Chapter 9
An Examination of Independent Inventor Integration in Open Innovation

Gavin Smeilus
University of Wolverhampton & Caparo Innovation Centre, UK

Robert Harris
University of Wolverhampton, UK

Andrew Pollard
University of Wolverhampton & Caparo Innovation Centre, UK

ABSTRACT
Open Innovation allows independent inventors to become suppliers of new product ideas to businesses. Unfortunately, only a small percentage of independent inventor approaches, to companies operating Open Innovation mechanisms, result in a commercialised product. Preliminary Critical Success Factors proposed in the previous chapter seek to improve the ability of independent inventors to operate as effective suppliers of new product ideas to businesses through Open Innovation. This chapter will take the preliminary critical success factors proposed in the previous chapter and utilise them as priori constructs (Eisenhardt, 1989) as evidence is sought through case study for their presence or non-presence in a practical context. A case study on the Caparo RightFuel, an automotive device originating from an independent inventor and commercialised through an Open Innovation model, forms the basis of this chapter.

INTRODUCTION
Open Innovation provides a mechanism for independent inventors to become suppliers of new product ideas to businesses. Unfortunately, only a small percentage of independent inventor approaches to Open Innovation schemes result in a commercialised product. The figure for the Caparo Innovation Centre open innovation programme, at the time of writing, stands at 0.7%.

Preliminary Critical Success Factors proposed in the previous chapter seek to improve the ability of independent inventors to operate as effective suppliers of new product ideas to businesses through Open Innovation.
An Examination of Independent Inventor Integration in Open Innovation

This chapter reinforces the previous chapter by focusing on a case study - The Caparo RightFuel, an automotive device originating from an independent inventor and commercialised through Open Innovation. The case study examines the presence or non-presence of the proposed critical success factors in an actual open innovation context.

BACKGROUND

Caparo is a multinational manufacturer of steel, automotive and general engineering products. With its headquarters in London, England Caparo was founded in 1968 by the industrialist the Lord Paul of Marylebone.

In 2002, in response to increased competitive pressure from low-cost Far-East manufacturers, Caparo took a strategic decision to supplement its steel processing and manufacturing activity with product ownership. In particular, the organisation were keen to introduce a portfolio of technically innovative new products that benefited from patent protection, as a means of generating alternative higher-margin income streams. Of particular interest to Caparo were mechanically engineered products that have a good synergy with manufacturing processes conducted within the organisation or the markets they currently address:

- Aerospace
- Agriculture
- Automotive
- Commercial Vehicles
- Construction
- Defence
- Furniture
- Industry
- Leisure
- Marine
- Oil and Gas
- Power Generation
- Railways

The physical manifestation of the strategic move towards product ownership was the formation of the Caparo Innovation Centre (CIC), a collaboration between Caparo and the University of Wolverhampton, which was launched in 2003. The CIC’s remit was, and continues to be, the identification and sourcing of innovative new products, typically of a mechanical or engineered nature, that display commercial potential, either through exploitation by Caparo directly or as a revenue stream from a license with an alternative commercial enterprise. The CIC source innovative ideas exclusively from independent inventors and have, at the time of writing, received 805 approaches since inception.

By supplementing traditional sources of innovative new products, through internal R&D teams, with an external source of innovation, Caparo have implemented an Open Innovation strategy skewed towards inbound open innovation (Chesbrough & Crowther, 2006, p. 229).

METHODOLOGY

One of the innovations successfully commercialised via the Open Innovation model employed by the Caparo Innovation Centre is the Caparo RightFuel, which will form the basis of this case study.

This chapter utilises the preliminary critical success factors proposed in the previous chapter, as priori constructs (Eisenhardt, 1989); as evidence is sought through case study for their presence or non-presence in a practical context (see Table 1).

The Caparo RightFuel, an automotive device originating from an independent inventor, Martin White, and commercialised through an Open Innovation model, is used as a case study to contextualise twelve critical success factors (identified through current academic literature), in a “real-life” Open Innovation setting. A case study approach was selected for this exploratory research because it is an effective method of developing