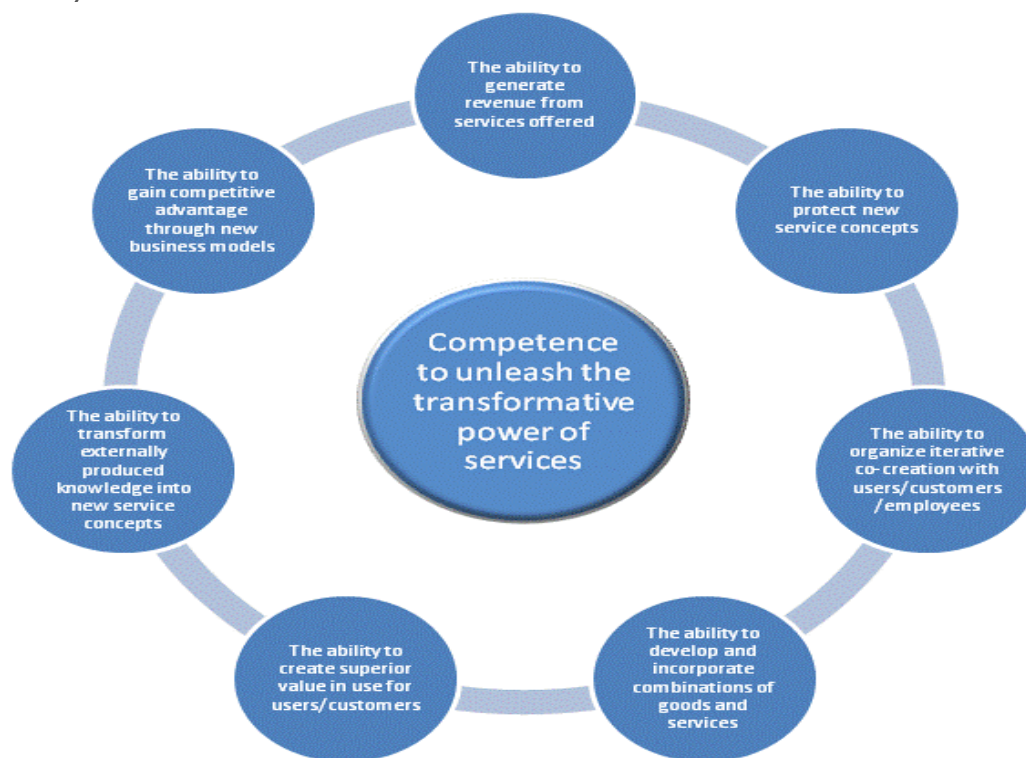
GDP, services as percentage of total industry, 2008



## A conceptual framework to explore service innovation

The figure below presents a conceptual framework to account for and enlarge the view of the competences necessary in the service sector as well as in the transition for goods to services in the manufacturing sector. A new framework is essential as ill defined creates mis-measurement of service-based innovation.

Conceptual framework identifying service innovation competence, Source: Martinsson (2011, in review).



# What are the goals of the OECD project on service innovation?

## Provide structured evidence of the economic value of service-based R&D and innovation across sectors

This project will provide quantitative evidence on recent service innovation trends and improve the measurements of service-based activity across sectors, i.e. the service sector as well as the “servitisation” of industry. The results will be used to better understand the role of public policies in promoting such activities. The project will include two strands of work which will complement each other by providing: (1) quantitative evidence on the extent and forms of service-based R&D and innovation activities and their impact on performance; and (2) analysis of the role and impacts of service innovation on R&D and innovation policies.

The project will mainly focus on market services in TIP countries and will combine both firm-level and industry-level analysis. In addition to identifying good practices across sectors, it aims to highlight service-based activities in key sectors such as knowledge-intensive services covering financial services, ICT services and parts of the health sector in addition to the manufacturing sector.

## Provide quantitative evidence on recent service innovation trends and the impact on performance and productivity

The project will examine the nature and importance of R&D and innovation activities across different types of services using two approaches. On one hand it will review existing data on the service sector as a whole as well as at the industry level to the extent these are available. Secondly it will explore the availability of data on service innovation wherever it is happening, as the boundaries between services and manufacturing continue to blur. The project aim at analyzing the impact of these trends on performance and productivity and provide recommendations for improving the definitions and measurement of service-based R&D and innovation activities across different sectors.

## Improve the understanding of current and emerging challenges for policy

There is still limited understanding the role of services and the policies needed to foster their development. Research on service relevant policy is divided between policies aimed to support the service sector and traditional industry policy. This calls for a multidisciplinary and non-sector specific approach in analyzing key policy challenges. Issues to address addressed by policy case studies include:

### Did you know?

Companies such as ABB Robotics, AGA and Ericsson, say that an increase of service offerings will increase revenue by 30-60%.

- *Which are the key policy framework conditions for fostering service innovation (e.g. regulation, IP, competition policy, financing, ICT infrastructure, skills and trade openness) and what should the priorities be?*
- *What is the rationale for adjusting the scope of horizontal policy instruments (e.g. R&D tax credits) to better support service innovation and how could this be achieved?*
- *What type of policies are required to enhance the skills and competences necessary for a more innovative service sector and a competitive manufacturing sector which combines products with new types of services?*
- *How can productivity in the service sector be addressed and still create sustainable new jobs?*
- *Who are the important stakeholders, that future policies should address, and how must these actors develop in order to promote economic growth?*

## Who is this project for?

**Policymakers in OECD countries** There is growing interest among policy makers in service innovation, as reflected in a number of OECD reports. Efforts are underway in a number of OECD countries to embed service innovation into the existing R&D and innovation agenda at both firm and national level.

On one hand services are a major source of productivity growth. On other hand, slow productivity growth in the service sector, as a result of low innovation, can be a major drag on economic dynamism. This challenge suggests a role for policy to enhance the competitive position of the service sector and, by extension, the whole economy.

At the company level, including firms whose primary activity is manufacturing, services represent an important dimension of their competitive position. However, despite their economic significance, the recognition services as an important element of the commercial offerings of manufacturing companies are a relatively recent phenomenon that is still not well understood.

**Policymakers in key non-member economies** The participation of key non-members will be sought during meetings in 2012. Many non-member economies recognize the importance of service innovation. For instance, extensive efforts are underway in China to renew the service sector. In India, the need for inclusive service innovation to combat the great poverty in the country is high on the political agenda; at the same time, India is known on the global market for its innovative ICT services.

**Economists and analysts interested in services and/or innovation** Improvements to the Oslo manual and the European Union Community Innovation Survey to include services have allowed better insights on innovation processes in the service sector. However, the development of service indicators beyond the service sector remains a critical issue.

## Upcoming events

**March 20-21, 2012** Indicators and policy workshop, at OECD in Paris

- Policy round table on service innovation: presentation/discussion of policy case studies
- New trends in the quantitative data on service innovation: presentation/discussion

**June 2012** Policy workshop, OECD, Paris

**December 2012** Final conference, Brussels (TBC)

## Project information

The project was launched in the start of 2011 and concludes at the end of 2012. It draws on work being carried out at the OECD Working Party on Innovation and Technology Policy (TIP) and the OECD Working Party of National Experts on Science and Technology Indicators (NESTI), with financial support from the EU's 7<sup>th</sup> Framework Programme KNOWINNO project.

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