Digitalisation in Maritime Logistics

Customized Solutions for Data Sharing
In which environment do you work - more technology-driven or more classical? It makes no difference to our offer: Although technology-driven companies and institutions are increasingly asserting themselves on the market, completely classic ones can also benefit from this trend. After all, the use of digital technologies can improve internal workflows, production processes and the services offered. However, many companies do not know what their digital business model can look like and how to apply the new methods correctly.

This is where we at Fraunhofer CML come in. To ensure that the digital transformation also succeeds efficiently at your company, not only processes and structures must be adapted, but the development and maintenance of interfaces and software must also be modernised.

A head start for your company

The Fraunhofer CML supports you in integrating your company into the digital information channels: We create concepts for interfaces that bring added value for your company and your customers. In doing so, we identify possible media breaks and avoid them through digital solutions. In addition, we offer solutions that serve the efficient management of internal software developments as well as external interfaces.

In fact, shipping and maritime logistics are characterised by a very fragile digital landscape: We often encounter outdated and fragmented data landscapes. Due to our many years of experience and in-depth knowledge of these industries, we can quickly identify your individual problem and insert efficient interfaces into the company context. This is interesting and efficient if you are in the process of switching to web services or already offer online services but these are not optimally linked and maintenance is therefore very costly.

We help you to orientate yourself in the market of data platforms and find the best solution for the respective problem. In concrete terms, this means that we give you an overview of the interfaces, for example which ones are available and how they are accessed. Here, we are talking about online registrations, for which it is better to use an automatic interface instead of a separate account management.

Our offer includes the design of the data model and the interfaces: For example, how is which data published?
Here we advise, develop and implement on the basis of our experience and with modern formats. In addition, we offer the integration of open standards and a concept for operation in industrial practice as well as training and service.

Benefit from the know-how of the CML

The Fraunhofer CML has been working on innovative information management systems for several years: Even with large amounts of data, these systems make it possible to maintain an overview and obtain exactly the information that is being sought.

In the research association „MISSION - Managing Information Seamlessly in Ports and Hinterlands“, CML was in charge of the conception of dynamic data exchange. This addressed the problem of the low level of networking in the maritime transport chain, which is characterised by an unstructured emergence of different systems and platforms.

The standardisation and decentralisation of information used structures and protects the data. As a result, the individual modes of transport in the maritime transport chain are securely networked and innovative applications are provided simultaneously.

The experts from the CML contribute their knowledge in the following areas in particular:

- Networking the maritime transport chain
- Networking of different systems and platforms
- Use of open standards and software
- Decentralised applications

Range of Services for Digital Interfaces

- Working with web services made easy: Digital infrastructure with low barriers to entry
- Individual design, development, deployment and service of data models and interfaces to provide your data
- Future-proof solutions with open standards and software
- Implementation of interfaces with modern frameworks
- Integration into a suitable data platform or data ecosystem
- Concept for operation in industrial practice