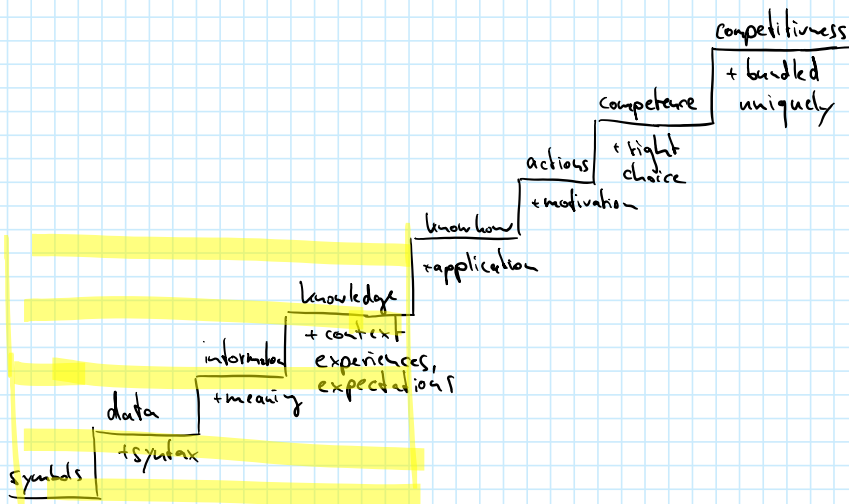


IDS Exam questions

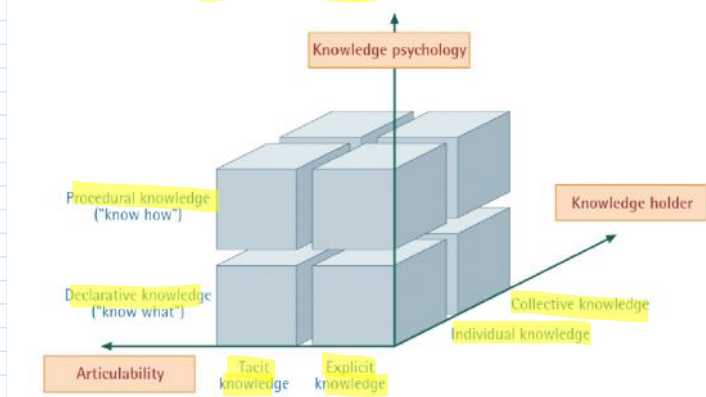
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1. Describe the taxonomy from symbols to knowledge with attributes?

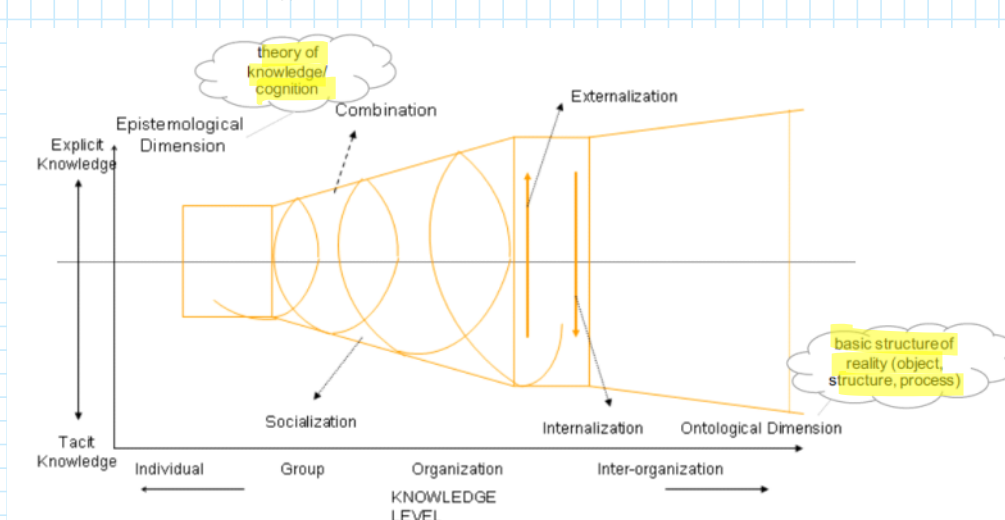


2. What are the three dimensions of the generic knowledge mode/cube?

3. What are the six generic types of knowledge?



4. What contains the epistemological and the ontological dimension of KM in the concept of Nonaka and Takeuchi? What means Ontology in IT?

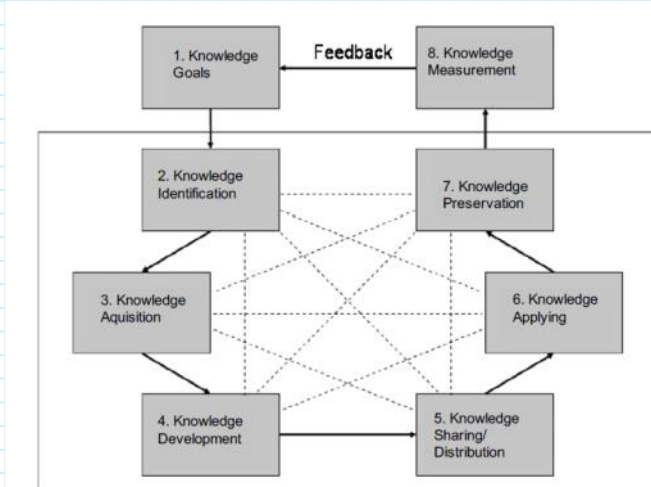


Epistemology: branch of philosophy concerning the nature and scope of knowledge

Ontology (IT): defines a set of representational primitives with which to model a domain of

Knowledge

5. Describe and draw a generic Knowledge management cycle in practice to Probst?



6. What is the CEN-definition of knowledge/ KM?

Knowledge is the combination of data and information, to which is added expert opinion, skills and experience, to result in a valuable asset which can be used to aid decision making. Knowledge maybe explicit, tacit, individual and/or collective

Knowledge management is the management of activities and processes for leveraging knowledge to enhance competitiveness through better use and creation of individual and collective knowledge resources.

7. Describe the three layers of the CEN-KM model?

1st: Business processes - focuses on the business itself, with clients, suppliers, partners

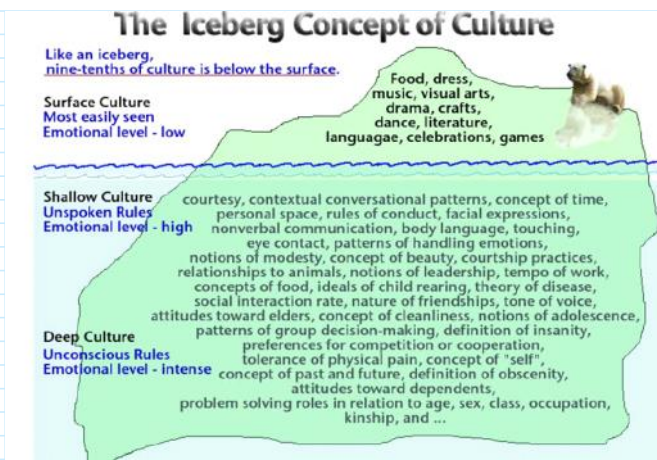
2nd: Core knowledge activities - this layer describes the cycle of knowledge:
 ↳ Identify - Create - store - share - use ↳

3rd: Personal and Organizational Knowledge capabilities

Personal: ambition, skills, behavior, experience

Organization: mission, vision, strategy, culture

8. Iceberg concept of culture?



9. Hofstede/dimensions of culture?

5 Dimensions of the Model:

1. Power Distance: Subordinates' expectation of the social distance between subordinates & superiors
2. Uncertainty avoidance: Level of threat felt by unknown situations and openness to innovations, risk etc.

3. Individualism vs Collectivism

4. Masculinity vs Femininity (values)
 - high opportunity for earnings
 - recognition when doing a good job,
 - opportunity for advancement
 - challenging work -- sense of accomplishment.

- Good working relationship with supervisors
- Cooperative environment
- Living area desirable to themselves and families
- Job security

5. Long-term orientation: saving for the future
Short-term orientation: giving for the future

10. Edward Hall's concept of culture?

- 4 Dimensions:
 1. Context-orientation

Low-Context	High-Context
Messages/Information are explicit, direct and unambiguous	message is part of the context / indirect information
Values: Individualism	Values: Group Sense
Direct verbal interaction less nonverbal expressions	Indirect verbal interaction more nonverbal expressions

2. Time-orientation

Factor	Monochronic action	Polychronic action
Actions	do one thing at a time	do many things at once
Focus	Concentrate on the job at hand	Are easily distracted
Attention to time	Think about when things must be achieved	Think about what will be achieved
Priority	Put the job first	Put relationships first
Respect for property	Seldom borrow or lend things	Borrow and lend things often and easily
Timeliness	Emphasize promptness	base promptness relationship factors

3. Space-orientation

Personal space, territoriality (mine and yours etc.)

4. Message (high, low context)

Direct (low context)	Indirect (high context)
• Explicit	• Implicit
• Context not important	• Context important
• Thinking-focused	• Feeling-focused
• Result-oriented	• Relationship-oriented
• Masculine	• Feminine

11. What are Porters three generic competitive strategies?

- **Cost Leadership:** target to become the most cost-efficient manufacturer
- **Differentiation:** calls for the development of a product or service that offers unique

attributes that are valued by the customer

- **Focus:** Concentrating on a niche, and within that niche, try to achieve cost or differentiation advantage

12. What is a stage gate method?

A Stage-Gate process is a conceptual and operational Road Map for moving a new product project from idea to launch

Stage: Period in which the work for reaching a pre-defined gate is done

Gate: Milestone with defined goals that have to be reached

13. What means FMEA what are the measurement dimensions?

Failure mode and effects analysis - a method for minimization of risks.

The risk is measured by Severity, Occurency, Detection : $RPN = S \cdot O \cdot D$

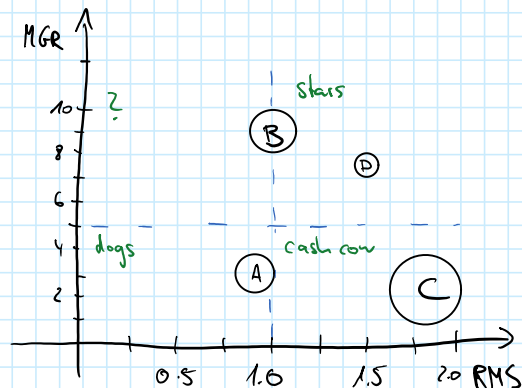
14. BCG matrix, draw a BCG matrix with following details in the box below.

Market growth rate (MGR) (0.0 -10.0)

Relative Market share (RMS) (0.0 - 2.0)

Product	MGR	RMS
A	3.0	0.8
B	9.0	1.0
C	2.5	1.8
D	7.5	1.5

The turnover of product A is 300.000 euro
Product B is 600.000 euro
product C is 900.000 euro
product D is 150.000 euro
draw proportional bubble size.



15. How are the four positions of products called in the BCG matrix? Describe the four positions?

Stars: require and return high cash flow

Cash cows: average return, no big invest, reduce cost

Poor dogs: negative cash flow, get rid off

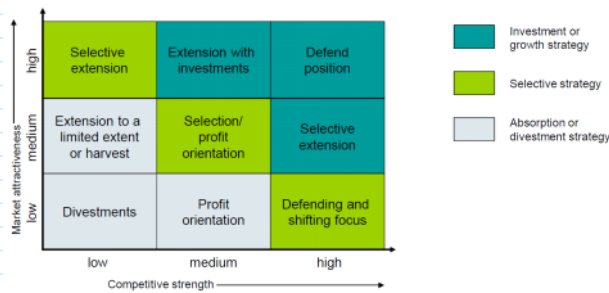
Question mark: above average investment needed, above average cash flow expected

16. What is the difference of BCG matrix and MCK/GE matrix?

Market attractiveness instead of market growth rate
competitive strength instead of relative market share

McKilley/GE Portfolio is more detailed and separated into 9 areas instead of 4.

17. The GE/MCK has two dimensions and nine fields?



18. Describe the advantages and disadvantages of McK/GE and BCG matrix?

BCG:

Objective data basis: market share, market growth, sales

Good communicability: Simplification of a complex control problem

BUT: No consideration of the technology perspective, No derivation of fields of activity

McK:

Can be adjusted to company requirements

More differentiated and more informative

19. Typically, five types of intellectual property right are used worldwide, name all 5 and explain each of them with two complete sentences?

Copyright: Copyrights are related to literary or creative works. They're automatically registered upon fixation in a tangible medium.

Trademark: Trademarks are related to symbols or brand names. Registration is not required, but recommended ("first use right")

Contractual agreement: useful between collaborating parties. They are also easier to enforce than traditional IPs.

Trade Secret: is used to keep info secret to gain commercial advantage. It is applicable to products that can not be easily reverse engineered

Patent: In exchange for a limited-term right to exclude others from making, using or selling a novel, non-obvious and claimed invention in the country for which the patent is to be validly granted, the inventor must provide a complete and accurate public description of the invention.

This provides others with the ability to use that information to invent further, thus pushing technology forward for the benefit of society.

20. Regarding patents it is worldwide accepted what so (...) measure which fulfill 3 topics is necessary to apply for (...) topics? Name and describe them in one sentence each.

- NEW: Does not form part of the state of the art
- NOT OBVIOUS: a skilled person is not able to achieve the same invention at the date of filing
- SUSCEPTIBLE OF INDUSTRIAL APP.: if it can be made or used (almost always)

21. What is EPO, DPMA, USPTO, WIPO, PCT stand for?

European Patent Office

Deutsches Patent und Markenamt

United States Patent and Trademark Office

World Intellectual Property Organization

Patent Cooperation Treaty

World Intellectual Property Organization Patent Cooperation Treaty

22. Article 52 EPC describes what cannot be applied for a patent. Name at least 4 topics

- o discoveries, theories, math
- o aesthetic creations
- o ways to think, play, do business and programs for computers
- o presentations of information

23. Assume you are researching for a patent on a certain topic. Assume you further find 3 papers, one is named US 5589 765 A1 another one is named A4 and the third one is named DE 7543 981 B1. What is detectable from the patents coding of each of them?

1. US Patent Application, 1st version
2. European Patent Appl., Supplementary search report
3. German Patent Specification, 1st version

24. give the four minimal elements of a one-page memo and sketch the content.

S y n o p s i s : Summarize the situation

F a c t s : Explain how the idea works

A l t e r n a t i v e s : Consider alternatives and explain why yours is better

R e c o m m e n d a t i o n : Suggest next steps to be done

25. Who suggested the one-page memo form and why?

Winston Churchill during the 2nd WW, because he wanted to stop wasting time reading a lot of paper.

26. Describe Harold Hotelling's linear model of a product of zero production cost.

The model demonstrates the relationship between location and pricing behavior of firms. It assumes that the production cost for two competitors are equal.

26a) What determines in his model the cost for the product?

It assumes, that firms just compete and price their products concerning the geographic location.

27. 12 Barriers to knowledge Management concerning CEN concept?

1. Time and Priority
2. Difference between management statements and actions
3. enduring notion that "knowledge is power"
4. Apathy about sharing knowledge
5. "Not involved here" syndrome
6. systems that encourage the withholding of knowledge
7. Different cultures

6. systems that encourage the withholding of knowledge
7. Different cultures
8. Language
9. "machine-like" organizations
10. Organizational amnesia
11. virtual working
12. knowledge doesn't grow forever

29. Name at least 5 states/departments which are directly dependent of the performance of the design department.

