Using the Product Impact Tool for Future Planning

Development of a method for using the Product Impact Tool for prospective analysis of strategies and future innovations

Thomas Raub, Industrial Design, University of Twente, Netherlands

This assignment consisted of the development of an analytical method for using the Product Impact Tool of Steven Dorrestijn for the purpose of prospective thinking and strategy planning. The Product Impact Tool presents a model of twelve effects, divided over four quadrants, that explain how technologies and products interact with and affect individual users as well as society as a whole. Dorrestijn wished to explore how the Tool's scope, which had up until now mainly focused on the evaluation of particular products, could be extended further to also encompass prospective thinking about future innovations and strategies. In doing so, the Tool would be able to help strategists and analysts to better understand the effects that their work can have on individual persons and society, and thereby lead them towards developing their technologies and policies in a more responsible manner that will result in society being more effectively changed in desirable ways.

In the pursuit of developing the method, there was firstly an analysis and exploration of the twelve effects that the Product Impact Tool contains. Within the Tool's model, the effects are divided into four categories: cognitive, physical, environmental, and abstract (Dorrestijn, 2016). This exploration showed that there lay potential in extending the Tool's scope further. Secondly, a series of existing strategic tools was investigated. These tools were broadly divided into two groups, namely those looking from a corporate-oriented perspective and those that took a more innovation-based approach. The tools were assessed for their potential for direct integration with the Product Impact Tool. While these assessments was largely unfruitful, the research did reveal that there were certain points of overlap in themes and features, that also showed how the Tool could provide added value. This added value was further explored through a series of short experiments, which also worked to develop and refine a new analytical method based on the Tool. In this method, an analyst looks at their subject from the perspective of each of the Tool's twelve effects, to investigate its impact. The new method was further tested out using a larger case study that focused on concepts for future transportation scenarios, namely those of the Dutch Centre for Technology Trends (Van Voorst tot Voorst & Hoogerwerf, 2014). The case study demonstrated how using the Product Impact Tool for prospective thinking forces analysts to look at their subject from all angles, and to take a more critical look at what they are working on. Through use of the Tool in this manner, they can gather more insight and understanding about the impact that their work can have in society, and thus they become able to steer it in such a way that the most desirable results are ensured. Moreover, much like the Product Impact Tool itself, the developed method remains largely independent from current morals and values, withholding early quality judgements, thus managing to provide fairly neutral information that can remain relevant for ethical debate about a particular innovation or policy.



Figure 1 Product Impact Tool (Dorrestijn, 2016)

The developed analytical method showed that there lies potential in strategists and future analysts using the Product Impact Tool for prospective thinking. It manages to uncover aspects that remain undiscussed by conventional methods and tools, and moreover provides added perspectives where necessary. In doing so, the analyst gains more insight and information about the subject they are working on and its impact, and can thus affect society in more desirable ways. That said, there remain certain points that require additional development and refinement through further research. Firstly, though tools of both a corporate and an innovation-based nature have been studied, it was mainly the latter that received the most attention. Similarly, the newly developed method was largely tested based on its potential for analyzing the impact of future innovations. As such, the applicability of the Tool and the developed method for more corporate-oriented purposes should still be investigated and tested further, to find the added value they can offer there. The Tool and its method have during this research been tested out using smaller experiments and a larger case study. However, further testing, both in regards to corporate themes as well as additional innovationoriented subjects, could manage to further refine the Tool's functionality and added value. Lastly, while the Tool's effectiveness has been demonstrated when used by someone experienced with it and the themes it presents, further research is needed to test its potential when used by actual strategists and analysts. It needs to be studied whether they can understand the Tool and method, and moreover whether they can see the added value it can provide for their work.

References

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Van Voorst tot Voorst, M.-P., & Hoogerwerf, R. (2014). *Tommorow's Transport Starts Today*. The Hague, Netherlands: Stichting Toekomstbeeld der Techniek.