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IAF BUSINESS INNOVATION SYMPOSIUM (E6)
Innovation: The Academics' Perspectives (3)

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# BUSINESS MODEL INNOVATION PATTERNS ACROSS THE SPACE AND NON-SPACE SECTORS

**Abstract**

This explorative study is about how digital transformation has impacted the business model (BM) elements of non-space firms (from a literature review perspective). By identifying how non-space firms impacted their BM elements through digital transformations, this research infers how space companies can appropriate or mimic successful (digitally innovative) business models in non-space fields. In other words, the study identifies business model transformations currently not explored by space firms and provides recommendations to the European Space Agency on how to stimulate the aerospace ecosystem to explore these potential opportunities. After a deep literature research, two samples were constructed, starting from the Industry Digitization Index and then filtering two sources which rank companies according to their digital innovativeness: MIT Technology Review "50 Smartest Companies 2017" and Tällt Ventures "Disrupt 100". This filtering process generated one sample of digitally innovative non-space companies (size = 48), and a similar sample of space companies (size = 4). From these two samples, using the causal analysis framework by Prem (2015), BMI patterns and higher level observations on the consequences of digitization across the two sectors were abstracted. Most innovative non-space companies leverage digital transformation this top trends - Value propositions aim to deliver certainty - Value co-creation blurs the boundaries of customers and partners - Capability evolves through both Exploitation and Exploration The innovative space companies are focusing on this preliminary observations: - A Resource Based View of space firms is appropriate - Partnerships define competitive advantage for space firms - Transformations of cost structure enable the expansion of targeted customer segments - Personalized customer relationship building is expected Based on these observations of the non-space sector companies, and overlaying them with preliminary observations about space sector companies some recommendations for ESA were constructed. Reflecting on new strategies regarding Innovation in "The Era of Digital Transformation", the ESA Corporate Development Office has engaged with on how the Agency can leverage digital transformation based on the experiences of non-space firms. This business project was conducted by 6 students from the Global MSc in Management Programme at the London School of Economics under the guidance of ESA Corporate Development Office in the frame of reflecting on new strategies regarding Innovation in "The Era of Digital Transformation".