

ABB Automation Forum Center for Innovation and Productivity



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In the past most customer – sales contacts were conducted with specific area neglecting extending ABB’s offerings just because there was not a single place where a broad ABB product offering could be shown. By the creation of a new all-year-exhibition hall at Ladenburg, which contains all important aspects on process and discrete automation technologies, this gap got closed. Now an attractive and amicable surrounding invites customers, colleges and young talents to experience ABBs world of automation.

Problem Description

Customers – Research – Sales – Students. An unusual quadriga! Customers need specific solutions and are widely spread – in interest, needs, structure, area and geographic location. In contrast, sale is focused on its own area and product portfolio. Consequently, ABB had several small and sparsely equipped “showrooms” at several widely distributed locations, unknown to nearly everybody else in the company.

This did not fit to the claim of providing everything from the sensor up to the control system and beyond. Only on some dedicated international fairs, the customer was able to get a feeling of what ABB is all about. However, there was no single point of information on ABB’s area of automation product and business portfolio. And, even worse, there were only few possibilities for the customers to discuss their future needs with those whose job is to solve long-term problems, namely the research department. Finally, it is hard for a big company that

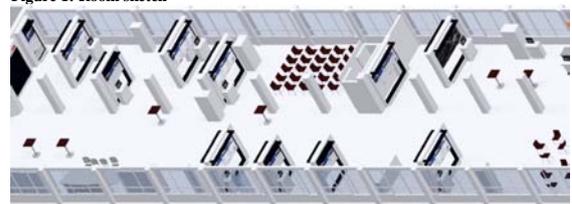
normally is not in public view, to attract young talent or even inform or inspire them about automation technologies.

The objective of this project consequently was, to build up an exhibition, where the complete ABB automation product and business portfolio is represented at one place.

Solution Approach

The first sketches showed a 600 square meter exhibition demonstrating the competence of ABB in the area of process automation and control systems.

Figure 1: Room sketch



This stationary all-year ABB automation fair got located in the building of the corporate research center to underline the message, that the visitor shall not only be informed about ABB's products but also shall be invited to report, which problems he sees dawning. Such a process obviously needs some encouragement. Accordingly, there had to be integrated dynamic elements, i.e. some exponents to experience the area. Those are e.g. several displays, a tank process, a ball sorting machine, a steam engine, a robot

Figure 2: Experimental exponents



Furthermore, it was necessary, to connect the different domains, technologies and processes by specific links and spatial vicinity. As this exhibit should have been interesting to use for all stakeholders, and at the same time should have been interesting towards all kind of users (e.g. customers, internal meetings, students), no large, area specific equipment was constructed. Instead, a wide spectrum of aspects and exponents was integrated, enriched by thousands of details, which can but not have to be shown to visitors who are more interested in a specific topic.

Figure 3: Frames and hardware-light-pillars



Now, there are topic areas on control systems, efficient engines, robots, engineering methods, instrumentation, service, autonomous sensors, drives and chemical as well as metal business challenges.

Besides those exhibition frame based regions areas of general use where integrated. The communication area enables catering buffets as well as discussion groups, work on your notebook or just taking notes and transfer information. In the meanwhile you may leave your notebook in one of the lockers located in the cloak room next to the entrance.

At the extended operator workplace (EOW), the visitor can find out, how modern operator, maintenance and service workflows are structured. Hardware demonstration comes with the territory and more complex plants can be included using virtualization technology.

The presentation area is, equipped with everything a professional presentation requires: projector, canvas, sound system, sun blinds, speaker's desk ...

Figure 4: Presentation area



To make all of this more comfortable, building technology from Busch-Jaeger is installed all over the side. If one enters the room, the light flashes on and, if you want so, some music sounds. To start a presentation, just press the presentation button and the light next to the canvas turns off, the canvas as well as the sun blinds next to the presentation area comes down and the microphone/sound system is activated. From the central operator screen ("Comfort Panel") you can easily detect in which of the seven areas of the room, which light is active and switch it on or off. You also can find out about weather conditions outside and the temperature inside the room. You can define temperature profiles or just read some RSS feeds, listen to the radio or watch TV.

Finally, the small kitchen which is equipped with modern home technology based Miele

kitchenware, like a dish washer, that can be controlled and observed via the Comfort Panel respectively the Ethernet. Besides those features, several modern energy devices offer the possibility to supervise and analyze the energy production (photovoltaic, block heat power plant) and consumption (light, cooling, and electric filling station) as well as find out energy prizes to plan optimal consumption times.

Technical Accomplishment

Within just a few weeks, a former office environment got transformed into an all-year-exhibition-hall. Thereby, existing house technology and cabling got combined with / complemented by state-of-the-art-plus-one equipment, fair frames got erected, exponents calibrated, several kilometers of wire coated, walls ripped out, carpet laid, sun blinds motors installed and all the necessary equipment like dishwasher, fridge, fire extinguisher, curtains, chairs, telephone, first-aid kit

Besides those building work, the exponents and pictures had to be designed, the operation concepts negotiated and all the substantial product and technology information formulated and consolidated.

On November 9, the chairmen of the German ABB divisions process automation (J. Braun), discrete manufacturing (T. Schreiter) and corporate research (C. Winterhalter) opened the automation forum.

Customer and ABB Internal Benefit

In the ABB Automation Forum, a center for innovation and productivity, products, systems and services from the process and discrete automation areas are presented in a clear and attractive way. By offering an open forum with all important aspects of automation technologies, the customers will become more aware on ABB. The alliance research –

customer – sales promises a fundamental surplus, for the customer and for ABB.

The new center will be the most important German ABB meeting point, located within an attractive surrounding and constructed to appeal young talents (“students”), customers, and colleges for automation technologies. ABB gained an adequate fair to show its competence and discuss current and future challenges together with its customer. By integrating the exhibition into the research center the interface between market needs and ABBs innovation potential is created.

And the story will go on, as this “all-year-fair” shall not become a static show, but will be enhanced continuously over the next years.

So far, most of the visitors were extremely impressed by the new exhibition hall. That’s why a number of at least 100 events is expected for 2011. Would you like to visit the forum? Feel welcome!

ABB-Companies engaged in this project

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ABB Automation Products GmbH

ABB AG Forschungszentrum Deutschland

Busch-Jaeger Elektro GmbH

ABB Grundbesitz GmbH

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Customers

Process and discrete automation

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