BPR4GDPR's Trial 2: compliance-as-a-service in cross-organisational automotive CRM

The **CAS automotive CRM** (Customer Relationship Management) system, which is used in BPR4GDPR's second trial, caters to the needs of multiple stakeholders participating in the network of car dealerships. Today, car dealers use modern networking and computing capabilities that include online services that store and process their users' personal data. Cross-organisational collaboration involves the full breadth of **involved stakeholders** within the automotive CRM context: car dealers, car manufacturers, suppliers, auto certification services (TÜV, ΕΛΟΤ A.E.), call centres, service providers, customers, lead data providers, vehicle license issuers, vehicle registration certificate issuers, employees, job applicants, leads, or banks. The **information processed** in this trial includes personal information such as client and lead data, digitalised receipts, client activities, services provided to clients, or interactions of all stakeholders with clients and leads. The **aim of the trial** is to enforce GDPR compliance in typical settings in which car dealerships conduct their business and network. The trial uses privacy-aware process re-engineering to enable GDPR compliance to the regulation by implementing technical mechanisms and business processes for accountability, process verification, and adaptation. The aim of the trial is broken down into the following three research and innovation goals:

1. Enforcement of the data subject rights in cross-organizational operations. This research objective requires the implementation of the management of retention periods, the right to erasure, and the management of the data transfer processes.
2. Enactment of process reengineering for GDPR compliance, which should improve existing customer management processes in line with the GDPR regulation.
3. Improvement of data security by performing a risk assessment of the trial and subsequent implementation of security mechanisms and measures to overcome the discovered risks.

Cloud-based automotive management is today distributed across different information systems spread in a complex ecosystem with the multiple stakeholders: car dealers, manufacturers, and call centres use the same cloud-based collaborative platform and automotive CRM. Accordingly, various risks to the rights and freedoms of data subjects arise as the stakeholders in automotive CRM solutions collaborate in B2B settings. In such an ecosystem, car dealerships and multiple data processors and controllers process and exchange lead and personal data as well as digitalised receipts. The aim of the trial is to integrate several BPR4GDPR tools and methods to make these business processes comply with GDPR and to provide data subjects with a set of tools to exert the rights that protect natural persons.

Stakeholder feedback regarding the automotive CRM trial

Based on a questionnaire for the CRM automotive clients, initial feedback of ten different car dealers could be generated that are interested in above-mentioned GDPR-handling functionalities.

The questionnaire tailored to the CAS clients in the field of cross-organisational automotive CRM in a BPR4GDPR questionnaire for customer management in car dealerships. The ten clients belong to organisations who are more motivated to adopt new technologies and to try new things even on a prototypical phase. Within the questionnaire, the respondents were profiled according to their experience with GDPR. Then, the need to cater to business requirements related to the heterogeneous nature of IT systems for automotive CRM had been assessed. Further, GDPR-related functionalities were assessed for the respondents' business field. Finally, the remaining functionalities were considered, and open feedback could be given.

The respondents have knowledge of GDPR based on the fact that some of them are DPOs or they are persons involved in GPDR implementation processes within the company. Alternatively, the respondents have to deal with data protection declarations or even with customers who have already requested data deletion. In addition, the customer selection for advertising measures requires the knowledge of GDPR. An interesting remark made by one of the respondents was that problems with GDPR are more likely to arise in the service area than in the actual sale of cars.

Considering the general handling of GDPR, one of the respondents noted that all activities and measures in this regard are very work- and consulting-intensive, especially in new fields. The issue is difficult to integrate into the workflow in the service area and spare parts sales. Although it is clear and understandable, why the regulation exists and its purpose, many things are difficult or even impossible to implement in practice. In addition, implementation takes an enormous amount of time and therefore also money. This weakens competitiveness in relation to countries that do not implement the issue as accurately as Germany.

With a rating of 4.8/5 the heterogeneous and multi-stakeholder nature, of how IT-supported business is conducted in automotive CRM information systems, was very important to the respondents. Most of them share information with partners, call centres, and other systems (especially, DMS, OEM, and product configurators). The clients of the respondents have been very concerned about the changes introduced by GDPR and constantly interacted with car dealerships since before the regulation was passed. Accordingly, now that the regulation has been passed, the respondents are very interested in having the possibility to integrate in their systems out-of-the-box functionalities for the execution of GDPR-related requests. Regarding the answers, the respondents are most interested in a supporting tool for gathering, updating and proofing consent (4.5/5) as well as in notification for ending retention periods (4.4/5), so that they can renew the consent. Tools to handle data subjects' requests for data access (4.1/5), the rectification of data (3.9/5) as well as for data erasure (3.8/5) are important for the respondents, too. However, the need for user-centred tools to fully implement the right to portability is quite low (3.2/5).The respondents were presented with information about additional functionalities that will play a role in BPR4GDPR's second trial. The respondents were introduced to the risk assessment tool, the CoProtect cryptography tool and the advantages of process mining. The respondents were interested in the approach of process mining in order to automatically discover GDPR violations (4.1/5) although they were reluctant to offer their data although open to discuss about non-disclosure agreements and meeting to increase trust in order to overcome this hurdle. The respondents were very interested in testing a BPR4GDPR risk assessment (3.8/5) and to learn about the CoProtect cryptography approach in order to increase their security provision (3.9/5).

Further needs for GDPR-related functionalities were the collection of all necessary information to send confirmation/information to the customer as well as the linkage of different privacy statements from individual and company contacts, but also from contact persons within the system and an individual selection of these.

Lessons learnt

The assessment and the discussions with the CAS automotive clients provided a fundamental source of information to plan the execution of the trial. The respondents provided details of their needs related to GPDR in addition to their everyday business needs. It was very useful to confront the BPR4GDPR tools and concepts with the pragmatic views of the CAS clients, which points at the potential of the BPR4GDPR tools to be adopted by the broad public of European SMEs. The main lessons learnt in the trial assessment are the following:

- Consent management: automotive clients are mostly interested in support for an efficient and compliant consent management.
- Multi-system GDPR requests: the respondents highlighted the multiple systems that compose their information systems and the need to take this into account to find the data of a particular data subject and offer them the chance of accessing, porting, (partially) rectifying or deleting them.
- Out-of-the box security provision: the CAS automotive clients were very interested in the idea of using easy-to-integrate security-oriented tools for cryptography and data anonymization.