



IOF2020 USE-CASE BUSINESS MODELS

WP 4

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Third overview of business models for all 33 IoF2020 use-cases based on sessions on value proposition, product description and challenges.



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EXECUTIVE SUMMARY

This is the third-version of the IoF2020 business model overview and after now successful 3 years of IoF2020, the economically hot phase of product launches and user validation is starting. However, the main challenge in 2019 was clearly the on-boarding of 14 new IoF2020 use-cases. In order to tackle this challenge of providing now individual business support for 33 use-cases, the product support restructured and staffed up its team quite significantly. Therefore, a major focus in 2019 was on analysing the product and service proposition of the new use-cases, developing their business model roadmaps and to integrate them into the synergetic network of IoF2020 use-cases. Next to this individual business model development, the business support team brought also some first concepts on the road that could potentially sustain part of the infrastructure and ecosystem that IoF2020 already established.

In the field of **business models**, we still see a majority of use-cases implementing the software-as-a-service (SaaS) model with monthly or yearly subscriptions. However, also the platform model is getting stronger and became actually in many sectors a key enabler for interoperability, distribution and accelerated product development. We saw the launch of the Data Connect initiative at the Agritechnica in 2019 where Claas, John Deere, CNHi and 365FarmNet declared to use common cloud API to make data available to smart services, but also the launch of the enterprise platform of Connecterra to monetize the data exchange with third-party services. Learn in the first section about the **successes and challenges** in the business model development of the IoF2020 use-cases and discover the positive influence of our business support team. In 2019 the business support also significantly staffed up its team of business model experts to keep up delivering the excellent support and we like to take the chance to shortly introduce them to you as they are all co-authors to this publication.

As already identified and discussed in the previous version there is clear potential in the **distribution of smart farming services** via digital marketplaces on farm management information systems (FMIS) that already manage the master data and bureaucracy of the farm. In this context, 365FarmNet announced as well on the Agritechnica their new Connect API that allows third-party services to integrate easily with the FMIS and accelerate the development of new impactful solutions. Next to the service marketplace there was also progress in the field of **data exchange solutions** that make data from different machinery source available to smart service providers. The Agrirouter adjusted its business models and repaired some limitations that were also identified in last version by the IoF2020 business support team. Furthermore, the Agrirouter won with CNHi one of the missing big manufacturer as a supporter and collaborates now as well with the JoinData initiative from the Netherlands. Read about these developments in the section on economic successes and challenges.

While all the points above reflect mainly on the economic infrastructure for a proper exploitation of smart agrifood solutions, the IoF2020 business support team also developed further **its approach for the implementation of a connected innovation ecosystem**. In a first concrete step it started monitoring 45 accelerators and their connections in the ecosystem with a monitoring tool that uses machine learning to crawl the digital communication of companies. This mighty tool which is called DataScouts collects, sorts, analyses and visualizes complex ecosystem data to find connections, call & product launches, topic trends and investment deals. The objective of this exercise is to support IoF2020 partners to setup their own innovation accelerating programmes and initiatives by having easy access to a pool of innovation service provider like digital innovation hubs, accelerators and competence center. Read about first results of this ecosystem monitoring in the section on the **mapping of agrifood tech accelerators**.

Next to the ecosystem mapping, the business support team also transformed the idea to turn part of the 140 test farms in IoF2020 together with test farms of regional initiatives, corporates and universities into a sustainable **European Digital Test Farm Network** further into a tangible concept. This initiative builds directly on demands discovered within IoF2020 for a more professional and reliable product validation service by test farms. Many SMEs invested quite some time and money into identifying, convincing, keeping and developing of test farms, which delayed in some cases the product roadmap quite significantly and also takes away key company resources as the acquisition is usually not a core

competence of these SMEs. But also larger corporates are more and more struggling to provide test farms that can cope with the demand for multi-actor and cross vendor testing. IoF2020 secured right from the beginning close collaboration on this concept with existing initiatives like NEFERTITI, SmartAgriHubs, EIT Food and existing structures like test farms of corporate and universities. Furthermore, IoF2020 experts constantly validate the value proposition of a test farm network and develops now the concept further in a multi-actor approach by conducting co-creation sprints with key stakeholders like service providers and farmers. In order to inform and win interested farmers and services providers as supporters, IoF2020 organized a webinar in November 2019 that attracted 193 registrations and prepared a low-profile website with a registration function. In 2020 the concepts will be further developed and tested to be ideally established by the end of IoF2020 as a sustainable entity providing validation service for digital farming services. Read more about it in the section on the European Digital Test Farm Network and learn also about the opportunity for farmers to get finally a comparable benchmark of available smart services and drive with informed investment decisions the uptake of IoT solutions in agriculture.

After this rather summarizing introduction to success stories and challenges as well as the ecosystem activities of the business support, the document delivers finally detailed insights into **current status of the business model** for each of the 33 use-cases. A major focus in 2019 was on the on-boarding and definition of the new 14 use-cases. Therefore, the main addition to the business model overview are product descriptions, value propositions and revenue models of these new use-cases. For the old 19 IoF2020 use-cases the business model experts added more details on the cost structure, distribution channels, marketing strategies internal resources, horizontal activities and partner networks. For some use-case it documents changed and adapted product description and value proposition after feedback and advice from the business support team.

A good example is use-case 2.4, Remote Milk Quality, which discarded on advice from their business model expert the development of a remote sample preparation tool in favour of a quality test directly on the milk truck. This adaptation brings now a potential solution with a better value proposition and an attractive business model opportunity.

As the section on the use-case business models is designed as an evolutionary documentation of the progress and changes of the economic exploitation plans, this section contains parts from the previous deliverable D4.9 and only additions and changes where the use-cases changed or further developed their planning.

Finally, the outlook section, gives some preview on the major objective for the business support in the final year of 2020. This phase will be under the clear objective of bringing products for all use-cases to the market and clearly demonstrate their positive economic and environmental impact as the sustainability of the business model behind it.