

Template How To

by *Gerrit Muller* Embedded Systems Institute
e-mail: `gerrit.muller@embeddedsystems.nl`
`www.gaudisite.nl`

Abstract

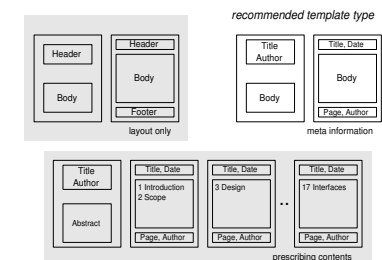
The introduction of a new process (way of working) is quite often implemented by supplying ready-to-go tools and templates. This implementation mainly serves the purpose of a smooth introduction of the new process.

Unfortunately the benefits of templates are often cancelled by unforeseen side-effects, such as unintended application, inflexibility, and so on. This intermezzo gives hints to avoid the **Template Trap**, so that templates can be used more effectively to support introduction of new processes.

Distribution

This article or presentation is written as part of the Gaudí project. The Gaudí project philosophy is to improve by obtaining frequent feedback. Frequent feedback is pursued by an open creation process. This document is published as intermediate or nearly mature version to get feedback. Further distribution is allowed as long as the document remains complete and unchanged.

February 10, 2011
status: draft
version: 1.6



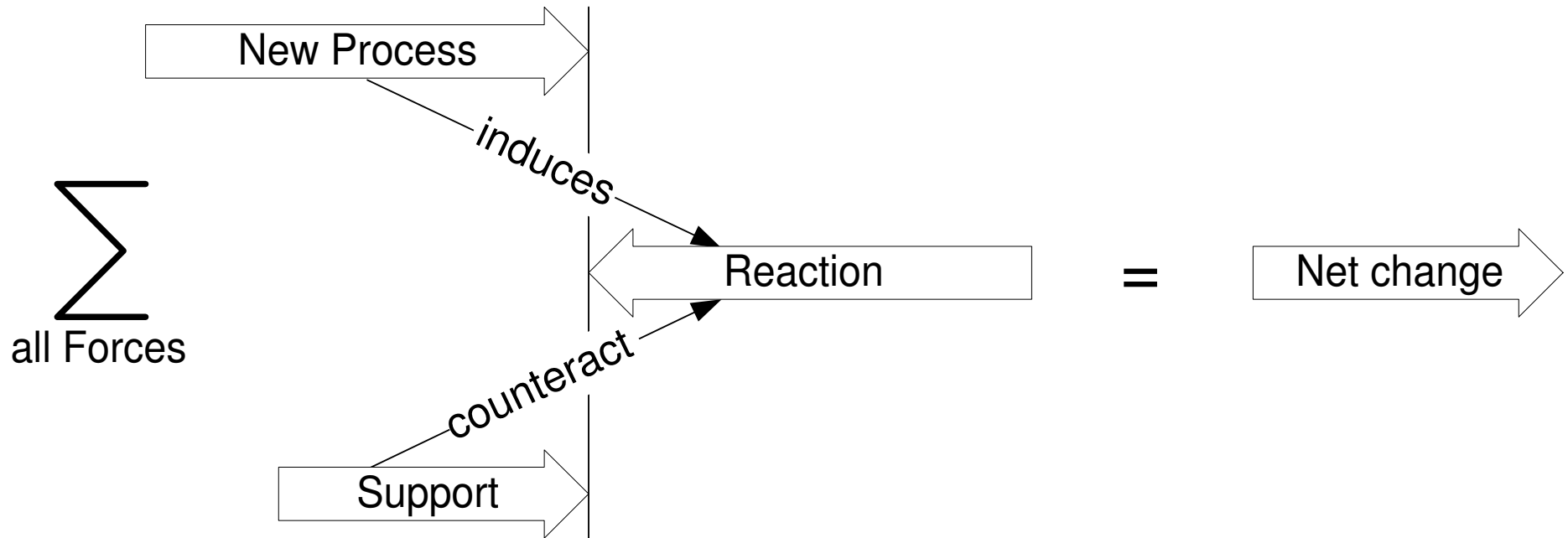
Rationale for Templates

- Low threshold to apply a (new) process (1)
- Low effort to apply a (new) process (2)
- No need to know low level implementation details (3)
- Means to consolidate and reuse experiences (4)

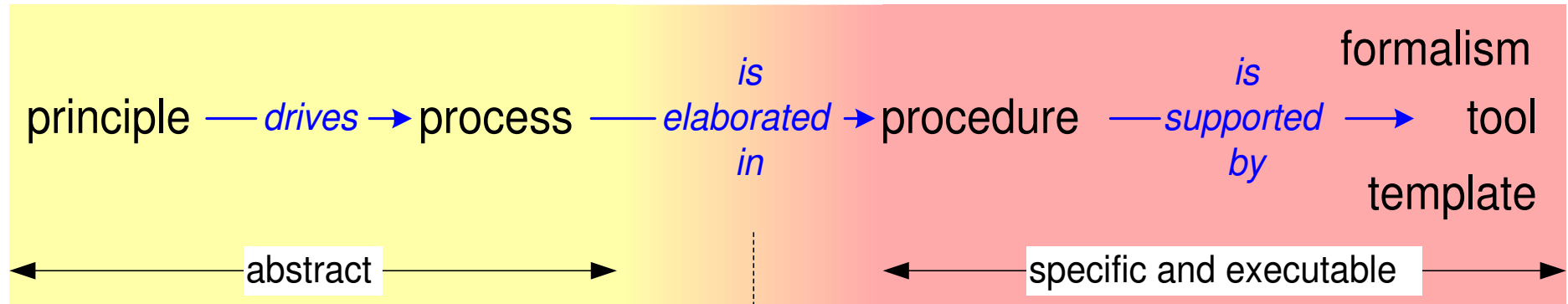
Bogus Arguments for Templates

- Obtain a uniform look (5)
- Force the application of a (new) process (6)
- Control the way a new process is applied (7)

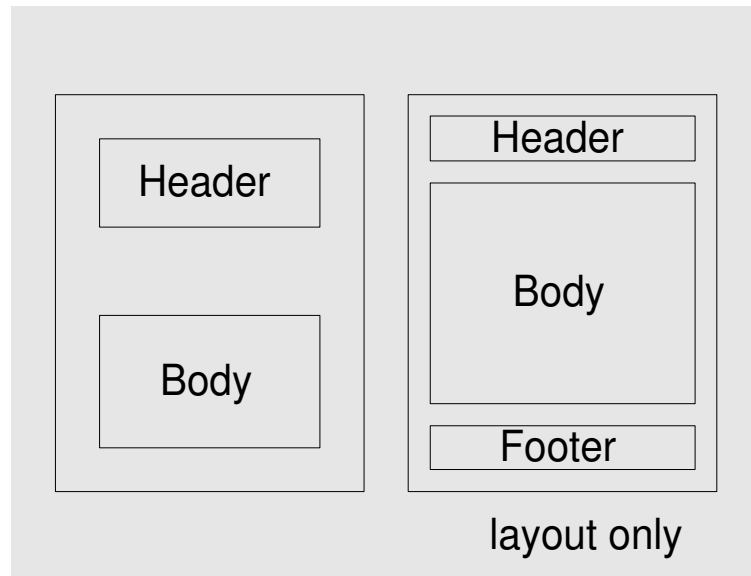
Forces of Change: Action = - Reaction



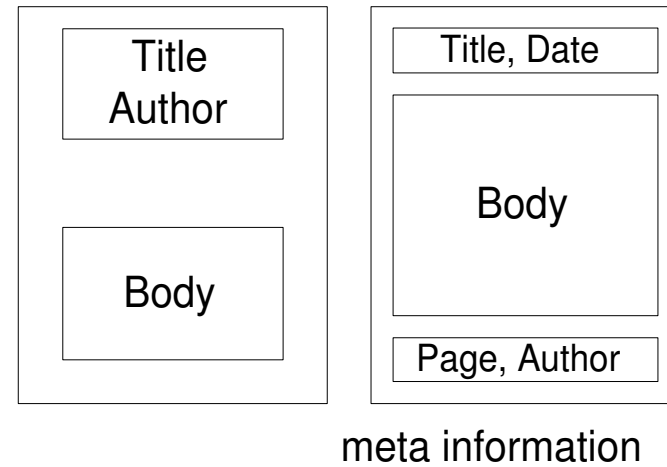
Template as Support for Process



Types of Templates



recommended template type



Recommendation

template type	context knowhow	value
layout only	no	low
meta information	process	high
prescribing content	process and domain	constraining

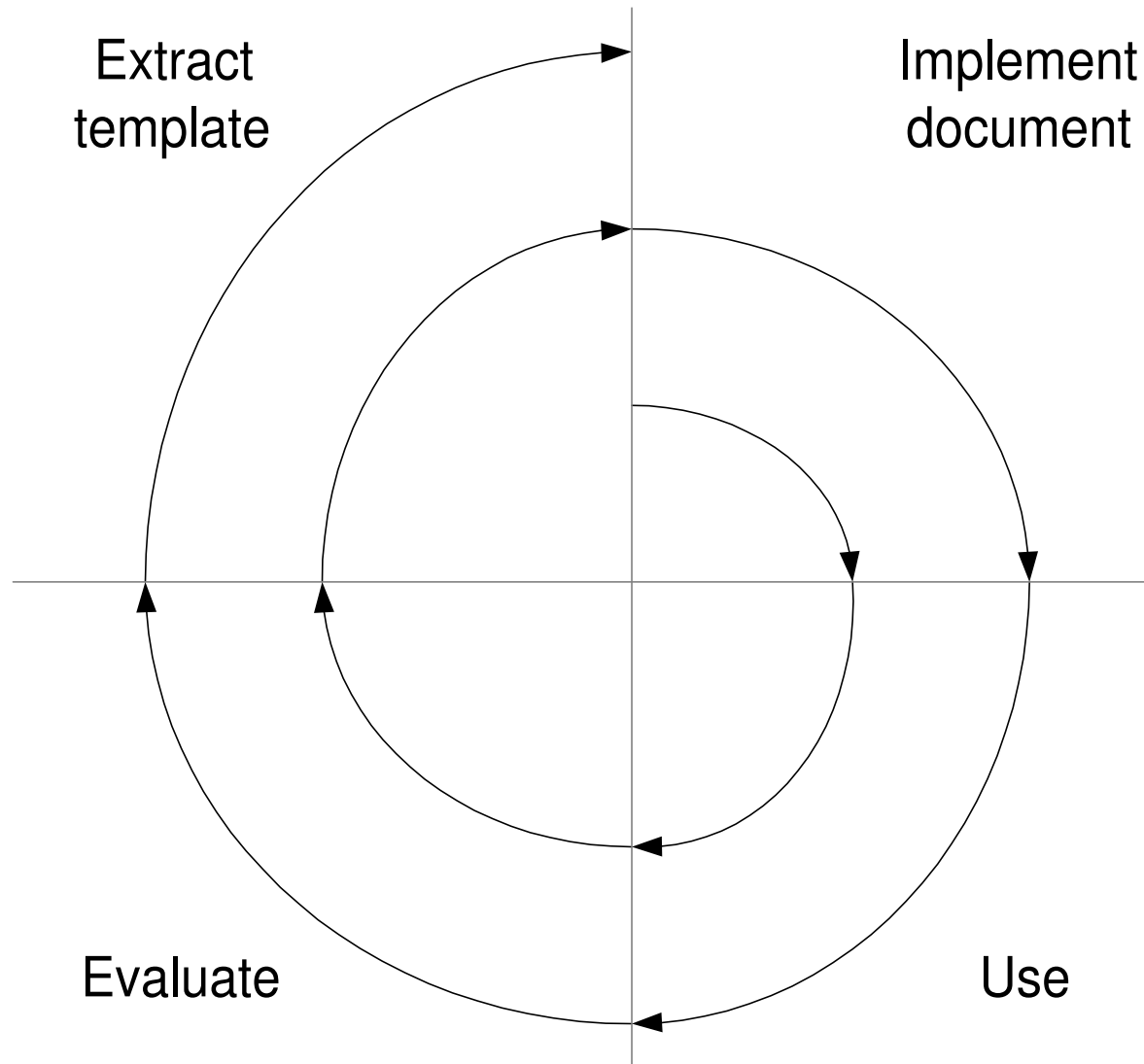
- Use templates for meta-information.
- Use checklists for structure and contents.

Template Development

Templates are an optimization of the Copy Paste Modify pattern:

- Look for a similar problem
- Copy its implementation
- Modify the copy to fulfil the new requirements

Spiral model: Use before Re-use



Example Guidelines Meta Information(1)

Mandatory per page:

- Author
- Title
- Status
- Version
- Date of last update
- Unique Identification
- Business Unit
- Page number

Example Guidelines Meta Information(2)

Mandatory per document:

- Distribution (Notification) list
- Reviewers and commentators
- Document scope (Product family, Product, Subsystem, Module as far as applicable)
- Change history

Example Guidelines Meta Information(3)

Recommended Practice:

- Short statement on frontpage stating what is expected from the addressed recipients, for example:
 - Please send comments before february 29, this document will be reviewed on that date
 - This document is authorized, changes are only applied via a change request
- See Granularity of Documentation [?] for guidelines for modularization and contents

Template Pitfalls

- Author follows template instead of considering the purpose of the document.
- Template is too complex.
- There is an unmanageable number of variants.
- Mandatory use of templates results in:
 - no innovation of templates (= no learning)
 - no common sense in deployment
 - strong dependency on templates

Recommendation:

- Enforce the procedure (*what*)
- Provide the template (*how*) as supporting means.

Summary

- Templates support (new) processes
- Use templates for layout and meta information support
- Do not use templates for documents structure or contents
- Stimulate evolution of templates, keep them alive
- Keep templates simple
- Standardize on **what** (process or procedure), not on **how** (tool and template)
- Provide (mandatory) guidelines and recommended practices
- Provide templates as a supportive choice, don't force people to use templates