Chapter 79
Rvolta, a Case for Open Innovation: How can a SME be Innovative in a Competitive Industrial Environment?

Margarida Cardoso
University of Minho, Portugal

Isabel Ramos
University of Minho, Portugal

ABSTRACT

Rvolta has been working in waste management industry for 16 years now. This SME (Small and Medium Enterprise) from Portugal is taken as a focus point for the case study addressing a network of partners working in various activities which became related, so as to disclose the underlying innovative spirit, strategy, and partnership structure. Objectives of the present chapter are to portray and analyze a SME success case in open innovation (through various innovation practices), and clarify how knowledge creation and collaboration amongst different players in a network takes place. An exemplary collaboration episode is told. Framing issues are addressed so as to understand how they affect open innovation in SMEs. The study finds interactions, networking, and partnership connections, are important issues and indeed make a difference, thus enabling SMEs to innovate. This case evolved from an exploratory phase of an Information Systems PhD qualitative research, addressing open and crowdsourcing innovation.

CASE ORGANIZATION

Rvolta is a SME working in the waste management industry. Its main business partner is Multirecolha, which collects waste edible oil to produce biodiesel to both firms’ truck fleet. These firms have established partnership with Agro Ideia, an agricultural consultancy firm, and Hora H, which does energetic efficiency consultancy. Rvolta is taken as a focus point to the present case study addressing this network of partners working in different activities but who found ways to relate and innovate together. Case shows open innovation as common and shared practices which seem to be based on a set of relational aspects including trust, collaboration and interchangeable benefit. Evidence
on how open innovation works and how this particular network implements it has been retrieved through four interviews: two interviews with Mr. Luís Nunes, Rvolta and MultiRecolha manager (referred to as LPN_1 and LPN_2); one interview with Mrs. Cristina Pinto, Agro Ideia manager (referred to as CRP); one interview with Mr. João Mendes, Hora H manager (referred to as JFM) and finally, an e-mail questionnaire to Rvolta IT Expert which for editorial reasons remains anonymous. Case presentation starts with the network background, and a descriptive review about the partners involved, including their activities within the Portuguese business context. Afterwards, the stage is set for a series of open innovation practices among the mentioned firms and other institutions. Issues addressed include business management, context, interactions, and IT and work processes; after that, one innovative collaboration episode is portrayed, and the chapter ends up with some challenges facing these network-type collaboration and SMEs, including some recommendations.

**Methodology**

This case is based on research made through a case study approach (Yin, 2003), subject to the following questions: how relevant and complementary are different collaboration processes aiming at open innovation practices; and how does an SME recur to open innovation practices to improve its business activities? The complete case is exploratory in nature and serves purposes for a PhD research on open and crowdsourcing innovation and SMEs; sampling method chosen was theoretical sampling (Flick, 2005; Gobo, 2008). Case includes four semi-structured interviews (Gobo, 2008), recorded, transcribed with F4 3.1.0 and analyzed through discourse analysis, interpretative repertoires (Talja, 1999), with CmapTools 5.04 and MindManager Pro7. The research also included document and artifact analysis; and one e-mail questionnaire. Discourse translation (Portuguese to English) was validated by interviewees.

---

**NETWORK BACKGROUND: THREE MAIN PARTNERS**

Established in 1994, Rvolta1 anticipates the beginning of an economic affluence cycle in Portugal between 1995 and 2000 (Amaral, 2010), a cycle followed by a ten year period of economic restraint and more recently financial and deep economic crisis. One of the interviewees, Mrs. Cristina Pinto, refers to that cycle exactly: *I earned more between 1995 and 2000 (...) there’s a set of customers who got thrilled with my work (...) my market is stabilized...* (CRP). If by 1990 SMEs were 8% of the economical enterprise panorama in the country, when we come to 2008 we have just 4% of it: micro-firms are prevailing (Rosa & Chitas, 2010). By 2009, non-financial enterprises on the whole decrease, due to economic crisis: manufacturing industries have a year-on-year fall of 15% (INE, 2010).

Rvolta works in the waste management industry in a wide-range of residues, and was innovative in Portugal when it was established, exactly because of that. The firm introduced several innovative patented products, intended to reutilize (so adding value) some of the residues the firm works with. Being a SME, almost all innovation was outsourced, meaning open and through organizational out-limits, and was brought in through partnerships formally developed with universities and work with one State Laboratory (for R&D and endorsement purposes too). In the process, Rvolta joined forces with some partner firms - subsequently producing some patents.

Though being a SME, it works with more than 200 industrial and commercial customers (chemical industry, food and beverage, automotive industry, logistics and distribution, energy production, food industry and health care). Residues include glass, paper and card, plastics, rubber, wood, metal junk, residue from landfill, waste edible oil, and other food residues. Activity comprises partial or complete waste management processes, including diagnosis of customer needs, placement of work