Business Models of Born Globals in a Forest-based Bioeconomy (BIOBM)

The bioeconomy as we see today is a cross-industry field characterized by complex value networks with no clear boundaries that is deeply embedded in the global economy. The progress of it highly depends on entrepreneurial firms that are able to build a business that is based on innovative, often technology-based products and services but it is also enabling rapid growth by effective distribution systems and scale on global markets. Yet little is known how these firms of the new bioeconomy scene are able to build business models that actually help them to scale effectively and rapidly on global scale. Our research used data from 23 firms settled in three small and open economy, Finland, New Zealand and Sweden to extract models of doing business internationally and proved that the business model alone doesn't explain the ability of the firms to scale rapidly on international markets. The firms who were able to grow rapidly and eventually become a born global where those that proved to be globally oriented proactive innovators willing to take high risks for reaching a global presence.

These findings led to a new research about the concept of sustainable entrepreneurial orientation examining those bioeconomy firms from our sample that were able to reach a global position. Our results showed that firms that identified a unique opportunity to build breakthrough sustainable products for global markets (e.g. replacement of plastic with durable biomaterial with multiple purposes), they also carefully planned their global value chain for sustainable sourcing and distribution, demonstrating that sustainability is not an exaggerated claim but a true sustainable entrepreneurial orientation.

The third area of our research focused on how the digital platforms alter the traditional linear business models that are still dominating the forest-based bioeconomy. We investigated how this new software-enabled business model enables novel and efficient business interactions and value creating activities that aren't possible with the traditional linear model of doing business. Using data on Finnish-based forest bioeconomy firms our results show that

traditional businesses more and more create their own transaction platform models (e.g. Stora Enso's Box Inc that is a B2B marketplace for renewable packaging) to extend their businesses in new areas with potential for exponential growth on the local as well as on the global market. We identified also a few solely digital platform firms such as Kuutio that offers a forestry platform for external participant to transact easily and through these interactions create new value fast and with a potential of global extension.

Lastly, through document analysis of Finnish and Uruguayan Pulp Industry and 12 expert interviews in Uruguay, we studied the changing operational environment of multinational pulp industry. We used the multi-level perspective model to analyze the socio-technical regime, landscape level issues and niche innovations at a country level. The results indicate that although global challenges and trends in forest bioeconomy are similar, the socio-technical regimes in country level are rather different, and hence also the country specific future perspectives differ what comes to the bioeconomy. Additionally, 17 forestry SME interviews in Uruguay suggest that the development of the pulp and paper industry at a country level heavily depends on the multi-national companies. Knowing the future aspects, opportunities, and threads related to pulp industries from national and international perspectives supports the transition to a more sustainable bioeconomy.

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