

Market analysis for expansion strategy of high-precision manual workstations

Degree programme : BSc in Industrial Engineering and Management Science
Thesis advisor : Prof. Dr. Bastian Widenmayer
Expert : Thomas Blaser
Industrial partner : Zesar.ch, Tavannes

The niche market of high-precision manual workstations challenges manufacturers in Switzerland to ensure sustainable growth. Companies in this sector must navigate a unique set of obstacles, including high competition, evolving technology, and a limited customer base. This study aims to identify and analyze various market opportunities to determine the best solution for overcoming these challenges and achieving sustained long-term success.

Introduction and Objective

Zesar.ch is a leading Swiss manufacturer of high-precision manual workstations, which are essential for the assembly of luxury watches and are characterized by precision and ergonomic design. However, despite its outstanding performance, Zesar.ch faces challenges such as niche markets and the trend towards digitalization. Using the research question „Which new market opportunities exist for Swiss manufacturers of high-precision manual workstations outside the watch industry and what are these opportunities in terms of market size, product-market fit and market entry?“, I am examining the strategic opportunities for Zesar.ch's expansion into new markets to ensure sustainable growth in a changing industry landscape.

Research Design

The study follows a multi-method approach involving desk research, site visits, and interviews with stakeholders. Firstly, I used the General Classification of Economic Activities (NOGA) code to identify all industries performing precision manual labor, determine the number of companies and full-time equivalents, and validate this data against the structural survey. Secondly, I analyzed the shortage of skilled workers based on existing studies in the respective industries. By examining the competition's portfolio and customers through internet research, existing documents, and direct contact with manufacturers, the study analyzed the competitive landscape. I then conducted a scenario-based market volume analysis for the various markets, considering best, worst, and base case scenarios using the previously collected data. Through semi-structured interviews accompanied by site visits, which were transcribed and thematically coded, I verified the market size and gained deeper insights. This process enabled market segmentation, identification of key features, and determination of acceptable price ranges for workstations. Finally, I calculated the potential annual units sold and turnover in each segment.

Results

I identified a total of 21 different NOGA codes, all classified as significant to moderate in the skilled labor shortage index. I found 15 competitors, six of which supply not only the watch market but also jewelers or MedTech. The industries identified are divided into seven markets, with the watch market being the largest in terms of units and turnover, followed by the laboratory, cleanroom, and MedTech markets (see Figure 1 for market size and respective CAGR from 2018 to 2021). Each is segmented into premium, medium, and budget, with only the premium segment being relevant for Zesar.ch. The key features I identified are ergonomic and modular design, stability and durability, with price ranges varying by market but generally between CHF 10,000 and CHF 30,000.

Implications and recommendations

Based on the results and Zesar's competencies, the study recommends that Zesar.ch targets the luxury watch market, followed by jewelry manufacturers and the laboratory market. The key features identified should be highlighted in marketing as they reduce absenteeism, improve well-being and increase productivity. Additionally, continuous monitoring of market changes is essential.



Julien Bouquet
Business Engineering
julien@sensemail.ch

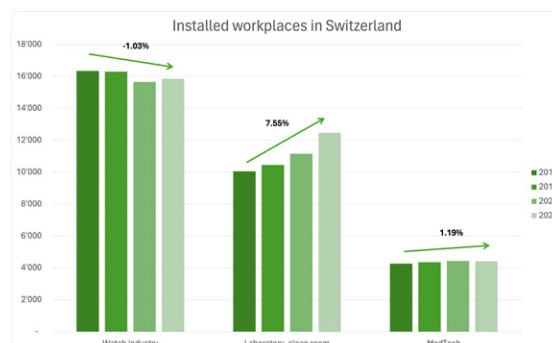


Figure 1: Development of the workplaces in the three largest industries between 2018 and 2021