



WP5 ROBUST SIMULATION AND PREDICTION MODELS



PrimeFish



Horizon 2020
Programme

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WP5 Simulation and prediction models

- Brings together much of the work undertaken in other parts of the project
- Objectives:
 - Apply the Fisheries and Aquaculture Competitive Index (FACI)
 - Boom and bust analysis
 - Strategic positioning
 - Success analysis models
 - Willingness to pay of consumers - prices that may be charged in different markets

WP5 Simulation and prediction models; FACI

- **Based on the Fishery Competitive Index (FCI) constructed in 2005 and used to evaluate the competitiveness of the Icelandic and Norwegian fisheries.**
- **Aims to give a consistent estimate of how well fishing industries are doing in the global business of processing and marketing seafood products by identifying factors that affect the competitiveness of fishing industries within different countries.**
- **FCI is intended to analyse the competitiveness of whole countries or industries, and not individual companies**
- **The FACI retains many of the elements of the FCI, but also incorporates aquaculture.**

WP5 Simulation and prediction models; FACI

- **The FACI is intended to serve two purposes**
 - Comparison between the competitiveness of individual countries
 - Benchmarking at firm level
- **Country-level FACI**
 - World Economic Forum survey
 - Hard data from national sources
 - Survey
- **World Economic Forum**
 - Institutions, infrastructure and higher education training
 - Goods and labour market efficiency, financial markets, market size
 - Technological readiness, business sophistication, innovation

WP5 Simulation and prediction models; FACI

- **Hard data from national sources and survey**
 - Fisheries management
 - Official monitoring and inspection
 - General infrastructure
 - Fishing companies
 - Processing companies
 - Marketing/sales firms
 - Aquaculture firms

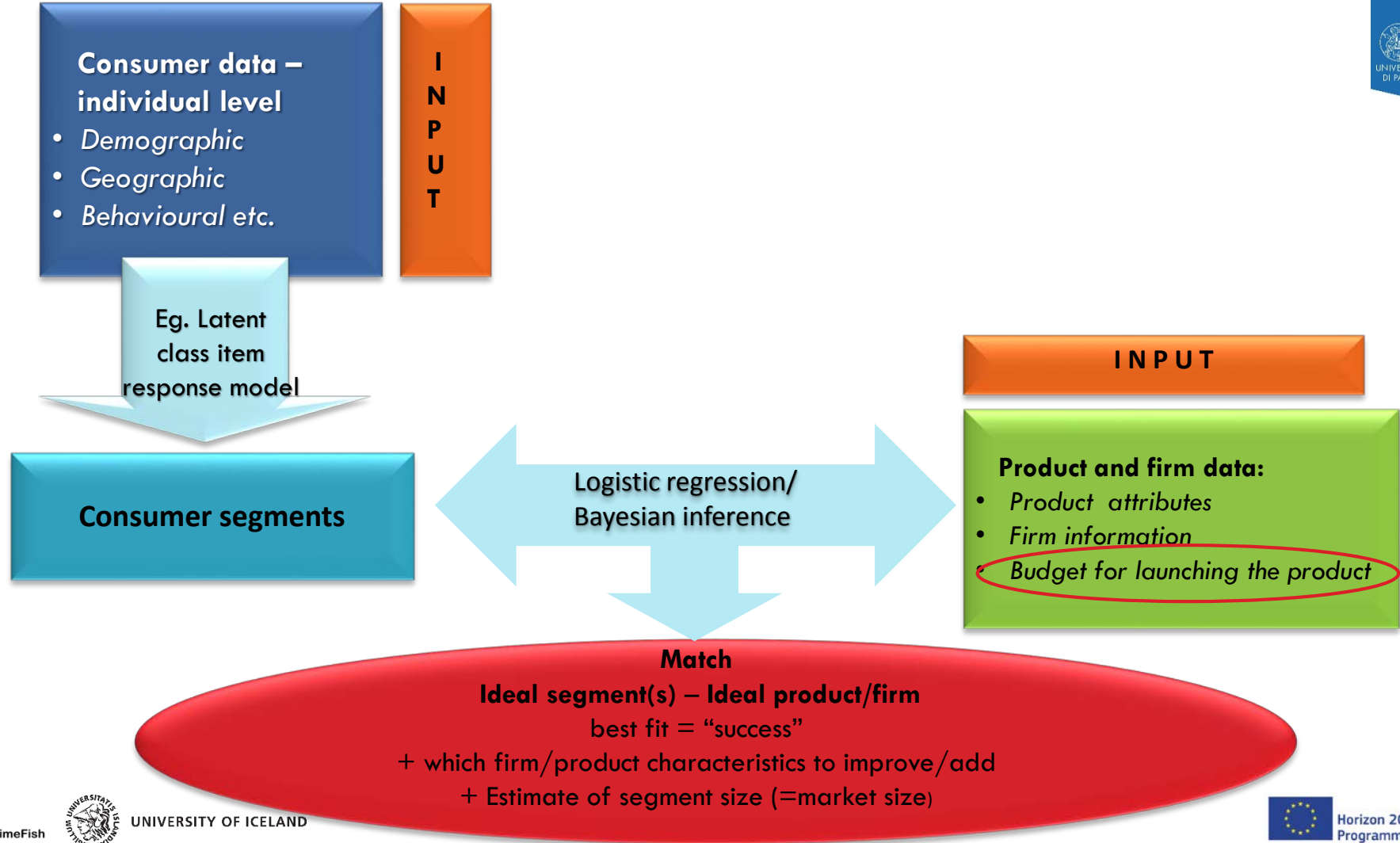
- **Survey will be conducted among various stakeholders**
 - Government
 - Academia
 - Industry

WP5 Simulation and prediction models; FACI

- **National-level FACI to be undertaken for several countries; Norway, Iceland, Newfoundland, Spain, UK**
 - Time-consuming to assemble for each country
- **Firm-level FACI**
 - Much shorter than the national-level FACI
 - Aquaculture and wild capture fisheries – production, processing, marketing
 - Survey – 40 questions (aquaculture), 36 questions (wild capture fisheries)
 - Data from firm accounts
 - Firms will complete online
 - Benchmarking

WP5 Simulation and prediction models

- **Success analysis; lessons learned**
 - **Successful companies are market-oriented**
 - **Identified unsatisfied consumer needs**
 - **Target a barrier to fish consumption**
 - **Exploit a growing market trend**
 - **A product must be a good fit**
 - **Clear understanding of the market and target consumers**



WP5 Simulation and prediction models

- **Willingness to pay**
 - **Attributes**
 - Price
 - Origin
 - Production (farmed, wild)
 - Product format
 - Preparation (whole fish, fillet, easy to cook)
 - Sustainability (none, certification)
 - Health/nutrition claim (none, source of Omega-3, low fat content)
 - Freshness
 - **Socio-demographics (gender, age, education level, occupation, family size, age of children, income, location, etc.)**