



Mining Cross-organizational Business Processes

In the EDImine project, we develop methods and tools for **analyzing cross-organizational business processes** (B2B) by examining Electronic Data Interchange (EDI) messages that are exchanged between companies. Firstly, EDImine discovers models of cross-organizational business processes backed by EDI through the application of so-called **process mining** techniques. Secondly, EDImine connects the mined information from business processes with actual business data contained in the EDI messages. This is a novel approach in this area with the objective of **lifting the information gained on the IT level to the business level**.

What Can We Learn from the Analysis of EDI Messages?

Our goal is to provide a **business cockpit** comparable to navigation systems supporting car drivers. Such a system will be able to visualize the networks of companies, show the flow of business documents and warn about bottlenecks in document processing. Our objective is to answer business-related questions on two levels: (i) **business process performance** and (ii) **general business performance**.

Questions on the first level focus on the **process performance** of an enterprise with the outside world. A few examples:

- How do the processes look like?
- How do the processes perform? (e.g., bottlenecks, duration, ...)
- How can the processes be improved?

Questions on the second level focus on **business performance** with regard to a company's economic relationships with partners. Examples:

- How important are individual business partners to the company? (e.g., number/volume of orders, ...)
- How does the importance of a partner relate to the partner's process performance?

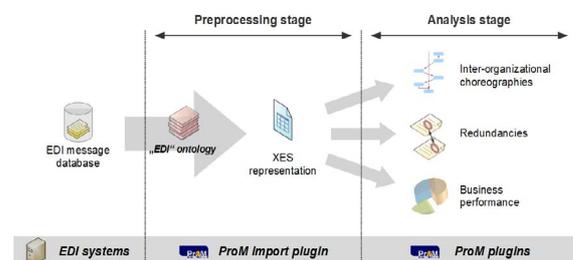
Benefits for Participating Organizations

Our research work depends on the availability of EDI data from real-world business environments. By supporting the EDImine project and providing sample EDI data, you benefit as follows:

- We offer **support and guidance in addressing and answering the specific business-related questions** you might have with regard to your inter-organizational business processes.
- You'll get **software tools for discovering, visualizing, and documenting your cross-organizational business processes backed by EDI**.
- You'll get **software tools for process performance and business performance analyses**.
- We offer **help & support in using these tools**.

In case you're concerned about privacy, we offer you a maximum of confidentiality by anonymizing your EDI data at our cost.

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EDImine architecture: After preprocessing the EDI data, analyses can be performed