



## Establishing an IT Strategy: Experiences in a German University Medical Center

Prof. Dr. Alfred Winter (IMISE)

Stefan Smers (B1)

Dr. Gert Funkat (B1, IMISE)

B1

Department of Information Management

**imise.**

Institut für Medizinische Informatik, Statistik und Epidemiologie



## Establishing an IT Strategy: Experiences in a German University Medical Center

Leipzig University

Experiences in  
Strategic  
IT-Planning

Strategic  
IT-Planning: Methods  
& Results

- Leipzig University Hospital and Medical School: A Typical German University Medical Center
- Experiences in Strategic IT Planning since 1996: Successes and Drawbacks
- Strategic IT Planning:  
Methods & Leipzig Results



# LEIPZIG



& Results





## Leipzig University Hospital and Medical School: a typical German University Medical Center

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Experiences in

Strategic

IT-Planning

Strategic

IT-Planning: Methods

& Results

- 1450 Beds
- 51.790 Inpatients
- 313.000 Outpatients
- 3143 Students
- 7 Departments
- 7 Research Institutes
- 32 Operating Rooms
- 51 Wards



## Experiences in Strategic IT Planning since 1996: Successes and Drawbacks

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Strategic  
IT-Planning: Methods  
& Results

- 1996 clear awareness:  
Systematic HIS development needs Strategic IT Plan
- 1996 Strategic IT Plan University Hospital
- 2001 Strategic IT Plan University Hospital
- 2004 Strategic IT Plan Medical School
- 2005 Strategic IT Plan University Hospital
  
- 2012 - ... working on joint Strategic IT Plan



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Experiences in

Strategic

IT-Planning

Strategic

IT-Planning: Methods

& Results

## Strategic IT Planning:

### Methods<sup>1</sup> & Leipzig Results

1. Strategic Goals of the Hospital and of Information Management

#### *Leipzig: Top Goals of University Medical Center:*

- *Organizational Integration of University, Hospital and Medical School*
- *Economic strength*
- *Excellent Quality of Care, Research and Education*
- ...

2. Description of the Current State of the Hospital Information System

#### *Leipzig: 3LGM<sup>2</sup>-Model*

<sup>1</sup>Winter A, Haux R, Ammenwerth E, Brigl B, Hellrung N, Jahn F. Health Information Systems - Architectures and Strategies. London: Springer; 2011.



### 3. Analysis and Assessment of the Current State of the Hospital Information System

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*Leipzig: 13 Workshops with different participants:*

- *General: (Medical School)*
- *IT-Governance*
- *Patient Care*
- *Research Data Management*
- *Information Management (IT)*
- *Application Management*
- *Education*
- *Medical Devices*
- *Public Relations*

just 2 cards  
per participant

Shall be realized within 1 year  
(just 1 issue!)

Shall be realized within 4 years  
(just 1 issue!)



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#### 4. Description of the Planned State of the Hospital Information System

##### *Leipzig: Some principles:*

- *Data Privacy*
- *Physical Infrastructure:*
  - *Server Virtualization & Centralization*
  - *Additional Storage as a Service, pay per Byte*
  - *Network-Virtualization*
  - *to Help Integration of Research facilities*
  - *High Security Network for Patient Care*
- *Logical Infrastructure (Applications)*
  - *SAP Software: ERP- and EHR-System*
- *Software development if necessary*
- ...





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## 5. Migration Path from the Current to the Planned State

### *Leipzig: Top Projects*

- *eLearning Platforms*
- *eOrdering*
- *Inhouse Social Network platform*
- *Extension of WLAN*
- *Virtual Multi-Client Network Services*
- *Bring Your Own Device (BYOD)*
- *Centralized Image Management (one PACS for all)*
- *CPOE (incl. decision support)*
- *Medical Report Writing*
- *Presentation of scanned medical documents*
- *Digital Signatures*



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## Migration Path from the Current to the Planned State (continued)

- *Coaching instead of Instruction Courses*
- *Research Data Management (RDM)*
  - *infrastructure (research data mart, data ware house, pseudonymisation)*
  - *RDM group in IT-department*
- *ITSM and Service Catalogue*
- *Process Analyzing Group in IT-department*
- *Integrating Medical Devices into Hospital IT*
- *Integrating Phone into Hospital IT*
- *Mobile Devices for Patient Care and Facility Management.*



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