Sand in the gears of the energy sector

Thanks to deregulation, electrical and gas markets are experiencing the biggest change since they came into existence. The "regulated deregulation" has caused structures that previously functioned flawlessly to run into problems – but it can also be understood as as a stepping stone.

For decades, energy companies were extremely successful in increasing profitability on a long-term basis through targeted investments in economically sustainable projects. The use of the best synergies is now suddenly a legal offense. The prohibition of logical action in favor of transparency and competitive development demands new patterns of thought. Forced into this corset, the companies are searching for the right strategy for complying with the guidelines while simultaneously searching for a new way to use their capacity and plants in the best way possible under circumstances that have changed.

Company structures are changing

Organizations, ownership and profits within the European energy market are being shaken up and restructured within an appropriate new legal framework. In order to be able to make the complex market processes involving multiple participants a reality, structural change is also taking place within companies. Silo organizations previously successful in practice are yielding to process-oriented organizations. Company procedures are no longer hierarchically arranged, but instead follow the entire process.

These internal changes also have consequences on the IT side. For optimal support of the business operation, the industry depended in the past on precise IT solutions. If requirements changed or new technologies came on the market, additional solutions were added. With more and more new requirements and business areas, a real "IT zoo" developed in traditional companies. Since departments were asking for solutions in ever shorter intervals, the development of an IT strategy usually fell victim to the pressure to implement things quickly.

Reactions to the structural change

The "regulated deregulation" creates a major thrust for new IT requirements. The roles are completely reversed. Neighbors become competitors and even need to be supplied with information of the highest value, the energy data.

For the IT department, these new requirements are not dramatic. The internal changes have effects that are much more striking:

- What had been built up over years simply no longer fits the situation.
- The organization, roles and processes have changed.
- The pace of change is increasing.
- IT can hardly take care of an implementation before it becomes outdated due to new requirements.
- New systems need to be integrated. This demands new interfaces – including interfaces to systems for which the relevant expertise has not been available for years.

With the existing means, IT no longer has a chance of satisfying the requirements of the departments. For this reason, a structural change – this time in the area of IT systems – must be made. Functional and clearly delimited IT solutions are yielding to process-oriented process solutions that operate on a networked basis and that can be automated. With new Business Process Management (BPM) oriented solutions, IT can go on the offensive when confronting the change:

- Individual IT systems can no longer map complete business processes. For this, BPM permits the handling and monitoring of processes on a cross-system basis.
- Due to the complexity of the processes, departments and users must be able to work with several systems in the course of their daily work. Since no key user can be an expert on all systems, BPM solutions can optimize user interfaces for the process and make them available via a portal (e.g., the Intranet). This allows users to edit the process without having to know how to operate the backend systems behind it.
- The number of interfaces within the IT landscape is increasing exponentially. Adjustments are avoided if possible, since interactions cannot be predicted. BPM helps here as well. Through a one-time linking to the Enterprise Service Bus (ESB), every system can become a valuable module for any number of processes – interfaces need to be maintained only once.

- Rigid structures hinder quick fulfillment of changing requirements. Thanks to the agile orchestration of individual services to processes using the existing infrastructure, new processes can be used productively much more quickly.

BPM provides advantages for all roles

In the end, it is not just IT that profits from the introduction of process management. Other roles such as network operators, sales and internal services are also able to prepare their structures for the future using process management.

IT gets the chance to support the business with the requested business processes faster than was previously possible. IT is much less dependent here on the system environment (release planning, interfaces, technologies) and can incrementally move toward a modern infrastructure by implementing new process requirements on the basis of BPM.

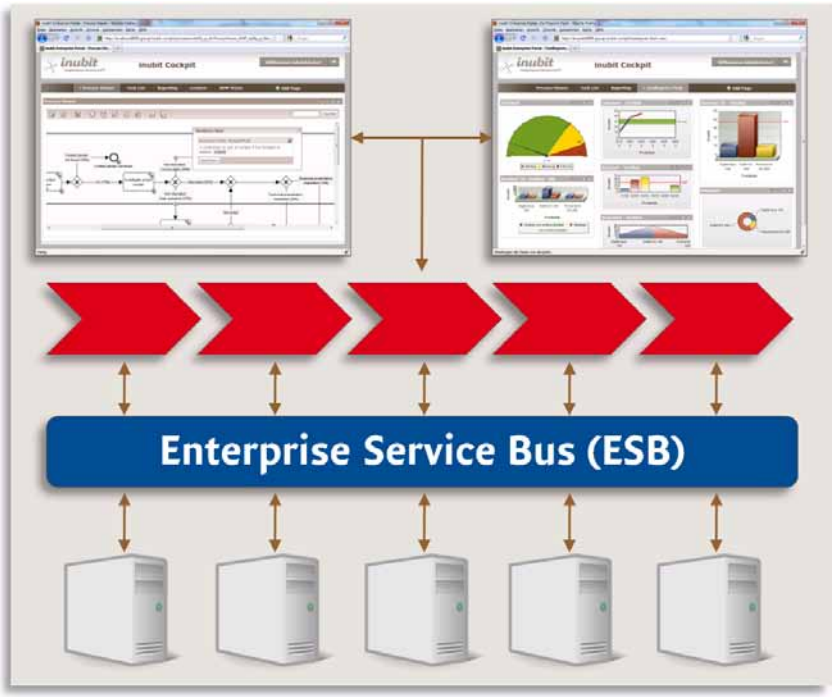
Using the possibilities made available by BPM, **network operators** can properly perform the new tasks resulting from deregulation with the required end-to-end monitoring. It is also possible at any time to automate any number of other processes, e.g. domestic installation control, fault repair and change of tenant. Moreover, cost savings can also be achieved, since the user-friendly interfaces require far fewer qualifications on the part of the specialized staff than was previously the case. And due to the seamless integration of a diverse array of sources, annual reporting for the regulator is greatly simplified.

Immense improvements can also be achieved in the **sales** area. Sales portals make it possible to accept customer requests and data updates and process them in a partially automated manner. Instead of an e-mail to a staff member, a process is triggered that applies the changes in all required systems. The Process Monitor gives information on an ongoing basis regarding the status of each process. The shortened processing period saves costs, since the changes become effective in all relevant systems much more quickly.

The portals allow **customers** to get direct access to the most current information from any number of systems. Offers, contracts and invoices can be viewed, changes can be made online, and the customer can accept new offers directly, whereupon the accepted offers are processed automatically. It is this extended communication arm that allows a smart metering system to exhibit its full benefit to the customer. At the same time, it reduces operating costs for suppliers and network operators. Thus, the value of the platform extends from acquisition to process automation to the settled contract.

Process management can also be used for internal process optimization in the area of **administration**, of course. Company processes are made available on the Intranet and can be automated as needed. Time-intensive administrative processes, e.g., in human resource management and applications for vacation time or professional training, have great potential for automation. In the case of invoice approval, acceleration of internal processing times can prevent discount losses, for example. Management profits from automated formatting of key figures from different sources for all stakeholders – thanks to clean integration of all company applications and information. All of these advantages show that BPM allows you to clear the sand out of the gears and prepare the company for the future.

Markus Brack



—> *Incremental conversion of the IT landscape into modern BPM infrastructure*