**Introduction:**

1. Warum sollten Universitäten KM betreiben
   - Universitäten haben eine riesige Menge an Wissen. Das Wissen ist aber meistens nirgends zentral gesammelt und kann deswegen auch nicht wirklich geteilt werden. Würde das Wissen zentral gespeichert und teilbar sein, kann man damit die Innovation in der Universität fördern - es würden mehr Ergebnisse erzeugt werden und dadurch auch wieder mehr Wissen was geteilt werden kann. Man erzeugt quasi eine Schleife.
2. half-time KM
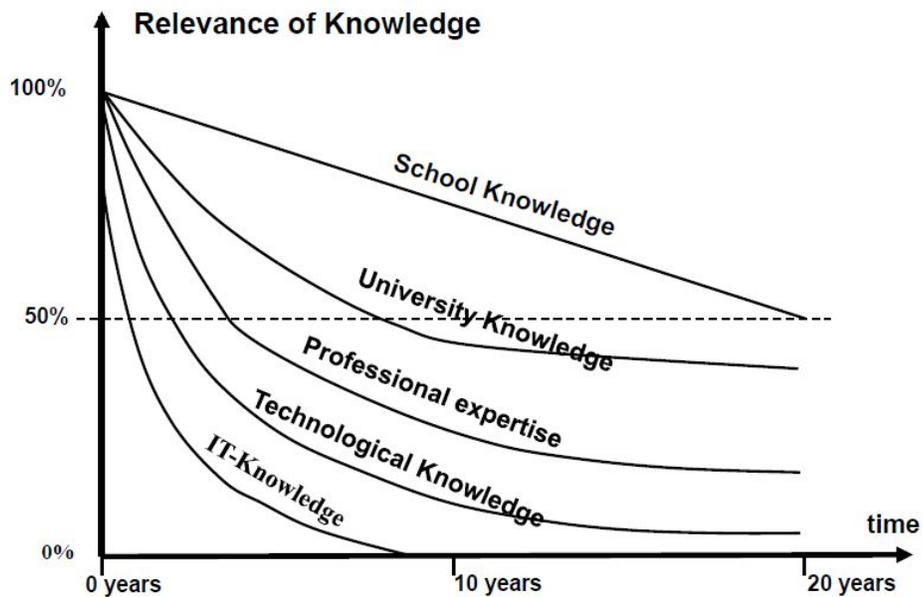
3. Half-time reaction time
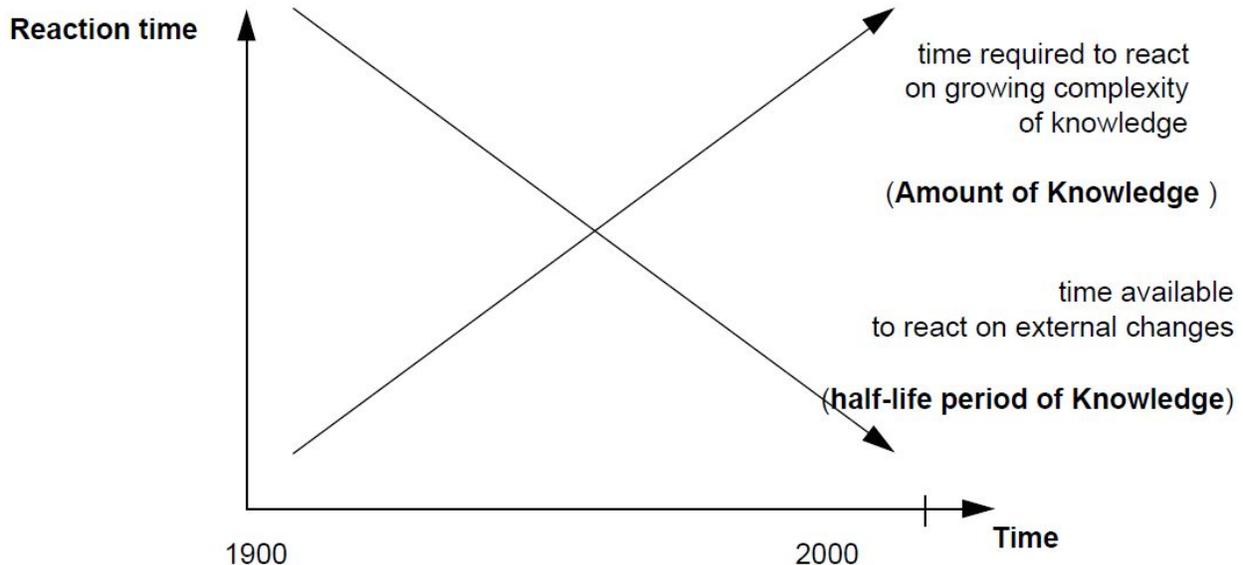
4. Half-time relations
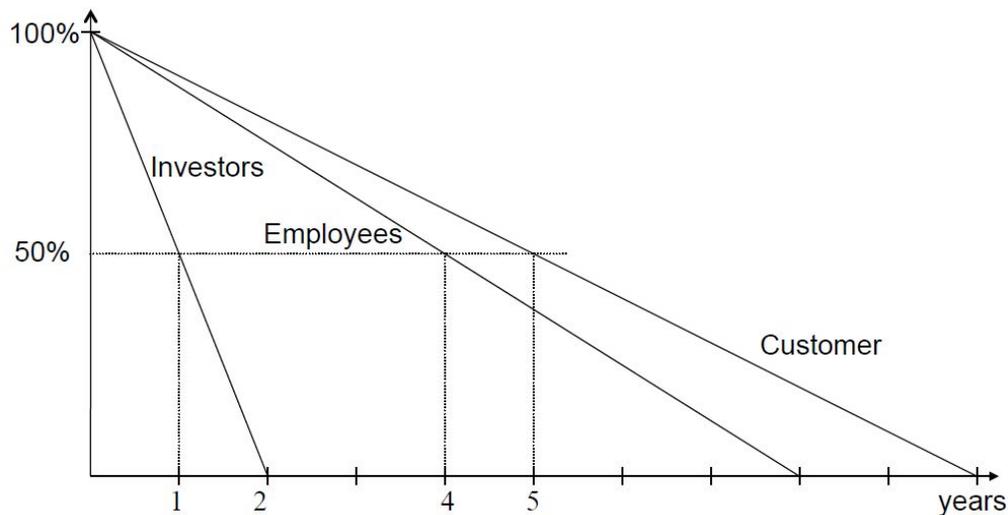
5. Was ist das structure capital vom intelectual capital statement?

Bewertung und Steuerung von geistigem Eigentum zusätzlich zu finanziellen Balance. Speziell adressiert im österreichen Universitätsgesetz 2002. Man unterscheidet:

Menschliches Kapital (Mitarbeiter und ihre Fähigkeiten)

Struktur Kapital (Prozesse und mehr)

Beziehungs-Kapital

Das Wissenziel wird definiert und die Strategien werden präsentiert um sie zu erreichen.

6. kinds of Intellectual Capital - don't remember what exactly

Menschliches Kapital (Mitarbeiter und ihre Fähigkeiten)

Struktur Kapital (Prozesse und mehr)

Beziehungs-Kapital

7. three layer structure of a KM based system

Normative: organization and culture

- organizational culture supporting knowledge exchange and
- learning
- learning organization
- life-long learning of employees

Strategic: content and networking

- which knowledge is required by organization and its members
- knowledge structures
- communication networks
- organizational learning groups

Operative: processes, controlling, systems, information,technology

Culture:

8. 7 Eigenschaften die von Mitarbeitern erwartet werden
   - Vision (belief)
   - System thinking (foresight)
   - Communication (frankness)
   - Empathy (intuition)
   - Charisma (core competencies)
   - Passion (creativity)
   - Self-confidence (security)
9. learning organization principles
   - personal mastery
   - shared vision
   - mental models
   - team learning
   - system thinking

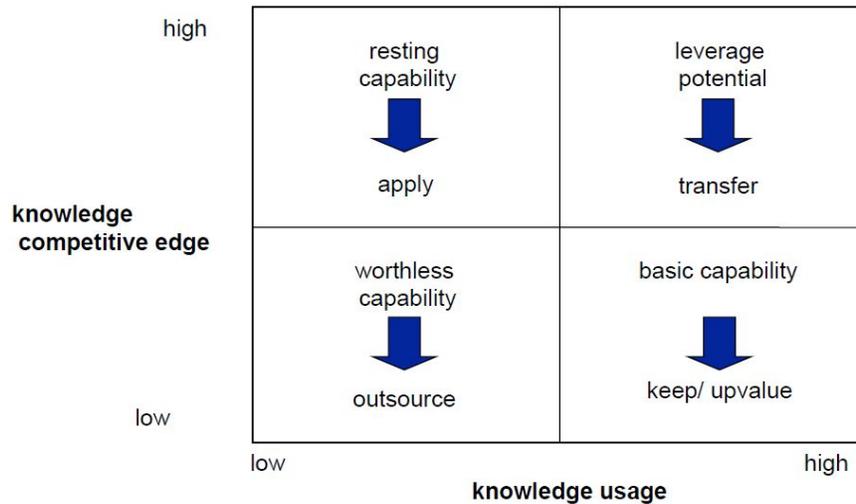**Strategy:**

10. SWOT-Analyse allgemein

Extern \ Intern	Strengths	Weaknesses
Opportunities (Chances)	develop new opportunities fitting the the strength of the organization	eliminate weaknesses to use new opportunities
Threats (Risks)	use strengths to avoid threats	develop defences to avoid weaknesses become

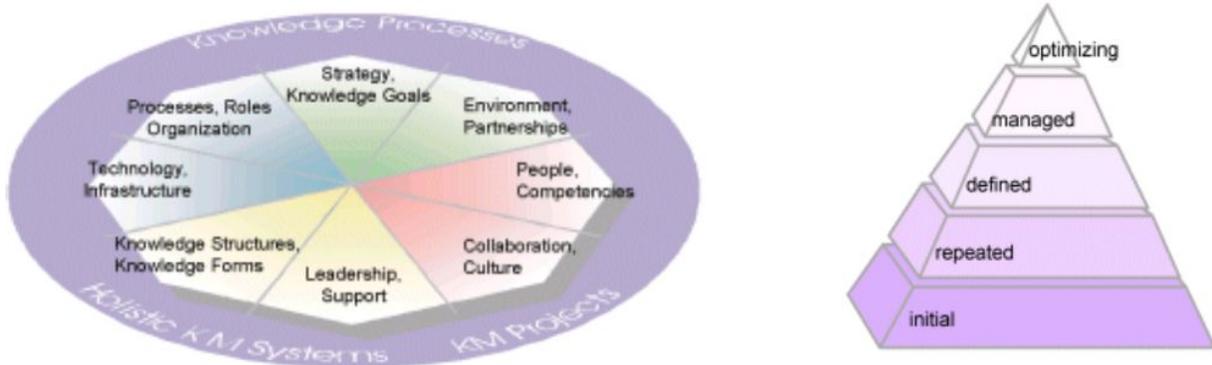11. strategische Ziele in Organisationen

Es gibt zwei Ansätze:

- market-focussed (e.g. Porter)
  - alignment of organization's development on
  - customers and market, analysis of competitors
- Resource-focussed
  - development of the organization's resources and
  - concentrating on core (existent) competences

12. KM-outsourcing - warum wichtig?

	low ← knowledge usage → high
high knowledge competitive edge	**resting capability** → apply **leverage potential** → transfer
low	**worthless capability** → outsource **basic capability** → keep/ upvalue

13. KMMM Diagnosemodell - 8 Kriterien


14. Wie kann KM evaluiert werden?

Knowledge Management kann mit dem Knowedge Management Maturity Model evaluiert werden.

15. Knowledge sharing 5. Principles of strategic knowledge management

- strategic relevant knowledge is derived from strategy of theorganization
- knowledge serves a critical contribution for differentiation in the competition with other organizations
- knowledge supports the enhancement of core competences
- knowledge is applied and creates value
- the knowledge portfolio targets the future

Processes:

16. Metaprozessor erklären (KBS)
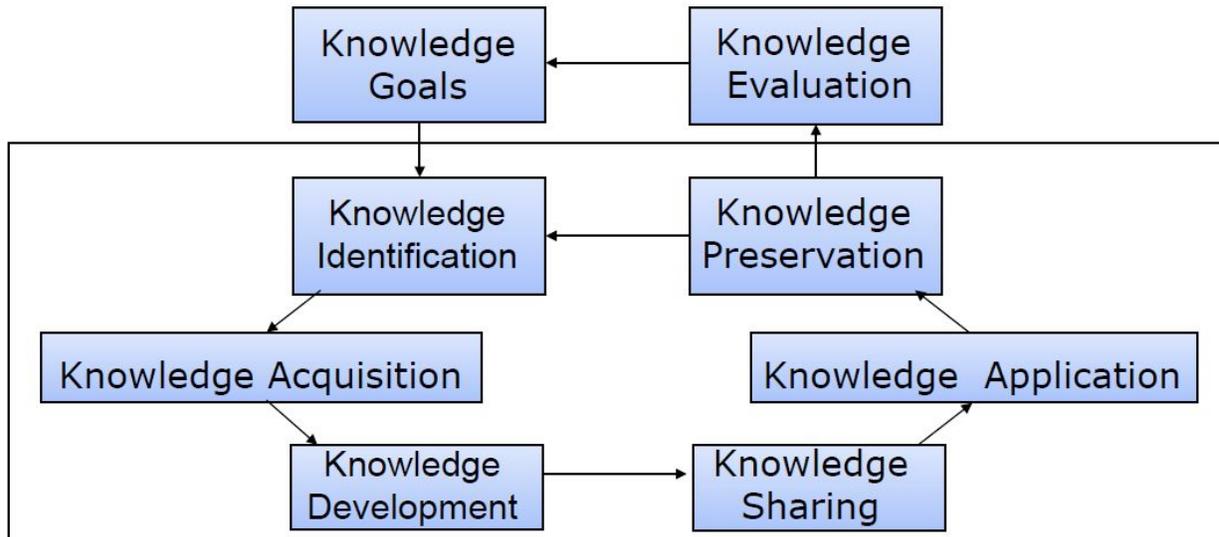
Knowledge Goals:

- goals on normative, strategic and operative layer
- knowledge goals for organisation / project / business process
- documentation in handbook

Knowledge Identification:

- internal knowledge transparency (externalization)
- external knowledge transparency (visibility)

Knowledge Acquisition:

- recruiting
- short-time members in projects
- exchange of employees between organizations for some time
- intra-organizational projects
- external coaching by expert
- mergers & acquisitions (of organizations)
- knowledge alliances, stakeholder knowledge
- external consultation or services
- knowledge preserve (CD-Rom, software)
- learning from best practices

Knowledge Development:

- classical research & development (R&D)
- utilization of customer experience to generate
- exchangeable knowledge
- problem solving approaches of other disciplines
- research co-operations
- learning workshop, learning arena

- development of environment for creativity
- creativity techniques
- continuous improvement process

Knowledge Sharing:

- best practice database
- Internet, Intranet, Extranet
- experience groups
- virtual teams
- workplace organization, room layout: communicative architecture"
- job rotation
- learning arena
- training- and communication measures
- incentives for knowledge sharing

Knowledge Application:

- is knowledge applied?
- user-adequate representation of knowledge: focussing to the essential
- management information system (MIS): decision supporting knowledge presentation
- intelligent distribution: who may use my knowledge?
- information broker: individual information distribution guided by user profiles
- info center, internal knowledge market place

Knowledge Preservation:

- selection - storage - update
- documentation of project experience
- integrating lessons learned into "theory in use"
- document management systems
- storage of implicit knowledge in routines and processes:trainer - apprentice principle
- tying core employees to organization
- unlearning of stored knowledge
- licences, patents

Knowledge Evaluation:

- intellectual capital statement
- evaluating the knowledge of an organization by business ratios
- due to TQM
- evaluation of knowledge management processes
- 17. Warum ist KM für QM wichtig?

Grundsätzlich wird im Rahmen des Quality-Managements ein Handbuch erstellt welches in weiterer Folge organisatorisches Wissen ist. Natürlich muss dieses Wissen mit Hilfe des KM verteilt werden.

- 18. relationship between process management and KM
  - the description of a process (sequence of actions and more) is knowledge (externalization of knowledge)
  - the management and control of processes requires knowledge
    - employees make decisions based on knowledge
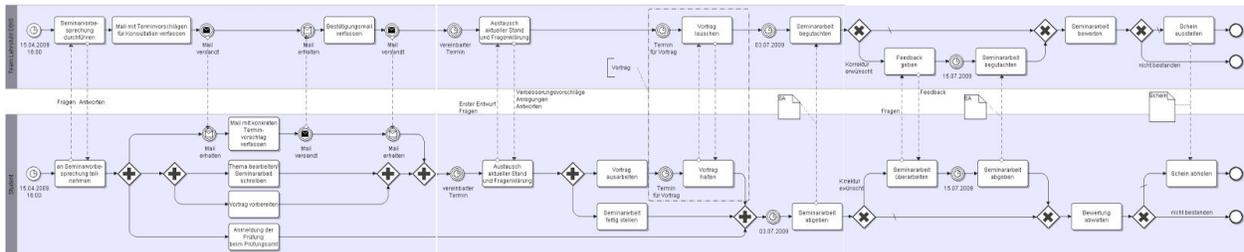   - automatic control also requires knowledge

- improvement of processes require explicit knowledge
  - process itself may require and produce knowledge

19. Beziehung zwischen KM und QM
20. BPMN - Modellierung Zahnarztbesuch
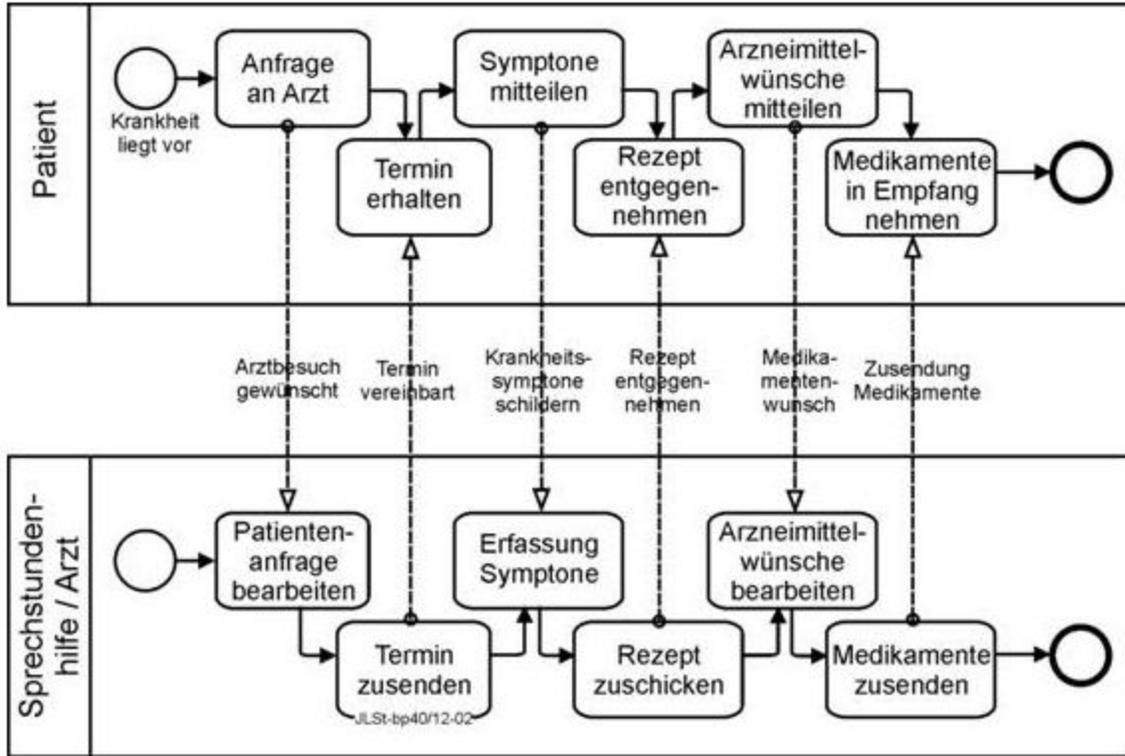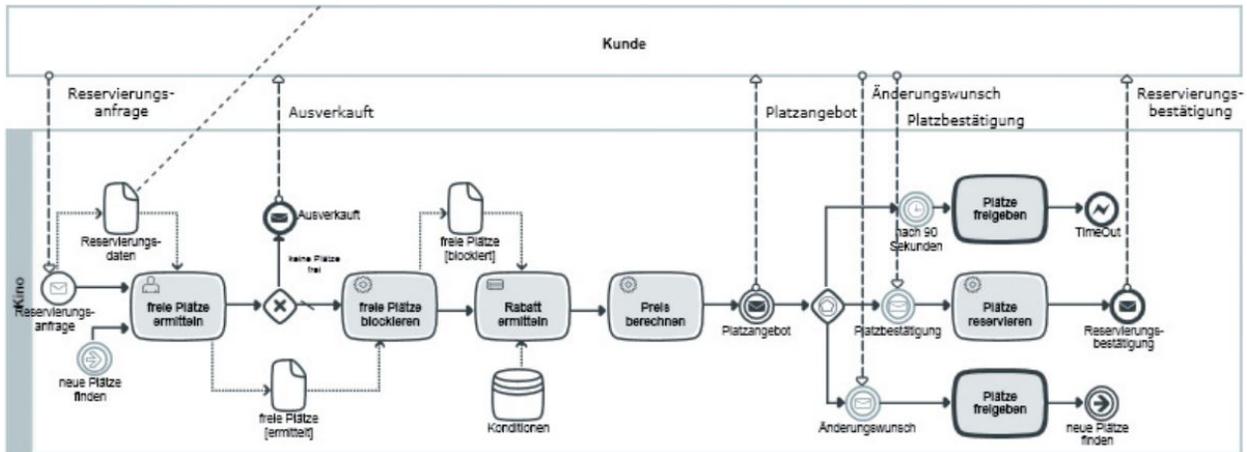

21. BPMN - Beispiel KM Prüfung (Ablauf- von Anmeldung bis zur Notenvergabe)
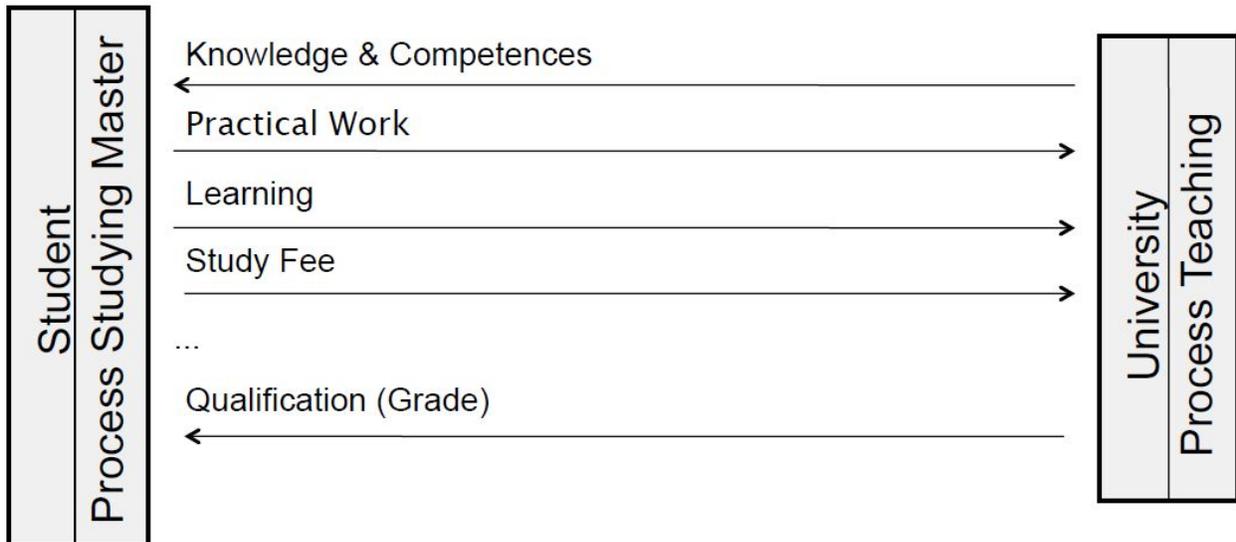
22. BPMN - process modelling: cinema

23. Wie schaut eine Service Analyse aus?
- Service Analyse von unserem Mobilhandy-Anbieter
- Service-Analyse vom Lieblingsrestaurant machen
- service provider analysis of a mobile provider+ comparison with other 2

Service Diagramm (Service Fluss zwischen Prozessen)

Service Katalog (verbale Beschreibung vom Service und den Komponenten - Feststellung welche Werte für die Qualitätssicherung messbar sind)

- **knowledge & competences**
  - content see study plan
  - examination & competence measurement
- **practical work**
  - programming, modelling, analysis, …
  - time consumption
- **learning**
  - study plan
- **qualification**
  - study plan

Service Porfil (Service Komponenten und Attribute werden bestimmt - mit Kundenbefragung kann qualität festgestellt werden)

- **identification of service (quality) attributes**
- **applied to knowledge**
  - half-life time (how long will the knowledge last)
  - professionality
  - delta (difference between required and learned)
  - effort for learning
  - level of knowledge
- **qualitative comparison between different providers**

	school	UAS (FH)	Uni
half-life	***	*	**
profession	*	***	**
level	*	**	***

Human Resources:

24. Was ist eine Stellenausschreibung
    - result of job analysis
    - definition where the job is positioned in the organization
    - which organizational goals shall be achieved by job holder
    - required information for replacement
    - base for employment contract
    - base for compensation (payment)
    - relatively inflexible for recent types of work (i.e. temporary project work)
25. Jobanalyse: 2 Methoden um zur Jobbeschreibung zu kommen?
    - analysis on content of job (e.g. new professor)
    - goal: job description and information, what the next holder of a position has to do and what privileges s/he has

Methoden:

- organisational chart, training manuals
- supervisor interview
- job holder interview
- job holder work journal
- job holder monitoring at work

26. competence management and employees

Beim Kompetenz Management geht es darum, dass man über die Kompetenzen der Mirarbeiter bescheid weiß. Dadurch kann man für die Zukunft planen, die Mitarbeiter zu Projekten zuteilen etc. Man verwendet dazu CMS in denen die Kompetenz Evidenz der Mitarbeiter gespeichert wird und daraus Kompetenzprofile erstellt werden.

27. 2 Beispiele warum KM für die EU wichtig ist

Im Bereich der Bildung mit unterschiedlichen Initiativen:

- Lisbon Strategy for Growth and Jobs (2000)
  Bologna Process (1999)
  Copenhagen Process
  EUROPASS (europass.cedefop.europa.eu/, 2004)
  European Qualifications Framework for lifelong learning (EQF, 2008)
  Dublin Descriptors
  Tuning project

28. HR-XML 4 Transaktionen

OrderRequest

StatusRequest

CancelRequest

Request

29. competences XML

http://www.omg.org/interop/presentations/HRXMLInterop.pdf

30. HR-XML 2 Politiker-Kompetenzen beschreiben

```xml
<?xml version="1.0" encoding="UTF-8"?>
<Competency description="In wie weit kann ist die Person in der Lage zu führen" name="Führung"
xmlns="http://ns.hr-xml.org/2007-04-15" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://ns.hr-xml.org/2004-08-02  Competencies.xsd">
 <CompetencyId description="Competency id basiert auf Mario Luefs taxonomy" id="1"
idOwner="Mario Luef"/>
 <TaxonomyId description="Meine Ids basieren auf der Taxonomie von Mario Luef" idOwner="Mario
Luef" id="1"/>
 <CompetencyEvidence dateOfIncident="2016-12-13" name="Assesement" typeDescription="Assesement
Center für Führung" typeId="1">
    <EvidenceId description="Führung einer Gruppe innerhalb eines Projektes" id="1"
idOwner="Mario Luef"/>
    <NumericValue description="Scale between 0 or 100" maxValue="100"
minValue="0">95</NumericValue>
 </CompetencyEvidence>
 <CompetencyEvidence dateOfIncident="2016-12-13" name="Partyleader" typeDescription="Leading
of a political party" typeId="2">
    <EvidenceId description="Führung einer politischen Partei" id="2" idOwner="Mario Luef"/>
    <NumericValue description="Leading time in years" minValue="0">4</NumericValue>
 </CompetencyEvidence>
</Competency>
```

```xml
<?xml version="1.0"?>
<Competency name="Communication Skills" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://ns.hr-xml.org/2004-08-02" xsi:schemaLocation="http://ns.hr-xml.org/2004-08-02
Competencies.xsd">
 <Competency name="Written Communication Skills">
   <CompetencyEvidence name="WRITTENTEST1-A" dateOfIncident="1995-01-01"
lastUsed="2000-01-01">
     <NumericValue minValue="3" maxValue="5" description="SEP-equivalent Skill-Level
Range">5</NumericValue>
   </CompetencyEvidence>
   <CompetencyWeight>
     <NumericValue minValue="0" maxValue="100">35</NumericValue>
   </CompetencyWeight>
 </Competency>
 <Competency name="Oral Communication Skills">
   <CompetencyEvidence name="ManagerObservation" dateOfIncident="1996-01-01"
lastUsed="2000-01-01">
     <NumericValue minValue="1" maxValue="5" description="Company XYZ Skill
Range">5</NumericValue>
   </CompetencyEvidence>
   <CompetencyWeight>
     <NumericValue minValue="0" maxValue="100">65</NumericValue>
   </CompetencyWeight>
 </Competency>
</Competency>
```

31. HR-XML - 2 Basis Qualifikationen eines scientific professors

Siehe Politiker Kompetenz

Communities:

32. social software system
    - an information system offering communication/cooperation capabilities to users
    - usually based on Internet as communication media
    - more or less interchangeable with the term Social Media
    - developing a community around common interests or goals
    - open or closed community
    - registered or unregistered users
    - communities can be used by organizations to support
33. Web syndication
    - integrating sources from different Web sites
    - RSS (Really Simple Syndication)
    - format defined in XML
    - client subscribes a service at a provider
    - client checks regularly for new information
    - Mash-ups

34. Was ist social software - Charakteristiken
    ○ information management
    ○ identity management
    ○ relationship management
35. Tech-Screen - Vorteile für Benutzer/Motivation
    ○ social software system to share knowledge about Internet related technologies
36. Social tagging
    ○ technique to structure or classify content
    ○ users may add free tags (keywords) to a contribution that describes somehow the content
    ○ social tagging is the community "process" of using almost the same tags for the same objects
    ○ if sometags are used by many users for same contents we may conclude that the terms have similar meaning

Portals:
Machine Learning:

37. casebased learning vs. inductive learning (Unterschiede)
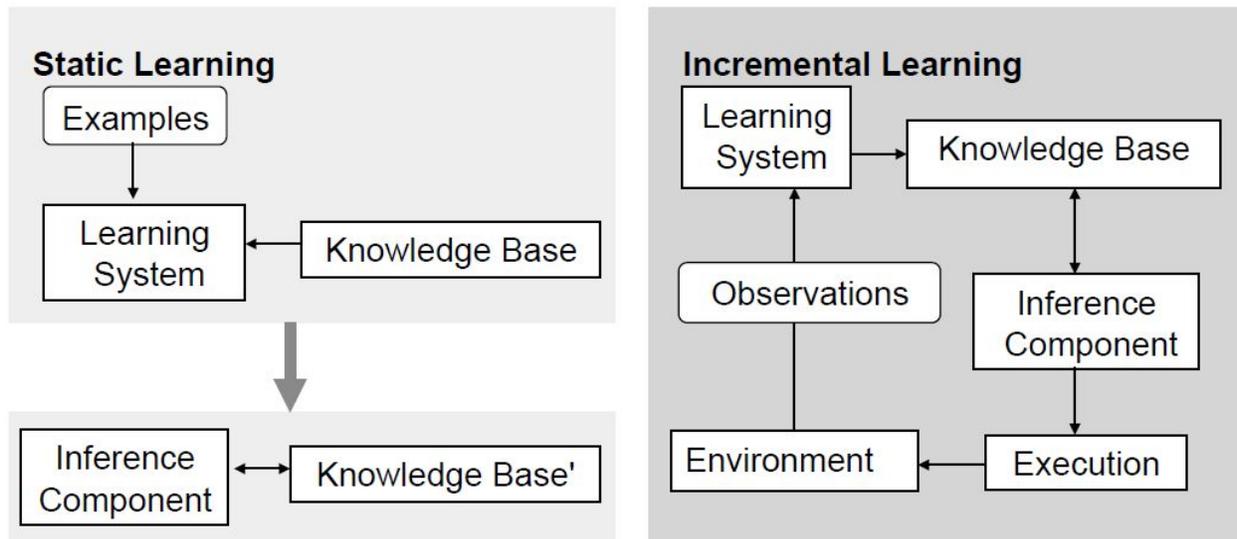
Sowohl bei Case based als auch inductive learning handelt es sich um inkrementelle Lernverfahren. Die Hauptunterschiede sind:

inductive learning use the paradigm of concept learning - answer the question "when is the current situation an example of some concept"	Case-based learning can be used for this (interpretive Case-based learning) Case-based learning can also be used as part of a Case-based planning system (problemsolving Case-based learning)

Inductive learning reduce experience to something like a set of rules	Case-based learning retains the information from earlier experience for direct use.
induction have particular algorithms;	CBL is an approach; there is no dominant algorithm.

38. XML - case - letzte verfehlte Prüfung

http://www.ec.tuwien.ac.at/~dorn/Courses/KM/Resources/CBML.pdf
http://www.ec.tuwien.ac.at/~dorn/Courses/KM/Resources/CBMLSimilarity.pdf

Beim Beschreiben von Cases gibt es 2 verschiedene XMLs die man eigl. Beschreibt. Einerseits beschreibt man den Case selbst und andererseits die Similarity zwischen Cases.

XML für einen Case:

```xml
<case name="DUB-OSL #34">
  <features>
    <username>Coyle</username>
    <traveloffer>
      <origin>DUB</origin>
      <destination>OSL</destination>
      <departuretime>Mon, 2 Dec 2002 at 6:45 GMT</departuretime>
      <arrivaltime>Mon, 2 Dec 2002 at 12:00 CET</arrivaltime>
      <distance>1051</distance>
      <flighttime>255</flighttime>
      <hops>
        <numberofhops>2</numberofhops>
        <hop>
          <origin>DUB</origin>
          <destination>AMS</destination>
          <carrier>KLM</carrier>
          <departuretime>Mon, 2 Dec 2002 at 6:45 GMT</departuretime>
          <arrivaltime>Mon, 2 Dec 2002 at 9:20 CET</arrivaltime>
          <class>Coach</class>
        </hop>
        <hop>
          <origin>AMS</origin>
          <destination>OSL</destination>
          <carrier>KLM</carrier>
          <departuretime>Mon, 2 Dec 2002 at 10:10 CET</departuretime>
          <arrivaltime>Mon, 2 Dec 2002 at 12:00 CET</arrivaltime>
          <class>Coach</class>
        </hop>
      </hops>
    </traveloffer>
    <recommendation>5</recommendation>
  </features>
</case>
```

```xml
<case name="offer4461">
    <origin>Dublin</origin>
    <destination>Ciampino</destination>
    <timeofday>615</timeofday>
    <price>62.53</price>
    <numberofhops>2</numberofhops>
    <via>London Stansted</via>
    <totaltime>615</totaltime>
    <stopovertime>335</stopovertime>
    <selected>true</selected>
</case>
```

Beschreibung der Gewichtung im XSD:

```
<feature name="price" weight="0.2">
        <graph type="asymmetrical">
                <point difference="-Infinity" similarity="1"/>
                <point difference="0" similarity="1"/>
                <point difference="200" similarity="0"/>
                <point difference="Infinity" similarity="0"/>
        </graph>
</feature>
```

39. Difference between a taxonomy and an ontology

taxonomy is usually only a hierarchy of concepts (i.e. the only relation between the concepts is parent/child, or subClass/superClass, or broader/narrower) in an **ontology**, arbitrary complex relations between concepts can be expressed too (X marriedTo Y; or A worksFor B; or C locatedIn D, etc)