

Technology Foresight 2.0 – Using data to predict the (technological) future A Master's Project at the Research Group IT-Entrepreneurship

Summary

The evolution of technology and the search of the 'next big thing' is a continuous quest for (not only) technology-driven entrepreneurs and companies alike. While mapping the future of a technology has been around for some time now (Boe-Lillegraven and Monterde, 2015) and various instruments such as technology roadmaps, scenario analysis, Delphi methods, weak signal detection to name just a few, many companies and especially entrepreneurs struggle with the complexity and resource intensity of technology foresight. Furthermore, the plethora of different methods, tools, and data sources makes it very hard to understand which method and which data is "right" for technology foresight.

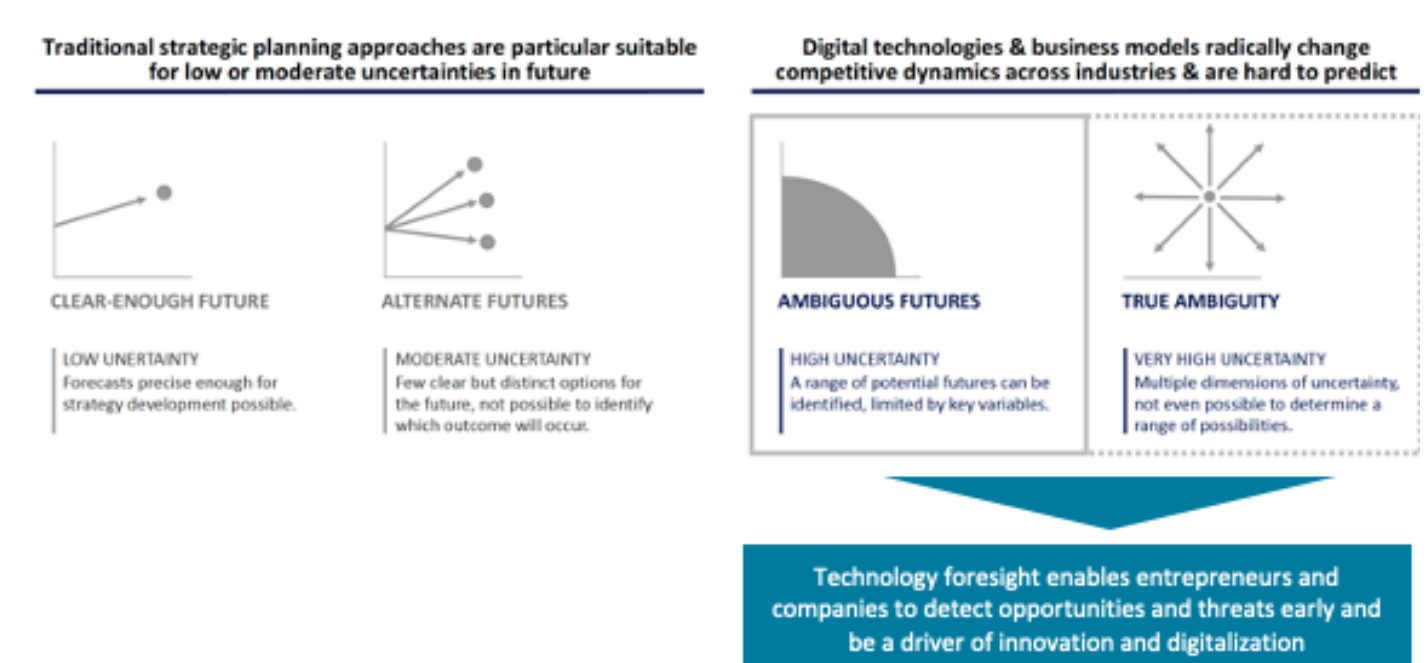
Your task in this master project will be to create an overview and comparison of current IT-based technology foresight tools in the fields of scenario analysis (e.g. Parmenides EIDOS), (real-time) Delphi, technology radar (e.g. itonics), technology roadmapping or system-dynamics models. Based on this comparison and a complementary literature analysis, you will identify key criteria and data sources for a technology foresight model suitable in particular for high-tech entrepreneurs to conduct technology foresight in a volatile, uncertain, complex and ambiguous world.

You will learn in this master project how to conduct a scientific literature review to derive hypotheses, how to analyze and compare different IT-based tools, and how to work with the collected data. We will show you how to "make sense out of the data" and build a solid foresight model. This master project is offered in cooperation with the B2B startup delphai that has developed a state-of-the-art market intelligence software. Building on their data sources and models, you will use their software to develop a first prototype for a technology foresight software. We will guide you throughout the whole process of defining your initial research question, developing the model and the prototype until the writeup of your final research paper. You will have some freedom with respect to designing your own research focus and what foresight methods to analyze. In the end, you will not only have learned how to conduct state-of-the-art digital entrepreneurship research but have also become a foresight expert and future shaper.

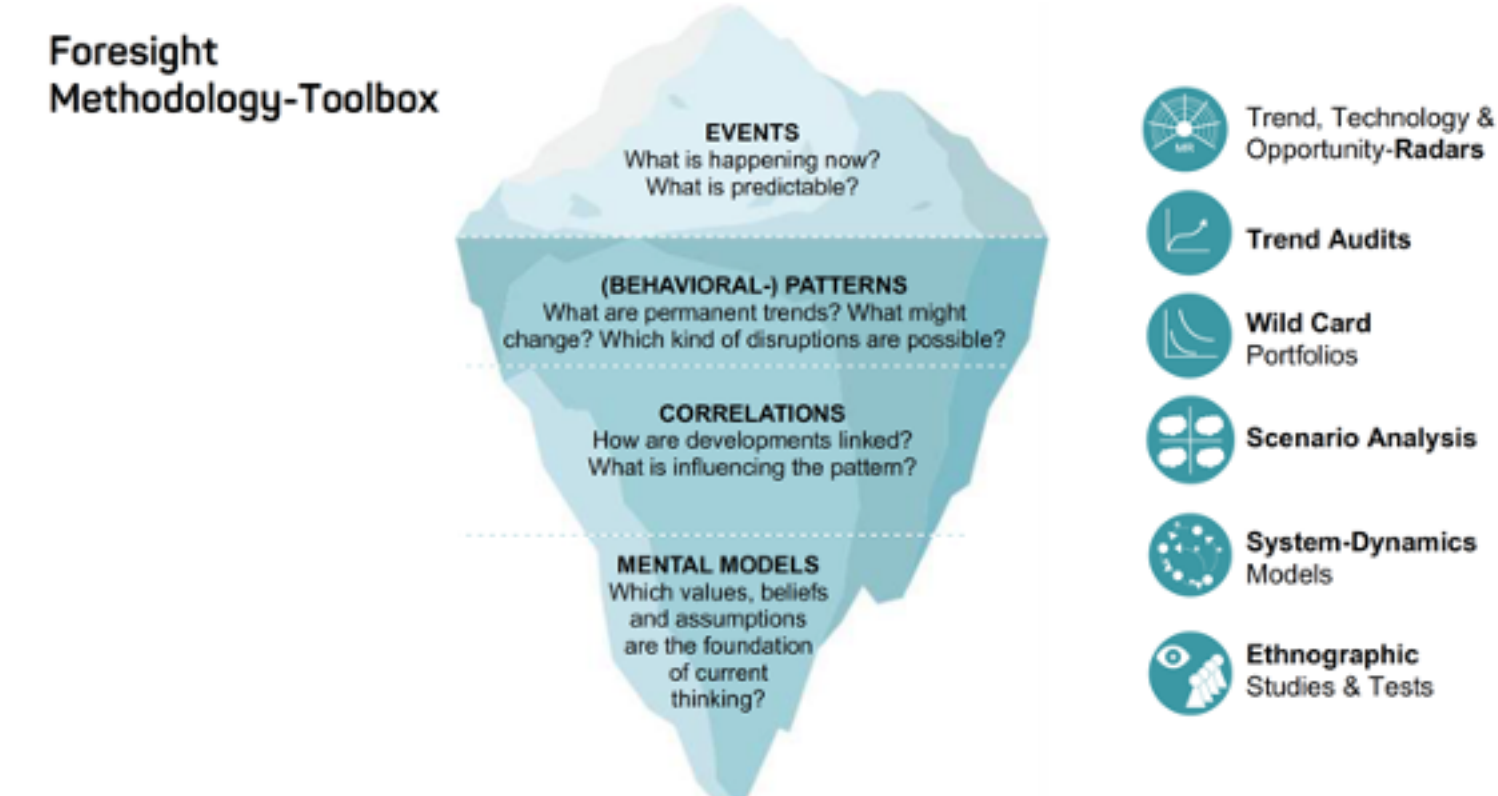
We expect from you a future-oriented mindset, motivation to conduct empirical research, and the drive to learn about technology foresight.

Responsible: Prof. Dr. Katharina Hölzle, Dr. Robert Rose, Daniel-Leonhard Fox.

The best way to predict the future is to invent it.
(Alan Kay)



While there are many tools available...



Our partner: delphai

ABOUT DELPHAI

delphai is a B2B Software-as-a-Service company. Our **market intelligence software** allows users to make sense of their current and future markets, and expand their business through intuitive big data analytics.

In a way, delphai is like a **Google for B2B**.

Data sources

- Company websites
- Conference participations
- Research reports
- Technology blogs
- Investor portfolios
- News & media outlets
- Financial statements
- Patent filings
- Job postings
- Stock market updates

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