

Consulting

Blueprint method to accelerate and support change projects

Achieving Operational Excellence

*The Open Group Oslo
Conference in 2013*

11 June 2012



pwc

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Table of Contents

Section	Page
Introduction to the PwC Operations Excellence Framework	4
1 The Context of Operational Excellence	7
2 Conceptual Models	12
3 The PwC Blueprint Method for Accelerating and Achieving Operational Excellence	14
4 Blueprint Structure and Blueprint Examples (also named Reference Models)	17
5 Execution of Operational Excellence Projects Supported by Blueprints	23
Illustrative Deliverables	



Introduction to the PwC Operations Excellence Framework

PwC Operations Excellence Framework (Enterprise Architecture) consist of several elements and the presentation will outline these

The objectives for the presentation

This presentation will be generic, but will use examples from the Oil and Gas industry

Will outline PwC Enterprise Architectural (EA) Framework for Operation Excellence and provide examples on the blueprint method, project execution and deliverables.

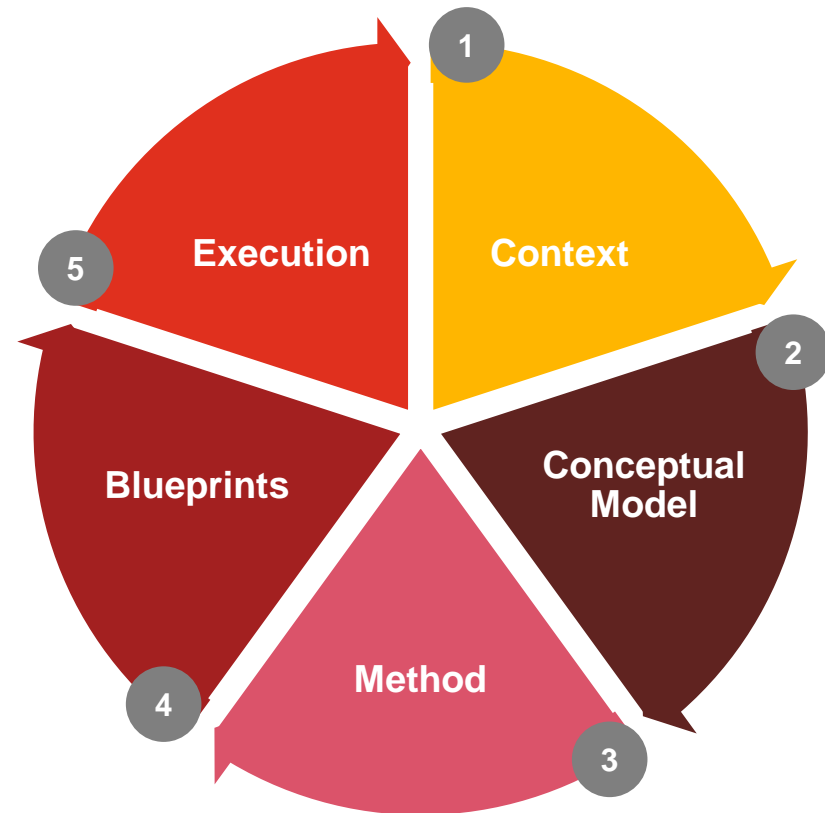
Often EA projects are initiated in IT department with IT manager as sponsor. This presentation will try to present examples on how to gain top-management support and involvement.

An often missing part in EA frameworks of today is a built in mechanism for continuous improvements and organizational learning (“business interruptions”). The presentation will try to outline how blueprints support this.

One of the main purposes with a EA framework is also to be a structure for company (PwC) post-project knowledge capture and learning.

Our Operations Excellence Framework

PwC takes a comprehensive approach to achieving and sustaining Operational Excellence four clients. Our well-established methodology looks at 5 basic architectural constituents:

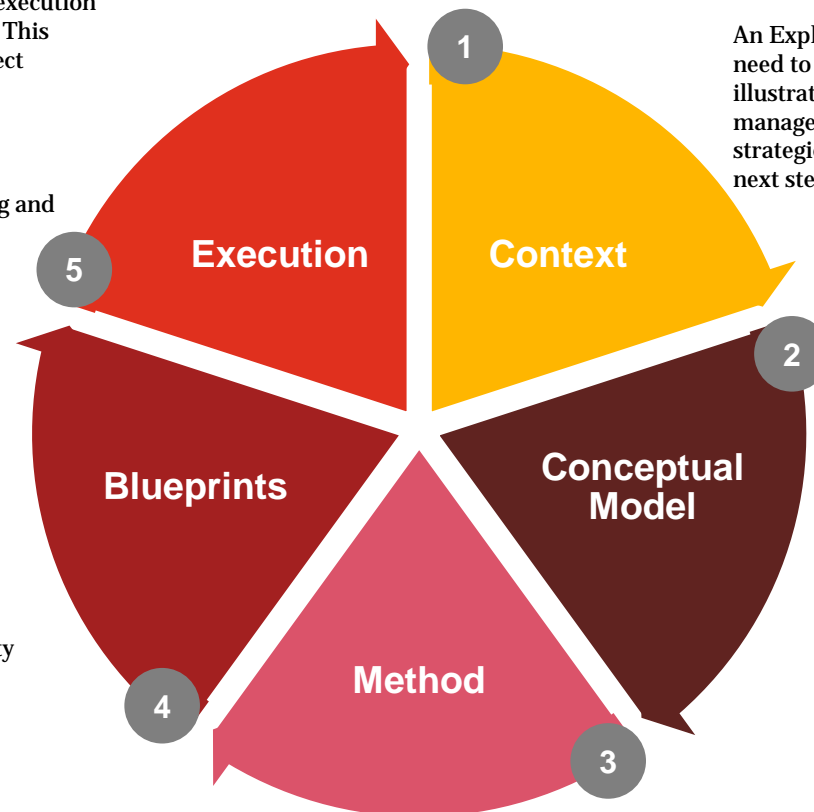


Through our numerous client engagements PwC have developed a comprehensive, systematic approach to achieving and sustaining world-class operational performance for our clients

An E&P core improvement or 'blueprint' project execution will be done by utilizing predefined execution models, blueprints, templates for deliverables. This assure excellent quality and a accelerated project execution. Also an EA framework should:

1. Support sales in achieving sales objectives
2. Support consultant in consulting
3. Support post-project knowledge capturing and lesson learnt

An E&P core improvement or 'blueprint' project utilize E&P blueprints that are reference models that describe how pieces of a business/functional unit fit together as a coherent system to achieve economic value and competitive advantage The E&P blueprint are used in our projects as a reference model to accelerate, facilitate and quality assure strategic change projects



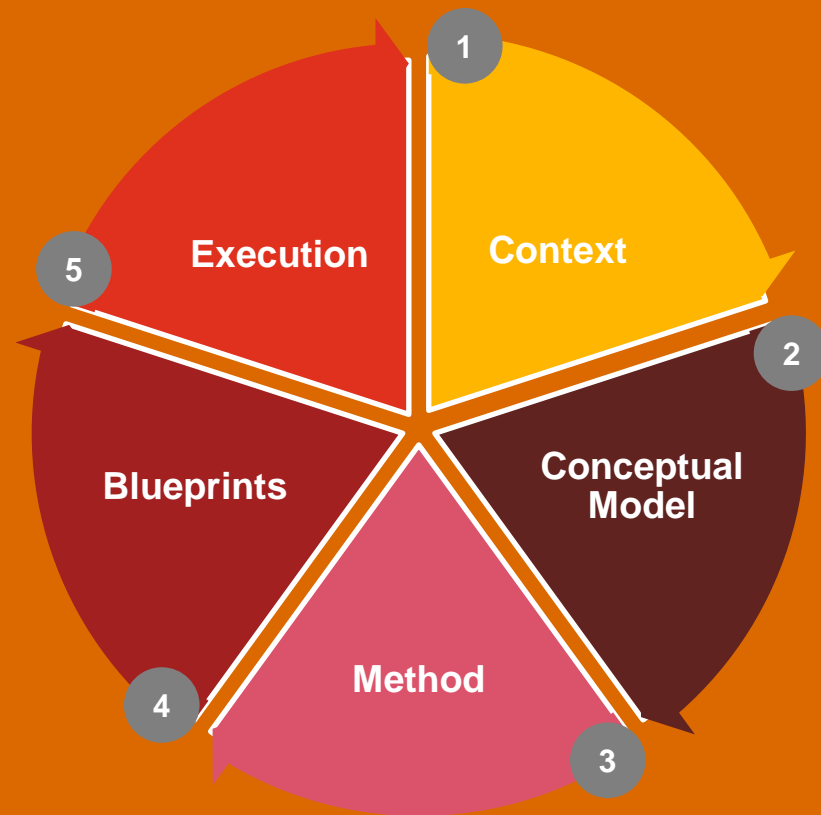
An Exploration & Production (E&P) core improvement or 'blueprint' need to establish a strategic context and PwC utilize conceptual illustrations to establish the strategic context and involve top manager in the project initiation. PwC are also involved in the strategic context and then the blueprint approach will be the natural next step in executing the strategy.

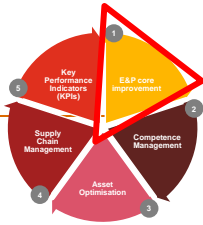
An E&P core improvement or 'blueprint' need to establish the functional/department Conceptual model. The Conceptual model describe the function/department into the corporate context and secure a good alignment with corporate strategy/objectives and interfaces to the rest of the corporate. Often when implementing a Business Management System (BMS) the Conceptual Model will serve as the MBS start page.

An E&P core improvement or 'blueprint' need to be executed to a proven and standard method. This secure good client interactions and anchoring at all levels. The Method also provide the client with a well planned and proven journey with predefined deliverables. The Method also serve as Quality Assurance and sign-offs – this support the project execution and we avoid redoing deliverables.

The Context of Operational Excellence

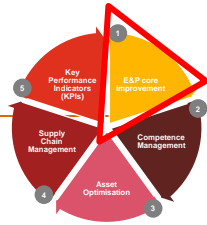
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What is Enterprise architecture (EA)

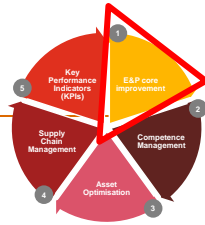
“Enterprise architecture (EA) is the process of translating business vision and strategy into effective enterprise change by creating, communicating, and improving the key principles and models that describe the enterprise’s future state and enable its evolution.” - *Gartner Group*



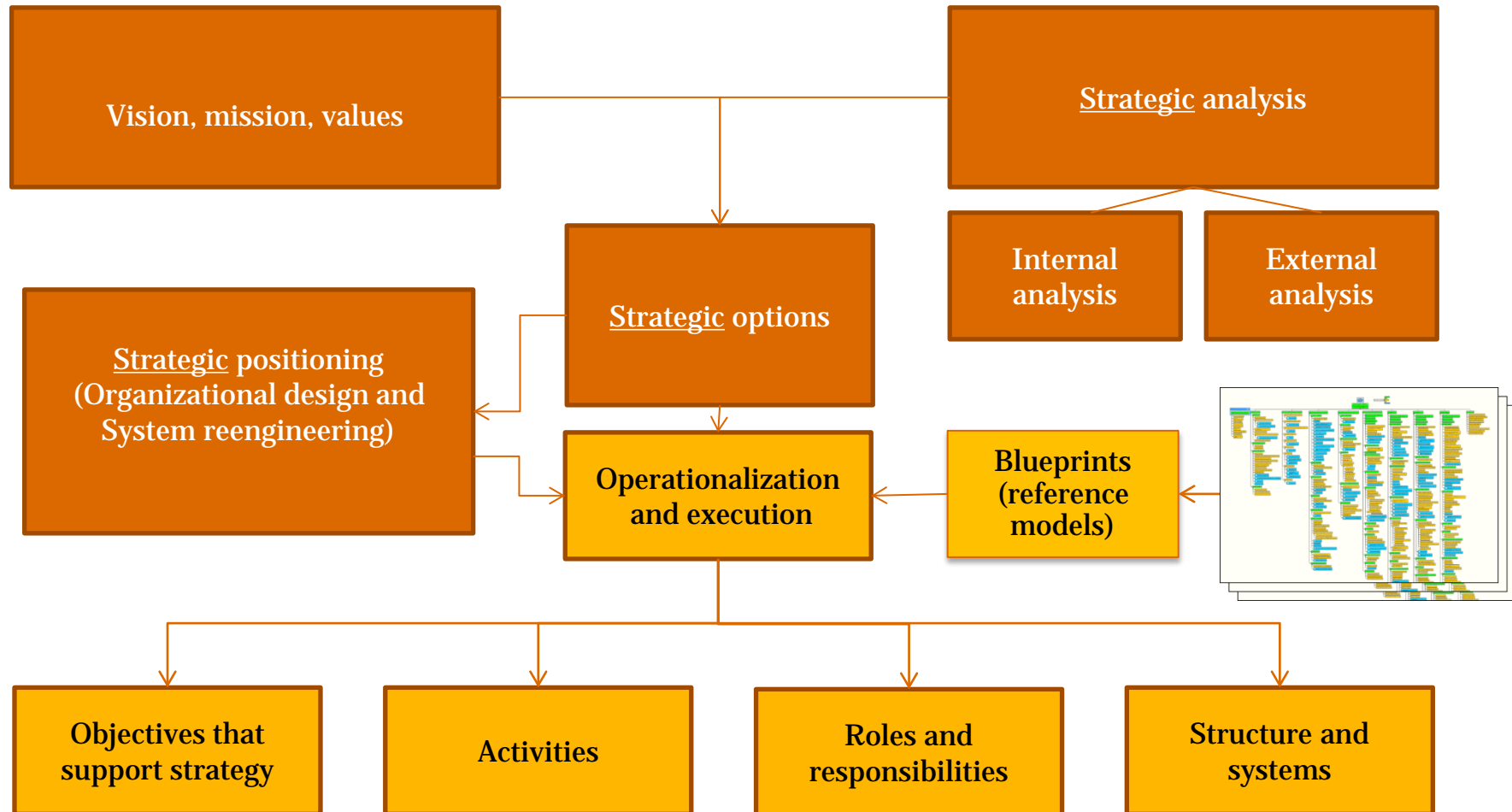
The objective is to close the gap between ambitions and performance

- On average 95% of a company's employees are unaware of, or do not understand its strategy (*The office of strategy management — Robert S. Kaplan and David P. Norton*)
- Often individual units/functions and shared service units do their own strategic planning and the strategies of these units are not coordinated with corporate strategy – *Robert S. Kaplan and David P. Norton*)
- In a study of 318 industrial E&P megaprojects, almost half (47%) of projects had significant operational problems (*Merrow, 2011*)
- In the E&P segment the first years of production are the most valuable the project will have from a net present value perspective – so it is critical that the business operate smoothly from start (first oil)
- Significant value destruction may occur during the transition from major project to operations because preparation for operation and operational readiness planning where not in focus at a early stage in the project

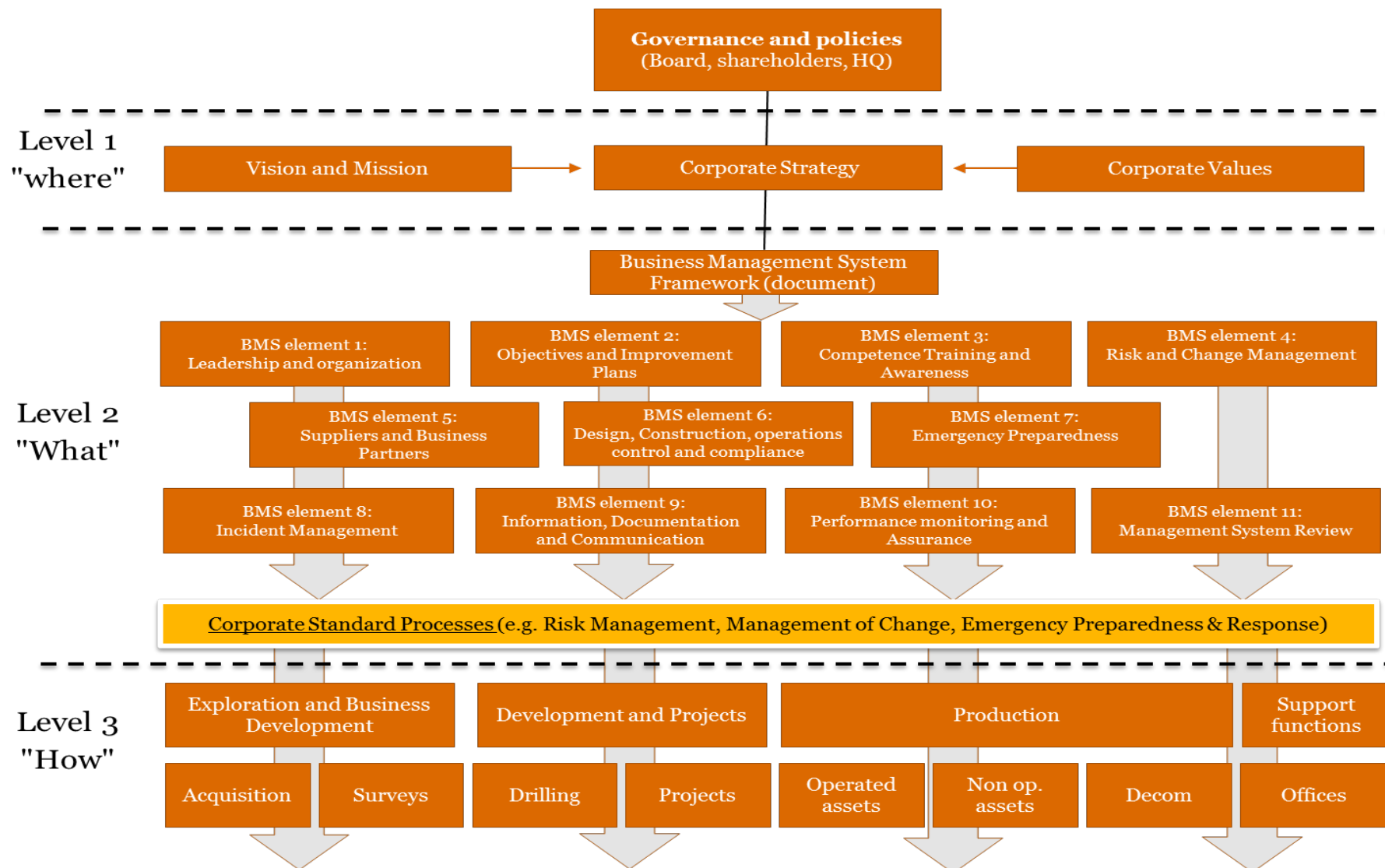
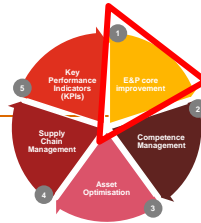
Any change projects will require significant process, information and system integration between parties to reduce cost and generate one core value stream – therefore there is a need for one dedicated method to coordinate and quality assure interfaces (e.g. strategy ->objectives ->process ->information and systems)

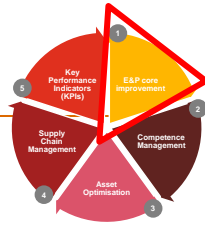


Need to secure that the blueprint method is set in a strategic context

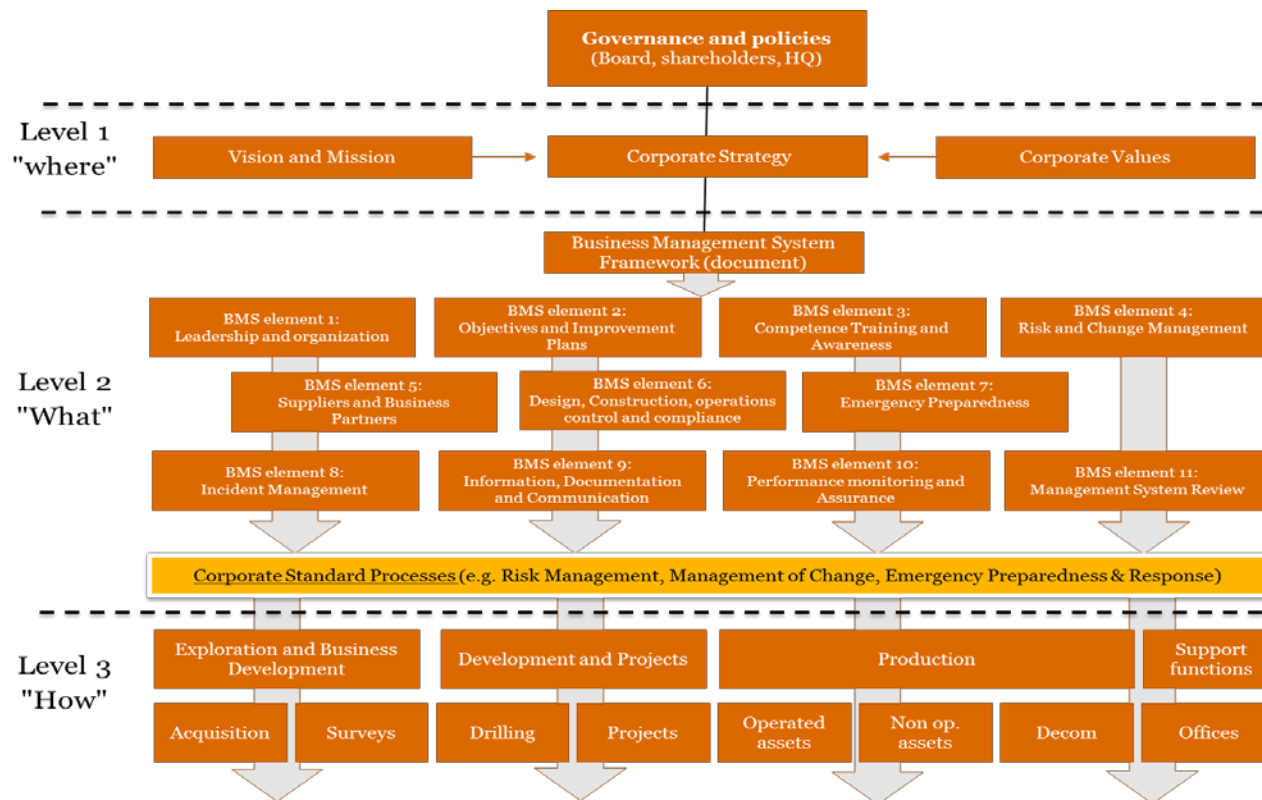


We present the blueprint method a tool to gain coherence and link from "where" to "how"





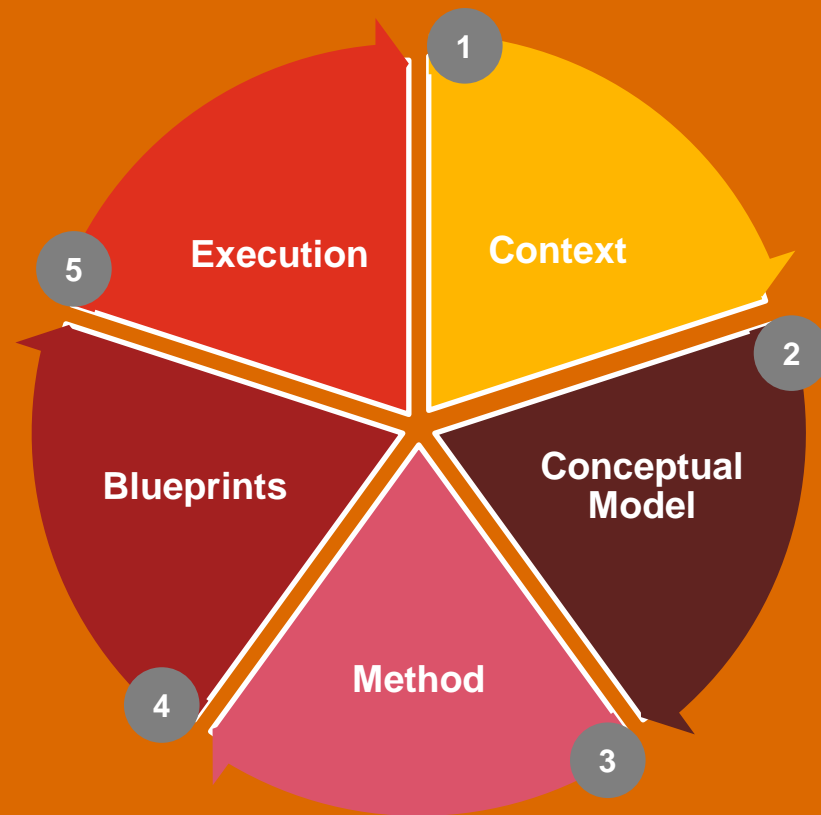
The use of a conceptual design and standard reference models assure enterprise alignment and coherence



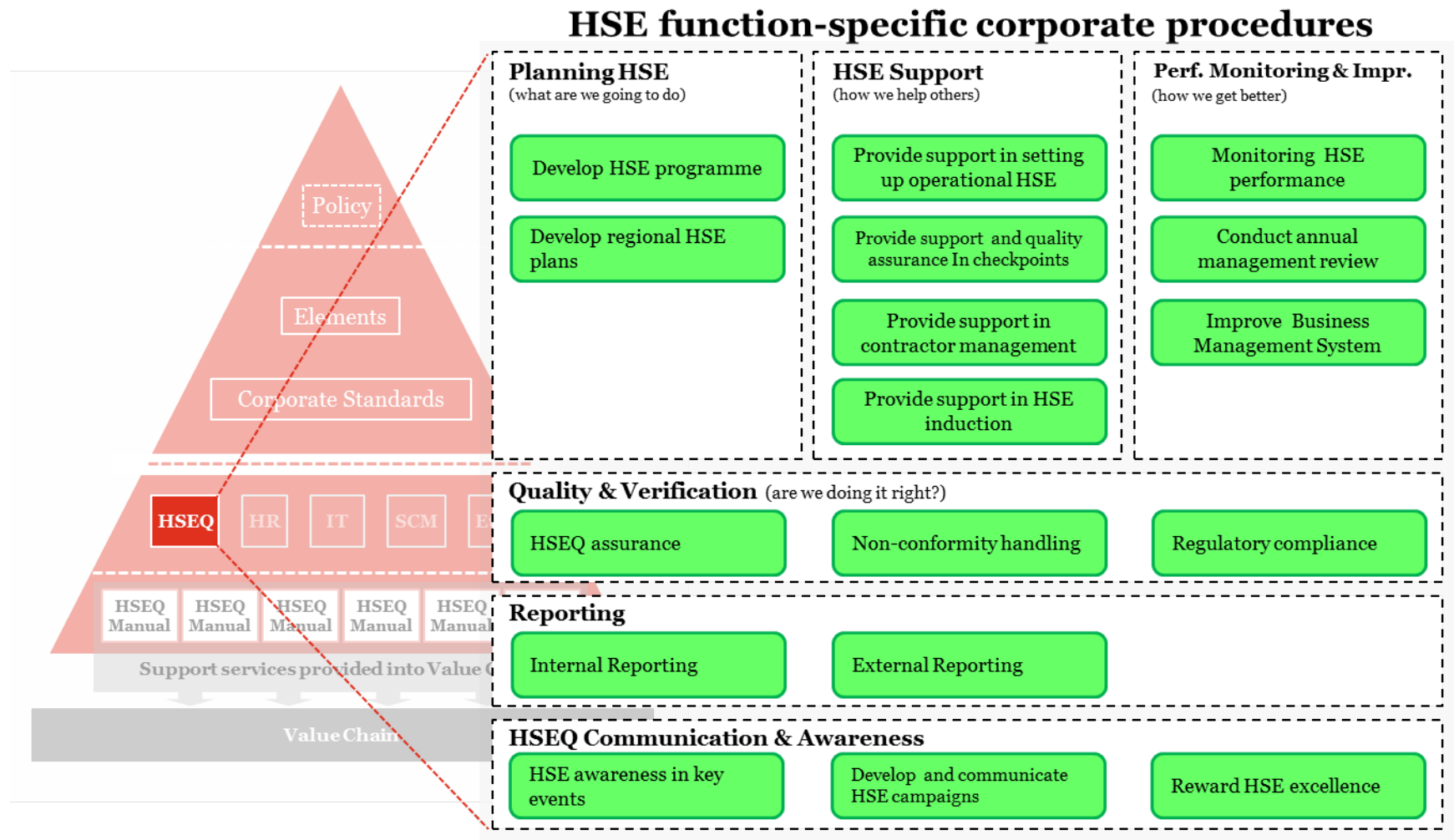
Supported by blueprints as reference models at level 2 and 3

Conceptual Model

2



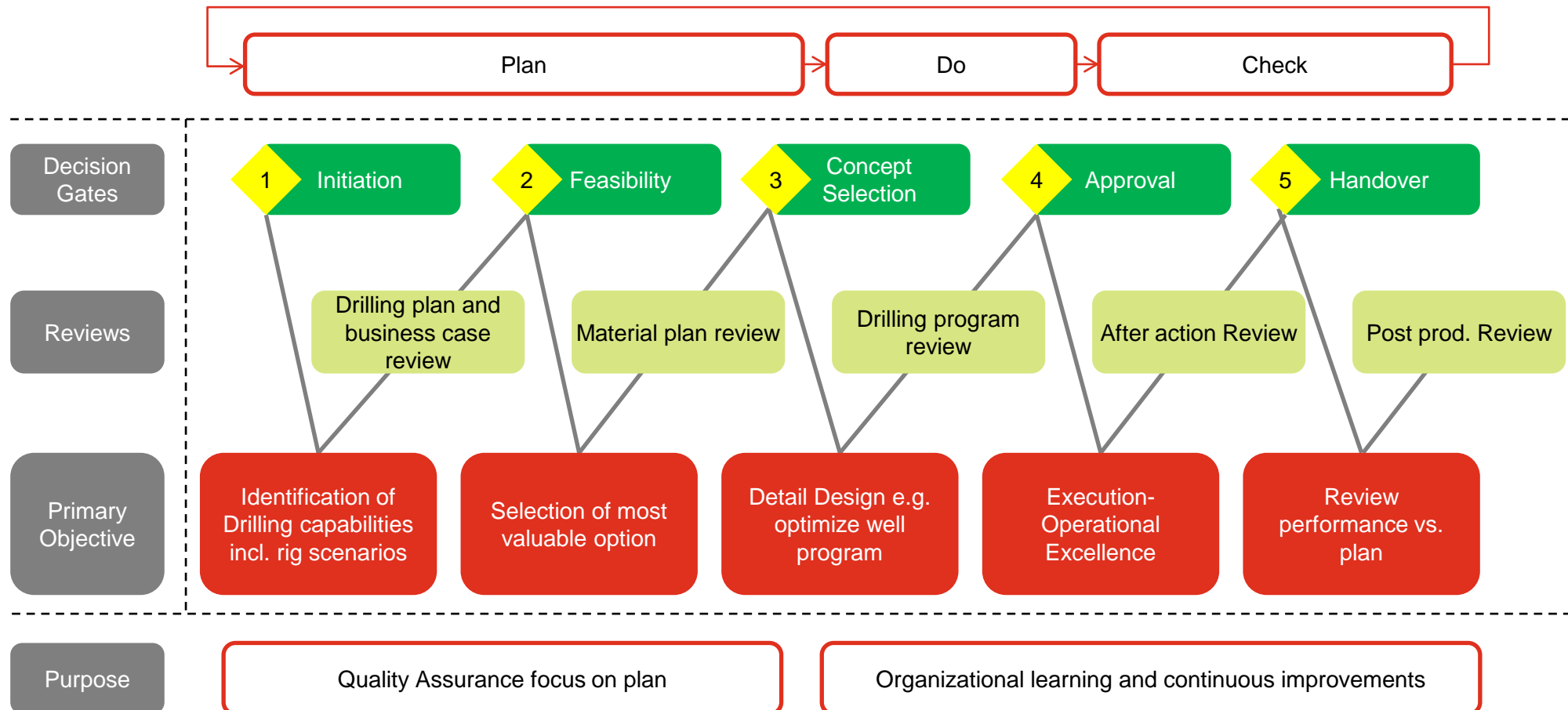
Example: HSEQ Function Procedures & Processes - Conceptual Design and landing page for the BMS



HSEQ = Health, Safety, Environment and Quality

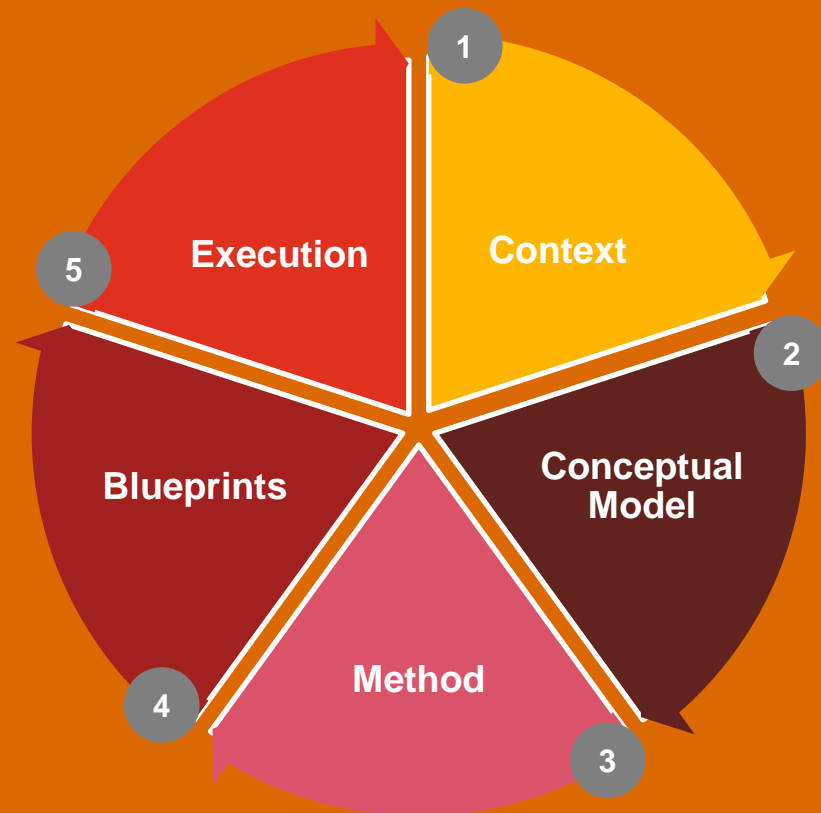
Conceptual model for the Well Delivery function. This model form the foundation of the blueprint

Act – findings will update programs and management system

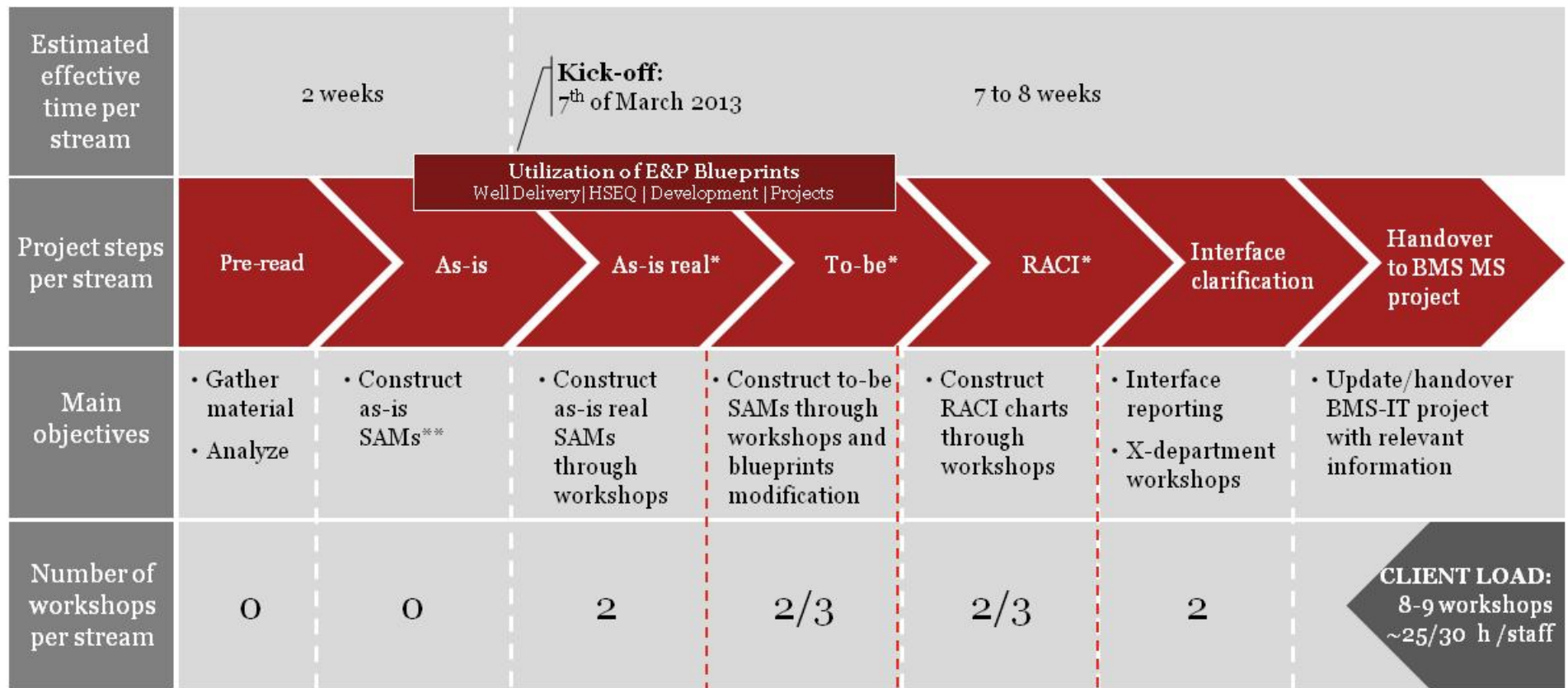
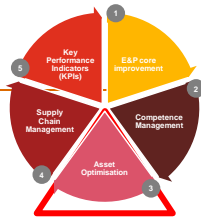


The PwC Blueprint Method for Accelerating and Achieving Operational Excellence

3



We propose a predictable client engagement/journey that is supported by the blueprint method and blueprint templates

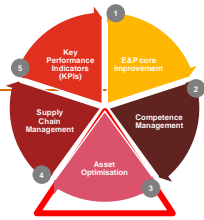


* Initial workshops require management attendance
 ** SAM: Strategic Activity Map

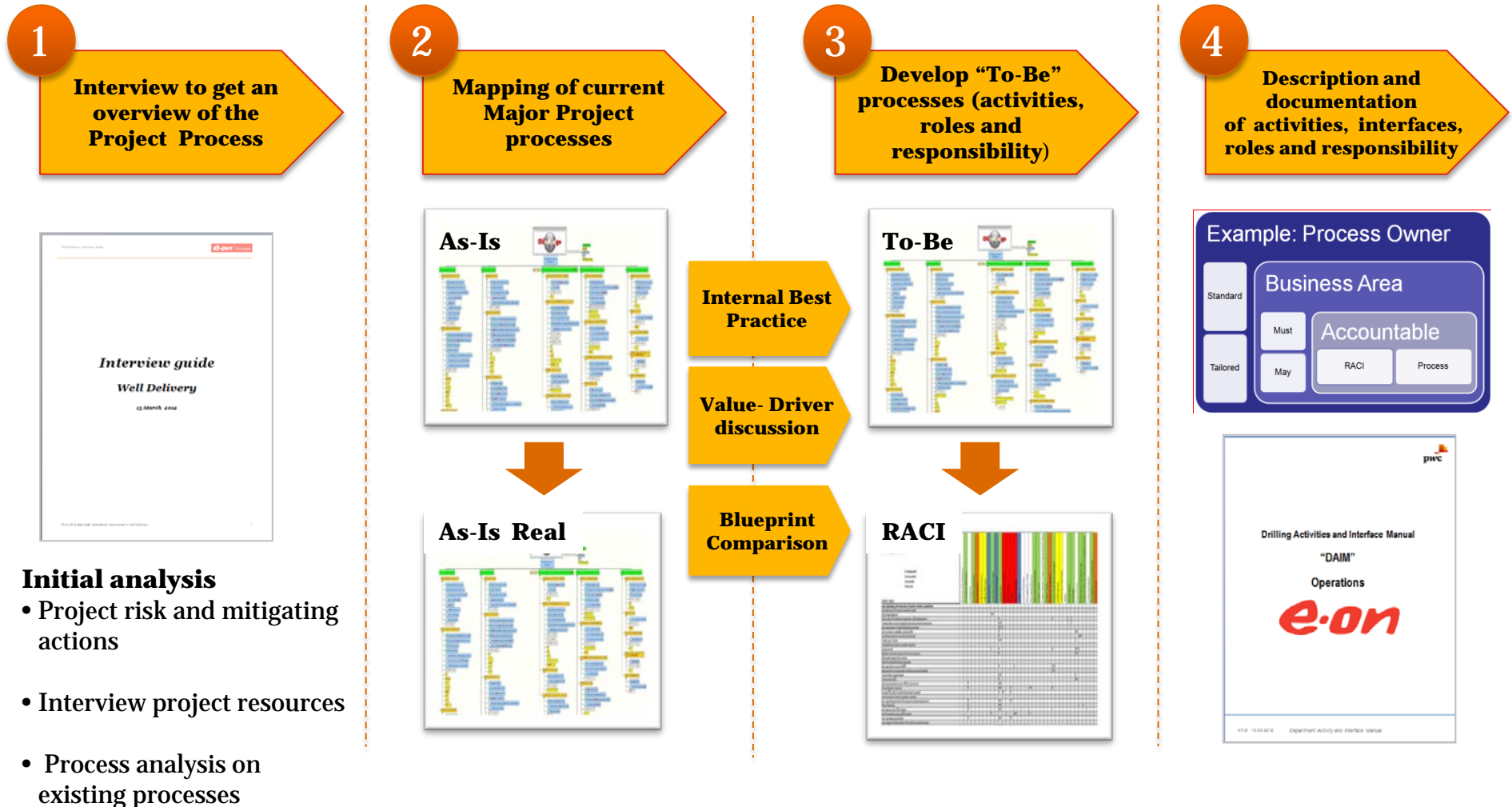
◆ **Project delivery /milestone:**
AS-IS Real SAM

◆ **Project delivery /milestone:**
TO-BE SAM

◆ **Project delivery /milestone:**
RACI Matrix

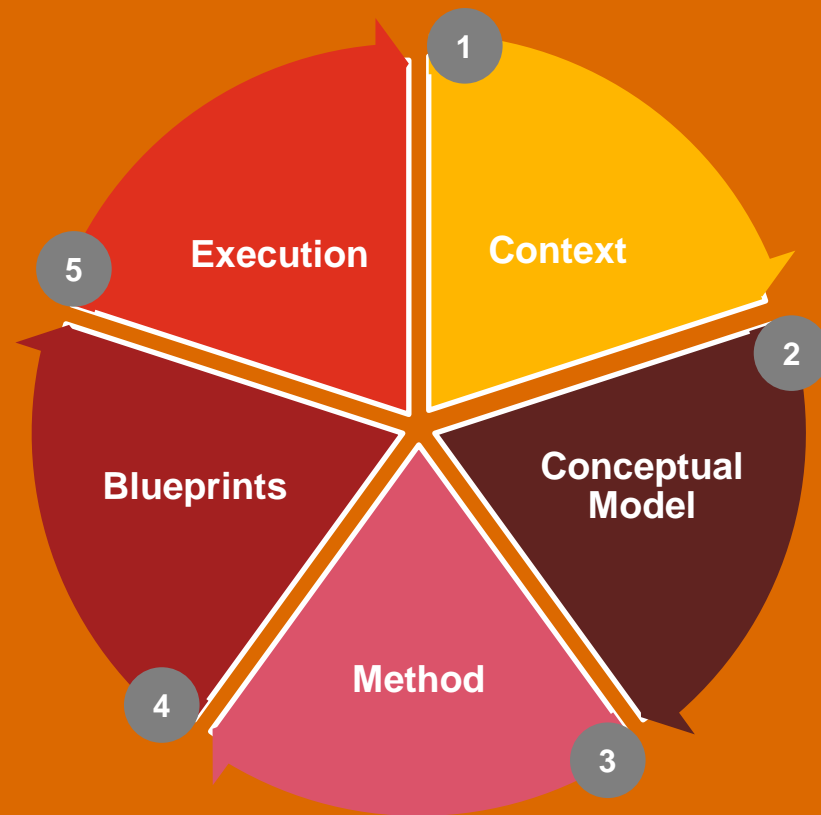


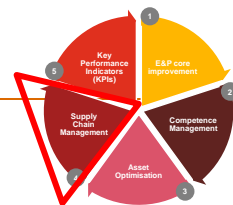
We use a standard and well proven delivery method used at IOC, NOC and Pan European Energy Companies



Blueprints (also named Reference Models)

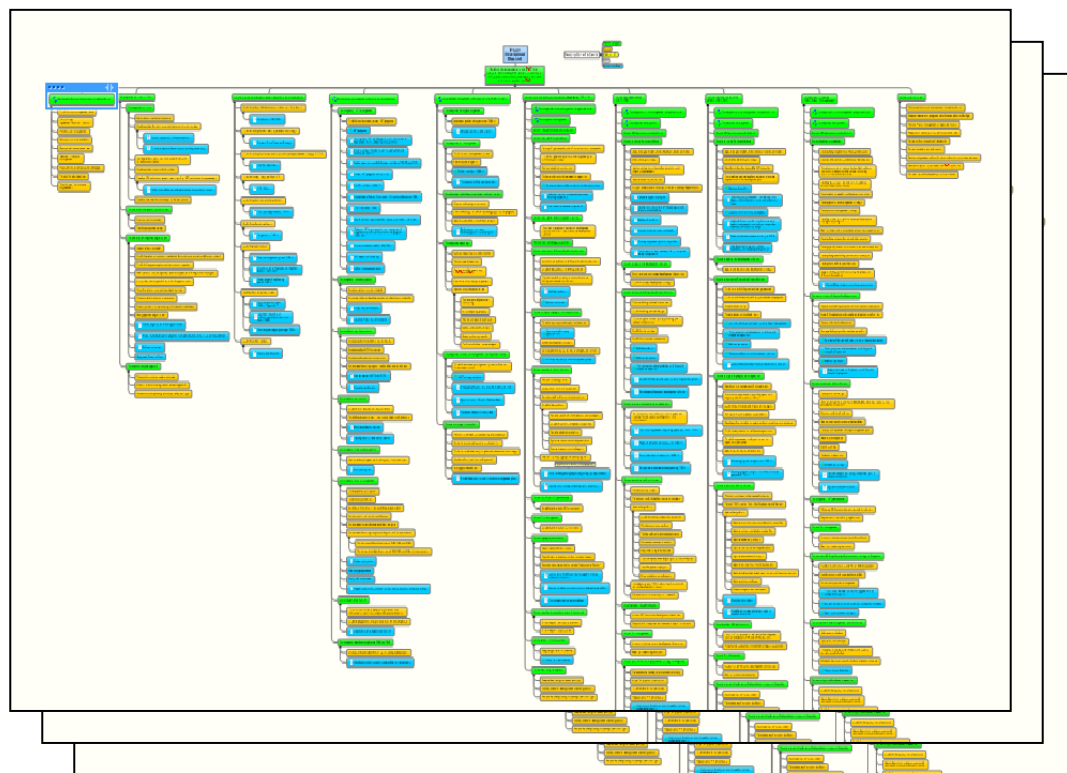
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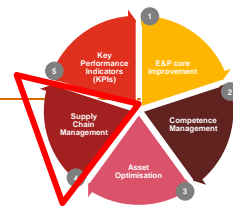




We use E&P blueprints to support the project execution and secure a consistent delivery across multiple streams

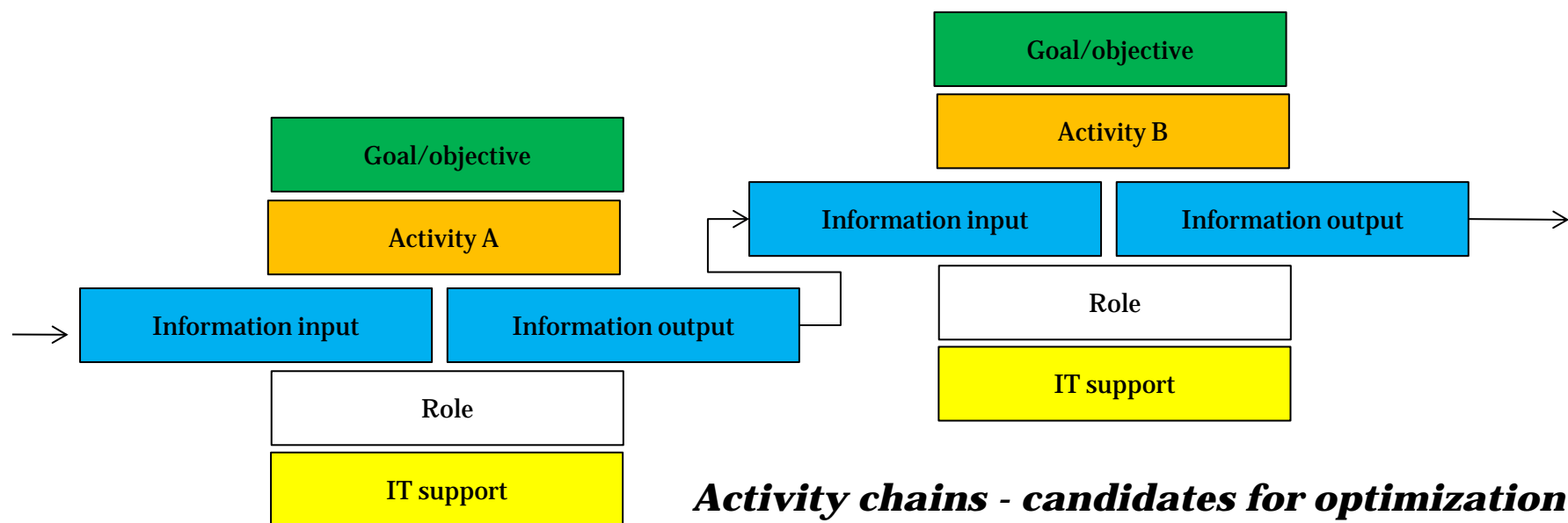
- The E&P blueprints are reference models and that describe how pieces of a business/functional unit fit together as a coherent system to achieve economic value and competitive advantage
- The E&P blueprint are used in our projects as a reference model to accelerate, facilitate and quality assure strategic change projects
- The blueprint reference model has build in support for continuous improvements, organizational learning and value chain integration check-points



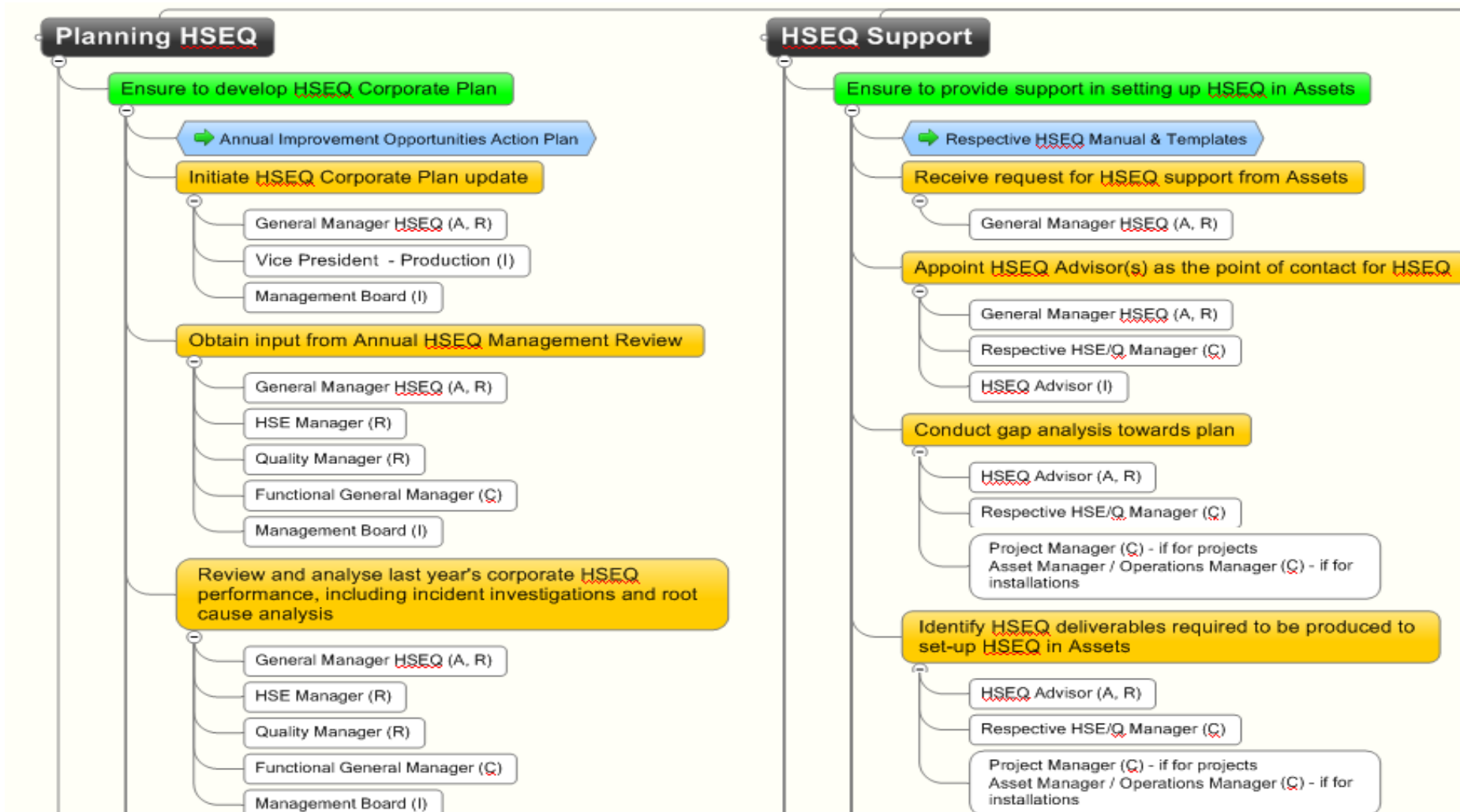


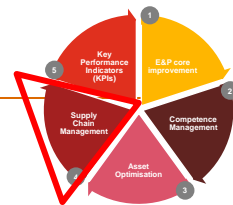
PwC use blueprints that are composed of “simple” building blocks to identify interfaces, opportunities and pain-points

- Building blocks illustrate how activities support goals -> how (and who) performs them
- We use the building blocks to facilitate workshops - focusing on goals, activities and roles
- The workshops give process ownership and involve key stakeholders
- Activities consume and produce information. We can identify the information flow and necessary systems to support To-Be operations.



Example on a blueprint section...



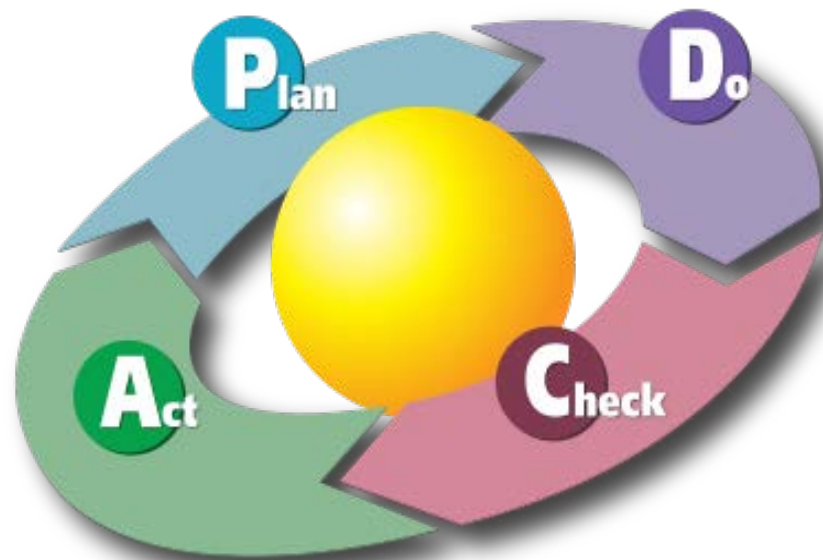


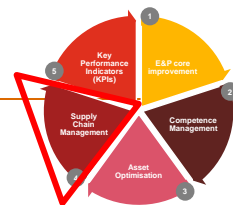
We facilitate change that include Continuous Improvement and Organizational Learning

- As a reference model the blueprints and the blueprint method implement "PDCA" structure and strive to secure continuous improvements and organizational learning in that could be documented in a Management Systems
- After completing a blueprint projects the "to-be" activities and RACIs should be documented in a Management System or Business Management System
- An important feature of a Management System is to prevent accidents from occurring. This implies that *learning from the past* is an important corner stone of any Management system. The ability to **continually improve** the way our operations is managed is therefore essential in claiming industry best practice.
- A Management System is not reflecting best practice unless it is continuously updated to reflect industry and company specific experience.
- The best practice is to use the Management System as a vehicle for how we develop, manage and operate our assets.

Deming Circle

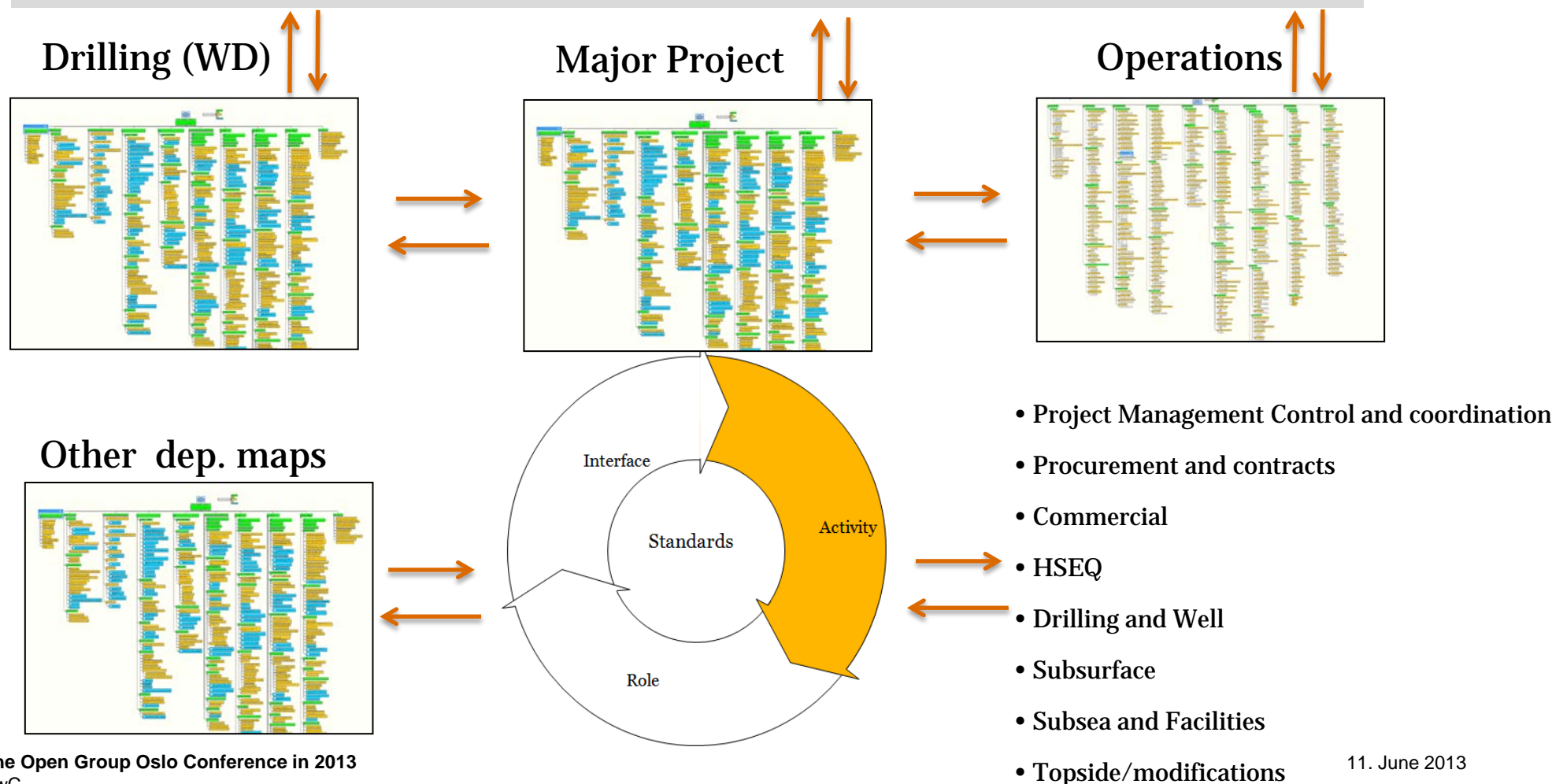
- PDCA (plan–do–check–act) is an iterative four-step management method used in business for the control and continuous improvement of processes and products. It is also known as the Deming circle/cycle/wheel, Shewhart cycle or the control circle/cycle (Source: Wikipedia).

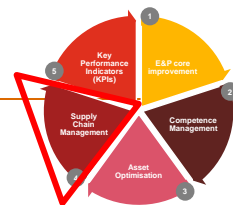




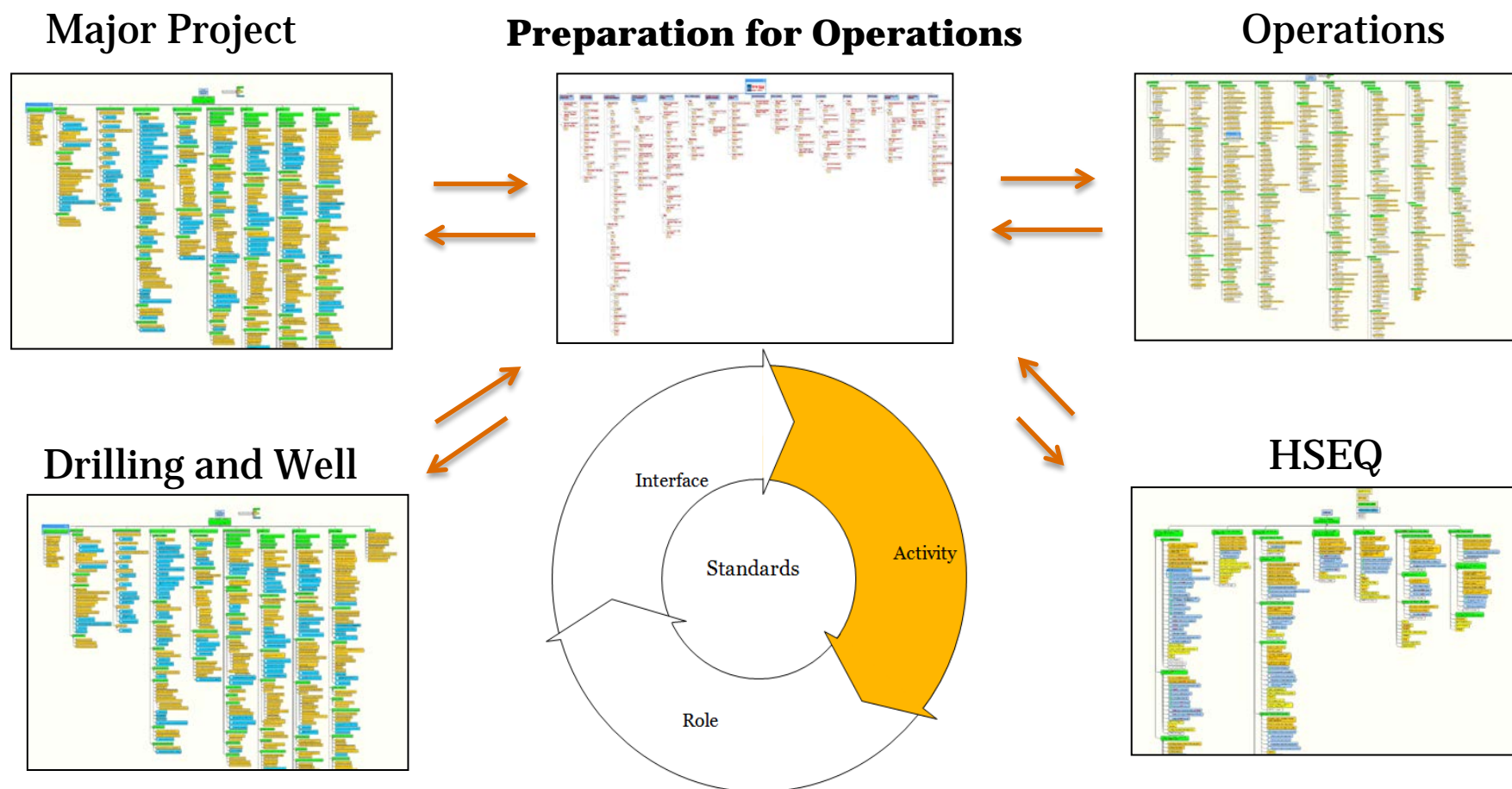
We secure a holistic view of the E&P company and secure coherent interface and handover points

Management, processes, Capital Value Process, Handover and Transitions



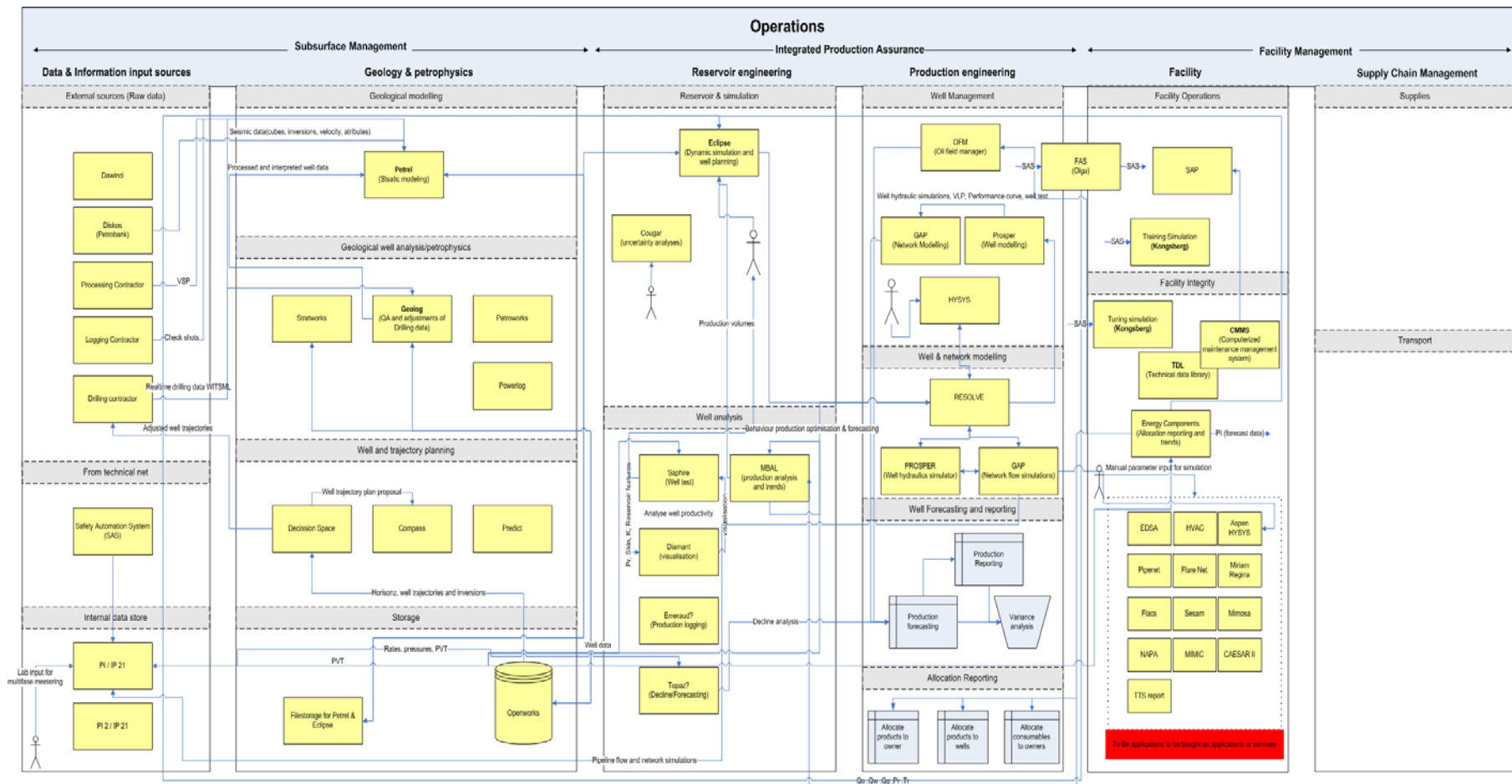


We secure an agreed upon holistic view of processes, roles and information



Then clarify critical internal/external interfaces and how to use corporate standards and functions

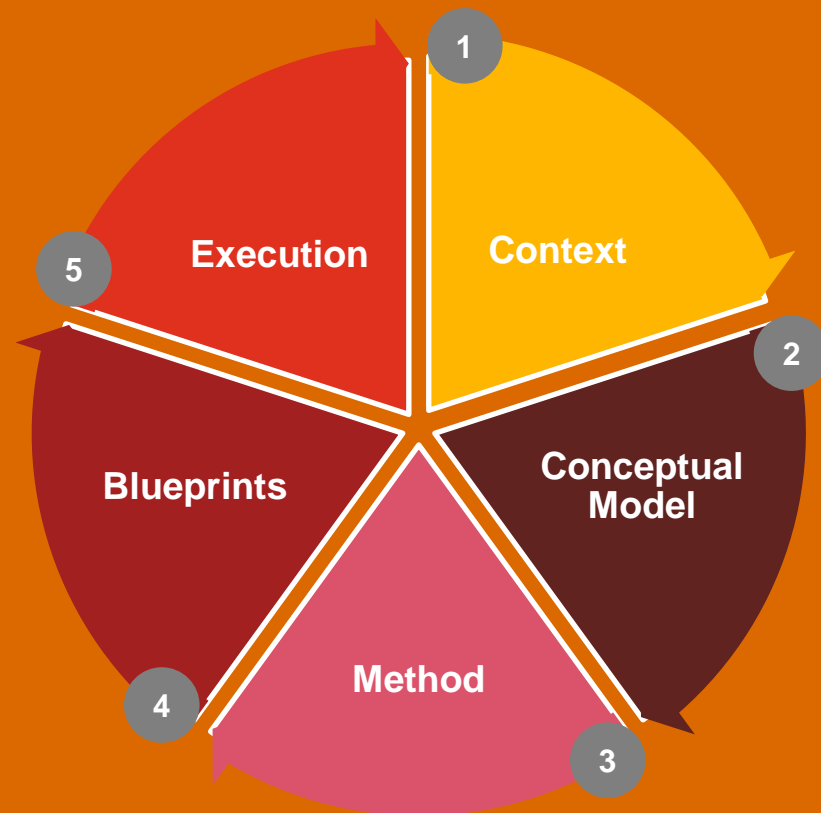
In some project we also map the IT landscape based on blueprint

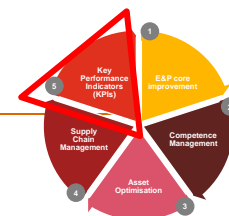


A well-selected portfolio of software will support the design of a project. Selecting a piece of software before knowing the design of your project is very risky. Most companies do not know their design and most IT solutions are considered to be a business failure for that reason

Execution of Operational Excellence Projects Supported by Blueprints

5



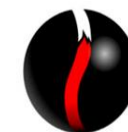


Selected E&P Blueprint projects in the E&P sector

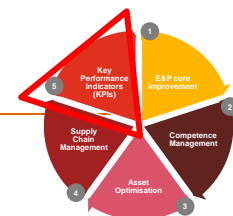
GDF SUEZ



■ • BASF Gruppe



مؤسسة البترول الكويتية
Kuwait Petroleum Corporation



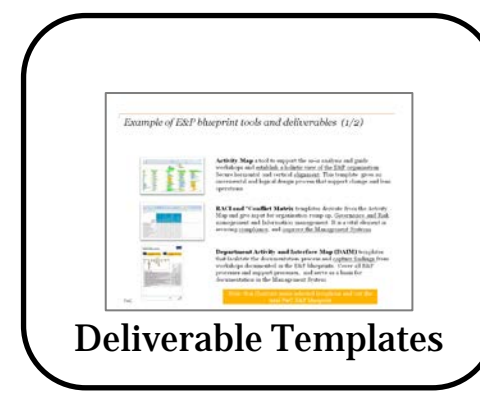
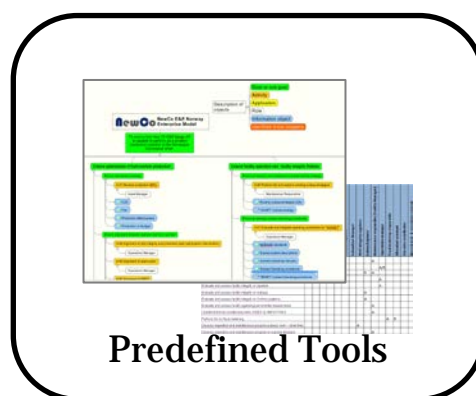
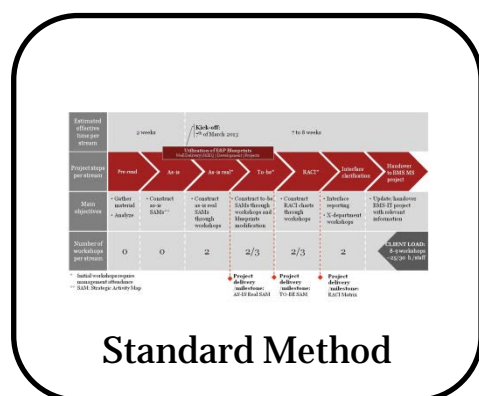
It is all about good oil field practice and structural project execution

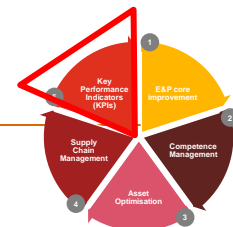
Project objectives:

- Execution of strategies and organizational change
- Alignment with Operations
- Timely handover and commissioning
- Compliance – External and Internal

PwC approach to support:

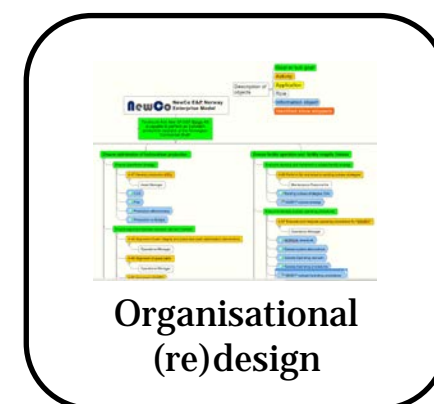
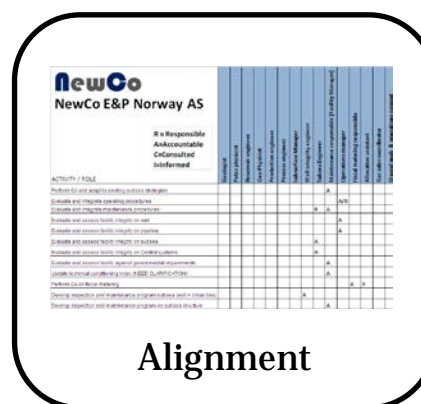
- Specialized, experienced and dedicated support team
- “Best Practice” and methodology for major project development
- Adaptable Toolbox to accelerate project execution and organizational growth



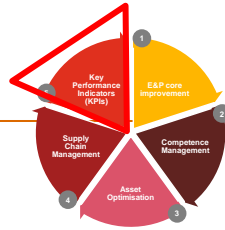


PwC Centre of Excellence support E&P companies to...

- Execute strategies
- Prepare for new operational responsibilities and projects – small or large
- Operational improvements
- Establish a common, documented, view of “how we operate”
- Align activities, roles and responsibilities to changes such as growth, merge or HQ directions



Change through a minimum-disturbance approach



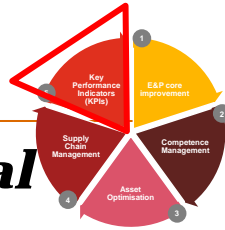
We involve management, project management and engage key influencers...

- Targeting only key parts of the organization. Minimal interruption.
- Introducing lessons learned – captured as Blueprints – as support and accelerators
- Collaborate with other departments to clarify interfaces
- Involve partners and vendors to secure interfaces and deliverables
- Work closely with HSEQ, to capture new processes and update Management System
- Coordinate with HR to revise or establish Job/Role descriptions, project organization and Competence Plans



**The Blueprints help accelerate projects
Driving Time, Cost, Quality and HSE**

**Utilize blueprints accelerate
implementation of change programs**



We adapt the method and client interaction to different cultural settings

The active Pan European



The Open Group Oslo Conference in 2013
PwC

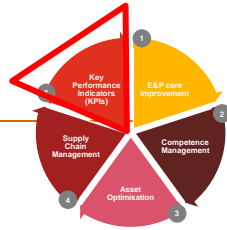
More class context in the Middle East



11. June 2013

We use the blueprints active to capture feedback and interact with key employees





Lessons learned from using the E&P blueprints in major projects

**Our clients have very positive experience utilizing the E&P blueprint methodology.
Some lessons learned from projects:**

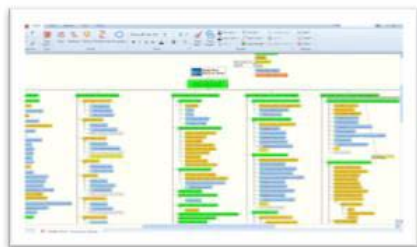


“... valuable to clarify interfaces with other departments and contractors”

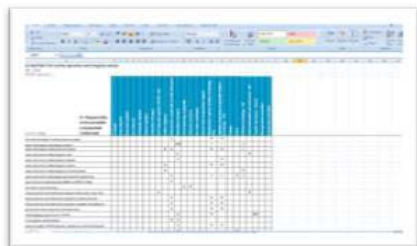
- **Coherency** of project strategy and goals with project activities and roles
- Bringing clarity to roles, responsibilities and **interfaces** between project and supporting departments
- Improves project understanding (clarifying) **across departments**
- **Accelerating** the project process and secure alignment and involvement of key stakeholders
- Align project **activities** and organizational design.
- Involvement in workshops ensures building of one team
- The results from the workshops are valuable inputs to **management system** updates

Illustrative Deliverables

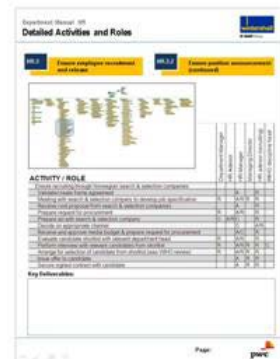
Example of E&P blueprint tools and deliverables (1/2)



Activity Map: a tool to support the as-is analysis and guide workshops and establish a holistic view of the project organization. Secure horizontal and vertical alignment with other departments and partners. This template gives an incremental and logical design process that support change and lean operations



RACI and “Conflict Matrix” templates derive from the Activity Map and provides input for organizational ramp up, Governance and Risk management and Information management. It is a vital element in securing compliance and improving the Management systems



Department Activity and Interface Map (DAIM) templates that facilitate the documentation process and capture findings from workshops documented in the E&P Blueprints. Cover the projects processes and support processes, and serve as a basis for documentation in the Management System

Note: this illustrates some selected templates and not the total PwC E&P Blueprint

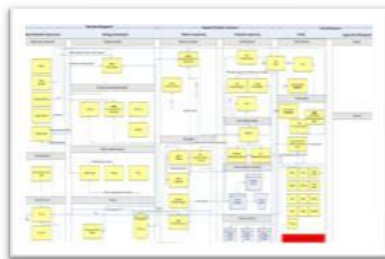
Example of E&P blueprint tools and deliverables (1/2)



Project report-out, with improvement suggestions. The project and other departments will receive a “report out” when completing As-Is, To-Be, Roles and Critical Interfaces. The report shows any issues identified with regards to activities and execution, and points out areas to be addressed for improvement

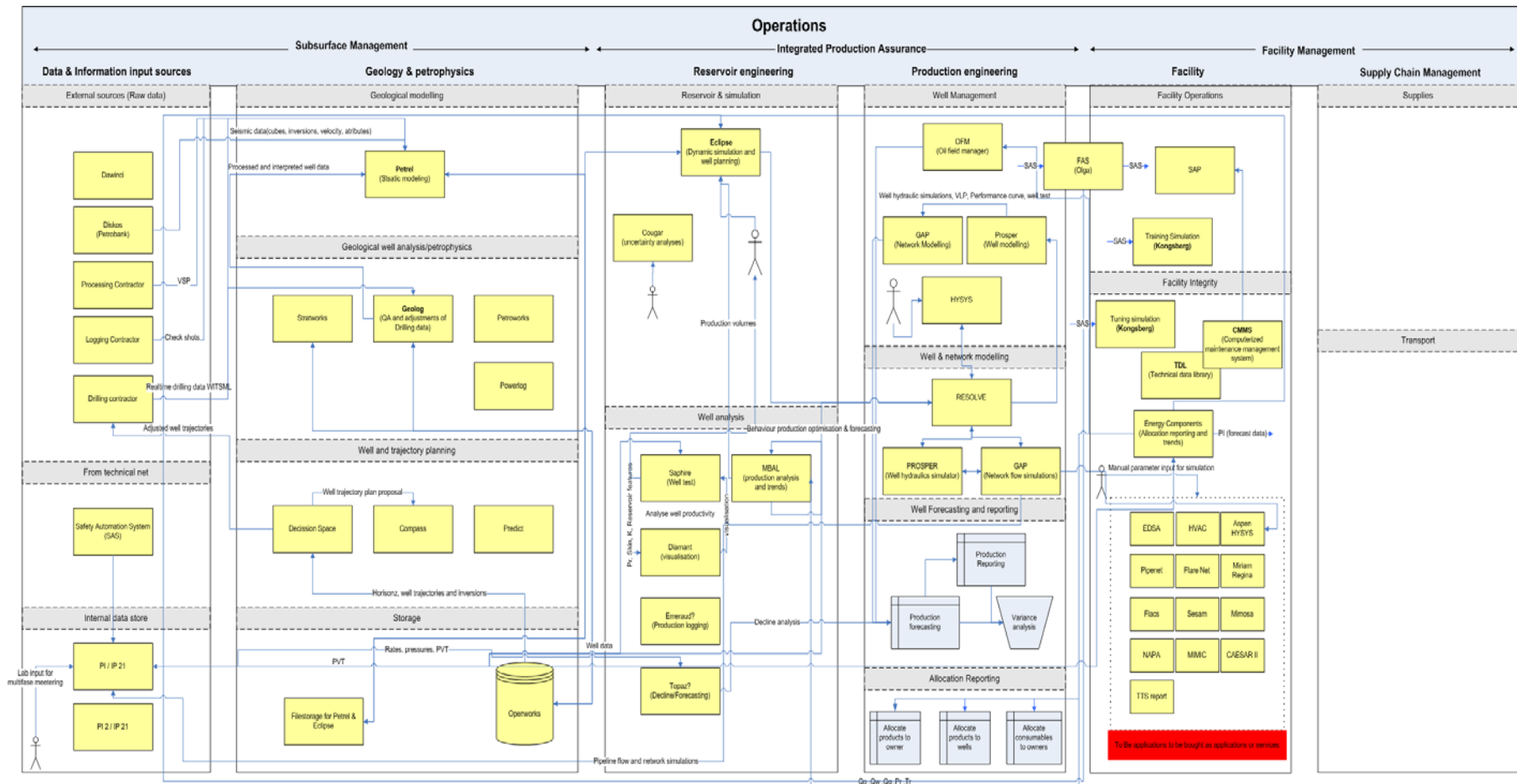


Generic Roles specific Job Descriptions: Following the Blueprint mapping of activities, roles and responsibilities connects with HR needs to establish Generic Role and Specific Job descriptions. Showing who does a job, and responsibility – must be matched by the expectations set in job positions – and influence recruiting



Information and Application model: Following the Blueprint approach allows for mapping of information objects and applications supporting the creation, reading, update and deletion of data (CRUD). Managing and controlling information is about business control – and compliance

Example: Mapping the IT landscape for a new operator



A well-selected portfolio of software will support the design of a project. Selecting a piece of software before knowing the design of your project is very risky. Most companies do not know their design and most IT solutions are considered to be a business failure for that reason

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