The Information-, Communication- and Mediacenter / Das Informations-, Kommunikations- und Medienzentrum (ICMC / IKMZ) of Brandenburg Technical University of Cottbus

Seminar of the LIBER Architecture Group
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• Founded in 1991 the university is the only technical university in the state of Brandenburg

• Arround 5,000 students, about 25% students from foreign countries

• 4 faculties with 130 professors and 24 curricula (BA/MA)

Faculty 1: Informatics, mathematics and physics,
Faculty 2: Architecture, civil engineering, urban development,
Faculty 3: Engineering, electrical engineering, economics,
Faculty 4: Environmental engineering, process engineering
The Concept of IKMZ/ICMC

• With the founding of the ICMC/IKMZ at the beginning of 2004 the library, the multimedia center, the computer center and administrative data processing were brought together under a single management which covered both the budget and staff responsibilities for the areas mentioned. With this consistent integration model the BTU Cottbus is one of the few universities in Germany which have, up until now, decided to follow this path.

• The heart of the ICMC/IKMZ is the new building in which the library and the multimedia center are housed; the areas of 'operational data processing' and 'computing center' – also belonging to the IKMZ/ICMC - are not housed in the ICMC/IKMZ but at their different locations on the university campus.
Building at daytime (1)
Building at daytime (2)
Description of the outside (1)

• The architecturally imposing and, at the same time, functionally oriented building was designed by the Swiss architects Herzog & de Meuron and finished, after a three year construction phase, in November 2004.

• The building, which stands in the eastern part of the BTU site between the University and the city, is a 32 meter high reinforced concrete construction covered by a double-shell, glass facade embossed with stylized graffiti.

• Costs: € 28 Mio (building), € 1,9 Mio (furniture and equipment), € 2 Mio (site incl. fees)
The building and the campus
Building at night (1)
The facade
Description of the outside (2)

- The ground plan of the building has a curved outline resembling a clover leaf which does not explicitly have front and back sides.

- The main useable area is 7,630 m² - 5,461 m² for public use, 976 m² for the administration, 1,193 m² for the closed stacks.
Building at night (2)
Description of the Inside

• Altogether the new building has more than 700 working places available (622 for users, 78 for staff). The user work stations are divided into 490 networked reader stations for notebook use, 100 public PCs, 61 pool stations, 54 research stations and 15 carrels.

• The public PC-facilities will be enlarged by around 100 work stations (diskless pc-stations) in the beginning of 2006.

• The amazing external architecture continues internally with a spiral staircase extending from the 1st to the 6th floor, and a striking color scheme (in vibrant yellow, green, magenta, red, and blue) for parts of the floor covering and walls.
Groundfloor - Servicecounter

Informations-, Kommunikations- und Medienzentrum

Deutschland
Land der Ideen
Ausgewählter Ort 2006
The Service Facilities (1)

- The library, with its underground stacks and the specialized libraries distributed over 6 floors (800,000 Volumes in total), is the focal point of the building's use:

- The individual specialized libraries are distributed over the various floors as follows with open stacks (ca. 500,000 Volumes = 80% of the total collection): Special library 1: Bibliographies, encyclopedias, economical and legal sciences (1st underground level and 2nd floor); Special library 2: Architecture, Civil Engineering, Technology (3rd and 4th floor); Special library 3: Natural and environmental sciences, informatics (5th and 6th floor).

- The multimedia center (e-learning, multimedia production) occupies the 1st floor by itself. On the ground floor, there is a lending desk, a service counter for all services of the ICMC/IKMZ and an exhibition area.
Ground Plan: Ground Floor
2nd Floor - Staircase
• In addition, on their appropriate floors, are the individual helpdesks of the specialized libraries as well as printing, copying, and scanning stations.

• Moreover, in the 1st underground level, pool and presentation rooms provide various possibilities for multimedia functions. In the 2nd underground level those stacks are located, which are closed for the public.
Ground Plan: 2nd Floor
Staircase
Working and Reading Areas

- In addition a further characteristic of the building is that within the ground plan none of the floor plans are the same.

- With the exception of the management and business areas on the 7th floor and the technical and pool areas in the two underground levels there are only a few truly separate areas.

- This allows a flexible and open concept for the use of the building which consciously allows for many work and communication forms for single users or user groups. How these will combine with each other, practice will show.

- The work and reading areas are in coves related to each of the floors, while the open access stacks of the library - floor related - arranged according to subject areas are located in the core of the building.
Building in usage (1)
The Network

- An important precondition for the supply structure in the new building is the network based access system. This is a modern, high capacity system based on a complete glass fiber infrastructure from the center to the individual workstations.

- The active technology used, the 'Motor of the Network', has a maximum transfer rate of 2x70 million data packets per second in routing processes or, in other words, 256 Gbit/s backplane bandwidth. The modular and fail safe chassis have enough space and performance reserves to supply the server for the library and multimedia center, and the numerous workstations and research computers. It can activate and supply ca. 920 ports (connections), each with 10/100 Mbit/s, or 420 ports, each with 1Gbit/s.

- Built upon experience in the area of authentification and authorization in the campus network, a further developed logon system, with modern security, is used in the cable connected, as well as the wireless areas (wireless-LAN) in the ICMC/IKMZ building for students, members of the university and external visitors.
Building in usage (2)
List of Publications

- IKMZ. Informations-, Kommunikations- und Medienzentrum der BTU Cottbus. Redaktion: Inken Baller. – Schimmelpfennig, Cottbus 2005
- Degkwitz, Andreas: Convergence in Germany. The Information-, Communication- and Media-Center (ICMC/ IKMZ) of Cottbus-University, in: Library Hi-Tech 2006 (to appear)
- Degkwitz, Andreas: Integrated services in Germany, in: SCONUL focus 2005 (to appear)
... thank you!

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