FAMS – a word from the Consultant

For the digital transformation to work, a company needs access to Internet, to electricity, to hardware, human resources and skills. All these elements entail costs and the digitalization of the work processes in a company only makes sense if this step ultimately leads to cost savings that are greater than the resources invested. These cost savings can be achieved through higher time efficiency, improved communication, a better utilisation of production capacity, lower product losses, better product quality, uninterrupted supply chains, lower administrative costs and a better basis for decision-making. These are usually the drivers for the digitalisation, for the introduction of databases, sensors, and apps.

In 2020, GIZ decided to have software developed that would provide all ProEcon, ProMove and GIAE partner companies with the tools and services they need for their complete digitalisation. An assessment of around 20 companies made it possible to identify priority use cases for implementation. In a later step, this basic software should then be gradually expanded to include very specific modules in order to meet the respective requirements of the individua companies. On this basis, I developed the software specification and the terms of reference, whereupon a tendering procedure on national level was initiated. The social enterprise Emponderando Mozambique (EM) from Beira won the project and the project was officially launched end of February 2021.

Over the last two years I have supported and monitored the development of this software that today is called the Farmer and Agent Management System (FAMS). When I was asked by GIZ to specify a system that meets the needs of so many different project partners of ProEcon and Green Innovation Centres in Mozambique, I was very sceptical in the beginning. A system that can support the various value chains, the numerous use cases, the different needs of the companies, the varying numbers of farmers, is difficult to develop. On the other hand, it's also a challenge to specify and develop such a system and many future users can benefit from it.

Today, FAMS is one of the most flexible digital systems for agri-businesses that I know. Only e-Prod from Kenya is similar as product. The FAMS Core is a customizable platform providing services such as farmer registry, communication tools, and training management. It can be extended by plugins for farmer-ID cards, e-payment, procurement, traceability, supply chain-, loan-, and stock management. The completion with customisation and consulting services makes the FAMS unique. The FAMS is not a software, it is a system with continuous customer support.

As nice as all this is, unfortunately such sophisticated software also requires the corresponding human resources also on the side of the software company. Over the course of the project, EM has been able to professionalise many young software developers from Beira and beyond, who are now all contributing to FAMS. This results in ongoing costs that must be borne by the FAMS business model and finally by the FAMS customers. While the development of the system was largely supported financially and technically by the GIZ, the future must show whether the FAMS business model is sustainable.

Unfortunately, only a few of the benefits that digital transformation can bring to a company are immediately visible. The majority only become visible after one to two years. However, the upfront costs of this first step are immediately noticeable: Investments in hardware and software, additional staff, costs for the internet all weigh on the company's balance sheet right from the start. Without sufficient digital skills at company level, the digitalization cannot bring sufficient added value. Training is the magic word, and this not only concerns FAMS, it should also build basic digital skills where necessary. We have seen that the availability of a full-time IT staff at company level is key to success. This

person does not need to be a software developer or server admin, this person should rather have an understanding for agricultural data and processes and should come with good Excel skills and a general tech-affinity.

In accordance with the project plan, GIZ will discontinue its financial support for the FAMS at the end of thes year 2023. From January 2024, FAMS will have to finance itself via licence costs and consulting services in accordance with EM's business model. FAMS is now installed and in operation at nine companies. The team that works permanently for FAMS at EM must also be financed via FAMS. This includes the operation of the system (server, hosting, maintenance, updates), the helpdesk, as well as error handling and finalisation. The last point is delicate, as the system should actually be completed and running error-free at the end of the ProEcon / ProMove project. I would ask both sides to be lenient and to be as flexible as possible when looking for solutions.

EM can search for additional clients, which can help raising incomes for the company, but on the other hand, additional clients will ask for additional work which in turn needs additional human resources.

The FAMS community, developers and users alike, are interdependent. If companies drop out, EM will also have to reduce the team, which in turn will reduce the service. Such software needs a critical mass of clients, otherwise sustainability is at risk. I hope that all current and future FAMS clients will understand the challenge and that everyone can endure the duration it will take for digitalisation to bear the expected fruit.

A visit to the FAMS developers from Emponderando Mozambique.

Thank you very much, I appreciated it very much to work with you. I wish you and FAMS a good future!

Ralph