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New Forms of Entrepreneurship in a Sustainable Knowledge-Based Service Economy

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Synonyms

[Business creation](#); [Start-ups in services](#)

Introduction

The question of entrepreneurship and its links with services is not a new one since most new businesses operate within the tertiary sector. Few studies, on the other hand, have addressed the link between entrepreneurship and innovation in services (Gallouj and Djellal 2010, 2015). The leading theoretical reference in the field of entrepreneurship and innovation is undoubtedly Schumpeter, who has developed two well-known models of innovation. His first model (Schumpeter Mark 1) describes the characteristics of an entrepreneur: (i) his capacity to detect, from among a stock of accumulated knowledge, an invention suitable for socialization, that is, transformation into an innovation, and (ii) his capacity to mobilize an interestment (“know-who”) network to bring about this socialization. In the

second model (Schumpeter Mark 2), knowledge is more explicit, to the extent that the Schumpeterian spirit of enterprise is endogenized in corporate departments specializing in knowledge-creation. Expanding on Schumpeter's theory, Gallouj (2002a) has hypothesized the existence of a Schumpeter Mark 3 model, based on interaction with knowledge-intensive service firms (engineering and consulting). The Schumpeter Mark 2 model appears to be incompatible with the characteristics of the service economy. In fact, R&D departments (in the traditional sense) are extremely rare in the services sector and the endogenization of the entrepreneurial function takes the form of multifaceted and transitional project groups, in which customers are also included. To a certain extent, this reduces the risk of the “bureaucratization” and the stifling of the enterprise spirit evoked by Schumpeter.

There are no (or not many) studies devoted specifically to the Schumpeterian entrepreneur in services (that is, to the “Schumpeter Mark 1 model,” the model of the entrepreneur who creates a business in relation to a “new combination”). As regards services, the subordination approach to innovation or to spatial location and regional economic dynamics, regularly highlighted and criticized in the literature, can be applied very naturally to the field of entrepreneurship. While the services sector would appear to be the principal host of “routine entrepreneurship” (the creation of traditional businesses), “innovation entrepreneurship” seems to be based

elsewhere. If innovation in services is underestimated, its stakeholders are also logically underestimated. However, the service-specific literature appears to imply the existence of four new entrepreneurial figures which are outlined below and merit a more in-depth theoretical, empirical, qualitative, and quantitative analysis: the “cognitive” entrepreneur, the “social” entrepreneur, the “ecological” entrepreneur, and the “entrepreneurial” entrepreneur (see Table 1).

The “Cognitive” Entrepreneur

The “cognitive” entrepreneurs are experts who root the creation of their business in new knowledge (new fields of knowledge) that they have either helped develop or benefit from without contributing to it. This new knowledge may or may not be incorporated into technical systems. It can belong to the natural sciences and engineering or to the human and social sciences.

“Cognitive” entrepreneurship is a heterogeneous category. It is probably possible to distinguish between several types of entrepreneurs within “cognitive” entrepreneurship itself, depending on the main field of knowledge addressed and their contribution to knowledge in this field.

The first interesting example of cognitive entrepreneur is the setting up of a consulting firm based on a new field of knowledge or expertise. The *consultant entrepreneur* is closely related to what is termed “new expertise-field” innovation (Gadrey and Gallouj 1998; Gallouj 2002b) to describe the detection of an emerging field of knowledge and the provision of consulting services in this area. This type of cognitive entrepreneur does not create the field of expertise: they detect it, appropriate it, and construct it socially. They can be said to create it in the same sense that it is sometimes said that insurance “creates” risk. The “objective” origin of these fields of expertise is the dynamic of institutional, technological, economic, and other types of change. Although they do not create these fields of knowledge objectively, the consultant entrepreneurs can contribute knowledge, methods, etc., to them. Examples of expertise-field innovation include the entry of

lawyers into new legal fields (such as space law, computer law), expertise in civil partnership contracts, the enlargement of the EU, environmental and sustainable development issues, etc. Many different fields of knowledge are therefore involved and cover the complete spectrum of business functions (technological, legal, social, etc.).

The second type of cognitive entrepreneur is the *researcher entrepreneur* (or *doctor entrepreneur*). This type of entrepreneurship refers to the creation of businesses by university researchers (young doctors making use of their thesis results and senior researchers drawing on their research). Unlike a consultant entrepreneur, the researcher entrepreneurs play a decisive role in the production of the exploited knowledge. They actually create this knowledge and not just socially. Business creation is based both on expertise in the hard sciences and in the social and human sciences. Social and human sciences play a significant role (which shouldn’t be neglected) in defining R&D in services. In other words, social and human sciences, like natural sciences, can provide the foundation for cognitive entrepreneurship. They should not be underestimated. When knowledge is not incorporated into technologies or tangible entities, the line between consultant entrepreneurs and researcher entrepreneurs can be very tenuous. The “researcher entrepreneur” category raises an interesting theoretical issue in that it challenges the validity of the notion of the Schumpeterian entrepreneur, to the extent that, in Schumpeter’s theory, invention and innovation are defined as two fundamentally different phenomena, just like their corresponding stakeholders – researchers and entrepreneurs.

The doctor entrepreneur is the subject of a quite numerous literature (Murray 2004). The sector-specific variable (that is, taking into consideration, if appropriate, the specific nature of the services) is never factored into these studies, which are primarily focused on the link between human capital (the researcher’s expertise) and social capital (the capacity of the researchers to mobilize a network and incorporate themselves into it).

A third expression of cognitive entrepreneurship is what might be called *e-entrepreneurship* or *cyber-entrepreneurship*, which includes service entrepreneurship linked to new information and

New Forms of Entrepreneurship in a Sustainable Knowledge-Based Service Economy, Table 1 New figures in service entrepreneurship

Types of entrepreneurship	Possible examples or subcategories (nonexhaustive list)
Cognitive entrepreneur	Consultant entrepreneur, doctor entrepreneur (researcher), e-entrepreneur
Social entrepreneur	Gray market entrepreneur, toddler entrepreneur, emergency outreach entrepreneur
Ecological entrepreneur	Ecotourism entrepreneur, “green technologies” entrepreneur
“Entrepreneurial” entrepreneurs	Nurseries, hives, incubators

telecommunication technologies (incorporated or otherwise, and produced by the entrepreneurs themselves or adopted). E-entrepreneurship could be a specific example of the two previous definitions of cognitive entrepreneurship (such as an IT researcher who creates a business to apply his or her results or who sets up a consulting firm). However, since this form of entrepreneurship (closely linked to the dominant information paradigm) is so important, it has been treated separately here and considered as an independent category. Cognitive entrepreneurship’s field of intervention is broader still. It covers all service activities developed to take advantage of NICTs (examples include people who set up websites, web designers, etc.) along with, if an even broader understanding of this form of entrepreneurship is adopted, all business activities designed to promote and sell goods and services via ICT networks: e-commerce (Internet sales) and e-business (all types of business transactions performed on the Internet).

The “Social” Entrepreneur

The field of action of social entrepreneurs is the social and solidarity economy. Social entrepreneurship consists of creating new organizations to manage, in an original (that is, innovative) manner, certain disadvantaged or vulnerable sections of the community, such as young children, the elderly or people with disabilities of all kinds –

socioeconomic, physical, and psychological. In other words, the aim of social entrepreneurship is to resolve social problems. The form in question here provides an innovative solution to these problems. Social entrepreneurship, like any form of entrepreneurship, can be performed at a local, national or international level.

It is not necessarily a nonprofit entity (a nonprofit organization entrepreneur). It can also be a public organization or a private company, and increasingly a hybrid form of commercial and noncommercial activities. It is therefore, as with the previous form of entrepreneurship, a heterogeneous category (both on an institutional and a functional level). However, it is possible to identify three major groups. They are not independent nor do they constitute an exhaustive typology.

The first group includes organizations (firms, public organizations, nonprofit organizations, etc.) created to meet, in an innovative way (in terms of services provided or service provision methods), the needs of the elderly (all types of care services). Taking into account demographic developments, the “gray market” or the “seniors market” (although the entry threshold for this category is not always clearly defined) has major development potential. “*Gray market*” entrepreneurs may operate in the commercial field or the noncommercial field.

The target of the second group is services for young children. This “toddler” market is at the origin of what might be termed “*toddler*” entrepreneurship, which is the mirror image of *gray market entrepreneurship* and which can also operate in both the commercial and noncommercial fields.

The third group consists of “*emergency outreach*” entrepreneurship. This refers to the creation of organizations that offer innovative, supportive solutions in the fight against all forms of insecurity and social exclusion at a local, national, and international level (Thompson et al. 2000). One of the most widely publicized examples of this type of entrepreneurship is the free distribution of food to the homeless by the French organization “Les Restos du Cœur.” However, there are many other examples, including

microfinance schemes, that is, the granting of microloans, savings or insurance schemes for poor people excluded from the traditional banking system, inclusive schemes for people in difficult circumstances, etc. Unlike the two previous forms of social entrepreneurship, this particular form exists exclusively in the noncommercial field.

Although a fairly large number of studies have been devoted to the social and solidarity economy and the major role played by local services in this field, very little attention has been paid in economic theory to the entrepreneurial dimension of this economy, and even less so from the point of view of services. The same cannot be said for the management sciences, which, for a number of years, have held an obvious interest for the notion of social entrepreneurship and more generally the social dimension of all forms of entrepreneurship (Leadbeater 1997). In any event, the theory – economic, sociological, and management – in this field lags behind social practices. The current debate on the social utility of organizations in this field and, more generally, on new wealth indicators could, help provide a better understanding, in socioeconomic terms, of the nature and role of social entrepreneurship (associated with innovation in services).

The “Ecological” Entrepreneur

The field of action of “*ecological*” entrepreneurs or “*ecopreneurs*” or “*green*” entrepreneurs is environmental prevention and the quest for sustainable development. Once again, the few studies to have addressed this subject (Issak 1998) lag behind social practices. This form of entrepreneurship is often considered as a specific expression of the former if the social dimension is widened to include the sustainable inclusion of man in his environment among the social problems addressed.

The ecological entrepreneur is also a heterogeneous category. Once again, the purpose, at this stage, is not providing a typology for it, instead it is simply to identify interesting groups by way of example.

The first interesting group of ecological entrepreneurs is developing its activities in the

traditional service sectors to take advantage of ecological and environment opportunities and the drive toward sustainable development. The tourism sector and the various components of this composite service (hotels, restaurants, leisure, etc.) include numerous examples of this type of entrepreneur who invests in opportunities and niches, particularly by supplying new tourism opportunities related to the local social fabric or new discovery activities, including agricultural tourism, industrial tourism, cycle tourism, etc. With this type of entrepreneurship, the service derives its innovative status from its ecological characteristics.

Another group has developed around the use of what are sometimes called green technologies – in other words, technologies that protect the environment. This could include technologies in both the tangible and intangible sense of the term, that is, technical systems, methods, or protocols. This group can overlap the cognitive entrepreneurship group when, for example, a researcher develops a “green technology” that he or she exploits by creating a business. Although there are studies devoted to ecological entrepreneurs who develop their activities around “green technologies,” they mainly focus on agricultural or industrial entrepreneurship (Andersen 1998). The eco-entrepreneur services are rarely taken into consideration in these studies. One example is “car sharing,” which consists of institutionalizing informal car sharing practices, and which falls somewhere between private car ownership and car rental, particularly when used as a means of reducing pollution and urban congestion. Unlike the social entrepreneur (in the strict sense), the ecological entrepreneur appears to work, in the main, in a commercial environment (Hockerts 2003).

The “Entrepreneurial” Entrepreneur

The “entrepreneurial” entrepreneur refers to a set of service mechanisms targeted at producing entrepreneurs and which are generally called business incubators. Incubators are mechanisms designed to encourage and support, in different ways, the gestation, birth, and first steps of a

company and thereby increase its viability. The term incubator is used in the generic sense to refer to this particular group of (still semantically variable) mechanisms that include nurseries, hives, incubators, etc. This category involves a different analytical approach to the previous categories since incubators are defined as “*entrepreneurial entrepreneurs*.”

The incubator is an organization providing complex services that aims to create entrepreneurs (who may belong to the different categories mentioned previously). In some ways it is a “laboratory of entrepreneurs.” In the case of innovative entrepreneurship (which is the focus of this entry), the innovation incubator is a new form of the endogenization of the entrepreneurial function, which complements the two Schumpeterian models and the Schumpeter 3 or the interactional innovation model (Gallouj 2002a). The incubator builds on the Schumpeterian analysis in an interesting way, in that it unexpectedly combines the Schumpeter 1 model and the Schumpeter 2 model. In fact, the incubator can be considered as a machine or a laboratory to “produce” entrepreneurship rather than innovation.

Conclusions and Future Directions

Defining and qualifying the notion of service entrepreneur offers a potentially interesting line of research. If the notion of entrepreneur is understood in its Schumpeterian sense (that is, closely related to the issue of innovation), it would involve verifying if, like the activities in which they operate, the services entrepreneur is specific in nature.

The categories of entrepreneurs working in services (in sales, retail, etc.) are not all taken into consideration in the four types of entrepreneurs mentioned above. They are, rather, relatively new and particularly dynamic forms of innovation entrepreneurship.

These four forms of entrepreneurship in services are not separate wholes. Entrepreneurship can obviously develop simultaneously in different fields – cognitive, social, and ecological. In fact, an innovation based on scientific research (PhD

thesis) can, for example, be applied to environmental protection (the decontamination of polluted sites and “green” technologies, for example) or the protection of disadvantaged people (“seniors technologies”). A new consulting activity in the field of organic farming emerging, for example, from the enactment of new EU regulations, falls into both the cognitive and ecological fields of entrepreneurship. A business devoted to social inclusion through economic activities that specialize in an original form of waste recovery and treatment service relates to both ecological and social entrepreneurship. An open source software developer can be both a social entrepreneur and a cognitive entrepreneur. Lastly, business incubators themselves can specialize in one of the previous forms of entrepreneurship. In the United States, for example, there are incubators that specialize in women’s entrepreneurship, ethnic minorities, nonprofit organizations, etc.

Cross-References

- ▶ [Academic Entrepreneurship](#)
- ▶ [Business Incubation](#)
- ▶ [Cyber-Entrepreneurship](#)
- ▶ [Digital Economy and Business Creation](#)
- ▶ [Entrepreneur](#)
- ▶ [Entrepreneurial Opportunities](#)
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- ▶ [Interactive Process and New Entrepreneurship](#)
- ▶ [Social Entrepreneurship](#)
- ▶ [The Schumpeterian Entrepreneur](#)
- ▶ [University Research and Innovation](#)

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