What are fleet management systems (FMS)?

These days, the use of fleet management systems (FMS) facilitates efficient ship management. They are used to support, optimise and monitor business processes specific to shipping companies. They are comprehensive, mostly modular, software solutions, which are connected by a shared database.

What are the challenges involved in selecting a system?

Selecting fleet management systems or modules is a crucial strategic step for a shipping company. In addition to the investment in new software, choosing an FMS also entails a long-term commitment to one manufacturer. The fragmented and less-than-transparent market for FMS poses a major challenge. The complexity of the supporting business processes represents another challenge. For these reasons, selecting a system is usually a lengthy and complex process.

What is the basis for a successful software selection?

Each business process is linked to the use of resources. The more effectively the company-specific business processes are supported by the use of software, the less resources are used. Ensuring that a software environment is successful in the long term is therefore subject to two prerequisites:

- A knowledge of current and future business processes that are critical to the success of the business.
- The identification of software systems and modules, which best support them.
Which FMS software satisfies your demands?

A multitude of FMS software providers, varying in size and background, exist. They provide preconfigured systems that are specialised to suit certain functions and target groups. It means that shipping companies have the option of purchasing a cross-functional integrated software solution or integrating individual modules into their existing system environment.

How does Fraunhofer CML provide support in selecting an FMS?

In order to take into account the individuality of each selection process and to minimise the risk in selecting a system, the Fraunhofer CML offers a support service based on the SDS-F method:

- **Structured**
- **Decision support in**
- **Selecting**
- **Fleet management systems.**

The method is designed in such a way that, in addition to providing support for the entire selection process, modular support can also be provided at individual stages of the selection and decision-making process.

To what stages of the project does the SDS-F method apply?

The decision support is provided during the selection process at the following stages of the project:

- **Analysis of current system**
  Based on the company’s specific existing environment, an analysis and evaluation is made of the business processes that are to be supported by new software systems or modules. The results are recorded in a process map.

- **Target System**
  By drawing on the functional and provider-related criteria, the software requirement is specified and transferred to a catalogue of criteria.

- **Market Analysis**
  Using a market survey and agreed KO criteria, suitable fleet management system providers are identified.

- **Selection**
  The number of suitable providers is narrowed down by comparing the target system with the providers’ service offerings. The preferred group is then subjected to a company-specific suitability review.

Structured selection of fleet management systems using the SDS-F method

- **SELECTION**
  Target/actual comparison

- **MARKET ANALYSIS**
  Market survey

- **TARGET SYSTEM**
  Catalogue of criteria

- **ANALYSIS OF CURRENT SYSTEM**
  Process map

- **Your demands**
  - Functional
  - Provider-related requirements

On the basis of a recommended ranking of the systems that have been examined

Effective fleet management software is becoming more important today and will continue to be important in the future in order to be able to respond quickly and flexibly to changing market requirements, reduce fleet management running costs, streamline operational planning processes and consolidate information from company departments with different functions.

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