### THE DYNAMICS OF ONLINE SOCIAL ENVIRONMENT IN Enhancing the competitiveness of services

PhD Student **Cristian- Mihai ENACHI** "Ștefan cel Mare" University of Suceava, Romania, Faculty of Economics and Public Administration, Doctoral School of Socio-Human Sciences <u>cristian.enachi@vahoo.com</u>

PhD Student **Mihaela-Claudia ENACHI** "Ștefan cel Mare" University of Suceava, Romania, Faculty of Economics and Public Administration, Doctoral School of Socio-Human Sciences <u>enachimclaudia@gmail.com</u>

### Abstract:

The advantage and strength of online social networks is to spread information in real time over a wide range of receivers. For this reason, from an economic point of view, we can discuss opportunities for endless development, especially in the service sector. This paper is trying to prove that sharing information through online social networking is a conscious act, with users having the power to decide on the integrity of information according to the importance they have on their own image in the context of the entire "friends" network or the existence of a target audience that might be interested in this information. Starting from this, online social networking users are generally distributing the information they value to these networks, or information that adds value to other people in their network. The unstable development of online informal organizations creates broad subjective and quantitative changes in human correspondence coming about because of immediate and circuitous online cooperation between people and mechanical objects of the interpersonal organization. Inside the online environment, self-composed networks are rising and developing, while practices, standards, patterns, certainty, and aggregate action examples show up as full scale level properties coming about because of low-level connections between interconnected ones. Contemporary social and economic development is marked by developments in the services sector, which are a vital part of the global economy. Global market services have enjoyed considerable growth over the last twenty years due largely to the diversity and other components of changing consumer behavior.

Key words: online social networks, service sector, competitivity, innovation, economic development.

JEL classification: O15, Z13

### **INTRODUCTION**

With the extension of the web and the developing fame of social and collective registering systems, as of late ordinarily called social processing (Parameswaran, 2007), informal organizations have risen as a critical and promising field in software engineering. Social figuring includes exercises, for example, gathering, recovering, getting to, handling, processing, and review a wide range of social data (King, 2010).

This theoretical examination has been made to characterize and order informal organizations on the Internet that have dependably existed in this worldwide correspondence condition. Presently, informal organizations can without much of a stretch be removed, regularly even from freely accessible information. In light of these information, we can find new learning about individuals utilizing Internet administrations and networks where they work. What's more, long range informal communication profiles in the virtual world contrast from person to person communication profiles in reality and hence they lead to an increasingly explicit examination, including reviews. The scientific community has increasingly focused on studying new media tools in recent years. The interdisciplinary features and the novelty of the field have led researchers to use tools specific to their field of activity to try to explain the phenomena of the new media without, however, succeeding in finding a cohesive approach from the theoretical point of view. Taking into account current trends in the development of online social networking systems and their overlapping capability with other existing systems, many online economic actors are looking to speculate their popularity to create profit. As a result, the possibility of sociological exploitation of information and the dynamics of online social networking systems becomes of utmost importance. The increasing popularity of online systems for social networking or focused on social (such as Facebook or Google+) or browsing social (YouTube, Flickr) or networking (LinkedIn), stimulates businesses and software developers to find new innovative ways to use data provided by users or shared by groups of friends to generate profit, personalize search results and web experience.

Given the huge number of users, it is worth wondering if this huge amount of data from users across the globe can be a starting point for sociological approaches, whether it can provide us with answers on the use of such online systems and whether this amount of data is valid and usable in research to identify the differences between real and online social networks or simply probe the reality of online users, given the phenomenal growth that this sector has seen in recent years.

### WHAT IS A SOCIAL NETWORK?

Prior to characterizing informal communities on the Internet, some essential thoughts regarding interpersonal organizations by and large ought to be explained. The general idea of society can be considered as a foundation for characterizing the interpersonal organization. A general public isn't only a straightforward collection of people; is fairly the aggregate of connections that connect these people to each other (Marx, 1956). In this manner, from a verifiable perspective, an informal organization is the limited arrangement of hubs (entertainers) and the edges (joins) connecting these hubs, Figure no. 1.

In spite of the fact that the idea of informal community appears to be very self-evident, pretty much every analyst depicts it in a marginally unique manner. A few researchers characterize an informal community in a formal manner, while others lean toward a progressively sociological methodology (Wasserman & Faust, 1994). A superior comprehension of the issue of characterizing the informal organization is introduced in Table no. 1. The posting indicates how the ideas of on-screen character, relationship, and interpersonal organization are tended to by different specialists. Obviously, the definitions exhibited in Table no. 1 are the most delegate, despite the fact that there are numerous different researchers who have explored the general idea of the interpersonal organization. In any case, different definitions are, truth be told, a blend of those introduced.



Figure no. 1. A social network is made up of nodes and links. Source: adaptation after (Musiał & Kazienko, 2012)

Author	Actor	Relationship	Social Network	Examples
"Wasserman and Faust"	"An actor is a discreet, corporative individual or collective social units."	"A set of links of a certain type; a link is a connection between a pair of actors."	"The set or finite sets of actors and one or more relationships defined between them."	"Friendship among children in a classroom; all the nations of the world and the formal diplomatic ties between them."
"Hanneman and Riddle"	"Actors are also called dots, knots or agents."	"Relationships, margins or links; one or more types of relationships between pairs of actors."	"A set of actors who can have relationships with each other."	"Family; collaborators in a company; neighbors' network; friendship among students in a classroom."
"Garton, Haythorntwaite , and Wellman"	"People, organizations, or other social entities."	"Relationships such as friendship, collaboration or information exchange."	"A set of social entities connected through a set of social relationships."	"Friendship between people; collaborators in a company; people communicating with each other through the computer."
"Hatala"	"The actors are either people or groups of people."	"Interaction patterns or links between actors."	"A set of actors with some interaction patterns or "links" between them, represented by charts or diagrams illustrating the dynamics of the various connections and relationships within the group."	"Collaborators within a company."
"Liben-Nowell and Kleinberg"	"People or other entities incorporated into the social context."	"Links are interactions, collaboration or influence between entities."	"Structures whose nodes are entities embedded in the social context and whose edges represent interaction, collaboration or the influence among the entities."	"Co-authors of scientific works in a particular discipline; project groups in a large company; business leaders who worked together on a corporate board."
"Yang, Dia, Cheng, and Lin"	"A node in a graph; each node is a client."	"Uncut edges, unmarked edges in the graph; each edge is the connection between two nodes."	"Unmatched, undirected graphics."	"The client's social network derived from client interaction data."

## Table no. 1. Definitions of an actor, relationship, social network and examples of social networks

Source: own elaboration

### SOCIAL NETWORKS ON THE INTERNET

The developing notoriety of the World Wide Web and the Internet has prompted an expansion in the quantity of sorts of administrations offered through a PC organize. Individuals

utilizing these administrations have made another kind of virtual organizations, normally called online informal communities. These can likewise be called interpersonal organizations or virtual networks.

The primary highlights that recognize web interpersonal organizations from informal communities separated from communications between individuals in reality are as per the following:

- Lack of physical contact in person only in distances, sometimes over great distances;
- Usually, an absence of uncertainty and trust between the character of the part in the virtual network their online personality and personality in reality;
- Possibility of multimodal correspondence, at the same time with a few individuals; likewise the likelihood of simple exchanging between various correspondence channels, particularly on the web and disconnected, for example VoIP on the web and disconnected content correspondence;
- The straightforwardness of a breakdown and suspension of contacts or connections;
- Relatively high simplicity of gathering information about correspondence or joint exercises and their resulting preparing;
- Increase the unwavering quality of information about clients accessible on the Internet.

### ONLINE SOCIAL NETWORKS IN THE CONTEXT OF BIG DATA

Top topics in the field of information technology include online social networks (OSN), the Big Data concept and cloud computing. Social networks, through Internet services, generate enormous real-time data streams connecting both individuals and groups sharing similar interests and features. The study of these data streams generated by online social networks drives researchers in this field to develop and build models and best practices, but this diversity of interconnected data also deeply affects the way people perceive them. We can define a social network as a structure of people or organizations (nodes) and the social relationships between them (links between nodes). For these social media to exist, we need support platforms, these platforms are applications designed to create and share user-generated content. These platforms can be divided into different categories according to form and content distribution, including blogs, forums, collaborative projects, or virtual communities. Platforms for creating social connections such as Facebook, Twitter, or Linkedin have seen explosive growth in popularity but also a strong influence on how to do business or speculate on market requirements.

Among the main features of social networking we can list the frequency of use, the frequency of requests and the number of friends (interactions) (Jung, et al., 2013). The advantages of these platforms are enormous if we take into account the ability to form a public in a very short time to promote our ideas or products, regardless of the geographic area. These online social networks provide us with a strong foundation for both communicating and maintaining social relationships, as well as identifying users with similar concerns or interests. Another important advantage of using these networks is that we can make real-time know-how transfer, using our knowledge and links from our list of friends.

Big Data intervenes when specialists from different areas of interest (IT, economics, marketing, management) try to understand and anticipate user behavior, a concept that becomes a representative element of the information society. If we get a fair interpretation of the data we collect, we can increase productivity, efficiency and effectiveness to the benefit of consumers by allowing manufacturers and organizations to reduce resource consumption and increase the added value of the products and services they create. Among the Big Data advanced sectors we can list banking financial services, information technology, the electronics sector and the public sector.

### THE RISE OF A NEW TYPE OF ECONOMY

A computerized stage based economy is growing in all respects quickly and is dubious with regards to globalization. Organizations like Amazon, Etsy, Facebook, Google, Salesforce and Uber make online structures that take into account a wide scope of human communication based exercises. This stream opens the route for radical change in the manner we work, mingle, make an incentive in the economy, and vie for the subsequent benefits. Their belongings are particular and recognizable, in spite of the fact that they are surely not by any means the only piece of the quickly rearranging worldwide economy.As uncovered by Michael Cusumano, Annabelle Gawer and Peter Evans, these advanced stages are multisite computerized outlines that shape the terms wherein members interface with one another. Its change administrations began with the Internet and was, to some extent, a vital reaction to value serious challenge between moderately comparative item producers.

The transformation of IT services has been founded on the use of various computational calculations for innumerable exercises, from utilization and recreation to administrations and generation. Making an interpretation of these calculations into a cloud, where they can undoubtedly be gotten to, has made the framework on which stages and stage based biological systems work. Stages and cloud structure a fundamental piece of what was known as the "third globalization", reconfiguring globalization itself.

These computerized stages are differing, they are isolated into classes as per the structure. Google and Facebook are advanced stages that offer pursuit and web based life administrations, yet they likewise give framework on which different stages are assembled. Amazon is a market, for example, so are Etsy and eBay. Amazon Web Services gives a framework and instruments to others to assemble new stages. Airbnb and Uber utilize these new cloud instruments accessible to constrain significant changes in an officially existing business assortment. Together they power the revamping of a wide assortment of business sectors, working courses of action and, at last, the making of qualities and benefit.

We incline toward the expression "stage economy" or "advanced stage economy," a progressively nonpartisan term that incorporates a developing number of computerized exercises in business, legislative issues and social cooperation. In the event that the mechanical upset was composed around industrial facilities, the present changes are sorted out around these openly characterized computerized stages. To be sure, we are amidst a rearrangement of our economy, where stage proprietors evidently build up a power that might be considerably more imposing than that of production line proprietors in the early mechanical unrest. The multiplication of names is essentially an impression of the acknowledgment that stages as of now have solid ramifications for society, markets and organizations, and that we are as yet vague about their elements and course. Regardless of what we call this change, the outcomes are sensational.

# THE RELATIONSHIP BETWEEN SERVICES AND COMPETITIVENESS: THE CONCEPTUAL FRAMEWORK AND THE THEORETICAL FOUNDATIONS

Despite the size and increasing importance of services in contemporary economies, these activities are generally less explored and analyzed by economists compared to goods, as a rule, they also receive much less attention from policy makers.

While there is a rich economic literature that analyzes competitiveness in the commodity trade, the number of theoretical or empirical contributions that address this topic from the services perspective is extremely low. However, the low interest in service competitiveness is incomprehensible given that services currently account for almost 80% of the modern economies in terms of labor and value added, 40% of international trade (if we are considering the wider definition of trade with services that also include intermediary transactions through FDI), and about 2/3 of FDI.

And while the trade in services is in a dynamic expansion, the factors that determine the competitiveness of services are largely unexplored in the empirical economic literature. The few existing contributions have attempted to answer the following questions: What determines the competitiveness of services? Does the service's competitiveness depend on the same factors that lead to industry benefits? Is there only one relationship between service and competitiveness or there are many relationships depending on the type of service? What role does service play in the relationships defined by Kaldor's paradox (increasing market share despite the worsening of competitive capacity)? What are the elements that highlight the contribution of cost and price variables to the competitiveness of services compared to industry? (Rubalcaba, et al., 2008).

There are several explanations for the precariousness of the theoretical and empirical contributions on services in general and the competitiveness of services in particular. Researchers are particularly confronted with two major difficulties:

- the very high degree of heterogeneity of the service sector;
- the difficulties caused by the generalized lack of consistent data on service output and the measurement issues that arise from it.

Regarding the heterogeneity of the service sector, it is important to underline that this sector is composed of different types of activities, which are based on different technologies and who know different pricing processes. While some categories of services are very intensive in capital (such as IT services, software and telecommunications, research, development, etc.) and / or knowledge (such as IT services, communications and professional services), others are very intensive workforce (eg hotels and restaurants). On the other hand, some services have a high degree of standardization, while others are highly personalized and tailored to the needs of customers.

At present, the heterogeneity of services is further exacerbated by the fact that the tertiary process under the impact of rapid advances in new ICTs leads to changes in the very essence of these activities and to their rapid and continuous diversification. At the same time, the high degree of heterogeneity of services and the large diversity of these activities make the service industry's approach globally meaningless, as it makes little sense to talk about the overall competitiveness of services. This is because the different subsectors / segments of the service sector are distinguished by different models of economic behavior and different social characteristics, which imparts their trajectories and distinct growth patterns. At the same time, the different categories of services (eg public, business, personal) have different market structures, different demand dynamics (ie, political decisions, industry decisions, consumer decisions) and require different modes of supply on foreign markets.

But studies also face numerous statistical difficulties. Since services are not adequately reflected by existing statistics, the analysis of the service-competitiveness relationship is difficult to achieve in empirical terms because of measurement problems stemming from statistical deficiencies. Thus, despite significant improvements on the methodological front, measurement of added value and labor productivity remains a major problem for most service categories, unlike service inputs that can be measured more accurately.

The assessment of competitiveness in the sphere of international transactions with services is also confronted with large measurement problems. First, standard service trade indicators only reflect part of total trade in services, as it does not capture factor-based trade (human factor and physical capital) that matter a lot in some service activities such as financial services, and so on In the case of these services, the establishment of productive units in the host country is an essential requirement as the means by which trade is made is that of specific factor flows (FDI). Then, international transactions with services are more difficult to analyze because of the need to consider all four modes of service provision (the various carriers that transport services) stipulated by the GATS provisions: cross-border trade, consumption abroad, commercial presence and the presence of individuals abroad. At the same time, it is difficult to assess the accessibility and the cost of each mode of supply as well as the relationships between the different ways (complementary or substitutable) (Francois & Hoekman, 2009).