DENSO

Automotive supplier puts European business processes back on track with iGrafx

iGrafx[®]

DENSO at a Glance



Since its ISO 9001 certification in 1998, DENSO Automotive GmbH from Eching has been one of the main players in the German automotive supply industry.

A subsidiary of DENSO Corp. Japan, the organization experienced success with the rearrangement of the process landscape using iGrafx technologies.

With over 160,000 employees and nearly \$45 billion in yearly revenue, DENSO is a specialist in the sale of automotive components, engineering services, design, testing, research, and development associated with:

Entertainment Electronics

Diesel Injection Technologies

Navigation

- Heating
- Ventilation
- Air Conditioning
- Information and Driver-Assistance Solutions

DENSO follows the lead of the major automotive companies and maintains close ties with manufacturers such as Toyota, Audi, BMW, Daimler, Fiat, Ford, and Volkswagen. With a commitment to quality, manufacturer requirements are necessarily rigorous. As a result, suppliers and their business processes must be continuously adapted to ensure prompt product development, production, and a problem-free supply chain.

ISO 9001 Certification: Putting Process Management to the Test

These same types of standards apply to quality management. In this case it was the ISO 9001 standard in conjunction with TS 16949 which guided the automotive industry and drove DENSO to make changes to its IT.

"When we applied for ISO 9001 certification, and then expanded it with the TS 16949 standard a few years later, the topic of process modelling was mentioned very early," said Albert Fendl, Senior Manager of Business Process Management, part of DENSO Quality Management. The ISO 9001 and/or TS 16949 standards are requirements which contribute to system and process quality, increase customer satisfaction, and prevent errors and risks in the development and production process and supply chain.

Suppliers in the automotive industry are required to structure and have their quality management system certified according to these rules. No ifs or buts about it," said Fendl.

Because of these rules, Fendl and the team needed to document the processes of the German DENSO subsidiary, first in writing and later in graphical form, but did not have the right solution. "The tool that we used at the time had a few flaws in its range of functions, and maintaining it was too expensive in the long term," said Fendl.

In addition, the seven other European branches of the DENSO group located in England, Italy, and Spain, used different quality management on the basis of national documents. These documents were not based on internationally standardized criteria.

Standardized Documentation



"It was time for a new quality and process management system that was able to supply all employees and managers with relevant information and processes in a shared European database," said Fendl. "One important requirement was the initial restructuring and harmonization of the business processes themselves. DENSO tried out a total of seven process management systems in the course a comprehensive evaluation phase.

Only three of them eventually made it across the finish line, with one solution emerging as the best option to fit their specific needs. "Our feasibility study identified a clear favorite in iGrafx," said Fendl.

The Challenge

One major reason for the decision was that the iGrafx platform allowed DENSO to input and edit Visio documents without any need to convert them. In addition, shapes and activities within a process were easier to understand. Fendl and his team noted they were "significantly clearer than in the competitor's products, meaning that significantly more information could be included."

The relatively simple operations to model a workflow and the attractive initial price combined to create a proof of concept for the tool and were also strong influencing factors.

The very active support and individual advice sealed the deal. These allow the software to be used even more productively," said Fendl.

iGrafx advisors worked closely with DENSO on projects to improve quality management, with the goal to reduce product downtime while accelerating project execution.

The Solution

Fendl's colleague Christian De Graeve, Corporate Functions – Business Management highlighted another technical aspect in the repository.

"A further important factor was that we were able to store all of our processes in a central database, providing us with new options for the assessment and description of business processes," said De Graeve.

The primary benefit was that all legacy systems from the seven European branches were consolidated in iGrafx before processes could be newly modeled and harmonized. Going forward, they would be available via browsers to all branches of the organization as well as various departments such as Development or Sales.

The iGrafx folder structure was easy to adapt to our very complex company relationships with extremely heterogeneous process landscapes and publish on the Internet," said De Graeve.



Just a few months later, the automotive supplier from Eching was able to go live with the new productivity system and has, since then, had a process management tool that interactively displays all business processes, including 250 workflow diagrams and 715 integrated documents in various formats, all the way to the seventh level.

These include Office files, verbal and graphical work and process descriptions, forms, and tables. De Graeve is looking forward to the possibility of integrating non-iGrafx documents into the process management system and to then link them to iGrafx files. Over 500 employees access documents stored on the database around 7,000 times each month. Administration of the process management system takes place either centrally or non-centrally via iGrafx, depending on the location, while rights management controls access depending on database folders and membership in the corresponding User Domain Group.

The Benefits

Company leadership in Japan have also been talking about improved access to processes since the implementation, although their focus has primarily been on compliance. The clear process descriptions now allow laws and regulations to be strictly implemented.

Now we have corresponding process key figures for everything, see fewer deviations within the ISO-TS certification and have significantly greater process compliance," said Fendl.

As a result, DENSO now uses process models created in iGrafx to run in other systems under controlled conditions to monitor the process indicators. This makes use of the iGrafx compatibility with workflow automation software. Fendl describes a typical example of this type of business process automation. During the development of a new air conditioning compressor, over a period of 36 months, managers were able to process individual milestones in a controlled manner and to closely document individual tests, objectives, and reports and modify them if necessary.

"We can see in real time, in the system, whether processes are complete and whether deadlines are met, escalation levels are managed, and superiors are kept up to date," said Fendl. "iGrafx is a very stable tool and has operated without interruption from the start. We have already achieved our return on investment in the second year."

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