Innovating SMEs - segmentation along lifecycle and sectors (analytical research activity)

**Funding:**
H2020 - INNOSUP-07-2017

**Possible Timetable:**
- Opening: 8 November, 2016
- Deadline: 28 March 2017

This proposal has been developed by the Research Centre for Entrepreneurship and Business Innovation (RCEBI) of the Rotterdam University of Applied Sciences (RUAS). The project proposes to use a methodology developed and tested by Dr. G. A. A. Bauwen, Rogier Cazemier, and Martijn Priem as the diagnostic tool to develop a segmentation of SMEs across the Netherlands and participating countries.

**Potential Partners**

The critical requirement is that participating universities or businesses will have the ability to survey a wide range of SMEs in their country or region.

RCEBI proposes to use its relationships with Rotterdam Chamber of Commerce and MKB Netherlands (The Royal Association MKB-Nederland is the largest entrepreneurs’ organisation in the Netherlands) to approach SMEs and surveys will provide projects for the business students of RUAS who will assist in implementation within the Netherlands.

**Basic Approach**

A basic approach has been set out by Dr. Guy Bauwen in his book The Innovation Compass. For businesses to be able to innovate there are five basic competences:

1. **Sensing** (Connecting): identifying new growth opportunities, selecting targets, and acting with agility and anticipating
2. **Scaling** (Shaping): tailoring and modularizing offerings and influencing the way the market develops
3. **Collaborating**: assessing and selecting the right partner at the right time
4. **Capturing** (Seizing): making the right decisions and executing with discipline
5. **Leading**: confronting conflict constructively and leveraging dialogue.

These capabilities are critical if a business is to be open to innovation. Dr. Bauwen then goes on to explain eight key steps to ensure that implementation of an innovative idea can be successful. These eight points describe the importance of identifying and working with lead:

1. Users
2. Customers
3. Markets

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1 Bauwen, Guy, "Innovation Compass" ISBN 9781616272760 see www.innovationcompass.eu
For the purposes of segmentation and targeting we believe that the first five capabilities will
provide the basis for a useful segmentation;

We have develop an on-line questionnaire comprising 25 questions, each question has a
section for additional comments. The responses to the 25 questions are then used to compute a
score which rates the business on each capability with a score between zero and five. Here are
three examples.

A simple chart highlights the score for each business.

The first chart shows a business that scores generally low across all capabilities, the second
chart shows a business that has poor sensing capabilities, the third poor leadership.

The Green line is the posited "Best in class" and the red line is the "Worst". The Blue line
represents the actual results from the particular business and the orange line is the average
score across the sample (in this case, 41 businesses). In this trail of the survey a rose wheel
was produced for all 41 participants (2015).
Potential for Segmentation

Based on questions that will identify:

- Type of industry (using EU classifier)
- Ownership structure (e.g., family, private, public)
- Size of Business (using # employees)
- Age of business (since founding)
- Location (country, region)

We hypothesize that we will be able to segment differences in capabilities - which would help to target programmes and incentives to raise the capabilities of SMEs.

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<tr>
<th>Capability</th>
<th>Training Programmes</th>
<th>Appropriate Policy Instruments</th>
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<tbody>
<tr>
<td>Sensing</td>
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<td>Leading</td>
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Kick-off meeting for Project Preparation

We would aim to hold a first meeting of interested participants some time before the summer of 2106 (June?) and start to work on the proposal, allocating tasks.

Between June and November partners would be expected to solicit partners (e.g., local chambers of commerce, SME organisations) and obtain letters of support and commitment.

In addition, partners would be collecting information on what incentives are available locally (EU provided or National or local government provided)

The goal would be to have a first draft of a proposal ready before the expected call in November so that December through February would be adapting to any specific requirements of the call.

Interviews

Each partner would be expected to survey a minimum of XXX companies in their country or region.

Companies to be in manufacturing and need to be SMEs - but with "M" defined a bit more broadly than the typical EU definition so we include what Germany refers to as "mittelstand" companies.

Output: A report for each company - highlighting their strengths and weaknesses (to be given to each participating company as feedback).
Output: Each country would produce a country report summarising the situation in each country.

In addition - we may have additional questions specifically relating to knowledge of and use of available incentives.

**The Project**

The project itself will probably be conducted in phases:

**Phase 1:**
- Surveys

**Phase 2:**
- Conference / workshop to share and analyse results
- Determine critical shortcomings by segment
- Review use of existing incentives by segment
- First report including draft recommendations

**Phase 3 (still thinking about this)**
- Share results with all participating businesses
- Discuss draft recommendations with local government, key businesses
- Review and finalize report and recommendations.

**Potential Benefits (for internal use)**

Research Centre - deeper understanding of innovation in SMEs, verification of methodology

RBS 2.0 - projects for students, potential to adapt curricula, develop tailored courses for local SMEs

Businesses - feedback on innovation capability, tailored capacity-building training, improved access to policies to assist innovation

Government - targeted policy instruments focusing innovation support for improved effectiveness.
Extract from the HORIZON 2020 Work Programme: §7. Innovation in SMEs

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Specific Challenge:

Creating a higher societal impact from innovation support requires increasing its efficiency. In the recent past innovation support agencies recognised that successful innovation is not originating only from scientific research and technological development, but from new business models, the uptake of technologies, design and organisational changes. Furthermore 'internationalisation’ of business activities is seen as a case of business innovation in some countries.

A better understanding of business innovation opportunities led to an even broader array of innovation support measures put in place for SMEs. But the question arose how to better identify and target those SMEs that can create highest impact from the specific support measures; and how to offer viable alternatives to those enterprises not yet ready to implement the most ambitious projects. Representatives from innovation agencies were describing this process of matching design and delivery of support schemes to the needs, potentials and ambition of their client SMEs as ‘segmentation of the client base’.

Processes of value creation from innovation differ between industrial sectors. For example between capital intensive - but low-speed – innovation in the mining industry; the high speed innovation software development for example for gaming which is realised in networks; pharmaceutical industry with a dominant role of patents and industries with long and complex supply chains like automotive or aerospace.

Many regions try to identify potential high-growth SMEs and orient their support towards realising their full growth potential, yet the methodologies to identify high potentials vary substantially and innovation support programmes put in place are hardly designed taking account of the economic fabric or of the smart specialisation priorities of the region. Instead often a standard portfolio of innovation support measures is put in place.

Scope:

The above describes three interwoven aspects of a challenge to segment the (SME-) clients of public innovation support in order to achieve a higher societal return from the investments into innovation support. The action shall contribute to documenting and analysing existing and potential new approaches to provide innovation support in a more effective and efficient way. Successfully segmenting 'innovating SMEs' – the clients of innovation agencies – is a key in that respect.

To address the described gaps proposals should address one or more of the following aspects:
Develop methodologies to identify segments within the group of innovating SMEs (including SMEs that are not yet innovating but have innovation potential or need) and describe portfolios of innovation support measures that typically address well their needs along innovation cycles. To that end the proposed project should rely on existing datasets (Community Innovation Survey [CIS] or others) or conduct own targeted surveys.

Analyse existing approaches to segment innovating SMEs and analyse existing portfolios of innovation support measures in how far they respond to the needs of important segments in the region.

Analyse in how far popular innovation support instruments like tax credits, vouchers, grants are biased towards certain innovating SMEs or provide opportunities to overcome existing biases.

Projects to be supported are encouraged to conduct specific communication activities targeting the relevant associations of regional development agencies and innovation support agencies.

The Commission considers that proposals requesting a contribution from the EU of between EUR 0.30 and 1.00 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

**Expected Impact:**

The result of the research action shall strengthen the capacity of national and regional ministries, innovation agencies and providers of innovation support, such as cluster organisations, science and technology parks or development agencies, to:

- better understand the patterns of innovation opportunities and activities in different segments of the SMEs according to age, size, business activity, industry sector, organisational features and other relevant aspects;
- better understand the impact of specific types of innovation support with low entry requirements on different segments of the SME population – of particular interest in this context are tax credits for RDI expenditure, voucher and small grant schemes to strengthen management capacity and technology uptake;
- target existing measures better to those SMEs that can create highest economic and societal impact;
- design new measures for specific segments of the SMEs to start or diversify innovation activities which create highest impact for their competitiveness.