

Learning Technique for FPS

Lecture: Future-Proof Software

«Hierarchical Transformation»

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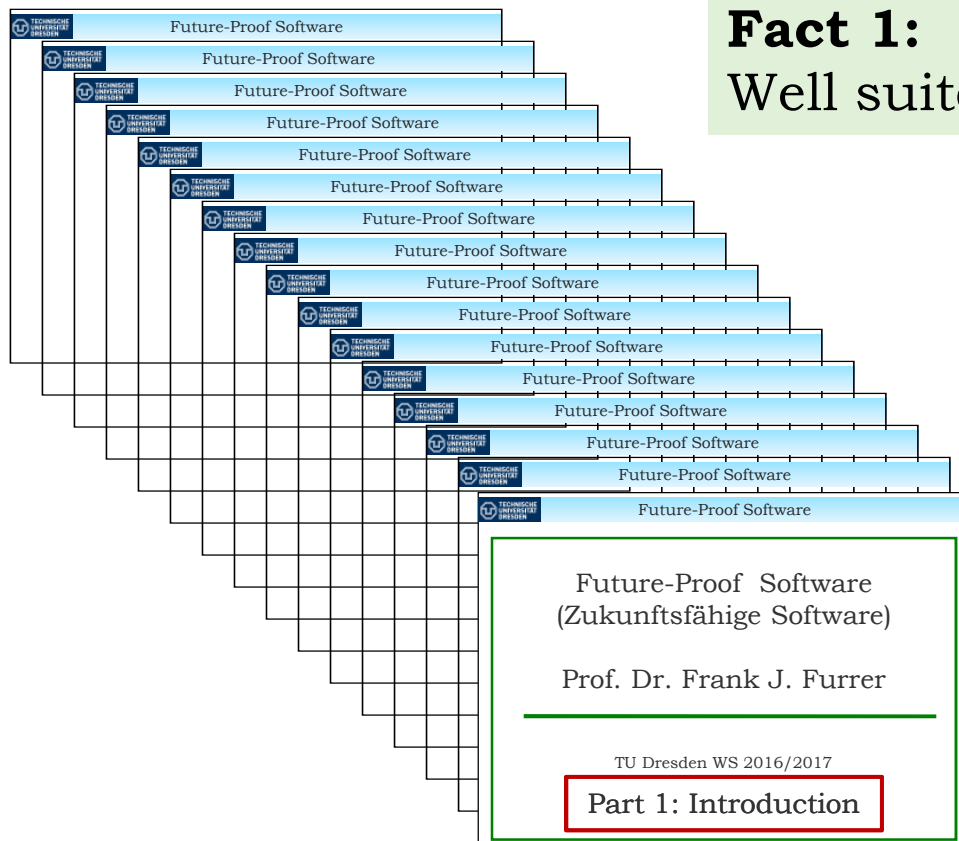
FPS *Learning* Technique

- The FPS lecture presents a lot of material
- The FPS lecture covers many topics

Which is an optimal learning technique?



Structure of the Lecture Material
= *Linear Sequence of ppt-Slides*

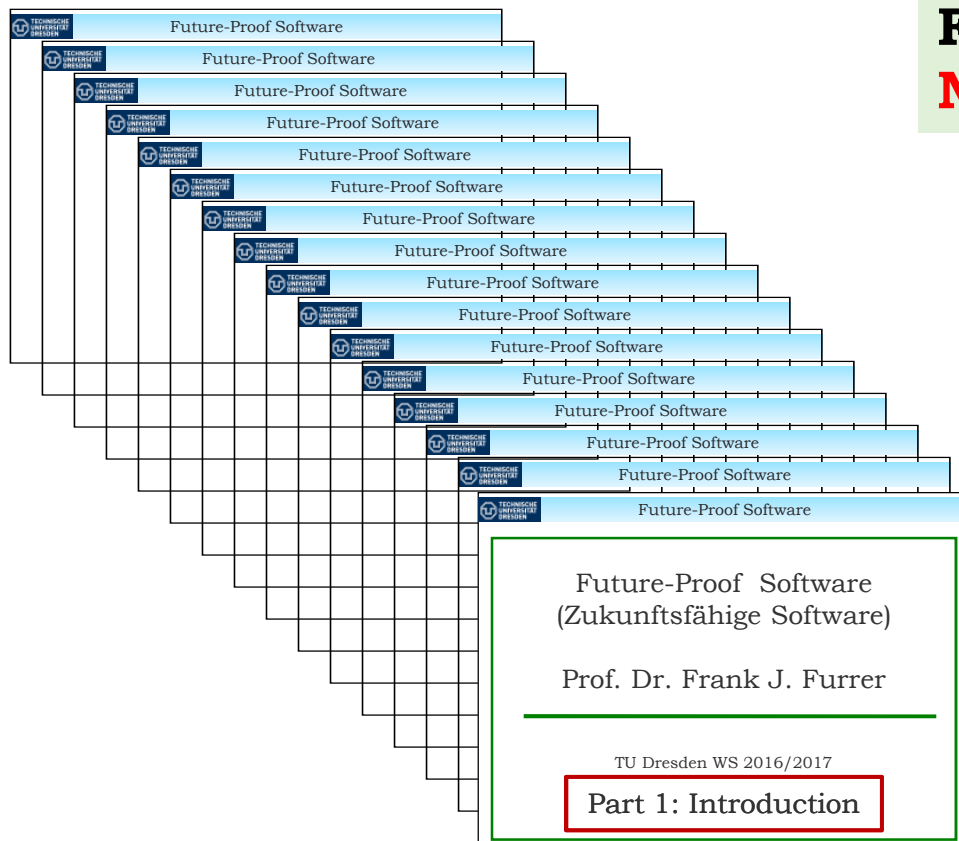


Fact 1:
Well suited for a presentation by a teacher



<http://teaching.monster.com>

Structure of the Lecture Material = *Linear Sequence of ppt-Slides*



Fact 2:
NOT GOOD for individual learning



www.123rf.com



Optimal FPS learning technique

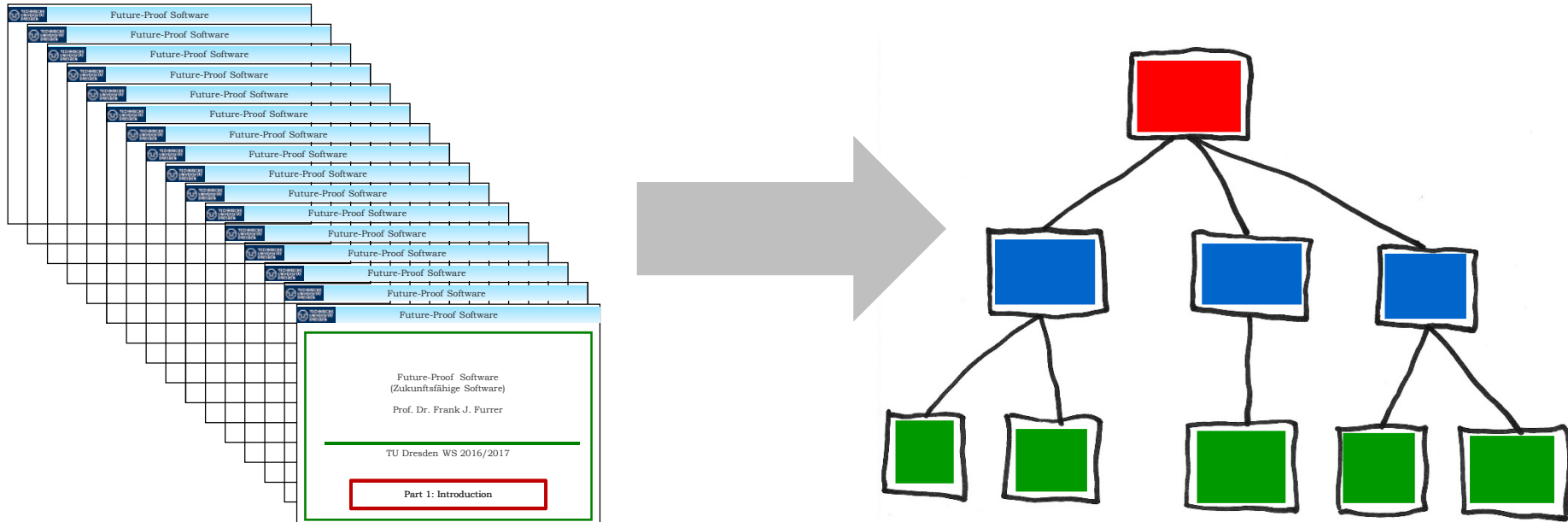
Step 1:

Transformation from linear (slides) \Rightarrow hierarchical (structure)

Step 2:

Representation as «learning cards»

Step 1:
Transformation from linear (slides) \Rightarrow hierarchical (structure)



a) Select a top-level concept

b) Identify the important sub-level concepts

c) Attach additional information

... repeat

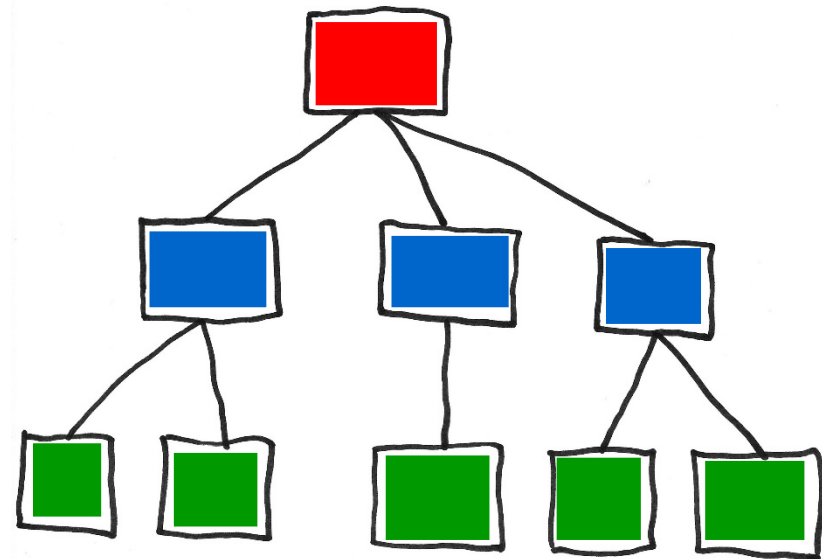
Step 1:

Transformation from linear (slides) \Rightarrow hierarchical (structure)

Top-level concepts

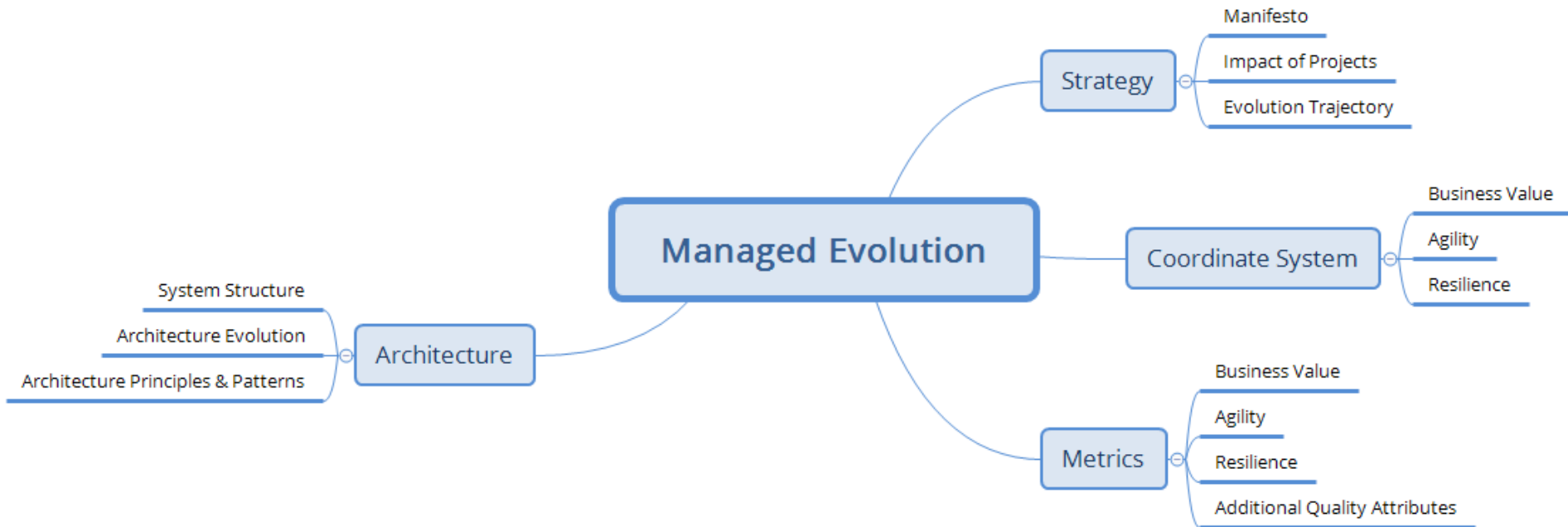
Important sub-level concepts

Additional information



Organizing complex material into *hierarchical structures* is a natural, powerful learning technique («classification»)

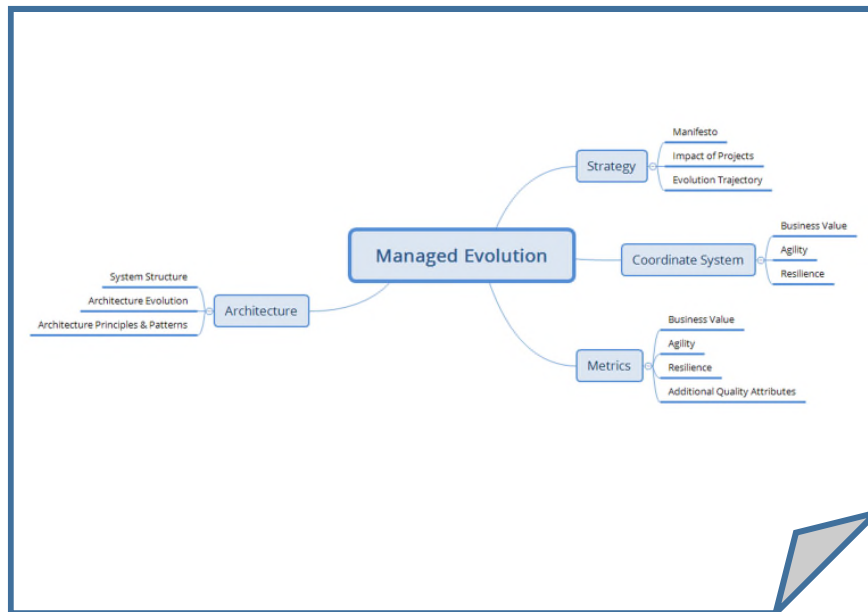
Representation: «Mind Map»



<http://www.xmind.net>

Step 2:
Representation as «learning cards»

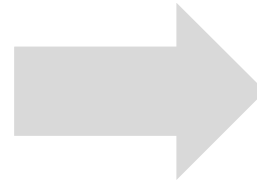
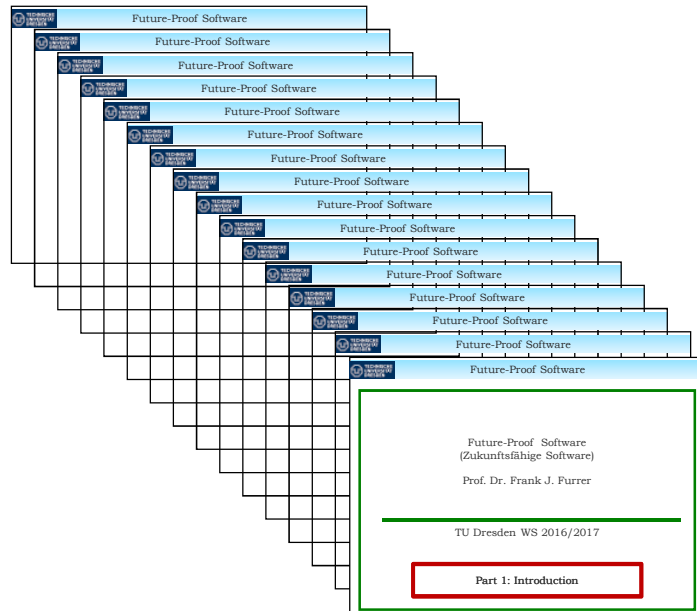
Front: Concept Hierarchy



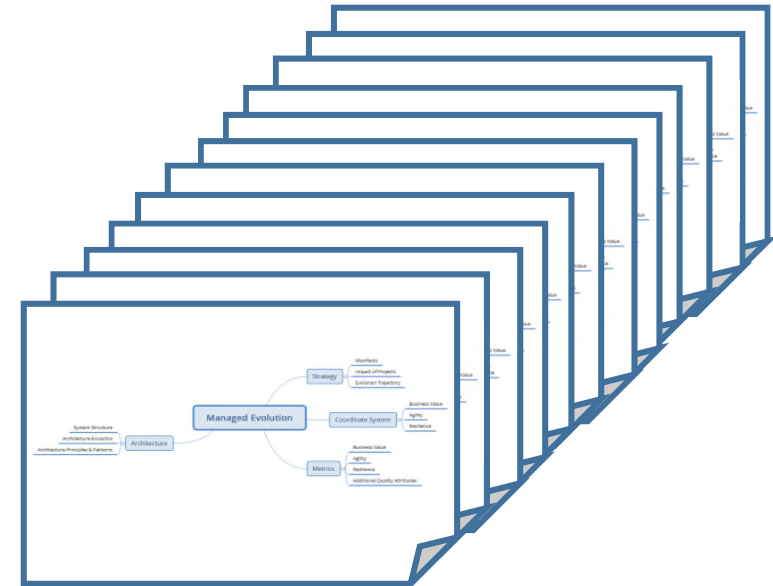
Back: Notes

- *Negative: Technical debt, architecture erosion, business + market pressure*
- *Business value, agility and resilience are continuously improved*
- *Tracking through metrics (BV, T&M, DevC, size)*
- *Resilience = survival / Agility = adaptability to new requirements (T&M, DevC)*
- *Resilience = survival / Agility = adaptability to new requirements (T&M, DevC)*
- *Architecture = Key success factor*
- *Business ↔ IT interests/conflict*

Slide Set



Learning Cards



Production = Knowledge organization & knowledge acquisition

Repetition = Knowledge amplification

Completeness = Sufficient time investment



Hints:

- Produce the learning cards continuously (e.g. after each lecture)
- Look at the learning cards regularly & randomly
- Refine and add more notes when necessary
- **DO IT YOURSELF !!!**

