

A Unified Sustainability System for Swiss Universities

Customer Needs and Market Analysis

Student



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Initial Situation: A critical component in the ongoing process of establishing a robust sustainability management at OST is the implementation of a sustainability monitoring and controlling framework. One major element of this initiative is to analyze and define a sustainability data management matching the specific requirements of a Higher Education Institution. Identifying a suitable tool for this in today's complex environment presents a challenge faced by the majority of universities in Switzerland. The recently completed stakeholder analysis from the project "Sustainability at OST" provides knowledge of the current situation at OST, which influences the selection of an appropriate sustainability data monitoring and controlling tool.

Introduction: A survey from ETH has revealed that most universities in Switzerland rely on using Excel-based solutions for their sustainability reporting processes. The specification, identification and implementation of a professional tool requires a significant amount of time, a resource often not available. At the same time there is an undeniable and growing need for a practical sustainability reporting and monitoring tool, starting with greenhouse gas reporting and ranging to a large variety of other sustainability-relevant topics. This work is the first attempt for universities in Switzerland to find a collaborative sustainability solution.

Conclusion: A customer profiling of the universities in Switzerland and a market analysis for sustainability tools has shown that most available tools are not suitable. One of the main reasons is that the scope for sustainability is different for universities compared to companies. Most tools are strictly aligned with a given framework and cannot add fully customized metrics, as it is needed in the field of Higher Education Institutions. Testing various tools with a comprehensive questionnaire did not reveal a clear winner for Swiss universities; instead, it identified a range of suitable tools depending on the desired complexity of the corresponding sustainability system. The next steps involve a decision-making process among the universities of Switzerland to select one or multiple tools. Another possibility is the development of a tool collaboratively. Particularly with the available resources, namely student projects at multiple universities, developing a tool tailored to this specific use case would be an appealing solution for the medium-term future. Considering the ability to keep improving and adjusting the tool as necessary and desired, along with eliminating license fees and the global impact of openly publishing the source code, are key arguments to keep in mind during the upcoming decision-making process.

Advisor

Prof. André Podleisek

Subject Area

Business Engineering, Innovation in Products, Processes and Materials - Business Engineering and Productions, Energy and Environment

Project Partner

OST Sustainability Office, Rapperswil, SG / ETH Sustainability Office, Zürich, ZH

Sustainability tool decision matrix with points from 1 to 10 of the most suitable software tools identified.
Own presentment

Tool	Functionality	Design	Enabling Collaboration	Availability	Cost	Total
Pelt8	9	8	10	10	2	39
Code Gaia	6	8	6	10	3	33
Kabaun	5	7	0	10	4	26
Ecuspeed	5	5	5	10	8	33
PlanA	4	7	0	10	6	27
Esg2go	3	6	0	10	8	27
Simap	3	5	0	10	9	37
BayCalc	3	2	2	10	10	27
In-house developed	9	9	9	1	10	38