

# **INTEGRATED SERVICES OF THE UNIVERSITY OF THE 21<sup>ST</sup> CENTURY: THE „MODEL CIM“ IN THE E-STRATEGY OF THE UNIVERSITY DUISBURG-ESSEN**

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## Introduction

In the European policy documents concerning the key role of universities in the Lisbon and related strategies towards the European knowledge society and its global competitiveness, three areas are specifically defined for necessary reform and re-orientation. Besides curricular reform - particularly the Bologna process - and funding reform, it is governance reform that has been identified as a key neuralgic point<sup>1</sup>.

It stands to reason that this crucial not only for the European system of Higher Education as a whole and each university or college. It also applies to relevant units within the university, especially to those driving change processes and re-inventing themselves in doing so, such as the departments and centres providing ICT and e-services.

Against this backdrop, this paper presents the conceptions and experience of the Centre of Information and Media Services (CIM) at the University of Duisburg-Essen, its reorganisation and re-alignment of the computing, media and e-learning services in a strategy towards seamless integration of digitally based support services for learning, research and management and their accessibility to customers and stakeholder.

Key aspects of the “Model CIM” are

- On the level of values and guidelines:
  - the balance between innovation and sustainability
  - its service-orientation
- On the level of strategy:
  - direct link to the university leadership
  - key strategic projects for the E-University (esp. service integration)
  - consistent and continuous improvement of quality of service
  - close cooperation/networking with all relevant players in the university to drive all the necessary changes to make the university competitive
  - openness to cooperation in the regional network of Ruhr area universities, as well as in wider national and European contexts.
- On the level of organisation:
  - combination of stability and flexibility in the organisational design
  - fostering process- and project-oriented management and work
  - systematic development of human resources

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<sup>1</sup> E.g. Commission of the European Communities, Communication from the Commission to the Council and the European Parliament, Delivering on the Modernisation Agenda for Universities; Education, Research and Innovation, Brussels, 10.5.2006  
COM(2006) 208 final, [http://ec.europa.eu/education/policies/2010/doc/comuniv2006\\_en.pdf](http://ec.europa.eu/education/policies/2010/doc/comuniv2006_en.pdf);

European Commission, Directorate-General for Education and Culture, From Bergen to London, Brussels, 22 December 2006/rev2,  
<http://ec.europa.eu/education/policies/educ/bologna/report06.pdf>.

CIM is thus evolving into an important actor shaping the profile of the university, based on an integrated e-strategy.

#### Background: The Origin of CIM

In 2003 the two universities in Duisburg and Essen merged into the new University of Duisburg-Essen. This entailed a reconsideration of the existing structures particularly in the central services where “double institutions” were immediately obvious. This opened the chance for a very far-reaching re-organisation, resulting in a leaner, more transparent structure, apt to exploit synergies and gain flexibility and efficiency<sup>2</sup>. As a result, the two university libraries turned into one and the two computing centres, the two media centres, the data processing units of the administration and of the library were combined into the Centre for Information and Media Services (CIM), founded Oct. 1, 2005. The Library and the CIM together make up the institutionalised sector Information, Communication Media (ICM), which is represented by a board, consisting of the directors of Library and CIM, the chairperson of the ICM committee and the pro-rector for ICM. Thus, the sector is directly linked to the university top management.

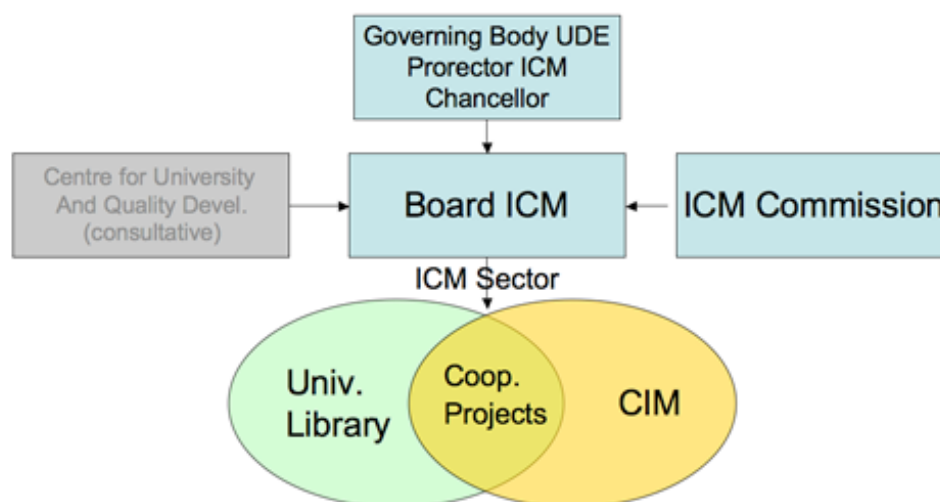


Figure 1: The Sector Information, Communication and Media at the University Duisburg-Essen.

The key role of the ICM sector for the university is highlighted by the commitment of the university leadership to an “E-Strategy”<sup>3</sup> leading towards the E-University Duisburg-Essen. In this strategy, CIM is not only the central provider of the IT infrastructure, but also as the

<sup>2</sup> This is not to imply that this type of far-reaching reorganisation requires some dramatic change such as a merger. In the case of Duisburg-Essen the merger did propel changes much faster than would otherwise probably have been the case. But as can be seen by many discussions, symposiums, expert round tables, publications etc. the question on how to make the central services efficient, which new orientations, organisational solutions and realignments are necessary to meet the challenges faced by higher education is a very topical one. The German discussion is well-documented in: Changing Infrastructures for Academic Services - Information Management in German Universities, published by Andreas Degwitz and Peter Schirmbacher, Deutsche Initiative für Netzwerkinformationen, [http://www.dini.de/documents/DINI\\_Informationinfrastrukturen.pdf](http://www.dini.de/documents/DINI_Informationinfrastrukturen.pdf)

<sup>3</sup> <http://ikm.uni-duisburg-essen.de/strategie>

provider and integrator of the e-services, supporting the core processes of the university all along the value chain. This includes the responsibility for the selection, implementation and operation of the central software applications, such as campus management and accounting software, portal architectures, E-Learning platforms, groupware, central CMS and more. In addition CIM offers a multitude of support services ranging from technical support and consulting over several levels, multimedia authoring and editing, training and coaching, providing hard- and software and much more<sup>4</sup>

#### CIM – The Organisation

CIM is organised in divisions and service groups. The divisions Media and Customer Service, Enterprise Resource Planning (ERP) and IT Infrastructure each integrate tasks of a particular large area of activities. The allocation of a wide range of tasks to the division Media and Customer Service underlines the significance of customer-orientation in the whole set-up and outlook of CIM. Overarching these three divisions is the fourth one Project Management and Cross Sectional Tasks. Its purpose is to take up and implement projects and to strengthen project and process oriented management and workstyles throughout the CIM.

The two big divisions, IT Infrastructure and Media and Customer Service, each consisting of around 35 members of staff, are subdivided into service groups.

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<sup>4</sup> The support system of CIM is explained in greater detail in the paper, D. Biella et al. (2007), "One Face to the Customer" – E-Services, E-Point, E-Competence At the University of Duisburg-Essen, Paper submitted to EUNIS 2007.

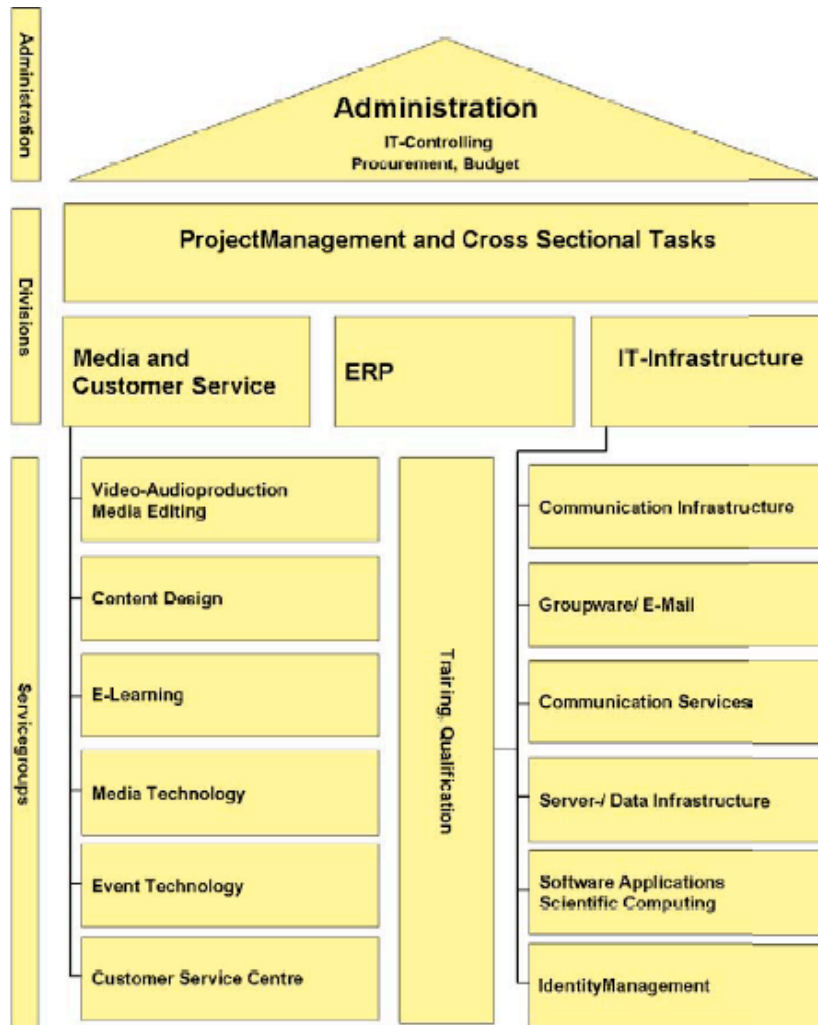


Figure 2: Organisational Diagram of CIM

This organisational structure can be considered as a “moderate Matrix organization” balancing stability and flexibility, in order to be able to act and react adequately in a complex environment. Especially the flexible elements, e.g. the project-management division and the service groups are relatively new and innovative compared to the traditional setup of German computing and media centres. These elements were specifically introduced at the foundation of CIM to foster exchange between divisions and process- and project-oriented workstyles overall.

Another innovative trait in the structure of the ICM-sector at the University Duisburg-Essen is the cooperation sector of CIM and University Library. Both organisations share the goal of consistent orientation towards the needs of their customers and of providing integrated, easily accessible services according to the motto: ”One Face to the Customer”. This led to setting up of two services run jointly:

- E-Point is the first contact point and first level support for all members of the university, but particularly the students, providing immediate help
- The E-Competence Agency provides qualified consulting and coaching on the e-services of CIM and Library, including eLearning. Also, the Agency acts as a broker

for the services and experts of CIM and library if there are requirements for specialist support or when the project envisaged is a complex one<sup>5</sup>.

#### The “House of CIM”

In order to integrate these complex structures and the staff members with their widely differing backgrounds and traditions into the new “house of CIM” and its strategic orientation, but especially to win them as active “builders”, the CIM leadership decided to launch a systematic process of staff and leadership development. This again is a novelty; traditionally media and computing centres developed their staff just through further training/re-training in IT and media technologies and applications. In cooperation with the staff development unit of the university, CIM designed a process of five stages for its leadership development:

1. Individual analysis and definition of the current position of each member of the leadership (first and second level) interviews of co-workers on their views and expectations towards the leadership. These provide the basis for phase 2.
2. Decision on essential guidelines for management and leadership as a basis for agreements of objectives and staff appraisal.
3. Information of all employees of CIM about the leadership guidelines and organization of two workshops on “Active Leadership”. The first workshop is focused on elaborating factors of success, while the second is centred on staff appraisal and agreements of objectives, including topics such as communication, conflict resolution, organisation of productive meetings, project management. Accompanying measures include individual coaching and consulting (on demand).
4. Reflection and evaluation of phases 1-3 and planning of the next steps. In this phase, members of the leadership receive feedback from their employees.
5. Securing transfer of the results of the first cycle of leadership development into the daily practice of CIM, review and planning of additional cycles.

This process was kicked-off by a workshop for first- and second-level management of CIM on goals and basic values for the “brand CIM”. The global aim of CIM was defined as “to contribute to the building of the E-University Duisburg-Essen in a sustainable manner by providing innovative, customer-oriented products and digital services, particularly by supporting and integrating digitally all the core processes – from research and teaching to management and organisation”. From this basic values for the branding of CIM were developed in a lengthy debate, namely: *innovation, sustainability and customer-orientation*.

At the moment the 3<sup>rd</sup> phase has been started. Included into this development are additional objectives such as gender mainstreaming or the development of employee mission statements in the different service groups.

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<sup>5</sup> This is fully described in Biella et al., see ref. 4

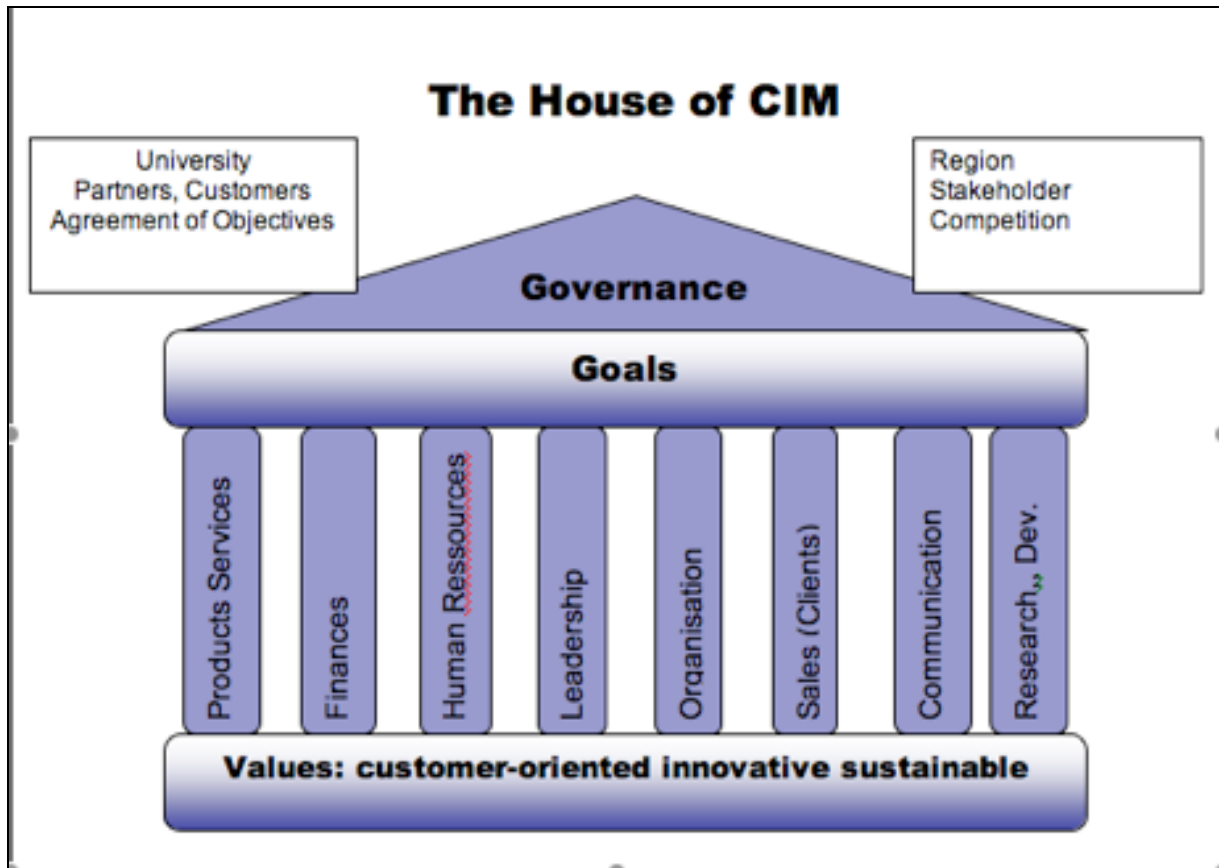


Figure 3: The Concept House of CIM

#### Key Points of Development

From its basic values CIM derived the following key points of development:

- To reinforce and focus customer-orientation throughout the organisation of CIM and to communicate this consistently to the university
- To coordinate central and decentral (departmental) digital services, in order to develop a high-quality, transparent service portfolio for the university
- To implement change-management in a sustainable manner, including the improvement of cost-benefit ratios and the professionalisation of marketing and sales activities and internal communication.

These are broken down into very specific aims and tasks in the current annual Agreement on Objectives with the university leadership<sup>6</sup>, based on the comprehensive catalogue of products and services<sup>7</sup> of CIM.

#### Current Strategic Projects

<sup>6</sup> <http://www.uni-due.de/zim/zlv.shtml>

<sup>7</sup> <http://www.uni-due.de/imperia/md/content/zim/organisation/portfolio/produktkatalog.pdf>

At the beginning of 2007, CIM and UB defined together with the newly elected pro-rector for ICM strategic projects to focus upon in the current year, in order to advance the E-University in a sustainable and highly visible manner.

The CIM projects are:

- A central integrated study portal with an identity management supporting it<sup>8</sup>
- extension of the WLAN infrastructure
- complete process of online course registration
- online re-registration of students returning for the new term<sup>9</sup>.

#### Accountability and Quality Assurance

In addition to the Agreement on Objectives and the strategic projects, the status of which are monitored on the website of the pro-rectorate, CIM is working on the conclusion of Service Level Agreements to formalise its cooperation with different departments and units. This adds to the transparency and accountability of the performance of the organisation. So far, Service Level Agreements exist with the University Library and the central administration.

Further measures for quality assurance include regular customer surveys by the Centre for Higher Education and Quality Development, encouragement of customer feedback, evaluating support statistics and the monitoring of mission critical applications.

#### Cooperation

CIM and its predecessors have a long and active tradition of cooperating in the university with all relevant players, hence the good foundation for joint activities of CIM and Library. In addition, there are a number of joint projects with academic departments. The cooperation with academic departments has been intensified by CIM recently by assigning members of the leadership as key account managers for different departments. Also, the pro-rectorate is going to institutionalise a regular ICM conference with the departments.

Furthermore, CIM is present and actively participating in most of the relevant regional and national and European associations on ICT and media. It cooperates with a wide range of partners from the region and further afield such as city administrations, schools, vocational training colleges, most of which are provided with ICT services such as Internet hosting.

A new framework of close co-operation has recently been launched: the University Alliance Ruhr Metropolis uniting the universities of Duisburg-Essen, Bochum and Dortmund<sup>10</sup>. Naturally, ICT and eLearning are fields for cooperation here and a first list of potential joint projects is under discussion.

#### Conclusion

The newly founded CIM is a complex organisation dealing with a complexity of tasks in a highly demanding environment calling for permanent innovation, but also stability and reliability. Explicit conceptions and measures of governance are required in order to integrate the variegated units into a common “house”, follow through strategic orientations and attain

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<sup>8</sup> For a detailed presentation of the cstudy portal see Weckmann et al. (2007), Study Portal: Service Integration in a Multi-Application Environment

<sup>9</sup> <http://ikm.uni-duisburg-essen.de/projekte>

<sup>10</sup> [http://www.uni-due.de/home/fb/presse/presse\\_1/presse\\_13.03.2007\\_30952.shtml](http://www.uni-due.de/home/fb/presse/presse_1/presse_13.03.2007_30952.shtml)

ever more optimal service levels, in order to contribute to the competitiveness and attractiveness of the university.

The “model” CIM described here is not presented as a blue-print for others but as one practical example of introducing relatively new measures of governance such as professional staff development, project management, service level agreements, management by objectives, active leadership, systematic quality assurance and customer orientation. The ideas of the European strategic papers for modernising Higher Education are being implemented in this model, e.g. cross-sector and inter-regional co-operation, professionalisation of governance and attractive services.

We very much look forward to compare notes and exchange experiences with other models from other universities in the framework of EUNIS.