

2017 Strategic Technology & Innovation Management Programme

The development of business models to anticipate disruption

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Industrial / managerial need addressed

Researchers indicate that when the advent of a new technology causes disruption, it is because firms might not have properly reacted and assimilated the signals of change. On one side, they might have missed out on the weak signals (as they might appear in areas which might seem not related to the business); on the other, they might have just downplayed the implications (as initially the commercial implications of a new technology might seem trivial especially for large businesses).

Having a way to feel prepared to imminent threats could be a proactive approach to reduce the challenges of assimilating intelligence relative to problems and threatening futures.

This project aims to understand whether there are patterns in the way managers react to new business models emerging in the light of a looming technological disruption.

- How do managers react in front of the opportunities provided by emergent technologies?
- How do managers evaluate the opportunities for new business models?

Expected deliverables

The results will be used to develop guidelines on how companies could reconfigure their value-capture approach when thinking about a prospective disruption. Academic publications will emerge from the work.

Approach

The approach will develop a range of theoretical business model options (Business Models Archetypes) and then it will attempt to work backward to the definition of the required steps for its implementation. This work has been initiated in STIM 2015-16, whereby a range of theoretically possible business models archetypes has been developed, based on the current experts' views of the business implications for additive manufacturing. Many authors have anticipated a future where manufacturing of goods could be produced locally via workshops and bureaus or by end users in their own homes and additive manufacturing, with other digital technologies, might enable this. This could be a revolutionary/disruptive scenario for some industries.

The business models archetypes range from:

- the more 'conservative' view that additive manufacturing will be a new 'tool in the box' to allow companies to move closer to mass customisation,
- to the most 'radical' view that manufacturing supply chains will be reconfigured, based on the notion that everyone who owns a piece of additive manufacturing equipment will be able to produce goods on demand and close to the point of consumption.

Based on these two views, the work of next year (STIM 2017) will be to expose managers to these two archetypes and collect responses on their view about implementation.

- How do managers react in front of the opportunities provided by emergent technologies?
- How do managers evaluate the opportunities for new business models?

Engagement opportunities

We are looking for volunteers who work in industries that might feel threatened by the disruptions linked with the adoption of 3D printing/additive manufacturing and wish to discuss this with researchers.