

Driving Business Transformation with Enterprise Architecture



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Agenda

- Context, definitions and relationships
Why is architecture important to business transformation?

- Structure, content and tools
How to enable the delivery of business transformation?

- Adoption patterns
How can we get there?

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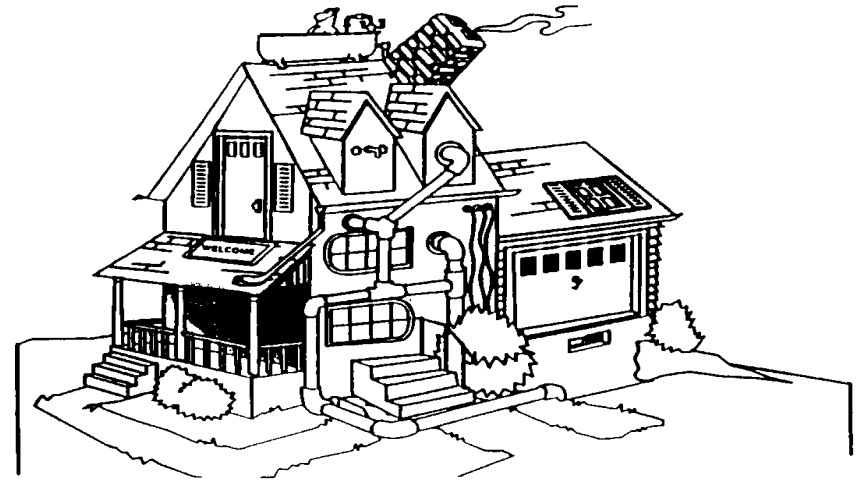
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Let me tell you a story, about my self-build DiY project...

- Strategy: *“We’re going to have the finest bathroom!”*
- Planning: *“It’ll cost this much, and give us all we need”*
- Design: *“It’ll look like this – let’s go build it”*
- Development: *“Here you are...”*
- Deployment: *“...Bingo! Oh dear...”*



- Architecture: *“understanding the parts within the whole”*
- Enterprise Architecture: *architecture of the enterprise*
- Understanding the enterprise’s architecture leads to better planning and better delivery



So what are the three critical transformational architectural practices? (What is BPM? What is EA? Or SOA?)

▪ **Enterprise Architecture:**

“An architectural discipline that merges strategic business and IT objectives with opportunities for change and governs the resulting change initiatives”

- Driving portfolio planning in a strategic context and directing change toward common enterprise goals

“The right changes enacted the right way”

“It needs to fit in with the rest of the house!!!”

▪ **Business Process Management:**

“A solution delivery discipline, based on SOA practices, that drives business agility, efficiency and optimization around organizational concerns and measurable business objectives”

- Business optimization and IT responsiveness via process definition, analysis, customization and deployment

“The right organizational resources doing the right things”

“It needs to work!”

▪ **Service Oriented Architecture:**

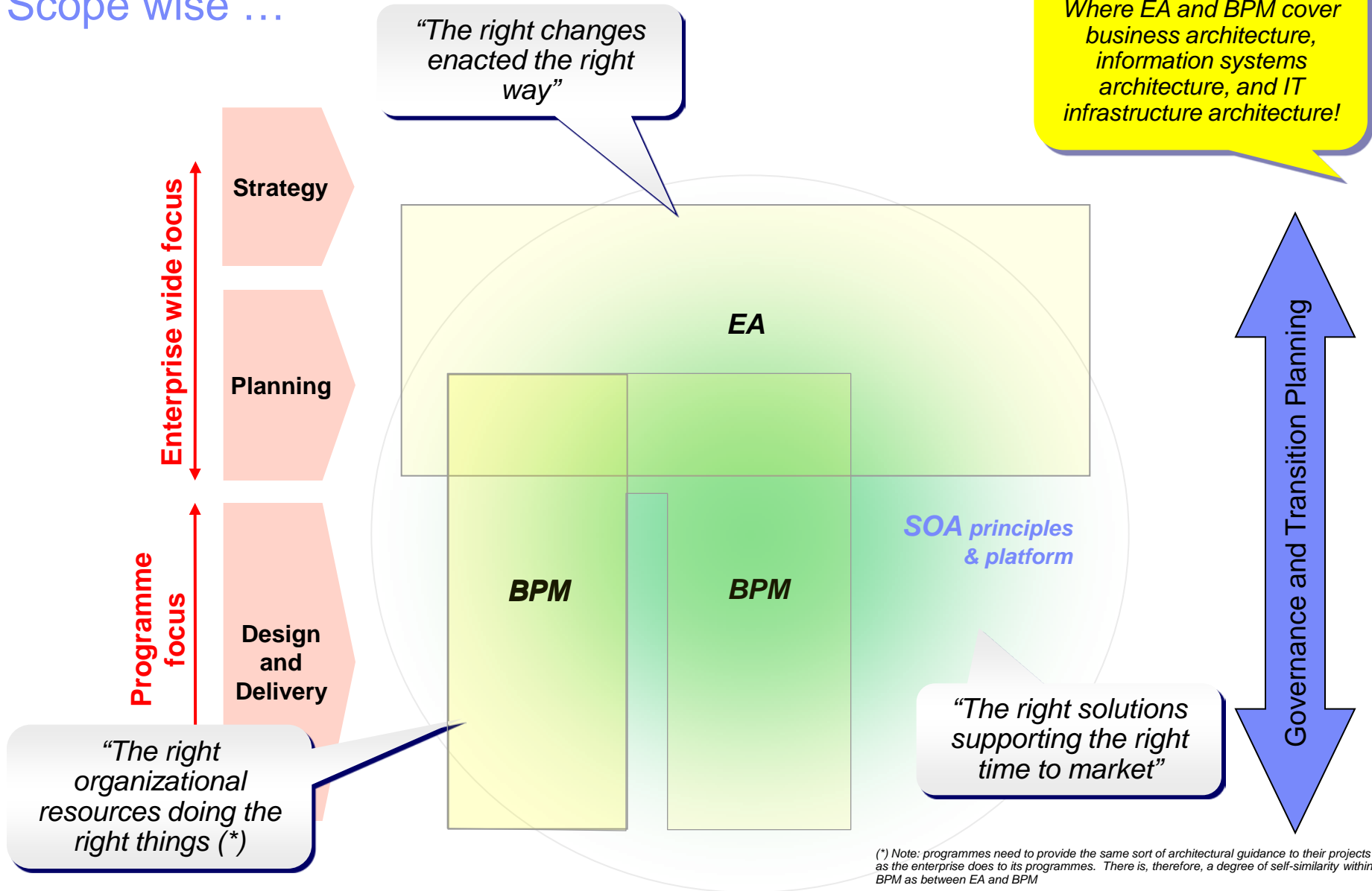
“An architectural style for business and IT that enables flexibility and improved time to market for integrated solutions”

- Agile and aligned business and IT design and delivery

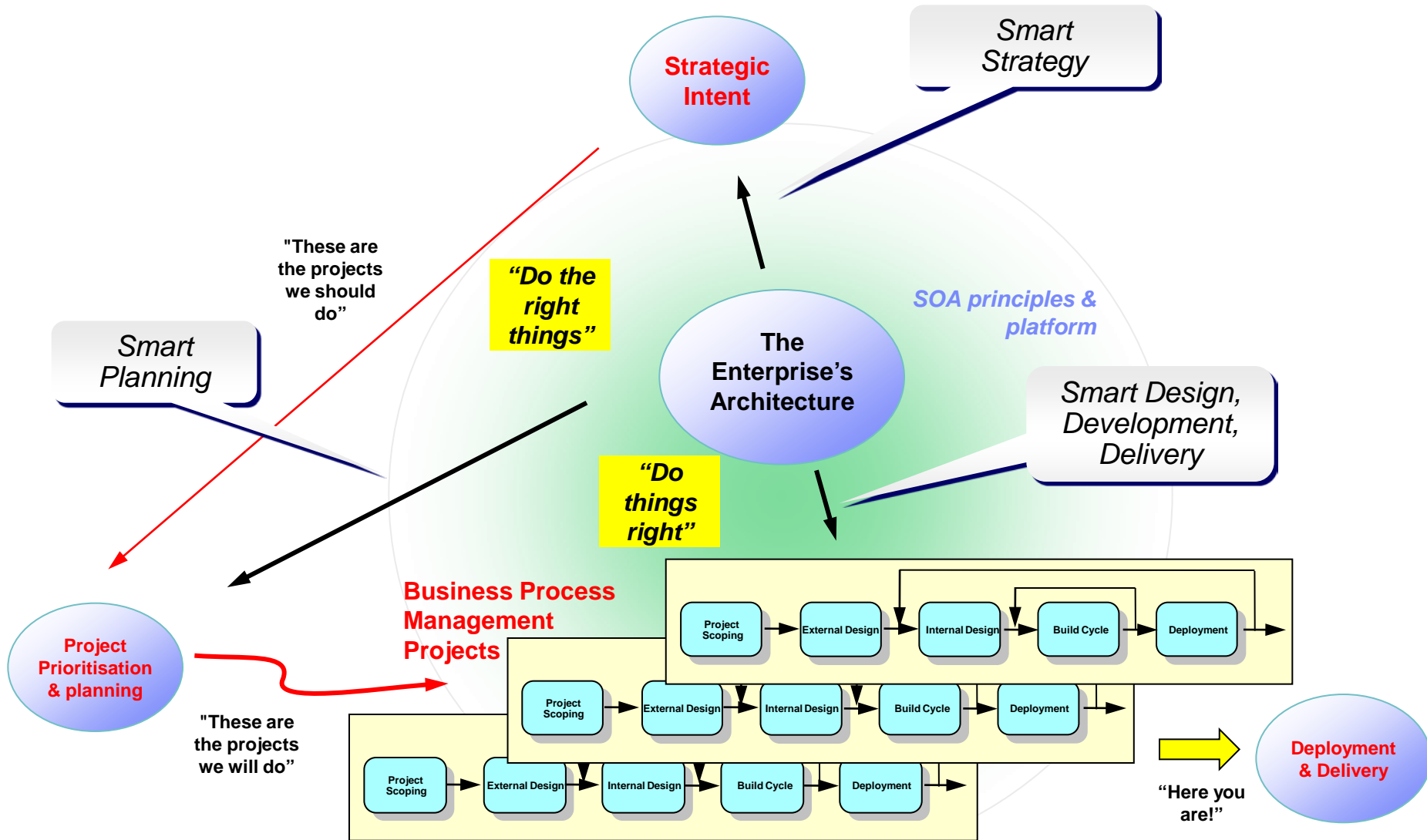
“The right services to the right consumers.”

“It needs to fit the needs of the family today and tomorrow!”

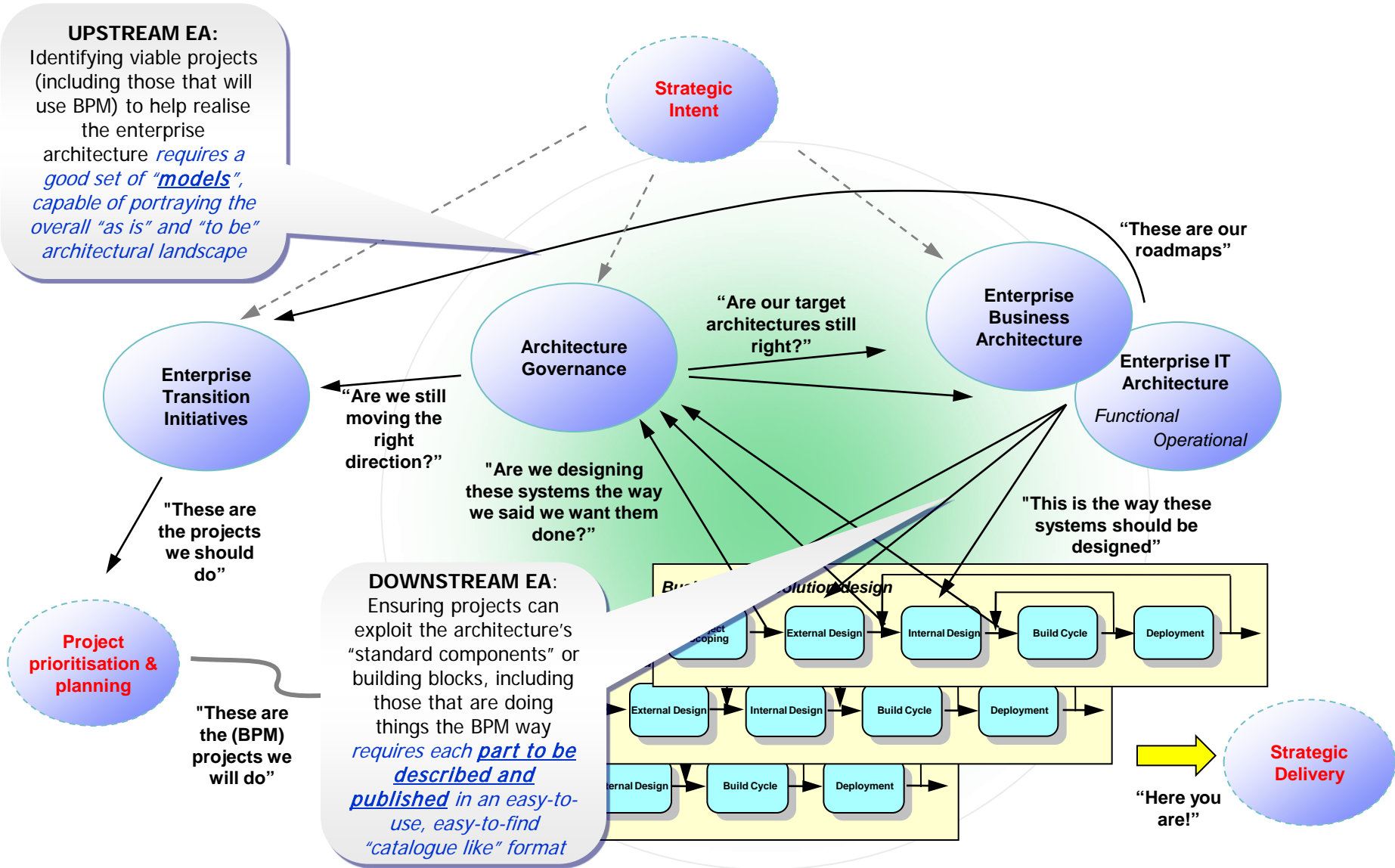
Scope wise ...



Required integrated governance touch points ...



The necessary EA core mission activities...



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So how do we do it? How should we do it? Firstly, by recognising two dimensions of “architecture”

1 Architect behaviour

1. Holistic, wide approach, - to define, explore, adjust and analyse from all points of view

“I need to see/work on something of everything”

2. Detailed, specialised focus - on some aspect, whether this be in terms of requirements, or functional structure, or operational deployment etc.

“I need to see/work on everything of something”

2 Architecture content (for BOTH styles of behaviour)

1. System¹ Modelling - describing the requirements on, and design of a specific target business system
2. Best Practice Guidance – standards, patterns, principles and building blocks that constrains these models

1: “system” embraces Business and IT parts

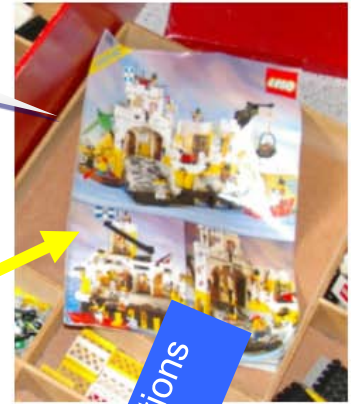
One analogy- LEGO®!!!!!!

Source: Ian's childrens' LEGO® box and models



Ian's Lego® box

Lego®'s pattern



Instructions ...



Ian's box's compartments & trays full of Lego®'s ABBs

Used to build...



Ian's model

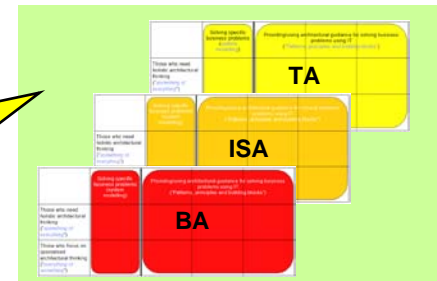
These dimensions mapped onto a model provide a landscape for architecture enablement planning and design ...

| | | | | |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--|--|
| | Solving specific business problems (system modelling) | Providing/using architectural guidance for solving business problems using IT ("Patterns, principles and building blocks") | | |
| Those who need holistic architectural thinking (<i>"something of everything"</i>) | | | | |
| Those who focus on specialised architectural thinking (<i>"everything of something"</i>) | | | | |

Business Process Management

Enterprise Architecture

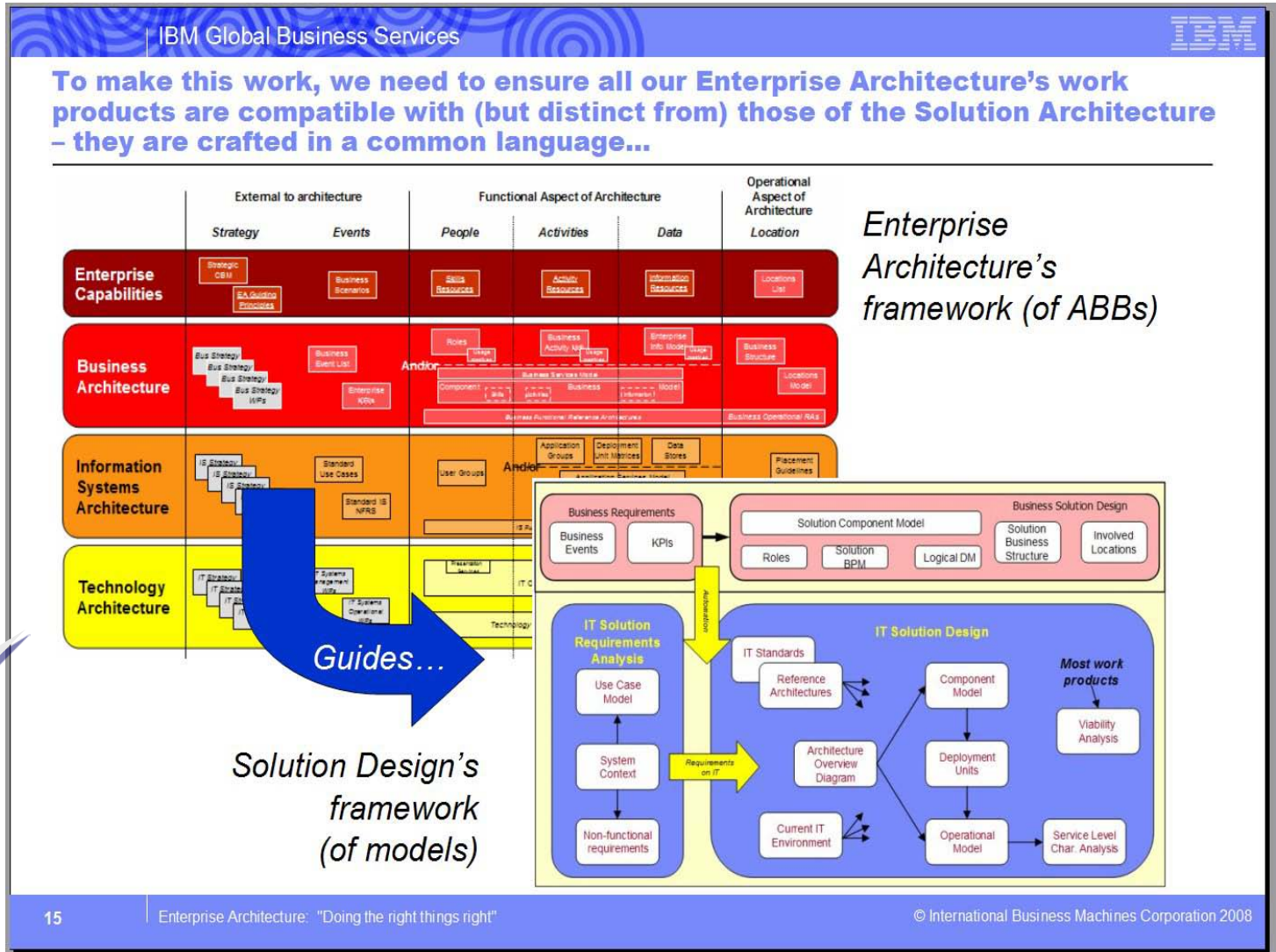
(Key note: this mental model covers all aspects of architecture - *business architecture, information systems architecture, and IT infrastructure architecture!*)



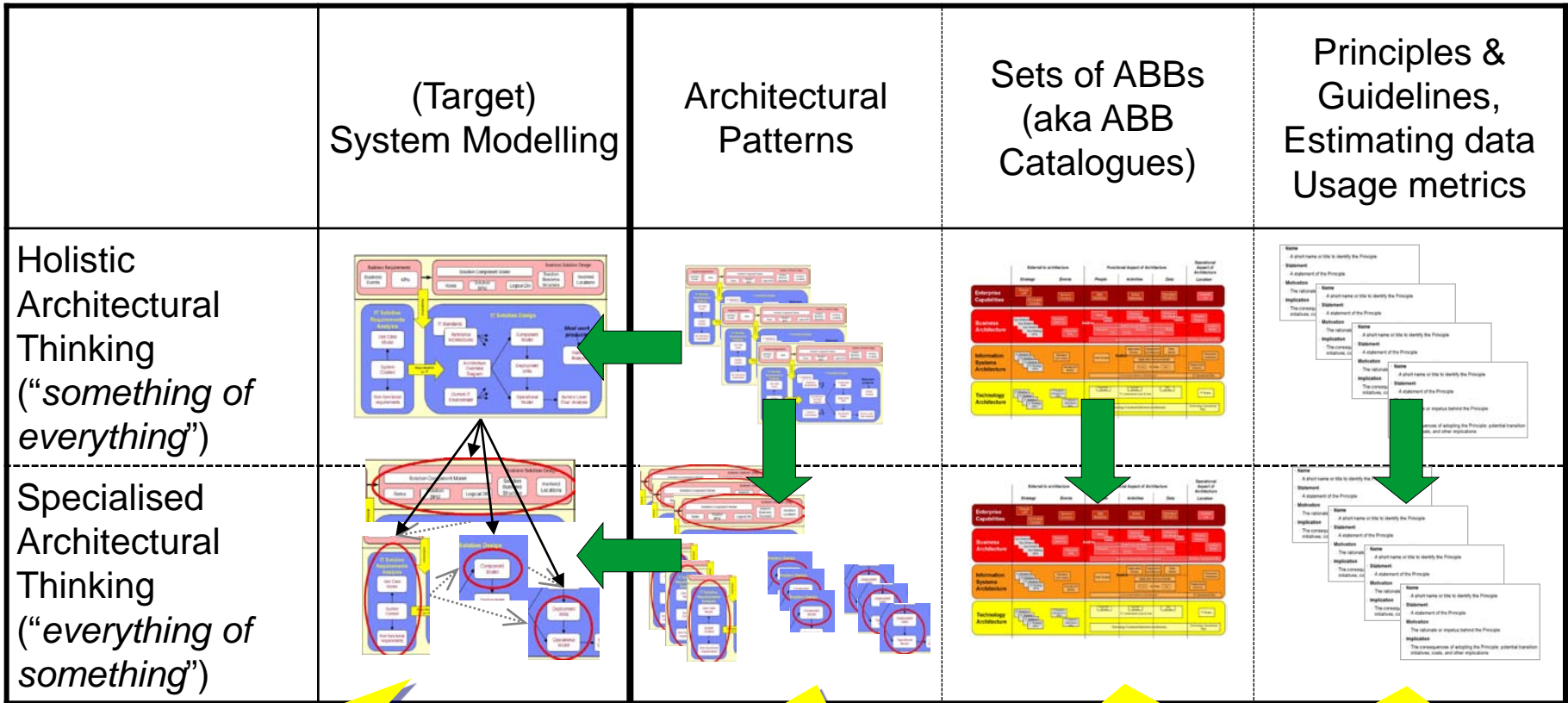
This theme we in fact see in the two sorts of work products used by both Enterprise and Solution Architects...

Source: IBM's EA Method education

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...To highlight how BOTH types of work products are used across both Enterprise and Solution Architect communities

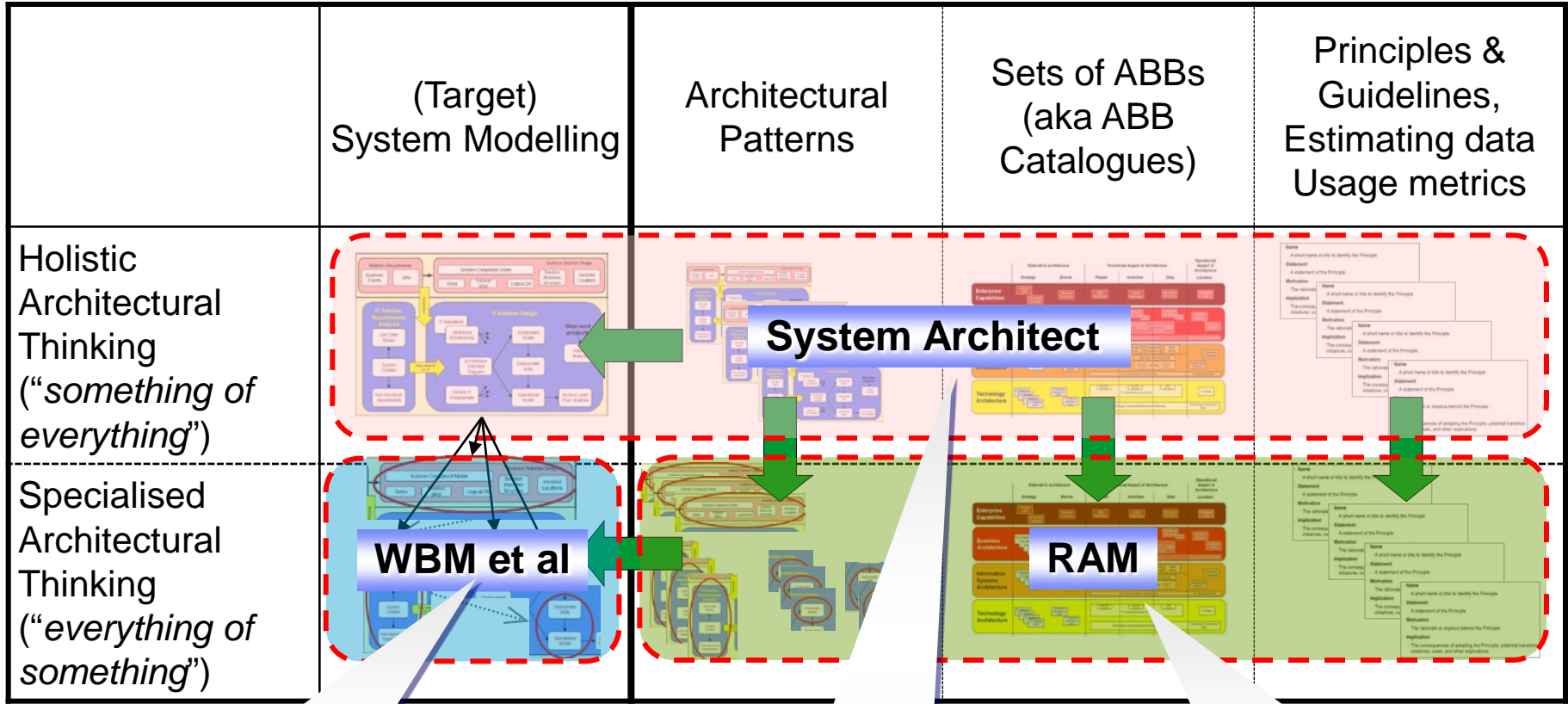


Business & IT work products documenting a specific business system's requirements and solution design

Business & IT work products documenting "best practice" patterns required or requested to be used when defining a specific system's requirements and design

Business and IT work products documenting the "elemental things" and their principles of use that are required or requested to be used when defining a specific system's requirements and design

This allows the positioning of a tooling portfolio for optimised architecture enablement



WBM, RSA, ReqPro: specialised tools for those who wish to focus on some aspect of the system

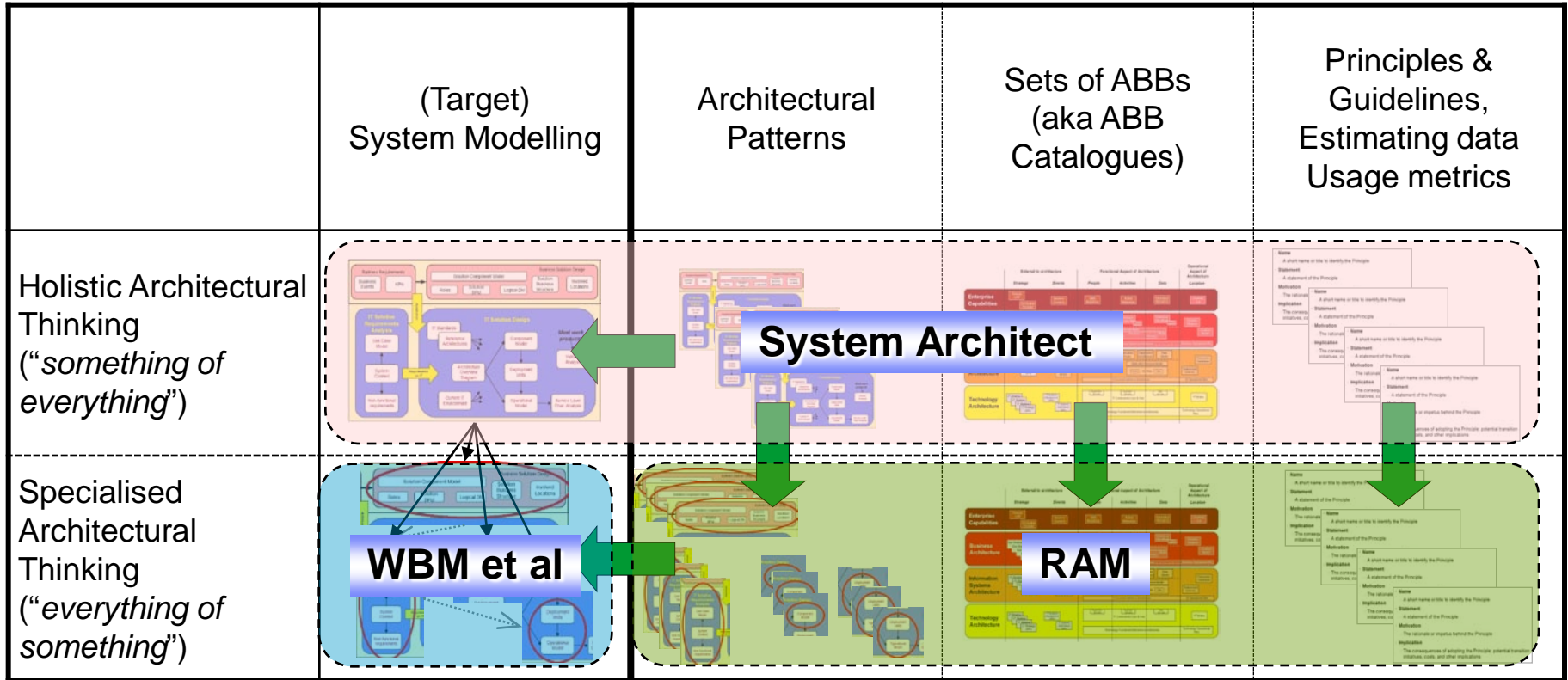
System Architect: tool of choice for those who wish to model the whole system, to some degree

Rational Asset Manager: acting as the repository of architectural assets (as well as work in process)

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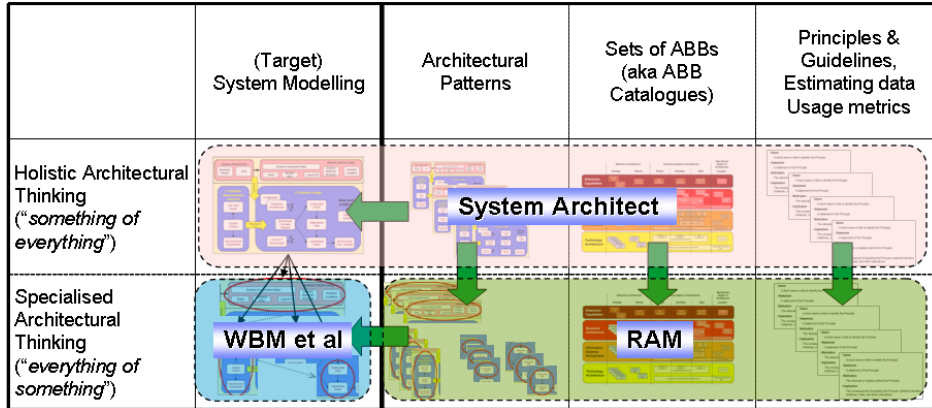
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How can we get there?

So where do we start? Is success predicated on doing all of this? NO!



- We need to simplify this mental model a little, in order to draw out some key considerations...

Re-factoring our landscape for architectural enablement gives a better model on which to discuss potential entry points (step 1)



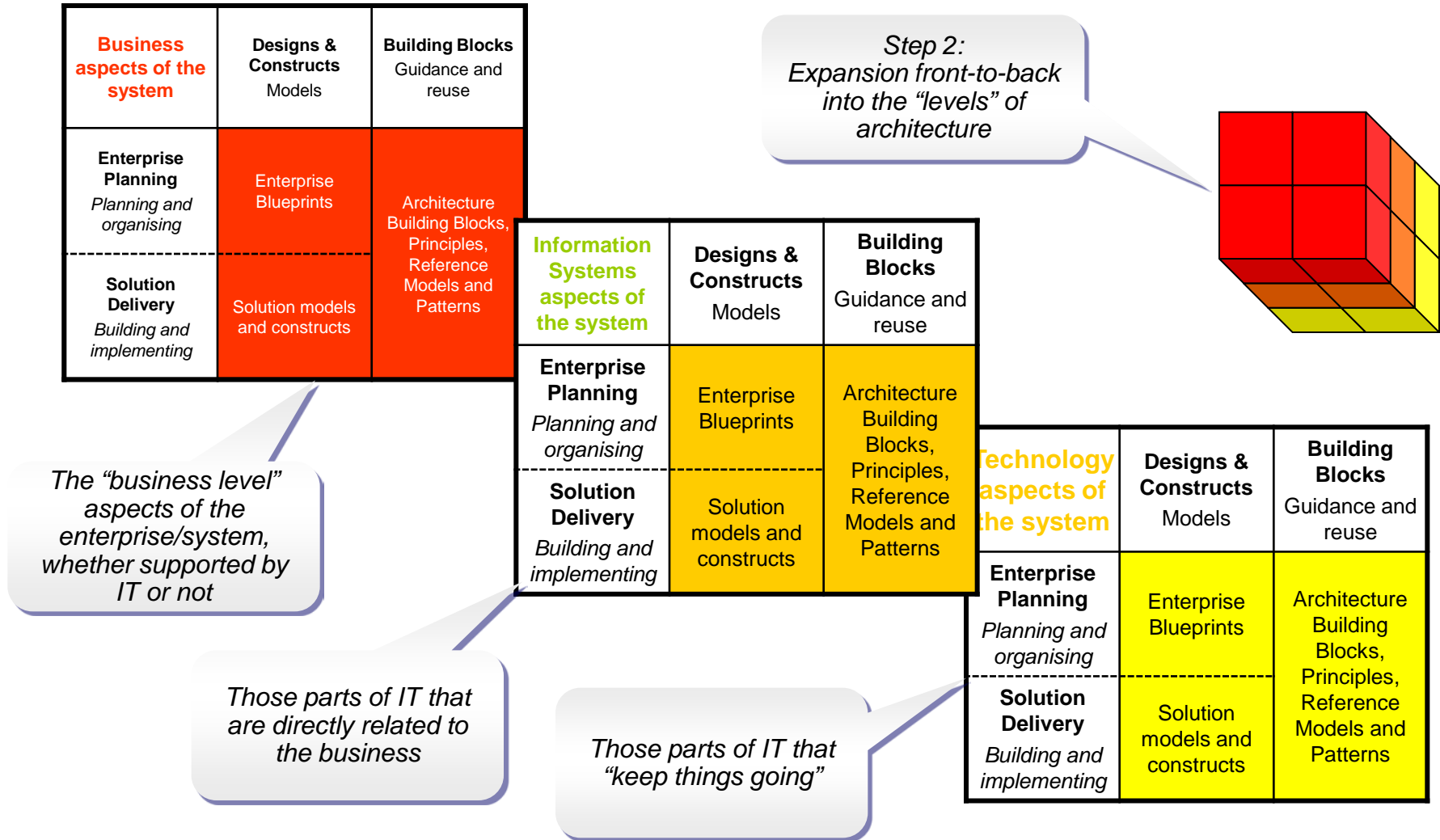
"Designs & Constructs"

"Building Blocks" (Guidance & best practice)

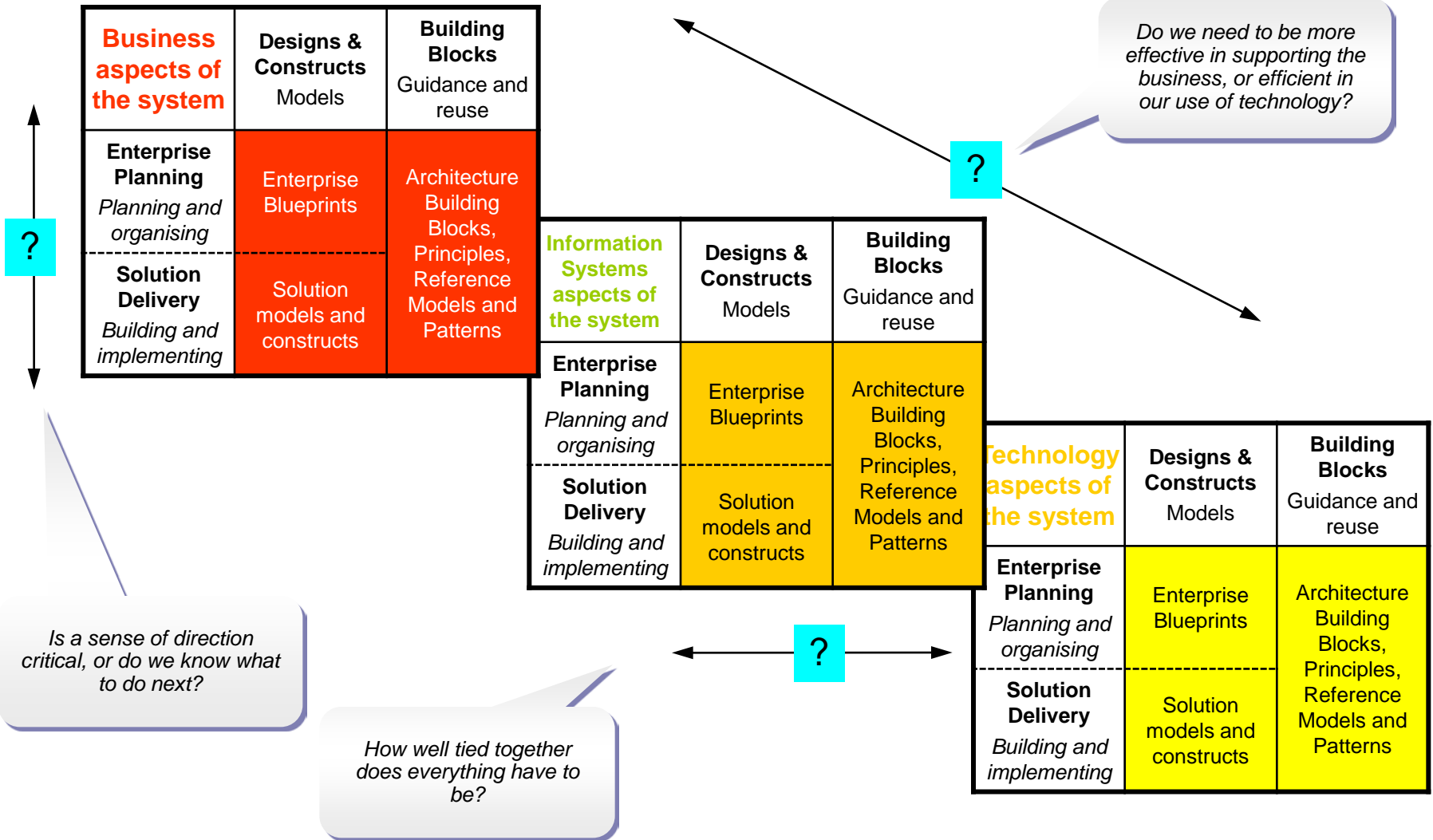
Step 1: Simplification into a "2 by 2"...

| "The System" (business & IT) | Designs & Constructs Modelling | Building Blocks Guidance and reuse |
|--------------------------------------------------------------|--------------------------------|-------------------------------------------|
| Enterprise Planning <i>Planning and organising</i> | Enterprise Blueprints | Architecture Building Blocks, Principles, |
| Solution Delivery <i>Building and implementing</i> | Solution models and constructs | Reference Models and Patterns |

Re-factoring this diagram gives a better landscape on which to discuss potential entry points (step 2)



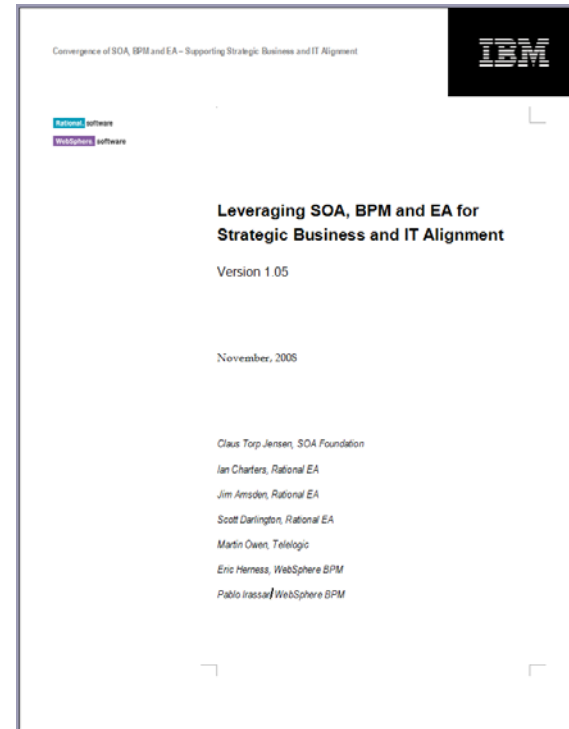
There is no one “perfect approach” – it all depends. (Although a sense of the end goal is always useful!)



“Leveraging SOA, BPM and EA for Strategic Business and IT Alignment”

- A Detailed discussions are presented in the recent whitepaper

“The alignment of business and IT... is one of the most important topics on today’s enterprise agenda. The compelling promise of SOA, Business Process Management and Enterprise Architecture individually... accelerate that alignment. However... even greater value can be gained through the convergence of all three”

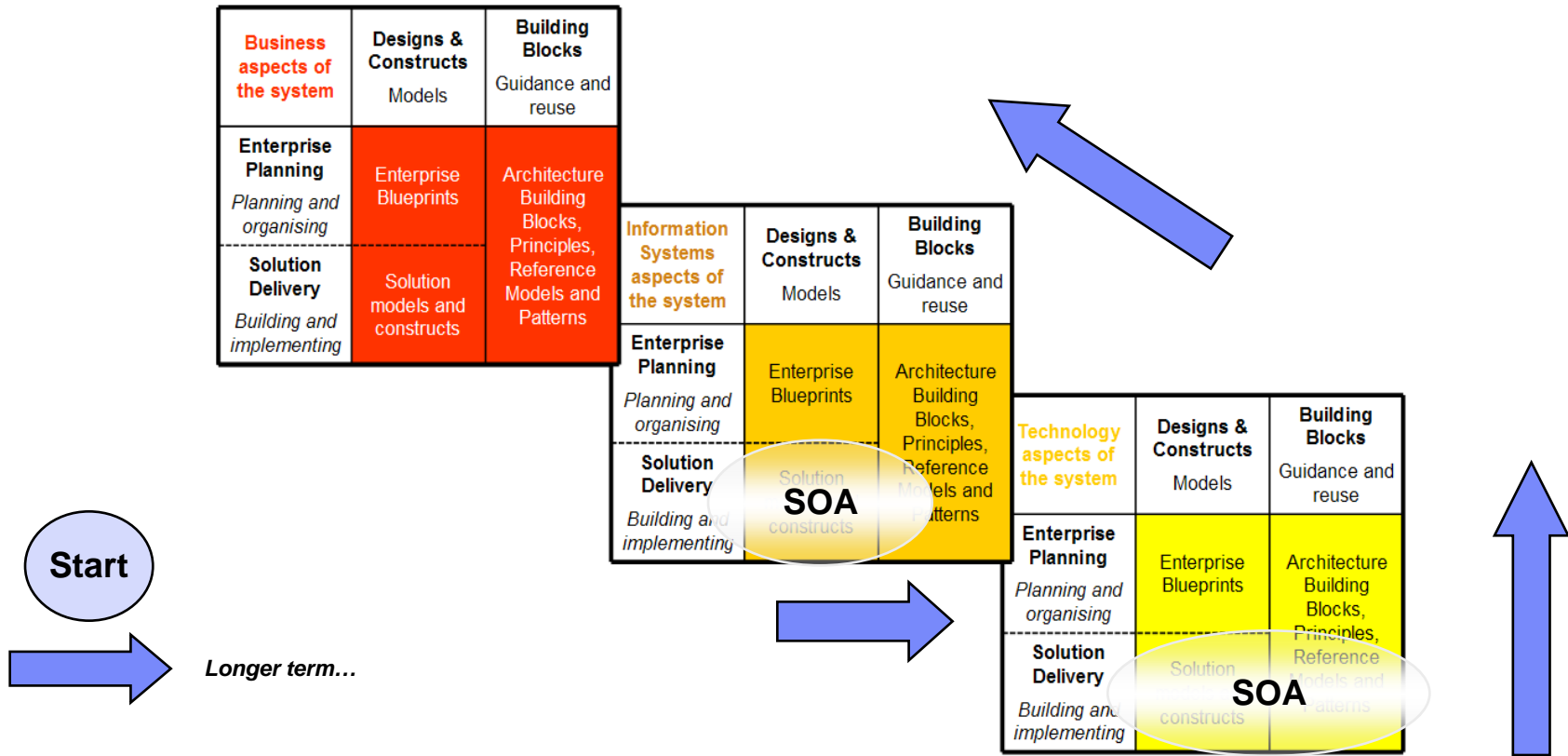


http://www.ibm.com/developerworks/websphere/bpmjournal/0812_jensen/0812_jensen.html

Pattern: SOA IT Solution Platform

“IT Development efficiency, agility, reuse and maintainability”

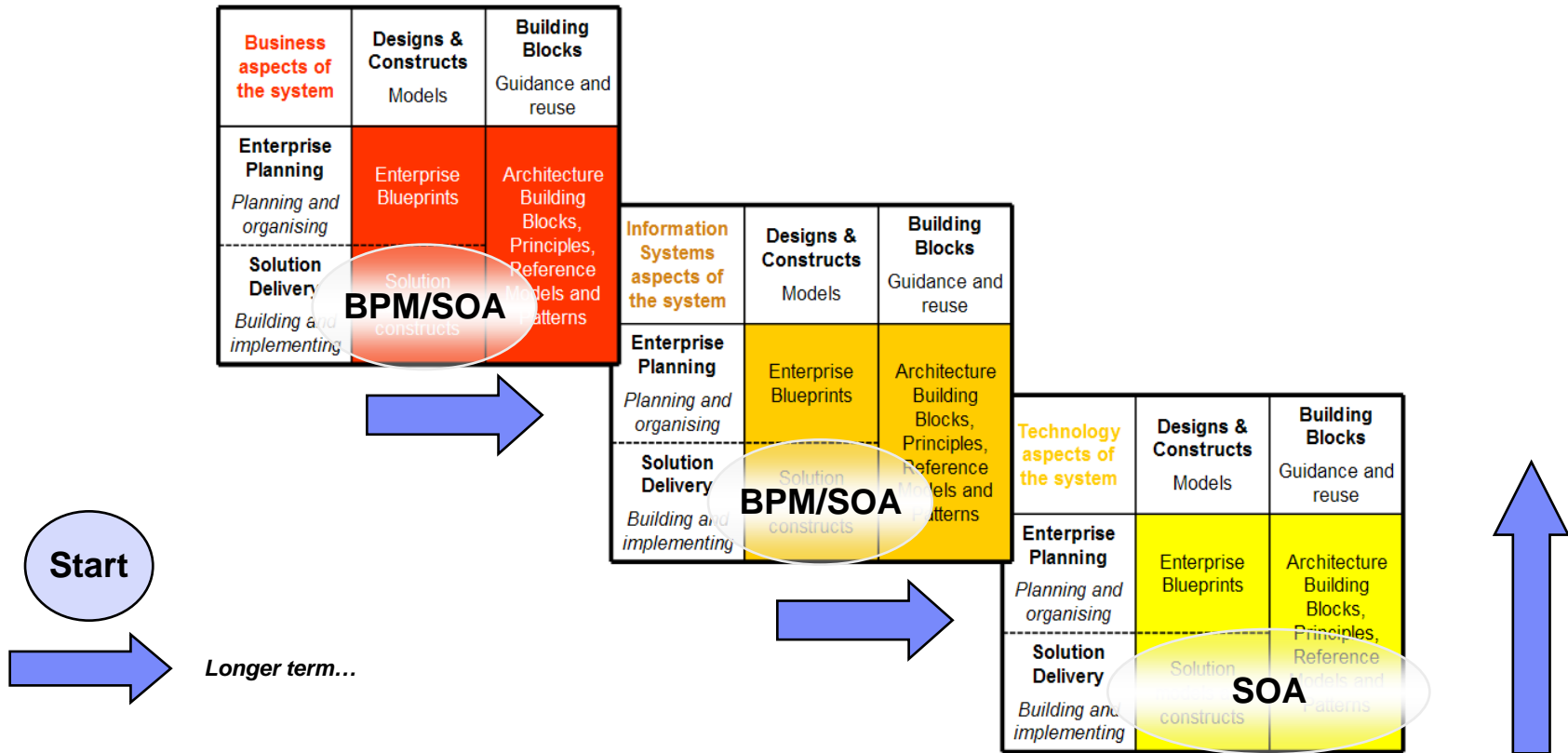
- Exploiting SOA within solution contexts, using a service registry to capture and promote reuse of appropriate IT centric building blocks
 - Longer term, a sense of direction may follow from these service maps (eg via SOMA), laying out the desired structure of services across the enterprise



Pattern: SOA based BPM

“Business optimisation & agility through SOA”

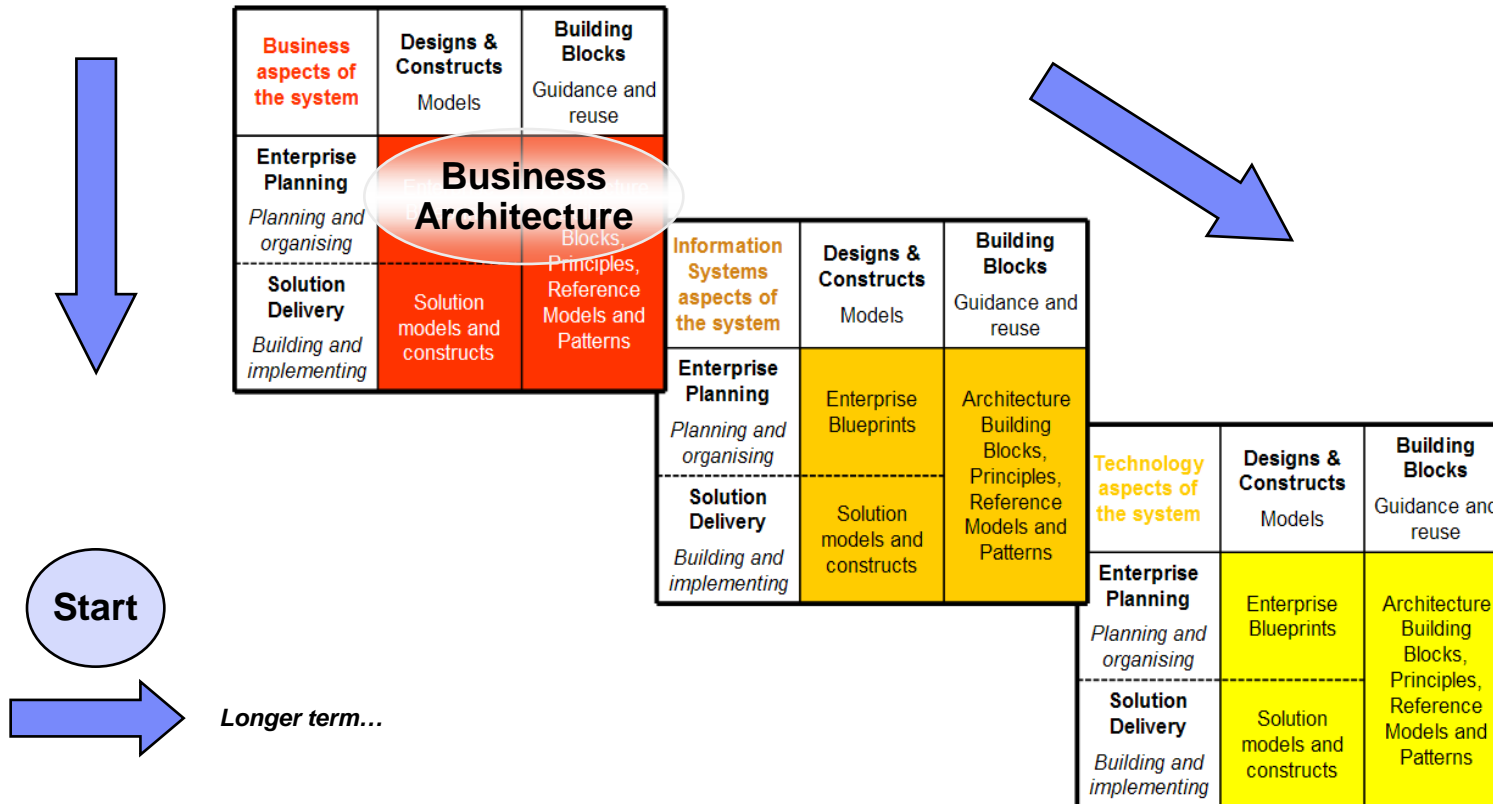
- Business (end to end) process analysis embracing service oriented (building block) thinking as “1st class” aspects of Solution Delivery’s System Architecture
 - Longer term, a sense of direction may follow via the identification of enterprise wide business services, together with corresponding IT services



Pattern: Business Architecture

“Aligning business systems with strategic direction and objectives”

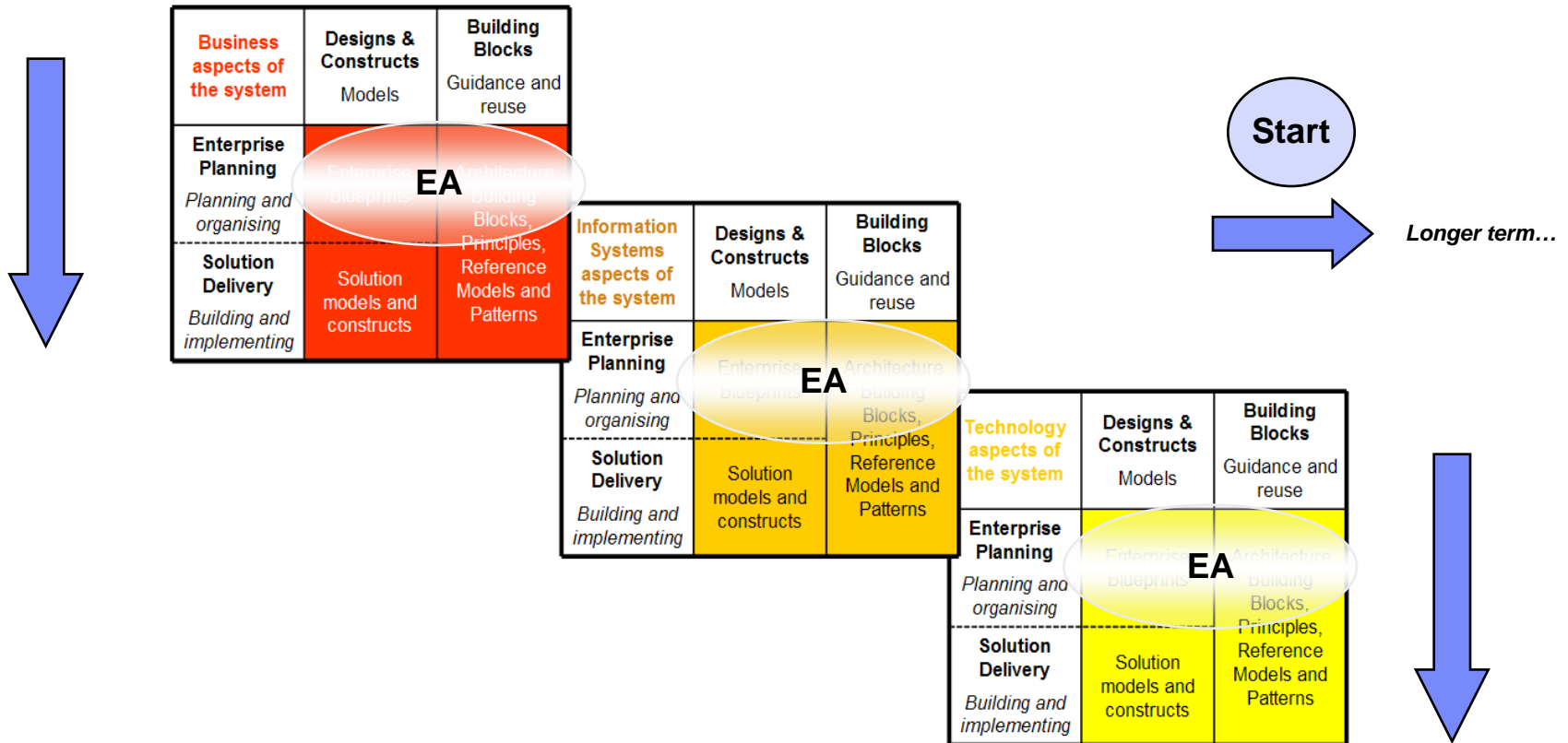
- Business structure analysis (systems and building blocks), identifying the strategic service oriented business “blueprints” (eg via IBM’s Component Business Modelling)
 - *Longer term, extending into the IT domains (completing the EA) to ensure a rigorous connection between BA & ITA, and therefore improved ability to deliver the right solutions*



Pattern: Enterprise Architecture

“Aligning business & IT systems with strategic direction & objectives”

- Business and IT structure analysis, identifying and planning for the delivery of strategic service oriented business (e.g. CBM) and IT “blueprints”
 - *Longer term, extending into guiding and governing the design of solution delivery’s system architectures, “doing the right things right”*

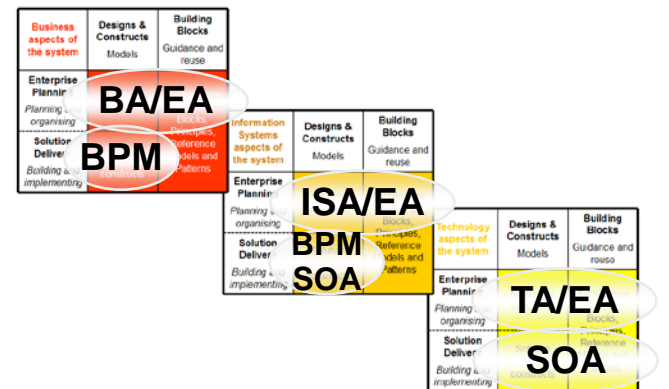
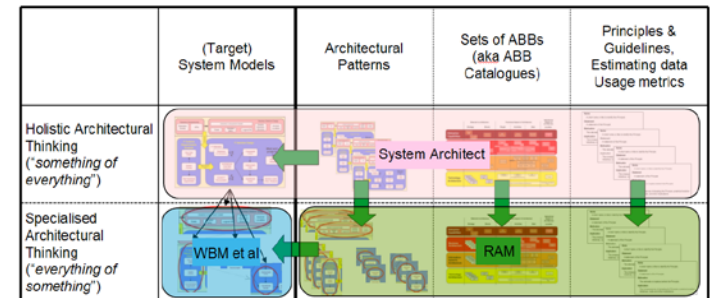


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We need to “do the right things right”

EA + BPM: 1+1 = 3, particularly if we exploit SOA!

- EA's** holistic, enterprise wide *“something of everything”* approach allows enterprises to *“do the right things”* the right way for all aspects and all parts of the enterprise – including BPM
- BPM's** focused, process centric *“everything of something”* emphasis allows enterprises to *“do things right”* including the right balance between human and automated processes
- SOA's** building block style facilitates both, particularly in their drive to connect the worlds of business and IT
- A landscape for architecture enablement helps to enable architectural practices and better align them to needs for architecture
- An appropriate tooling profile optimises architecture practices and binds architects together, whether they be Enterprise, Solution, Business or IT
- One or more approaches can fit an enterprise's *“as is”* as well as *“to be”* states of architectural maturity



(*) Recall the self similarity of projects within a BPM programme and BPM to EA – i.e. there is a need for “something of everything” within the focus of a BPM/SOA programme

Questions



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