

Applying SEMAT concepts at Munich Re: Personal Reflections

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Topic Leader Methods & Standards



Agenda



- Munich Re and its IT Application Development
- Applying SEMAT @ MunichRe
- Rollout, Open Issues, Conclusion

History of Munich Re





Munich Re is founded on 19 April 1880 at the instigation of Carl von Thieme, Baron Theodor von Cramer-Klett and Wilhelm Finck.



First major loss in the 20th century: the earthquake in San Francisco on 18 April 1906. Munich Re's liability: US\$ 2.5m Munich Re acts fast to settle losses on the spot.



Munich Re has 511 employees and a premium volume of DM 737m.



Katrina – The largest loss occurrence in insurance history With wind speeds of up to 280 km/h and gusts reaching 350 km/h, Katrina sweeps over the Gulf of Mexico at the end of August. Estimates put overall losses at US\$ 125bn and insured losses at US\$ 61bn. Financial strain for Munich Re: approx. €1.6bn.



Munich Re pools its international health insurance and reinsurance expertise in a new business segment: Munich Health.

Munich Re redefines its positioning in reinsurance with a new branding.

1880

1906

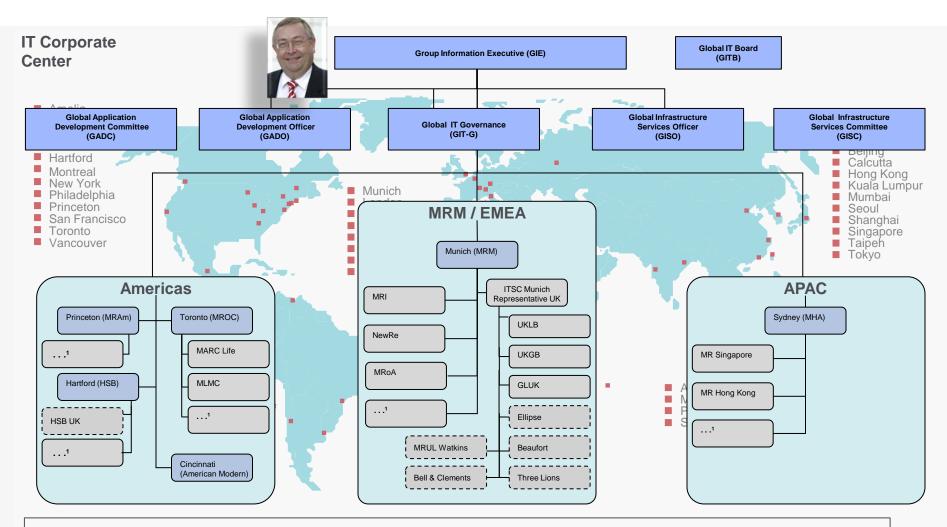
1960

2005

2009

The Reinsurance Group – Present in all markets





The Munich Re IT supports the business with global governance and service provision accordingly

Multisourcing Strategy Support the Strategic Goals of IT



Flexibility

- By building a powerful internal organization for a flexible response to business requests, growth and global operation
- By contracting scalable external services in order to provide flexible capabilities to increase or decrease service volume as needed for supporting product development and maintenance according to innovation and growth of Munich Re business

Focus on Core Competencies

 Focus on excellence in those competencies essential to support effectively the business in achieving their objectives and to support product leadership and a successful global operation.

Predictability

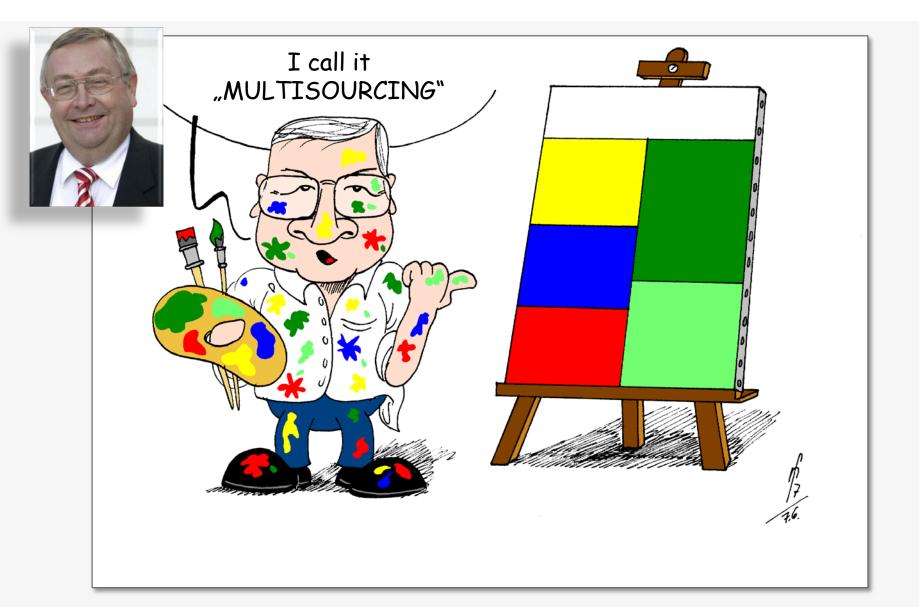
 ... of fulfillment of business requests by an up-to-date overall planning of service resources and transparency of resource allocation.

Cost Reduction

- By benchmarking of services to ensure market conform prices and service quality
- By standardized software development process as common base.

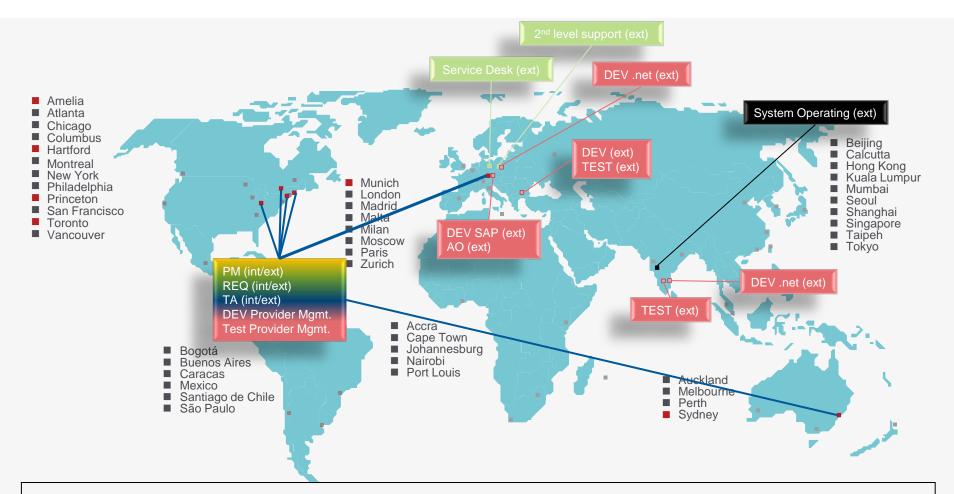
Rainer Janßen, head of IT of Munich Re, has a vision for application development ...





The services for Munich Re Application Development are distributed over the globe





- The line organization of MR Application Development is divided into disciplines (PM, Requirements, Technical Architecture, Development, Test etc.)
- High outsourcing & offshoring rates for the services Development and Test

The old way of working: The discipline-oriented setup led to a strictly sequential &artefact-based approach





Sequential activities with formal artefact-based hand-over from one service to the next, 'orchestrated' by a Project Manager, each service with a specific way-of-working focused on their own activities.

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Problem Statement





Core Principles of Application Development

Lightweight and modular methodology foundation

Munich Re Essentials

- Increase quality, transparency and predictability in product and project delivery
- Define a common way of working all over the global IT Organization as base for global service provision.
- Emphasize the assumption of responsibility for the quality of a product and the success of a project by IT people
- Develop risk-driven & reactive to change
- Adopt agile practices
- Ensure quality & transparency
- Continuously improve
- Focus description on collaboration
- Must be adaptable & extensible for organization, projects, locations & over time
- Supports a lean way of working
- Based on industry standards

Core Principles for MR Application Development





Development methodology

Iterative and incremental development methodology

Risk-driven development approach

Transparency regarding progress, cost, and quality via key figures and metrics

Quality

Explicit orientation towards quality across all activities and all roles involved in a project

> Explicit Quality assurance (e.g. via Quality gates)

> Test-oriented development & Continuous Integration

Tooling and reuse

Reuse of software components and platforms

Ready-made tool support and automation for standard tasks

Learning and

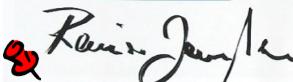
Improvement

Systematic feedback and continuous improvement

H. Kalle

Doputa

les with the



A.Mil

MR Essentials: Some Tenets



Practical rather than Theoretical

Global rather than Local

Multiple Project Types rather than Single Optimization

Repeatable rather than Local Heroics

Single Vocabulary rather than Various Meanings

Inclusive rather than Exclusive

Supportive rather than Authoritative

Guidance rather than Rules

Munich Re rather than Generic

The successful use of MR Essentials requires a good understanding about the principles behind them, the benefits and the opportunities of tailoring.

A snap-shot from a typcial discussion in an improvement initiative for Multi-Sourcing ...



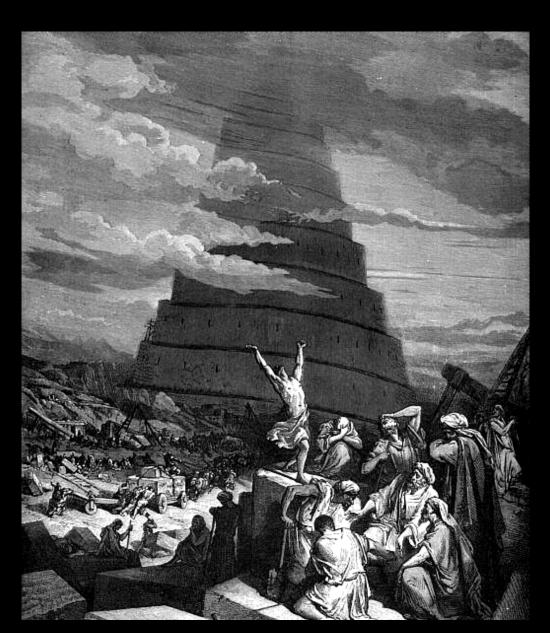


Communication is Key to Collaboration!

THE CONFUSION OF TONGUES GENESIS, 11.5

But the LORD came down to see the city and the tower that the men were building. The LORD said, "If as one people speaking the same language they have begun to do this, then nothing they plan to do will be impossible for them. Come, let us go down and confuse their language so they will not understand each other."

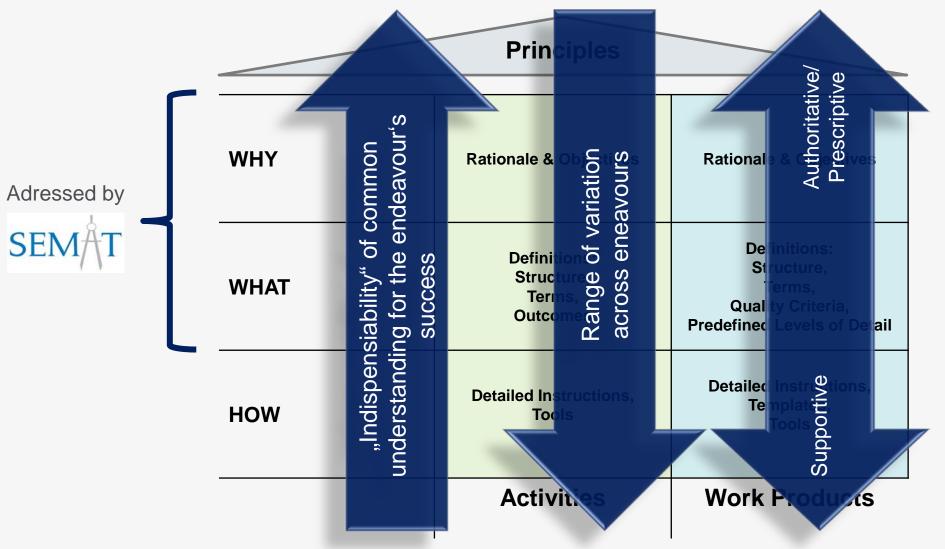
So the LORD scattered them from there over all the earth, and they stopped building the city. That is why it was called Babel — because there the LORD confused the language of the whole world. From there the LORD scattered them over the face of the whole earth.



Engraving *The Confusion* of *Tongues* by Gustave Doré (1865) [Wikipedia]

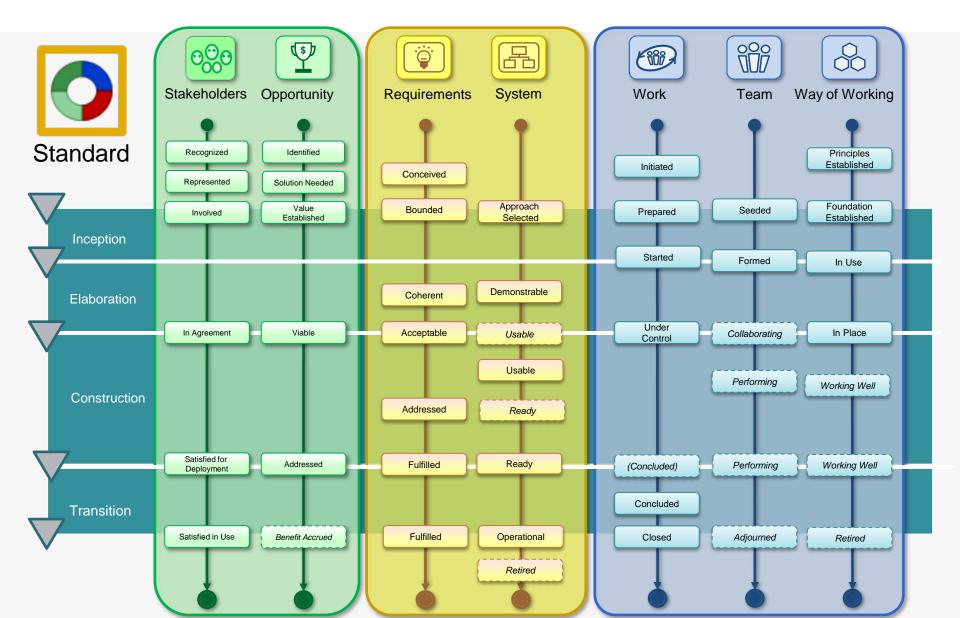
At what level should MR Essentials give prescriptions and guidance?





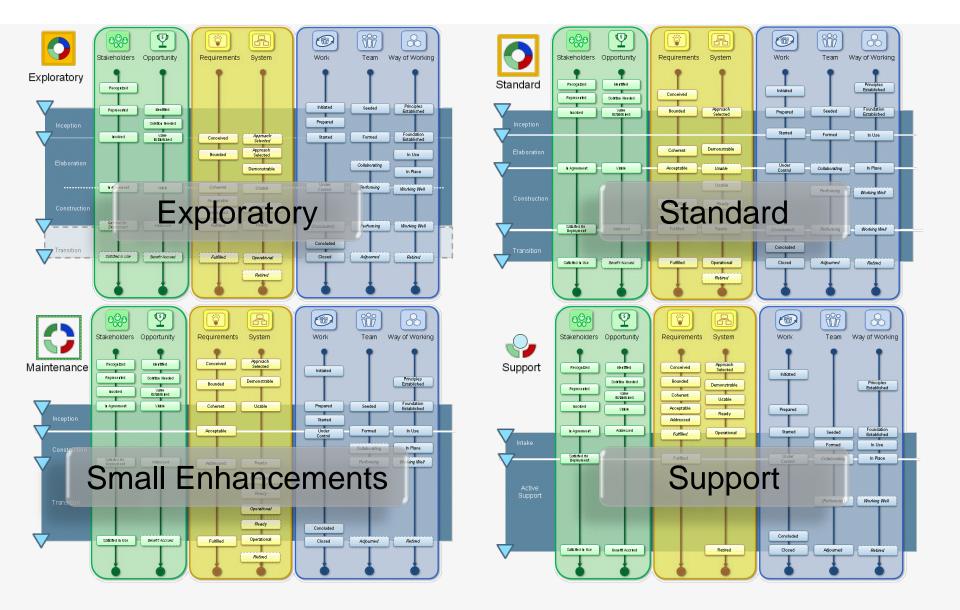
Coherent sets of states of "things to progress" form a software development lifecycle with phases





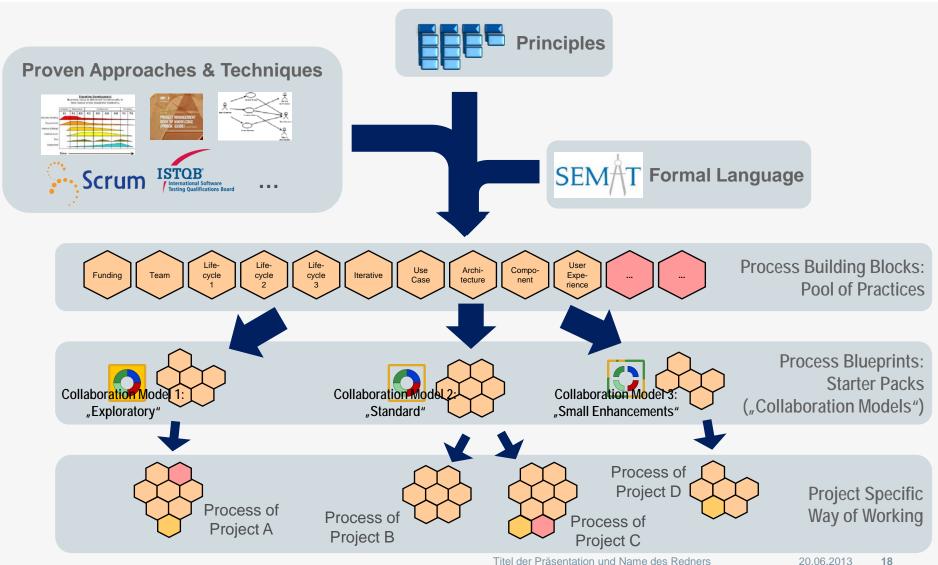
Depending on circumstances projects need different software development lifecycles





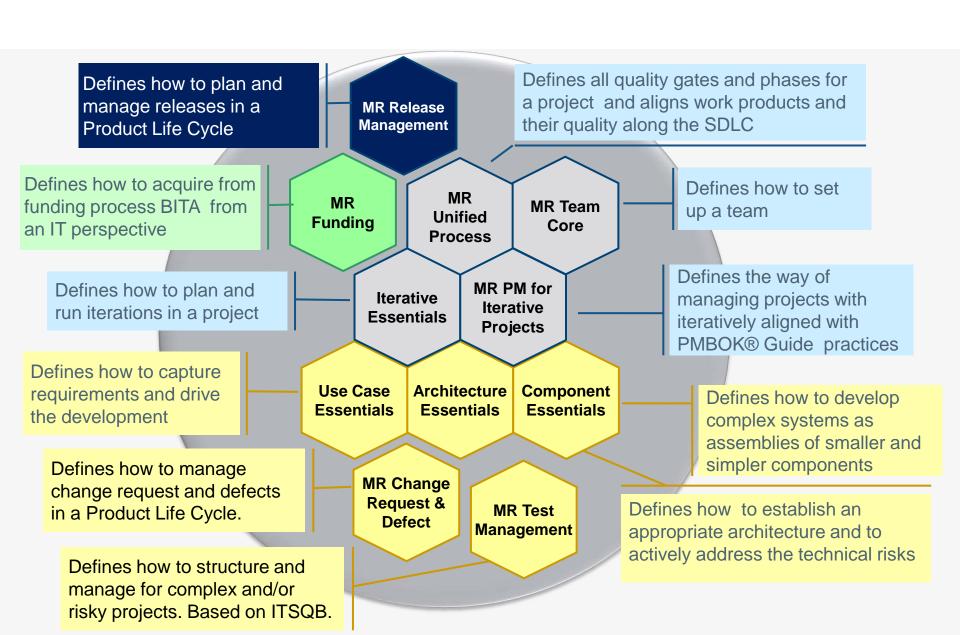
Structure of MR Essentials





MR Essentials – Core Practices & Pool of Practices





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Experience: Learning by Simulations and in Workshops (1) Coaching Community Munich & Americas



Experience: Learning by Simulations and in Workshops (2)



Open Issues



- Only few people use alphas in their daily work (except the alpha for Use Case Slice)
 - ➤ We need more supporting material to explain the benefit. The material explaining the application of SEMAT concepts in practice should provide descriptions from many different view points and in different levels of detail.
- Tool Support to be improved
 - ➤ (Too) Steep learning curve for beginners when learning SEMAT and learning using EssWork at the same time.
 - Weak support for refining/composing/documenting a different process for every project.
 - ➤ No link to PM tooling

Conclusion



- The concepts of SEMAT were a life-saver when discussing and defining the way-of-working in application development at Munich Re.
- The concepts of SEMAT are well elaborated, powerfull and nevertheless very practical.
- The concepts of SEMAT provide a quite different way of thinking about software engineering approaches. Highly appreciated in a small group of experts, outside of this group adoption is slow.
- Tool support to be improved
- And another thing ...

Where is the biggest challenge in adoption when introducing a certain way of working?







Thank You

For questions, feel free to contact me, Burkhard Perkens-Golomb, at bperkens-golomb@munichre.com