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**Preliminary assessment of business model
concepts alternatives**

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List of abbreviations

BM: Business Model
EC: European Commission
EU: European Union
ICT: Information Communication Technology
KPI: Key Performance Indicator
NPV: Net Present Value
NGO: Non- Governmental Organisation
RI: Research Infrastructure
R&D: Research and Development
WP: Working Package
CT: Net cash inflow
CO: Total initial investment costs
R: Discount rate
T: Number of time-periods

Summary

The aim of D12.2 is to conduct a preliminary socio-economic performance assessment of the different alternatives proposed in D12.1 based on general hypotheses and assumptions on economic, social and scientific Key Performance Indicators.

D12.2 does so by evaluating four business model alternatives, all including policy makers. Beyond policy makers, BM1 consists of researchers, BM2 researchers and businesses, BM3 researchers and consumers, and BM4 researchers, businesses, and consumers. To evaluate the business models, an assessment methodology and an assessment tool has been developed with the scope of providing an ex ante assessment thus allowing a comparison of the cost-benefits associated with each alternative in three major themes; economic, scientific, and social. Furthermore, the assessment tool has been constructed with flexibility in mind, which will allow the tool to be used continuously to monitor the impact of the RI as certainty regarding cost-benefits become more apparent.

Due to the ex ante nature of the project, and the limited research available regarding similar projects, the data utilized in the assessment is widely based on well-argued assumptions about the impact of the endeavour as well as qualified estimates of the cost-benefits associated with implementing and operating the RI. To mitigate this factor, the assessment tool allows the assessor to provide both pessimistic, most likely, and optimistic measures for each KPI and business model alternative, thus yielding the opportunity to weigh the impact of specific KPI's on the overall business model.

In conclusion, it is found that the inclusion of businesses significantly drives the economic and scientific utility of the research platform but simultaneously also increases the complexity of the business model as it is assumed that business needs for the RI are considerably different than those of consumers and researchers. Furthermore, it is found that the main contributor in terms of social impact, specifically awareness, is brought forth by consumers, since these are expected to increase the user base of the RI significantly. Thus, BM4, including all customer segments, is considered to have the highest potential but is also the most complex as the RI will have to be constructed in a way that accommodates the needs of all three customer segments. The increased complexity posed by BM4 warrants an in-depth consideration of the associated risks, hence the most apparent risks related to the implementation of the RICHFIELDS have been identified and outlined, and contingency plans for mitigating these have been proposed.