

CHALLENGES

1. VIRTUAL REALITY IN MUSEUMS

The city of Frankfurt am Main has many museums that need innovative concepts for visitor guidance -- for example, apps with an option of evaluating the location that provide the appropriate information about the place, or "mixed reality" support (for example, Microsoft Hololens). The technology could be used by various institutions.

2. PAYMENT SYSTEM FOR MENSA

For university catering, our own card system (with Intercard as service provider) is currently offered in addition to cash payments. The system is used by about 43,000 students, 20% of which are international, and by 7,000 university staff members in Darmstadt.

Our cards can be charged through cash and cashless payments. The catering facilities are also open to all guests who are not enrolled at a university or are not university employees. These guests have no access to our system and can only pay cash. Since we want to move away from cash payments or reduce its usage, we are currently looking for alternative payment options and already had contact with the company BlueCode. We would be happy to offer payment options via smartphone to our customers. Since we have a large number of transactions of small amounts, a bank-specific payment option such as Sparkasse app is out of the question for us.

The development of the product will be made through Klarna Sandbox. We would like to have an app that is simple to operate and can quickly be understood and used intuitively by the target group.

3. OPTIMIZATION OF THE PROCESS "COLLECTION AND BOOKING OF BOOKING INSTRUCTIONS"

One of the principles of accounting is "No booking without receipt!". Therefore, at Mainova a booking instruction is the basis of every booking and serves as proof of the transaction accuracy. Here, the manual accounting process is carried out around 3,000 times a month. The goal is to streamline and automate this time-consuming and technically obsolete process from initial entry to final registration in the SAP system.

The IST process consists of three main steps:

1. First entry: The author fills the booking instruction (MS-Word) with the document header data (posting date, reference, document header, company, currency, value date). Additionally, in every booking line next to the amounts (debit / credit) there are the primary accounts, the secondary account assignment information (for example, cost center, profit center, order) and the document line texts. After the final verification of the data records the clerk releases the document with date and signature and directs the booking instruction according to the Mainova release directive (depending on facts and value limits).

2. Release: The responsible person checks the information on the booking statement. Eventually, the details will be checked and adjusted. The release will then be documented on the booking instructions with date and signature and the document will be forwarded to the accounting department.

3. Booking: The accountant first performs a plausibility check (e.g. account assignment objects). As part of the transfer of the posting instruction to the SAP system, an error check is made for master data and for the balance adjustment (debit / credit). Incorrect information on the booking instruction when entering the posting in the SAP system leads to the termination of the transaction, and a clarification must be initiated with the entry. Depending on the booking circumstances, additional accounting information and additional book entries must be derived and supplemented by the accountant. After the successful posting in the SAP system, the accountant enters the system-generated document number in the booking instruction and confirms the booking with date and signature. The final booking instruction is then scanned in PDF and the corresponding document number is registered in the SAP system as auditable "Business Document".

The requirements for the TARGET process:

- All relevant data should only be entered once and checked on entry by master data verification and logic checks as well as authorization checking of account assignment elements.
- The entire process should be portrayed as a guided workflow and must be documented auditable, including personal releases. Additionally, supporting documentation, such as calculations in Excel, should also be added.
- The workflow should also be able to be filled by a standardized CSV file.
- From posting facts (for example, reserve posting, internal transfer etc.) and value limits, the necessary release steps as well as certain posting information should be retrieved automatically.
- After final processing, review and release by the accountant, the posting should be automated in the SAP system.
- Finally, the booking instructions, including the SAP document number, all release steps and accompanying documentation are filed as "Business Documents" at the SAP document, and the process participants are informed about the successful completion of the booking process.

The first ideas and requirements such as derivation rules as well as personal and technical checks in the workflow have already been developed for the individual process steps. These can be presented and explained if needed.

4. CREATING A REGISTER FOR SPORTS FACILITIES.

The sports department administers 55 sports facilities, where the athletes have over 110 playing fields at their disposal. Now the department is in need of a tool that would allow easier booking of pitches by athletes and sport clubs. The aim of the new register is to account for the remaining free slots at the individual sports facilities in order to enable more efficient slot assignment by the supervising club, especially by school sports in the mornings.

It is important to remember that different pitches can be used for a limited number of hours per year, i.e. grass pitch up to 600h / year, tennis courts up to 1,100h / year and artificial turf pitch up to 2,400h / year, and various teams (youth / adults) have different training times depending on the sport.