

A.T1.1.2 SURVEY - ANALYSIS

Report on Survey - Analysis

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1. Introduction

The NABIAM project focused on technology transfer from science to industry and addressed the topics of Nanotechnology, Biosensing and Additive Manufacturing as a cross sectoral and transnational collaboration analysis of existing science and science infrastructure as an Technology offer with demanded technology requests from industry and with the focus on medical applications. (Interreg AT-CZ- Region)

The Gap Analysis process refers to the space between "where we are "as a part of the business (the present state) and "where we want to be or in which direction we want to move "(the target state or desired state). The goals of the Gap Analysis Report (GAR) are two-fold: first, it aims to identify and analyse the industrial activities in cross boarder collaboration to provide an in-depth look at the daily topics. Second, the GAR endeavours to offer recommendations on ways to improve knowledge (reducing information gap) as well as to determine what the companies in one territory need to make growth happen in the competitive market.

In NABIAM project, we aimed to summarize and analyse the current activities of the companies in three defined area such as: Additive manufacturing (AM), Bio sensors (Biosensing) and Nanotechnology (Nanotech), the involved value chain in those companies as well as the room for development in such topics which could be the potential for future cooperation.

2. Survey analysis

For this report, different steps were determined from starting point to the final step.

The steps are as follow:

a) Define the objectives of the Gap Analysis:

The first step to creating a good questionnaire for the survey report is defining the objectives of the project. For this purpose, three main topics such as Additive manufacturing (AM), Bio sensors (Biosen) and Nanotechnology (Nanotech) were selected and several questions were planned to evaluate the current status regarding to the proposed topics.

b) Define the target group:

The target group in this project were companies and RTO's in the AT-CZ Interreg Region, so the survey was contributed by 73 companies including both RTO and KMU mainly from the Interreg Region AT-CZ.

c) Data analysis and visualization

After defining the survey and the target group, the next step is to determine the methods for visualization the data to simplify it for the better understanding. In this regard, a summary of the data analysis was prepared and shown in Fig. 1.

The included 6 questions for each of the main topics and the results were categorized into four main parts. The statistical output displays the percentage of KMU and RTO that are currently active/inactive in the respected area. The second and third part of the output address the prioritized list of the relevant topics as well as the involved value chain in the target group. Finally, the last part of the output, that could be the main goal of the GAR, refers to the area that the companies are interested to initiate the collaboration.





While through collaboration, companies can often complement each other and specialise in different areas to compete in markets usually beyond their individual reach.

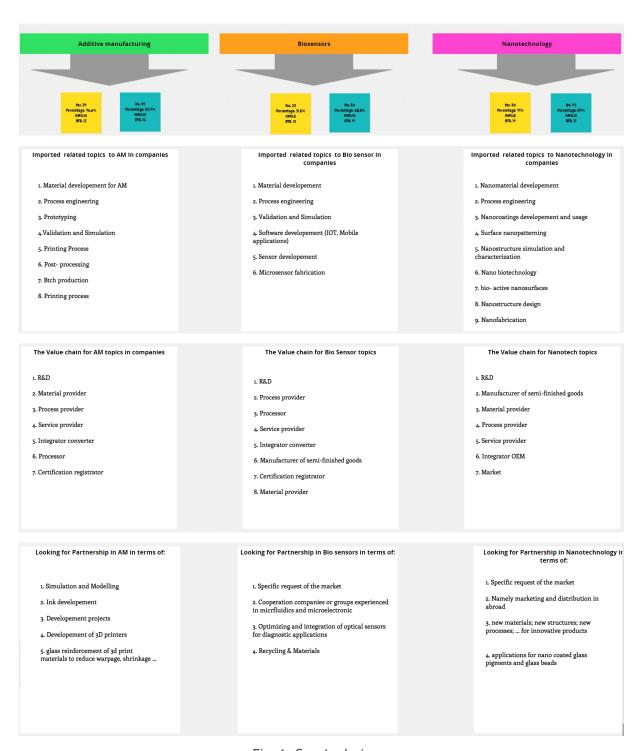


Fig. 1: Gap Analysis summary







3. Conclusion

Output Focus and Interpretation:

Based on online survey additionally 20 bilateral visits and direct 20 interviews with survey content could be managed. Based on the visits the competence mapping and the online survey was improved by iteration which allowed to reach more than 74 direct survey participants which was one of the important and exceeding goals in Nabiam to reach RTO, Industry and SME.

For the analysis an important result are that for AM (N=34 active interests) and therefore 46% of the survey participants (10 SME's and 12 Research & Technology Organisation) where interested and addressed their looking for partnerships on simulation & modelling, ink development, new 3D printing technologies and reinforcement of structures e.g. by glass or biocompatible materials.

For Bio Sensors it could be clearly monitored that this is the field with the most scientific approach and still in TRL level below TRL7. So here only 31,5% had an interest and priorities are material & process development. (5SME's and 13 RTO's) showed their interests and main questions are "Market Requests" Collaboration Neds in microfluidics and microelectronics with process integration & optimizing of optical sensors for diagnostic applications. Biocompatibility and Recycling were additionally addressed.

For Nano Technology 41% declared there interest (7SME and 14 RTO) with strong focus on Nano Biotechnology within Nano Material Development or bio active nanosurfaces and process engineering.

The majority of the companies surveyed have so far used additive manufacturing in the area of prototyping.

There are a few companies that are also active in the field of nanotechnology or biosensor technology, but the interest in networking is currently rather low among all the companies surveyed.

In the direct interviews with the industry partners, the picture emerges that there is little willingness to cooperate and network, especially when know-how has been built up.

It is important for the companies to secure their knowledge advantage (IP or NDA), which means that market access or approvals in medical technology are important additional services that must be taken into additional account beside research demands which is an important result for the clusters and networking focus.