

~~Obstacles~~ Challenges to MDE Adoption - ICSE 2008

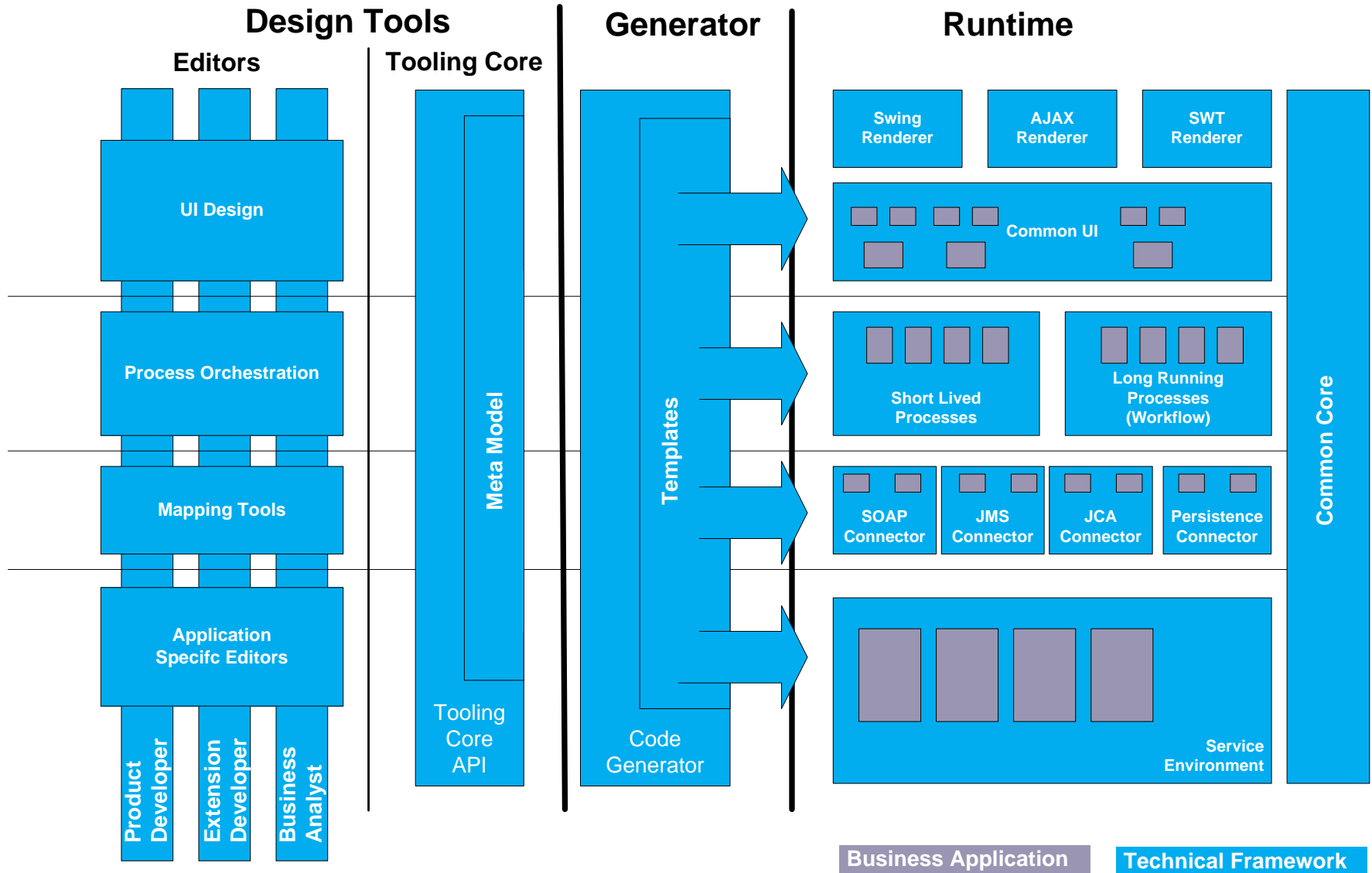
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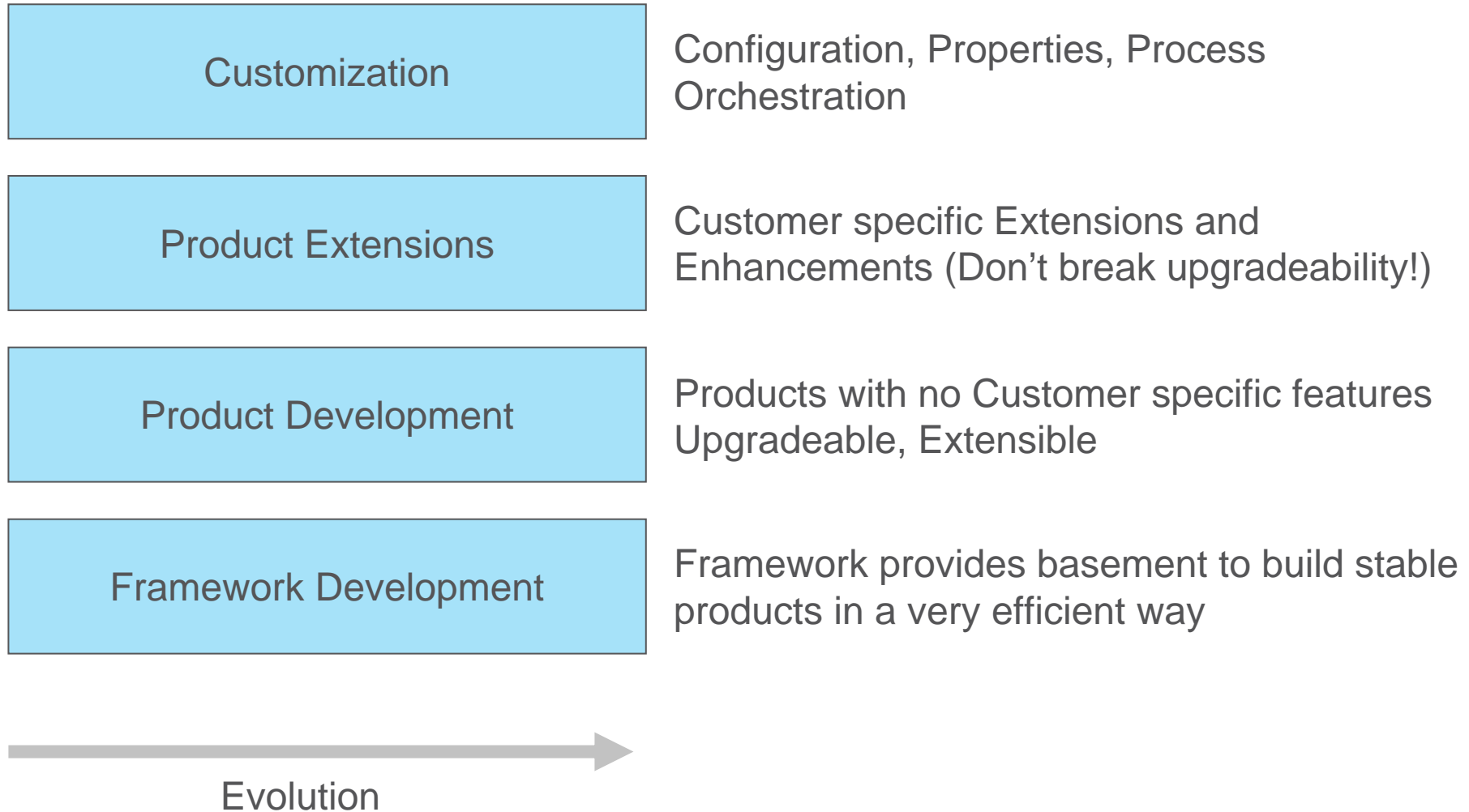
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- Model is the central point of the software development process
- Model is defined by a meta model
- Generative approach

- ✓ Increase Quality
- ✓ Reduce Costs
- ✓ Manage Complexity

# MDE @Misys – The Big Picture





- Manage the evolution of a system, i.e. keep customized systems upgradable
- Manage product variations
- Keep the model consistent when
  - many users working in different locations
  - using different editors to work on the same part of the model (e.g. graphical, textual)
- Integration of 3rd party modelling tools

## Benefits

- Helps to close the gap between Business Analysts - Designers - Programmers
- Makes it easier to include all stakeholders into building/maintaining a system
- Higher productivity (in the long run) over whole life-cycle
- Short familiarization (for application developer)
- Model is always up-to-date

## Drawbacks

- Set-up costs
- Maintaining costs for modelling tools/generator
- Different way of implementing a system, i.e. create a meta model = how to model

## pro

- Protect IP of business applications against technology changes
- Investment in quality (constrain the application developers to do something the right way)
- “Industrialize” software development (e.g. off-shoring)
- When the MDE environment is in place:
  - Short ramp-up time
  - Easy to scale development

## contra

- Abstraction level of the programming language is necessary in most parts of the application (e.g. implementation of a framework)
- No “reusability patterns” expected
- Small projects (if no MDE environment is already available for that specific domain)