



Software Product Line Evolution

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Sources of evolution	Strategies for handling evolution	First development of product line infrastructure, then product development	First product development, then product line infrastructure development	
			Development of a reference product	Development of more than one product in parallel
Infrastructure extension	Generalization or extension of the product line infrastructure to support additional requirements	●	●	
Infrastructure improvement	Improvement (e.g., automation) of the product line infrastructure to make derivation more efficient (e.g., through application generators)	●	●	
Functional reason		●	●	●
Non-functional reason		●		
Domain-based reason		●	●	

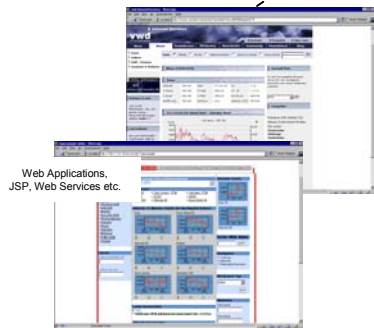
Legend:
● Recommended strategy
● Appropriate in certain situations

Proactive Evolution Strategy:

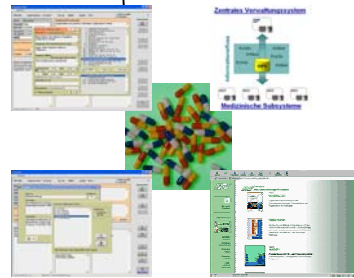
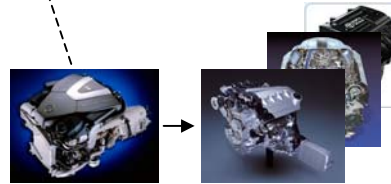
- Planned and intended evolution of a (whole) product line, that is, of its infrastructure (or assets)
- Applicability: mature/slow markets, predictable products/features

Reactive Evolution Strategy:

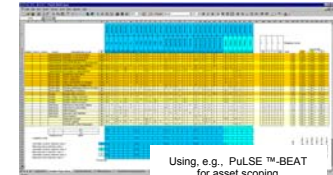
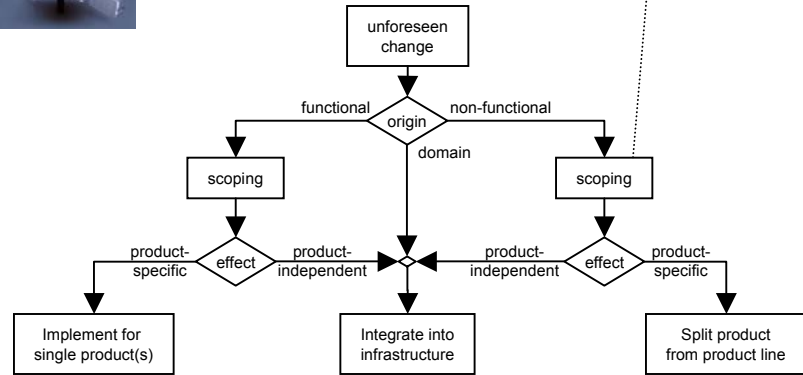
- Unplanned evolution, typically as result of maintenance activities
- Applicability: no restrictions
- Recommendable: generally not...



Web Applications, JSP, Web Services etc.



Evolution:
The development software undergoes over time as result of many, often small changes over time, for example, from (adaptive or perfective) maintenance tasks



Using, e.g., PuLSE™-BEAT for asset scoping