



# Chances for University-Enterprise Cooperation in TEMPUS Projects

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- (2) Focus & Culture
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I.

# Challenges & Expectations



## Competition and more ...

- “Productivity “gains, financial stress
- Increasing autonomy
- Growing reliance on the market: everything seems to have a price (tuition fees, licensing policy & patent rights)
- Pressure to “Perform”: Service orientation & Quality assessment
- High-level R&Tec alliances with companies
- Part of regional knowledge cluster
- Internationalization



## 4 Levels of Coop.

- Cooperation as a future objective
- Cooperation as a one way benefit => mobility programs
- Cooperation as reciprocal action => technological window, staff training by universities
- Cooperation as a strategic tool



# Specific Programs

- Collaborative research and development
- Jointly developed training programs and post doc courses
- Mobility or interchange programs (students, univ. and industry staff )
- New management structure to promote coop.
- Technology transfer activities, science parks



## Expert's Opinion

„University-industry relations are **critical** to maintaining the **viability** of the biomed community.“.

„Regions that do well are those regions where you have closer ties between universities and the private sector – since most of the innovations come out of the university community.“

Ahmen Enany, Executive Director of the Southern California Biomed Council



II.

# Focus & Culture



# University's Benefits

- Access to real-world problems
- Profile building
- Modernize the curriculum / the content
- Additional financing
- Accelerates technology transfer
- Opens new perspectives for researchers within and outside their institution
- ...



# Company's Benefits

- Reduce the risks of research
- Helps distribute the risks of employment
- Complements the competence
- Accelerate innovation
- Investment into vocational offspring
- Instrument for recruitment
- Building up a network
- Helps to take part in state research programs
- ...



# Univ.-Enterprise Co-operation in ...

- ... Research ✓
- ... Education ✓
- ... Tec-Cluster and Knowledge Transfer ✓
- ... Entrepreneurship Encouragement ✓



# Cultural divide?

University	Company
Consensus driven	Leader driven
Long-term thinking	Time-to-market thinking
„I“ precedes „We“	The team is the star
Financial pressure low	Financial pressure high
Pre-market orientation	Market driven
Prototype is king	Running solution a „must“
Publish or perish	Earn money
Focussed on high-end solutions	Focussed on working solutions
Miles ahead and miles behind	Newest IT-technology as daily business



## III.

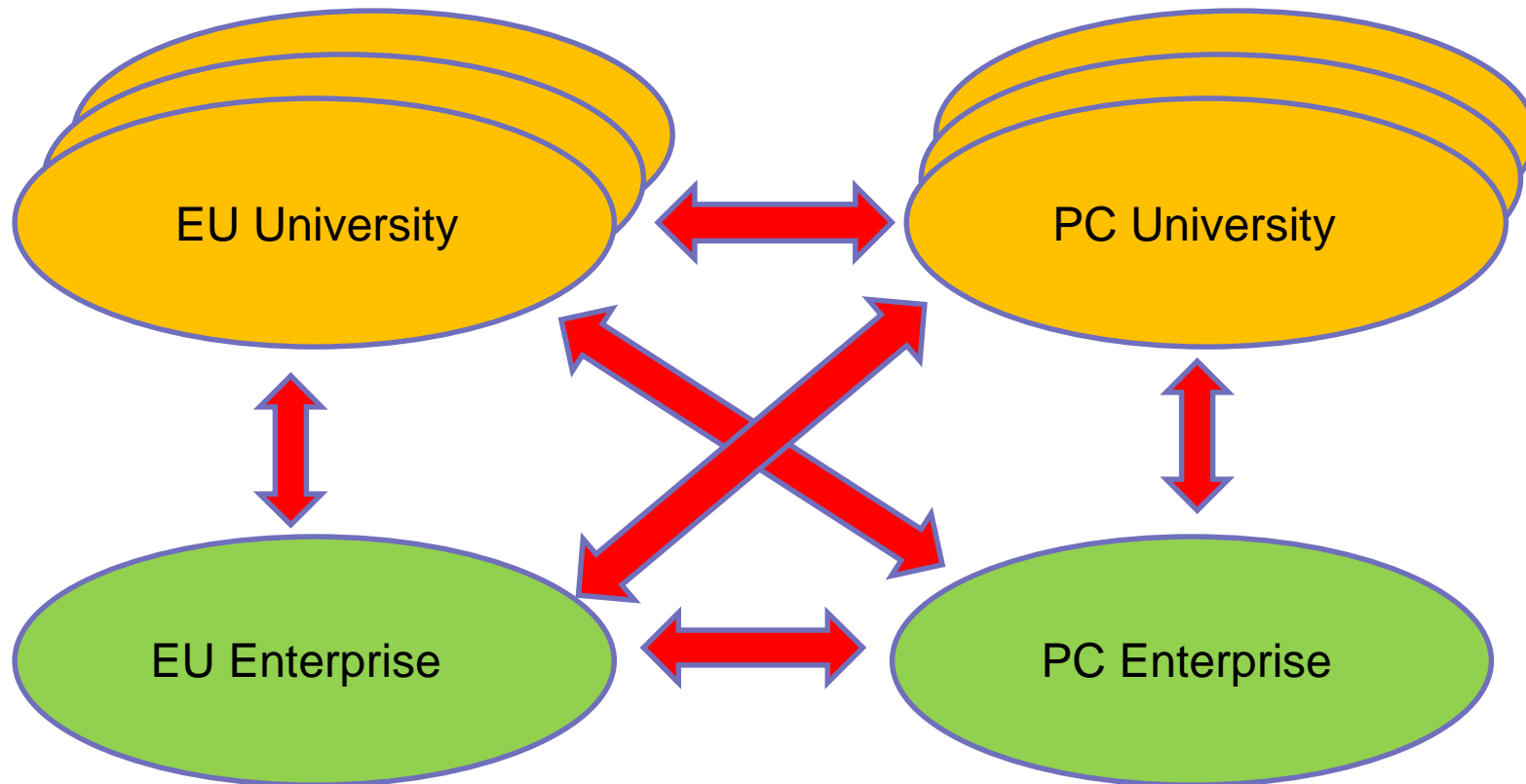
# The Tempus Perspective

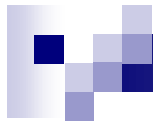


# Aims of Tempus

- Curriculum Development
- University Management
- Institution Building

# TEMPUS' Complexity





# IV.

## A Case Study



# Goals of „WODOMI“

- Establish a Sustainable Web Based Network System to be used as an Interoperable Environment for University **Workflow and Document Management**
- Implementation of **“Integrated University” Concept** and Goals recommended by the Bologna Process
- **Learn from the Experiences** other EU Universities have faced, how they resolved them and what new Problems they have faced
- **Enable Open Public and Multilingual Access, Transparency in Workflow Activities**, compatible to **EU Standards**

# University Structure

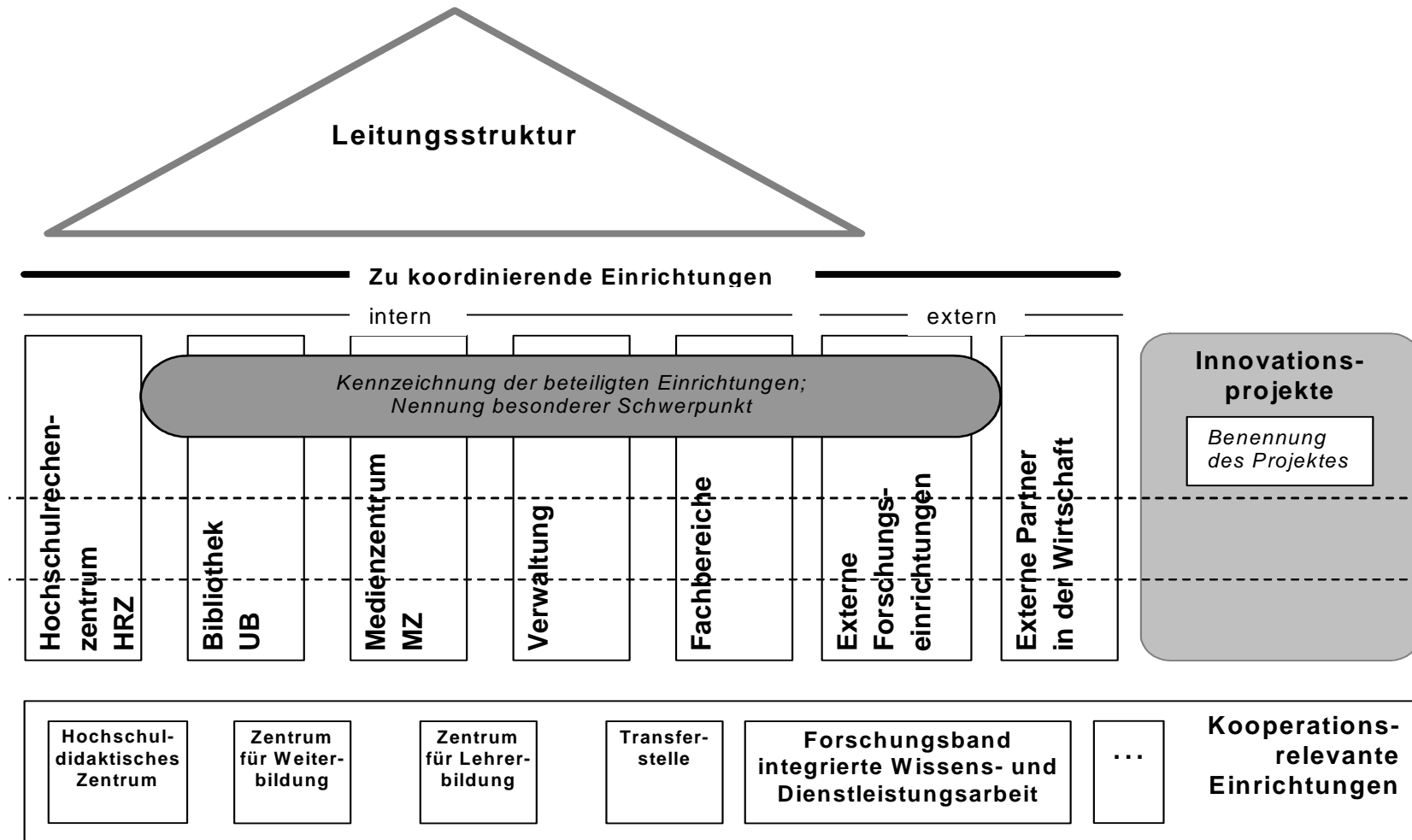


Abbildung 1: Relevante Strukturen für das Informationsmanagement an der Universität Dortmund



# Organizational Units

- **14 Chairs**
- Dean's office
- Departmental Computer Center IRB
- Software Technology Lab STL
- Software Lab SOPRA
- Hardware Lab HAPRA
- Computational Intelligence Lab CI-Lab



# Committees

<b>FBR</b>	<b>Fachbereichsrat</b>	<b>Departmental Council</b>
<b>LUST</b>	<b>Lehre und Studium</b>	<b>Student Affairs and Teaching</b>
<b>HAST</b>	<b>Haushalt und Struktur</b>	<b>Finance and Structure</b>
<b>PA</b>	<b>Prüfungsausschüsse</b>	<b>Examination Committees</b>
<b>PromA</b>	<b>Promotionsausschuss</b>	<b>PhD Committee</b>
<b>BKs</b>	<b>Berufungskommission</b>	<b>Search Committees</b>
<b>QSL</b>	<b>Qualitätssicherung</b>	<b>Quality Assurance</b>

All committees: Professors

Assistants

Students

FBR also Nonacademic Staff

BKs Guests from interested Departments, Rectors Advisor

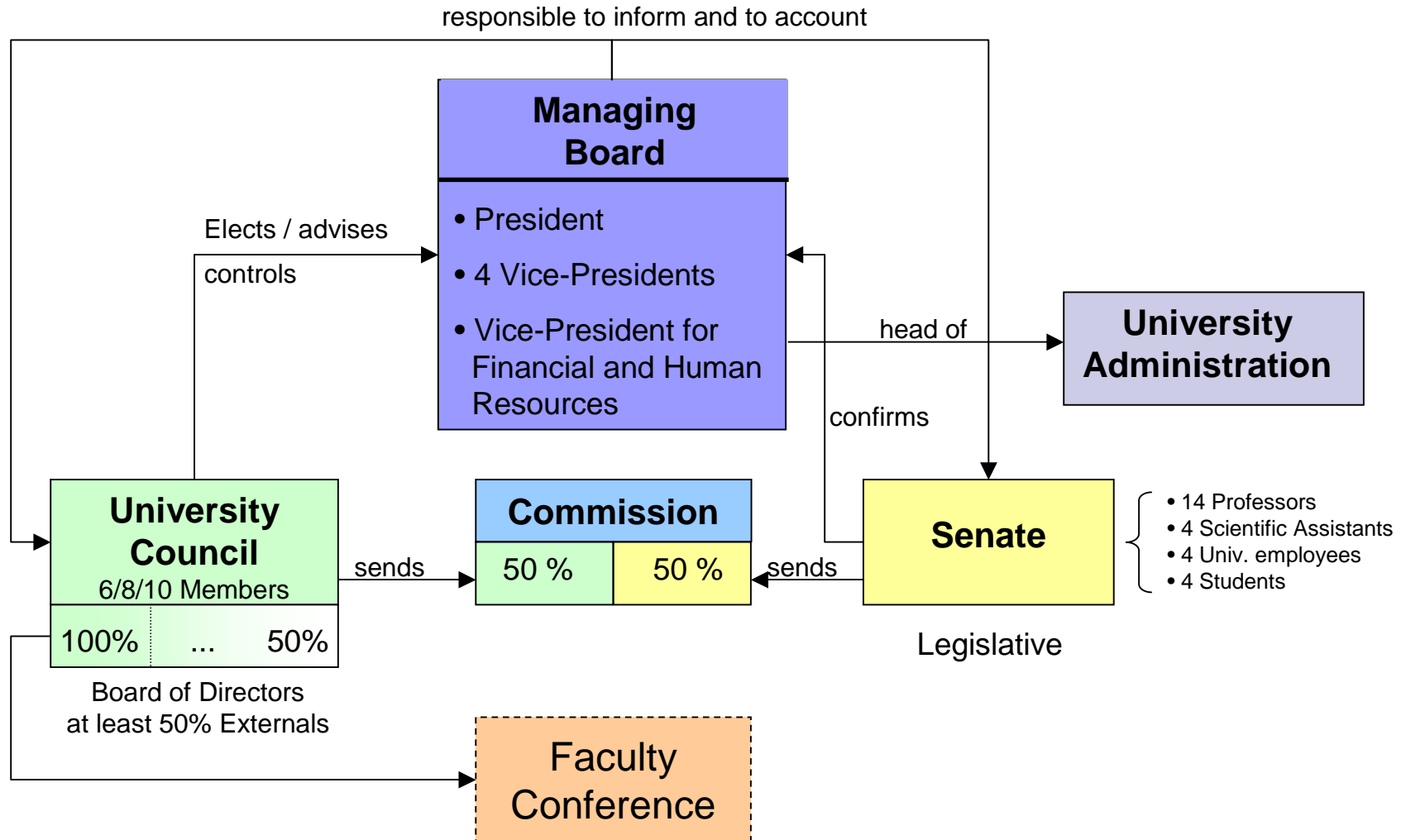


# People in charge of...

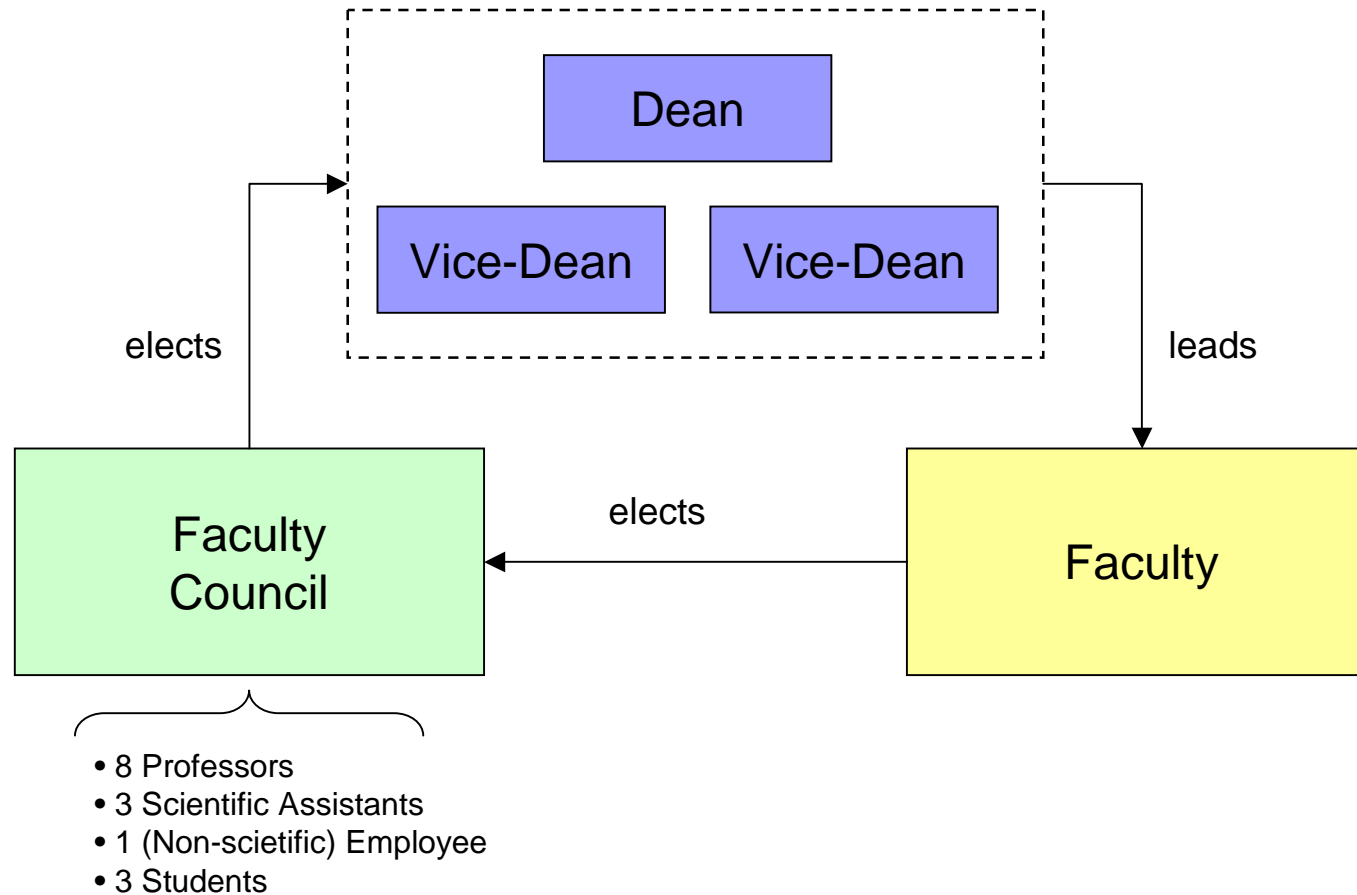
- Student Advisor (3 Persons)
- Foreign Student Advisor
- Course Planning (Study Programs)
- Course Coordination (Place and Time)
- Capacity Planning
- Colloquium Coordination
- Group Project Coordination
- Teaching Assistant Coordination
- Equal Opportunity / Women Rights
- University Election Coordination

**and a few more**

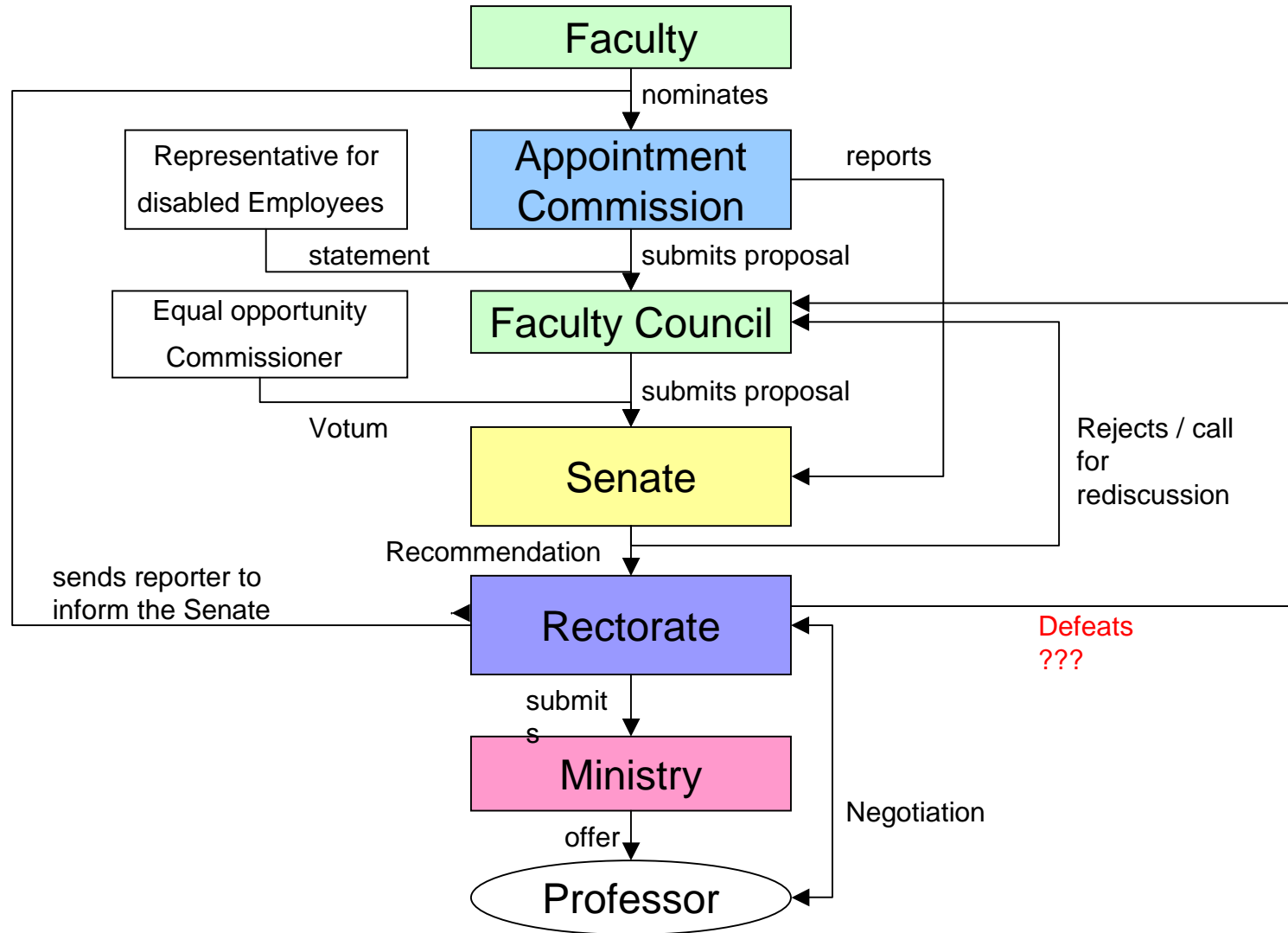
# Management Structure (HFG)



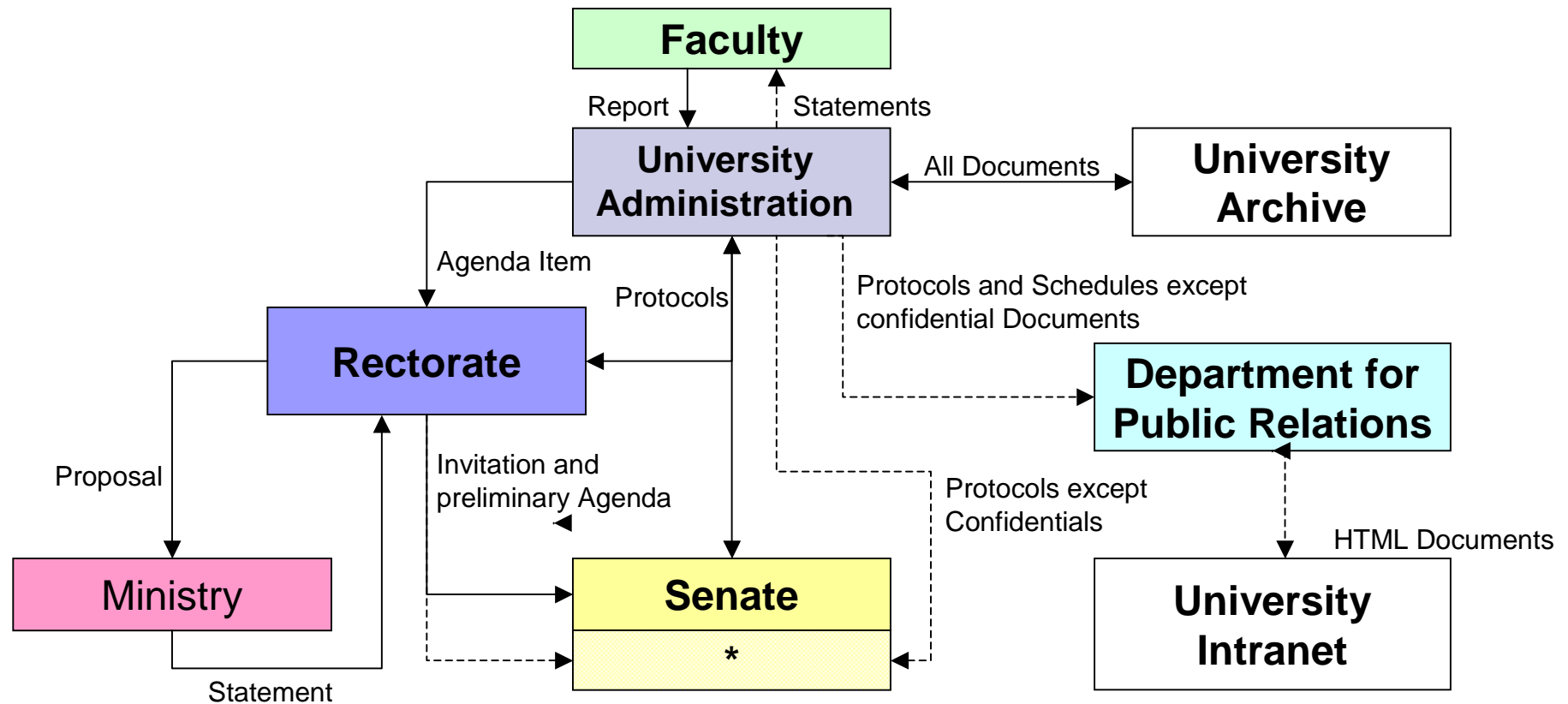
# Faculty Organisation



# Appointment for Professors



# Document Workflow of an Appointment for a Professor



- \*)
- Heads of the Departments
  - Chairmen of the Commissions
  - Commissioners of the Senate
  - Deputy Members of the Senate

— Operative      - - - - Informal



# Mode of Operation

- **Integration of Data**

- Integrate all relevant data sources and consolidate the data

- **Workflows**

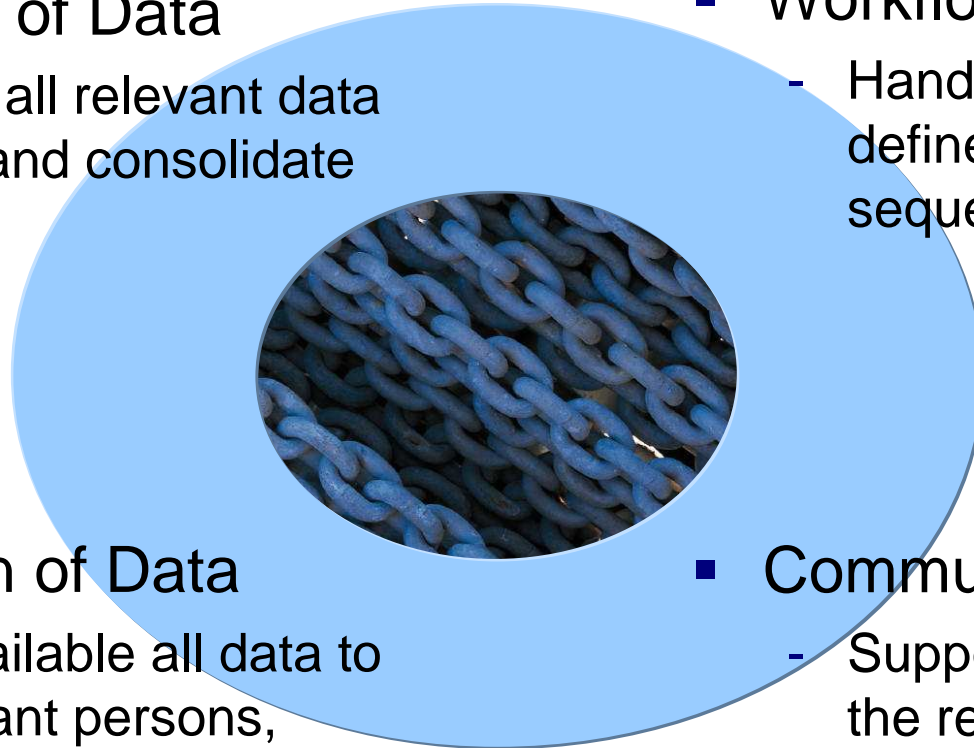
- Handle the data in a defined state in a sequence of persons

- **Distribution of Data**

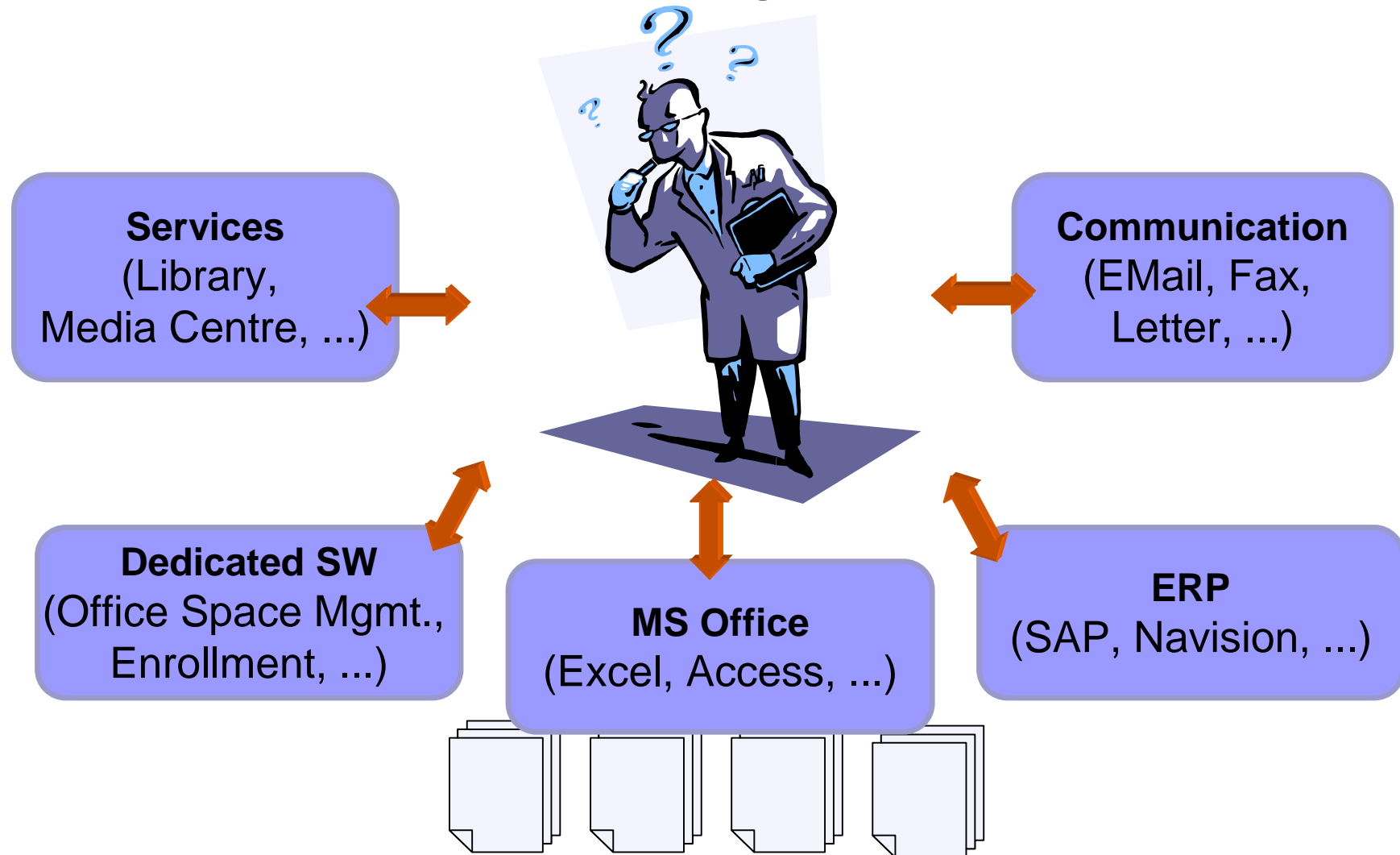
- Make available all data to the relevant persons, anytime

- **Communication**

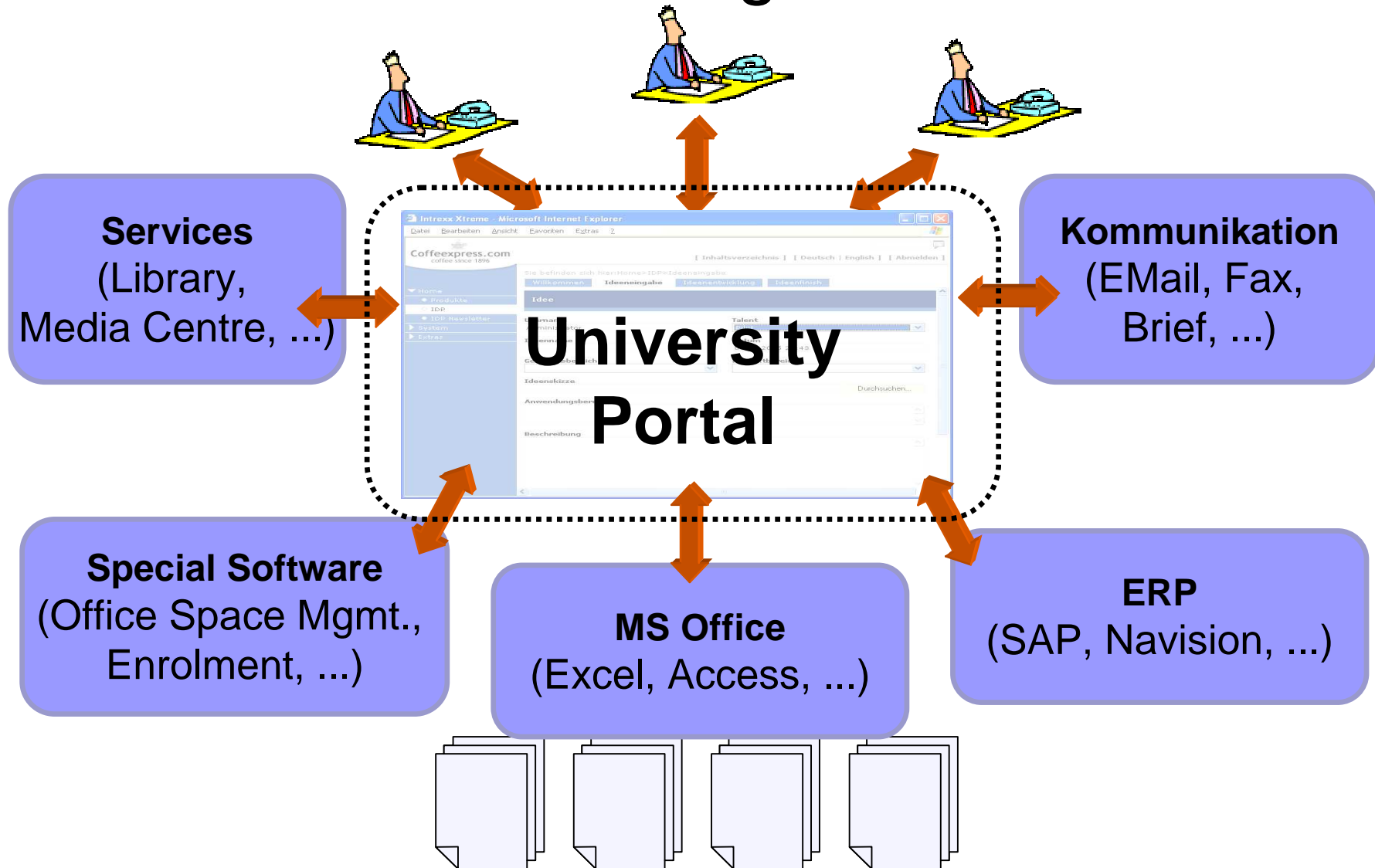
- Support and document all the required information / communication



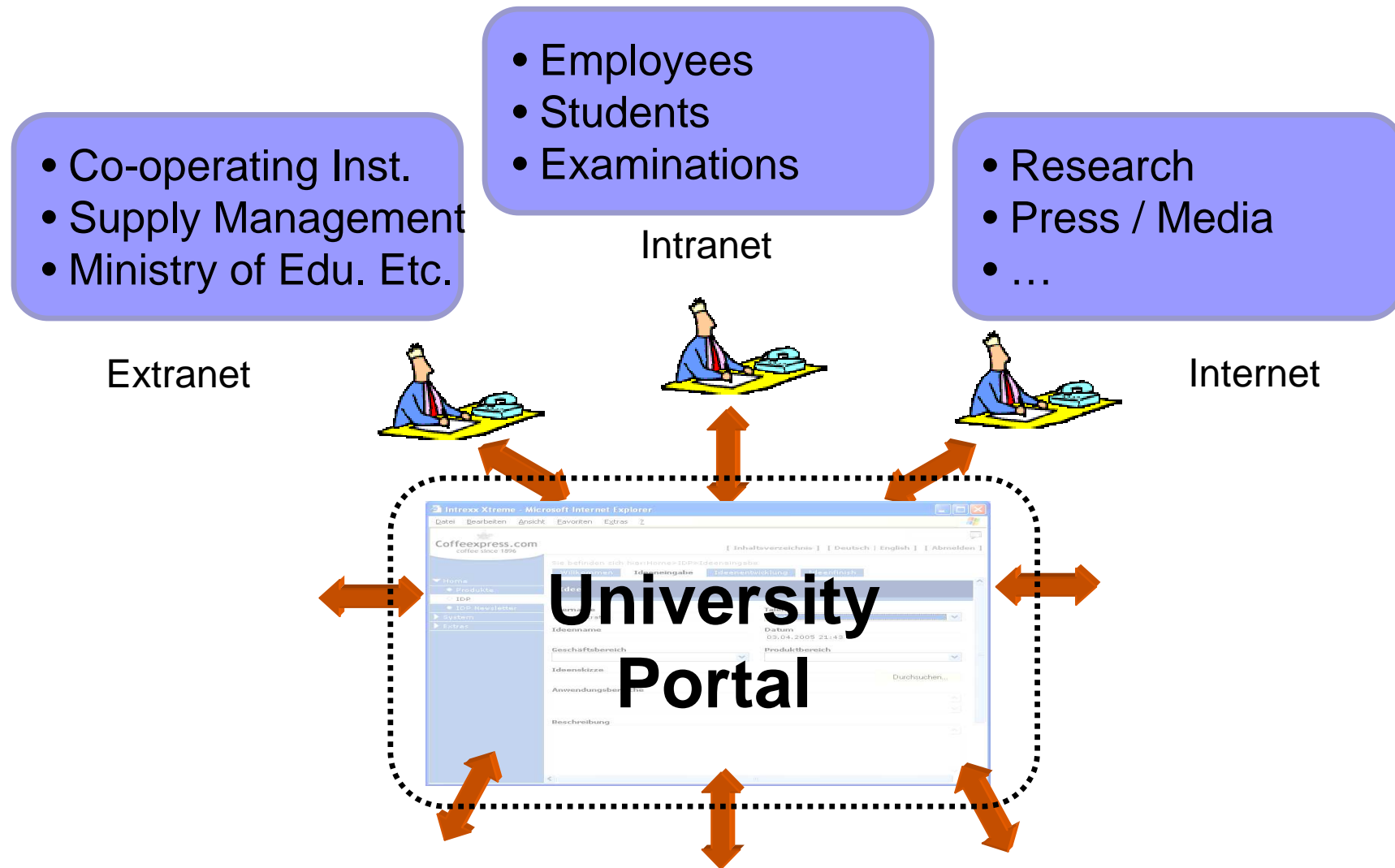
# Data Integration



# Data Integration



# Data Distribution





# Workflow: Oral Examination

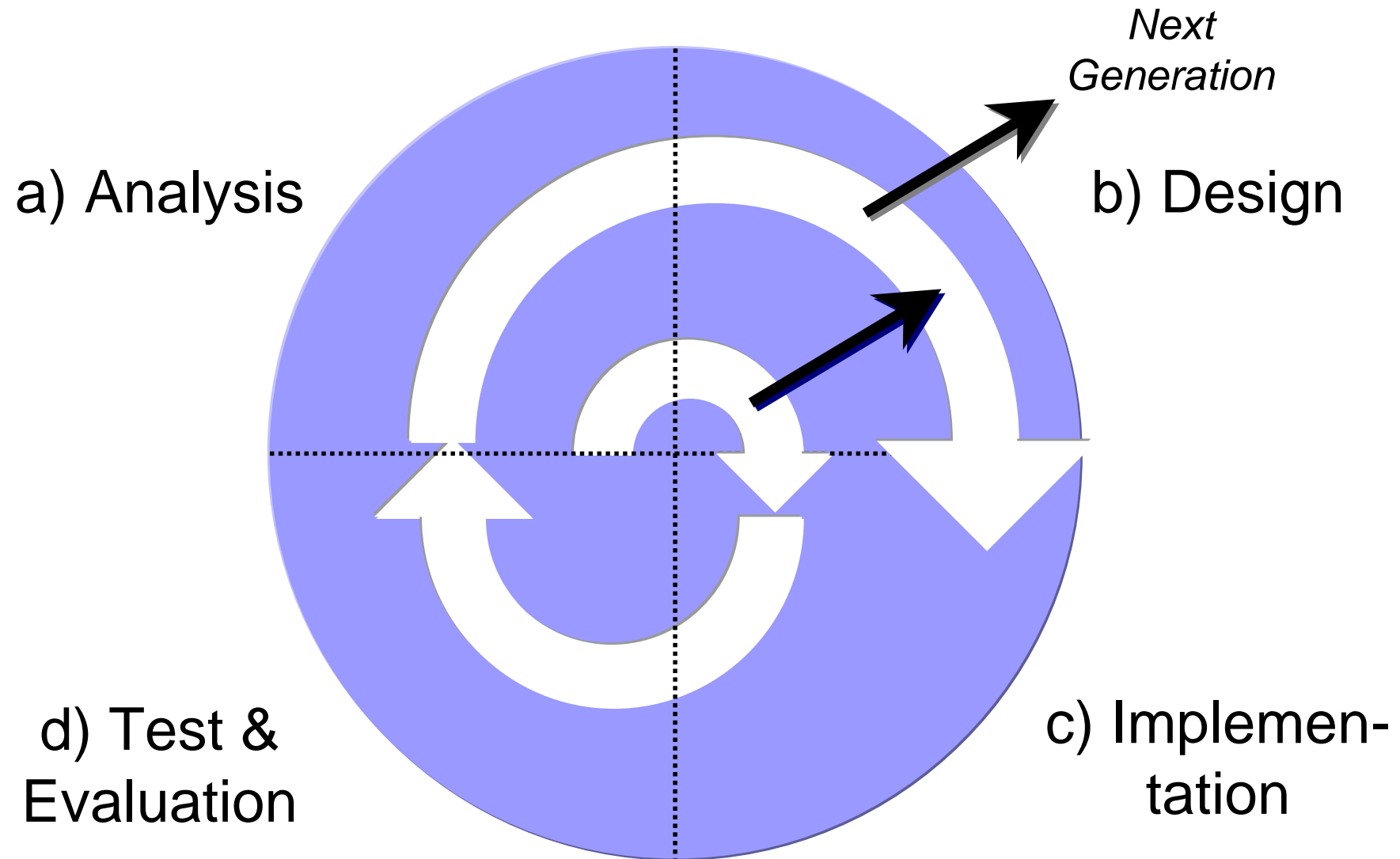
- Outmoded Workflow
  - Student asks Examiner for Exam. Date
  - Student goes to Exam. Office to ask for Reg. Form
  - Student goes to Examiner – Examiner signs the Form
  - Student brings Form to Exam. Office
  - Exam. Office mails Exam. Questionnaire to Examiner
  - After Exam: Examiner sends Questionnaire to Exam. Office

# Workflows

- Portal Substitute Paper-Based Workflows, e.g.
  - Application for Leave
  - Application for Reimbursement of Travel Expenses
  - Appropriation Requests
  - Procurement, e.g. IT-Equipment
  - Student Enrolment
  - Project Management
  - Meetings: Invitations with Agenda, Compilation and Distribution of Minutes
  - ...



# Development Process: Spiral Model





V.

# Short Summary



# Summary

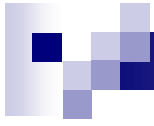
- No doubt: cooperation necessary
- No doubt: different cultures (today)
- Clear analysis of motivation
- Seeing also the benefit in the long run
- Define clearly the objective, the work packages and the mutual responsibilities



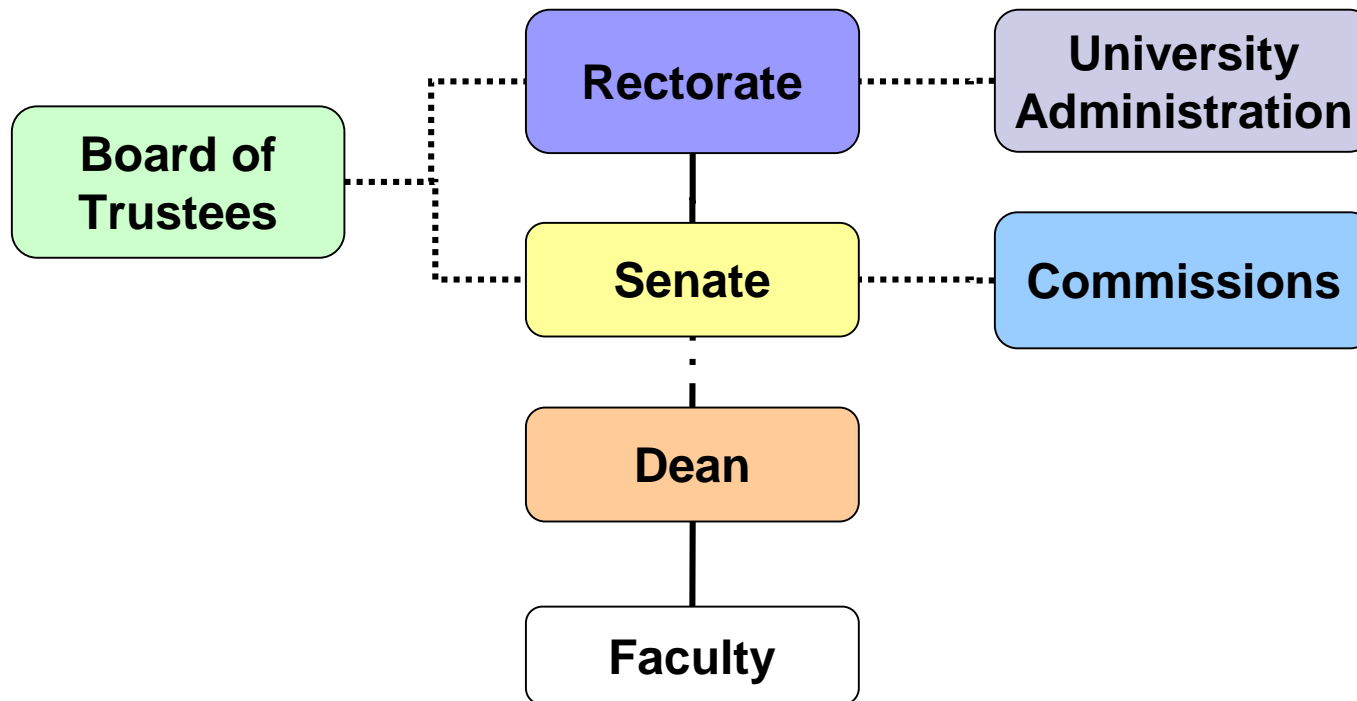
**High Chances for a Successful Project**



**Thank You for the Attention !**



# University Structure





# Univ.-Enterprise Cooperation

## Research: „Hatch“ Innovation and Entrepreneurship

Where cooperation might pay off

- Need to improve the quality of graduates
- Shortage of high quality training materials and courses
- To adapt to changing needs of society
- More effective link between pure and applied science

Promotin Structures

Liaison offices

Univ.-industry consortia

Professional associations and graduate associations