# Chapter 7 Motivations and Barriers of Participation in Community Wireless Networks: The Case of Fon

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# **ABSTRACT**

Wireless communities are an interesting alternative to 3G networks to provide mobile Internet access. However, the key success factor for their sustainability is whether they are able to attract and retain a critical mass of contributing members. It is thus important to understand what motivates and dissuades people to join and participate. This chapter analyzes motivations, concerns, usage, and satisfaction of members of Fon. Fon is the largest wireless community in the world. This study employs a mixed research method, combining qualitative exploratory interviews with a quantitative survey. Members are mainly motivated by a mix of utilitarian (getting free connectivity) and idealistic motivations (reciprocity and altruism), whereas intrinsic and social motivations are less relevant.

# INTRODUCTION

We live in an increasingly mobile and connected society. People traditionally accessed the Internet via fixed-line services. Currently, with the diffusion of a new generation of mobile devices like, laptops, smartphones and tablets, the need for having affordable Internet access anytime and anywhere becomes stronger. This fostered a massive adoption of wireless technologies for connecting to the Internet, to the point that they overtook fixed broadband subscribers in 2008 (International Telecommunications Union, 2009).

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The 3G networks, offered by Mobile Network Operators, are by far the most widely adopted solution. They are ubiquitous and reliable, but are slow and expensive. For its distinctive advantages, Wi-Fi is an interesting alternative despite its limitations. It has limited range, but is faster and cheaper. Moreover, it operates on unlicensed spectrum and hence allows many alternative business models (Bharat, Rao, & Parikh, 2003). Network operators use it to complement 3G by offering paid fast connections in crowded venues like airports and hotels. Individuals can integrate their private Wi-Fi access points into wireless communities providing free wireless connectivity to each other and the public at large. Other forprofit companies may try to blend commercial and community aspects into hybrid communities where the company supports members who share their own access points in exchange of being able to operate and cash in on the community network.

For these communities to be viable it is fundamental to attract a critical mass of members. As a result, it is important to understand:

why people join and actively contribute to wireless communities?

Understanding why community members contribute and participate is very important for offering suitable incentives. Even though researchers have recognized this to be the most critical research issue on wireless communities (Bina & Giaglis, 2005), existing research mostly focused on pure non-commercial communities.

The purpose of this chapter is to understand what drives people to join and actively participate in a hybrid wireless community. The distinction between pure and hybrid communities is important because the presence of a supporting firm can influence members' motivations and participation, ultimately determining the success of the community. Moreover, while most pure communities struggle achieving a critical mass (the largest one, NYC Wireless, only has 40,000 participants),

hybrid communities appear to be more successful (the largest one, Fon, claims to have more than 4 million users). A possible reason is that the latter are better at motivating people by offering an attractive mix of incentives and support.

To attain this research purpose, a mixed method approach was employed. The Fon community has been chosen because it is the largest and most successful case of hybrid wireless community. In a first phase, a qualitative content analysis of Fon community forums and 40 exploratory semi-structured interviews with Fon members were conducted. This chapter complements these qualitative insights with a quantitative survey of 292 members about their participation, motivations, and concerns with the Fon community.

#### THE FON COMMUNITY

Fon (Fon Wireless Ltd.) is a for-profit company founded in 2005 by Martin Varsavsky. Its mission is to create "a Wi-Fi network built by the people" where "you share a little bandwidth with others and millions more share with you."

Fon initially provided a free software solution that could be used to convert Linksys routers into Fon hotspots, but then quickly started selling its own custom "Fonera" router to provide an easier way to create community hotspots. The idea was to generate revenues through the sale of routers and antennas and access fees from non-sharing members wanting to use the Fon network and advertising.

Fon received funding from important firms including Google and Skype. This allowed it to heavily promote its activity by distributing their routers at a low cost or even for free, thus seeding the community network and enabling its growth. However, with that course of action, "Fon has been losing large amounts of money since its inception" (Middleton, et al., 2008).

Over time, Fon regularly adjusts its business model to adapt to evolving market conditions.

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