

5/13/2015

Future of MITK

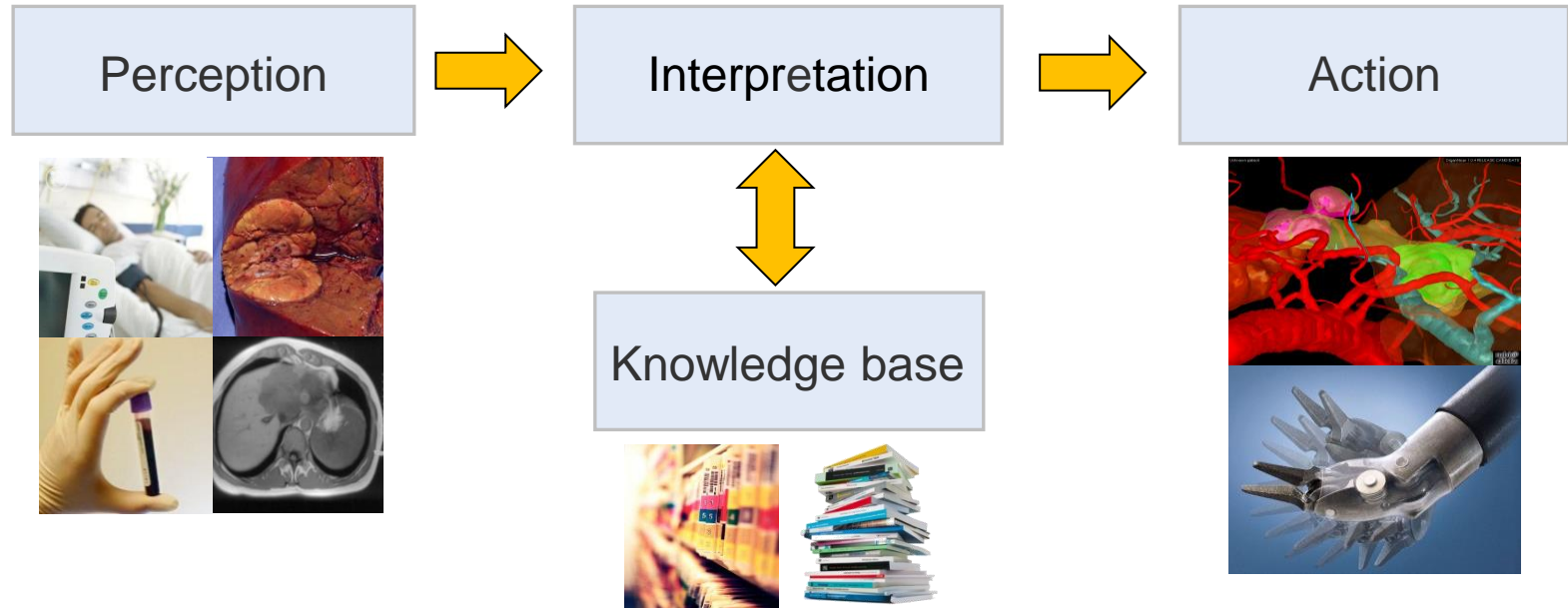
MITK Users Meeting 2015
Marco Nolden, Stefan Kislinskiy

dkfz.

GERMAN
CANCER RESEARCH CENTER
IN THE HELMHOLTZ ASSOCIATION



50 Years – Research for
A Life Without Cancer



- Perception of pre-, intra- and postoperative information
- Interpretation of the current situation
- Derivation of diagnose, planning and therapy



- Phase 1: Initialization (2012-2016)
 - CGS workbench
 - XNAT data infrastructure
 - Training and support
- Phase 2: Integration (2016-2020)
 - Deeper integration of semantic concepts
 - Large-scale processing
 - Stronger integration of actual development work
 - ...

Software integration in DKFZ Research Program E: Imaging and Radiooncology

- Target audience:
 - Radiology
 - Radiotherapy
 - Nuclear Medicine
 - Medical Physics
- Phase 1 (2011-2014)
 - research data infrastructure
 - MITK-based pilot projects
- Phase 2 (05/2015 – 05/2018)
 - Dedicated funding for platform development
 - Translation of results

Technical Roadmap



- Make use of C++ 11/14 features
- CppMicroServices



- Mapper as services
- Tools as services
- Plugins interact with service registry by default



- Improve data handling via DICOM and XNAT

Technical Roadmap



- Use RDF to create flexible, extensible, semantic data model
 - Data manager
 - Properties
- Extensible menu bar, tool bar, and status bar



- Improve Python support (and other languages: Matlab, R, ...)

Technical Roadmap



- Support alternative rendering engines
- Support auto-save
- Improve sharing of code and functionality between projects and institutions
 - Extend MITK-PluginGenerator ?
 - Source and binary „App store“ ?
 - Dynamic plugin loading ?



Thank you for
your attention!



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