

Health Informatics

Core Concepts

What constitutes Business Process Management?

Core Concepts

- Defines characteristic of **process** vs. **project** repeatability vs. **uniqueness**.
- **Process** is a repetitive collection of interrelated tasks aimed at achieving a certain goal.
- **Project** is a unique endeavour with a beginning and an end undertaken to achieve a goal.



Management Discipline and Enabling Technologies

- Enabling technology is meaningless without the management disciplines and processes for exploiting the technology
- Vendors have created **application suites** which help enable organisations to better manage their business processes
 - **Tools** to visually design and model business processes
 - **Simulate** and **test** business processes, automate, control and measure business processes
 - Provide feedback and reporting on process performance
 - Some vendors have combined these into integrated business process management suites

Addresses End-To-End Work

- Business *functions* are typically defined by a group of activities related by a particular skill or goal such (i.e. sales, finance, manufacturing)
- Business *processes* focus on the end-to-end work, i.e., tasks and activities, across functional boundaries to deliver customer value
- Business *processes* have defined inputs and outputs and functions

Ongoing Management of Processes

- BPM involves a permanent ongoing organisational commitment to managing the organisations processes
- Includes:
 - Modelling
 - Analysis
 - Process design
 - Performance measurement

Modelling, Analysis, Design and Measurement of Processes

- Practice of BPM requires the measurement and supervision of process performance
 - Setting process **performance goals**
 - Measuring actual performance, the **efficiency** of the business processes (*“doing the thing right”*) – aims to achieving the task, as best result as possible, with optimal utilisation of resources (or minimal waste of resources).
 - Reviewing the **effectiveness** of business processes (*“doing the right thing”*) – aims to achieving the best and most correct result, irrespective of the utilised resources.
 - Providing information, insight and feedback to other primary activities such as process analysis, design and transformation
- Gather information at key points in the process to support decisions regarding cost or timing

Organisational Commitment

- Management of **end-to-end** business process crosses organisational boundaries
- New **roles** and **responsibilities** are introduced, such as process owners, designers and architects
- Individuals responsible for end-to-end process design must interact with **traditional functionally** based managers
- **New governance structures** need to be introduced which may change the way organisations **make decisions** and allocate resources
- Practice of BPM requires a significant **organisational commitment**: without organisational commitment, the practice and benefits of BPM is unlikely to mature within an organisation
- Without supporting **leadership**, values, beliefs and culture, BPM is unlikely to successfully take hold within an organisation

BPM Technology

- BPM is a **technology enabled** and supported management discipline
- Wide range of **technologies** available to support the planning, design, analysis, operation and monitoring of business processes
- Application suites available which help enable organisations to better manage their business processes
- BPM systems must be able to **integrate with legacy systems** in order to control work and get information or measure performance
- Common framework for how these technologies are deployed is most often referred to as a **Service Oriented Architecture (SOA)**

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BPM Components

What is Business Process Management made up of?

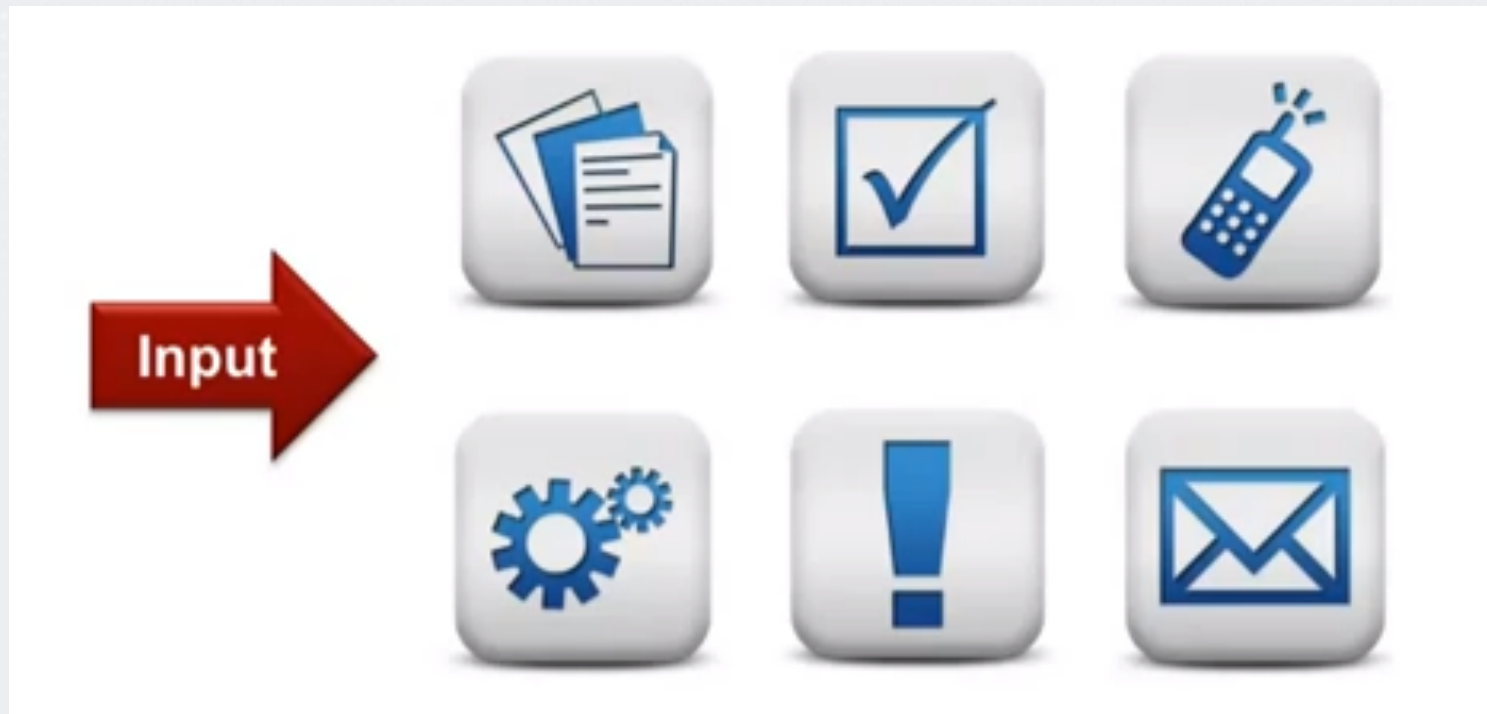
Its main components

BPM: Components

- A management approach to continuously improve processes and achieve organisational objectives through a set of methodologies and technologies
- People and processes are key components



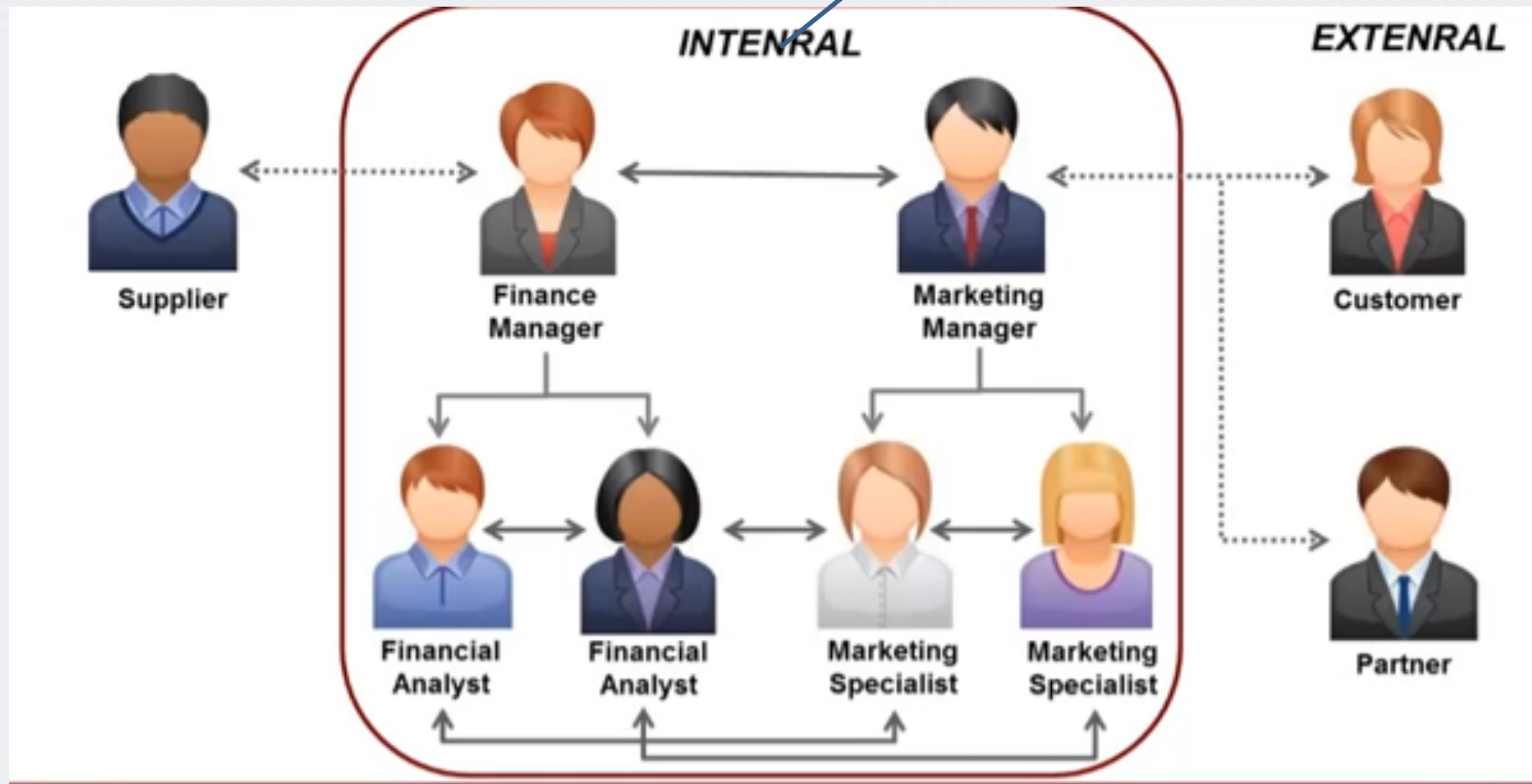
Input



- An input can be a form, a document, an image, an approval from a person (employee/customer/ manager can trigger an event), data, alert, mail from a person or a system.

Process Participants

From the same team project, but also cross-functional



Process Activities

- Types:
 - **Value Added** - contribute to the process output in a positive way
 - **Handoff** - pass control of the process to another department or organisation
 - **Control** - assure that the processes behave within desired tolerances or specify a validity checkpoint
- Examples:
 - Planning & strategy
 - Analysis
 - Design & modelling
 - Implementation
 - Monitoring & controlling
 - Refinement

Output



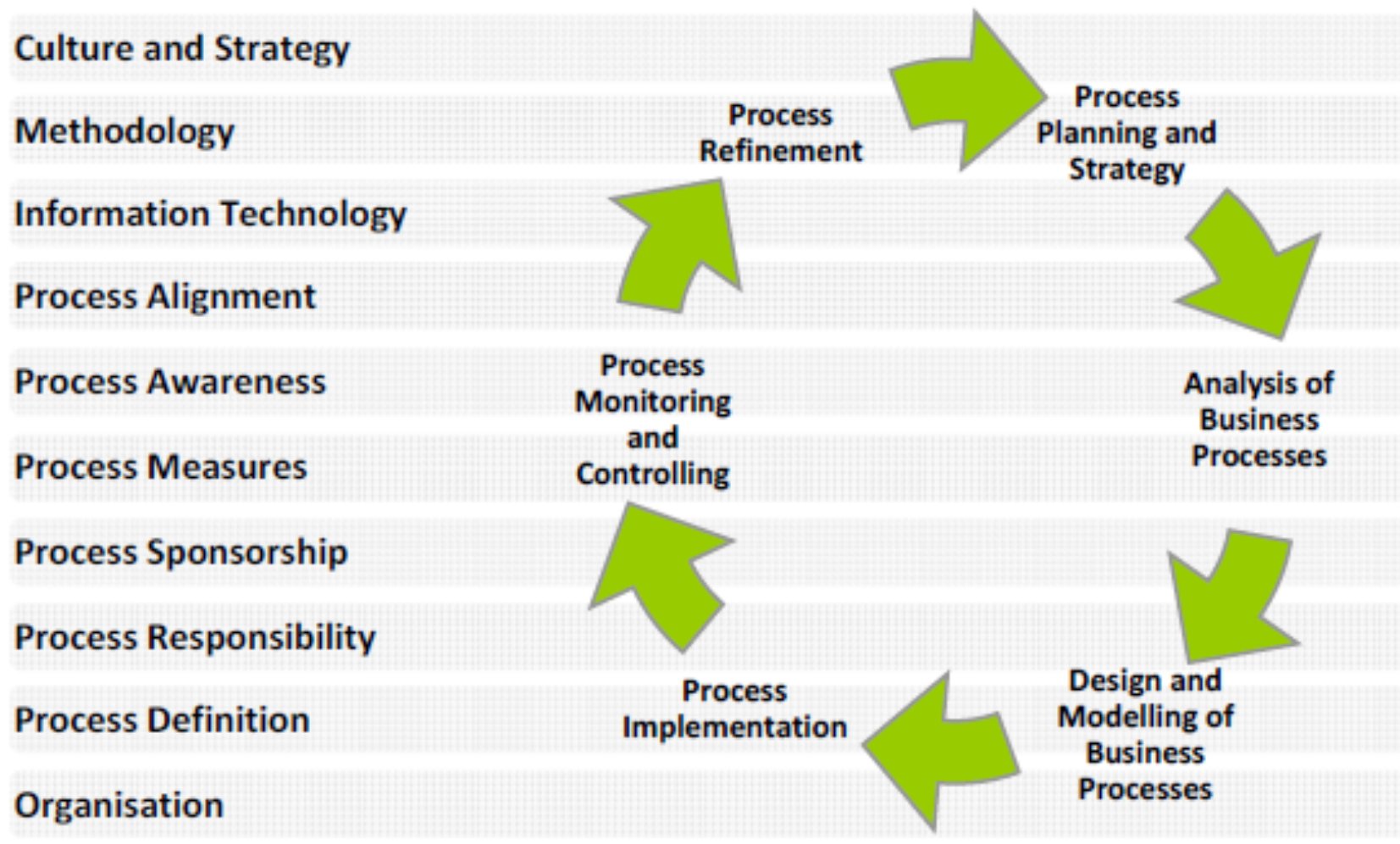
- Management dashboard, reports, phones, e-mail alerts from key participants and reviewers
- Good outcomes for participants and organisation
- Brings the process to an end

BPM Lifecycle

What does Business Process Management
function?

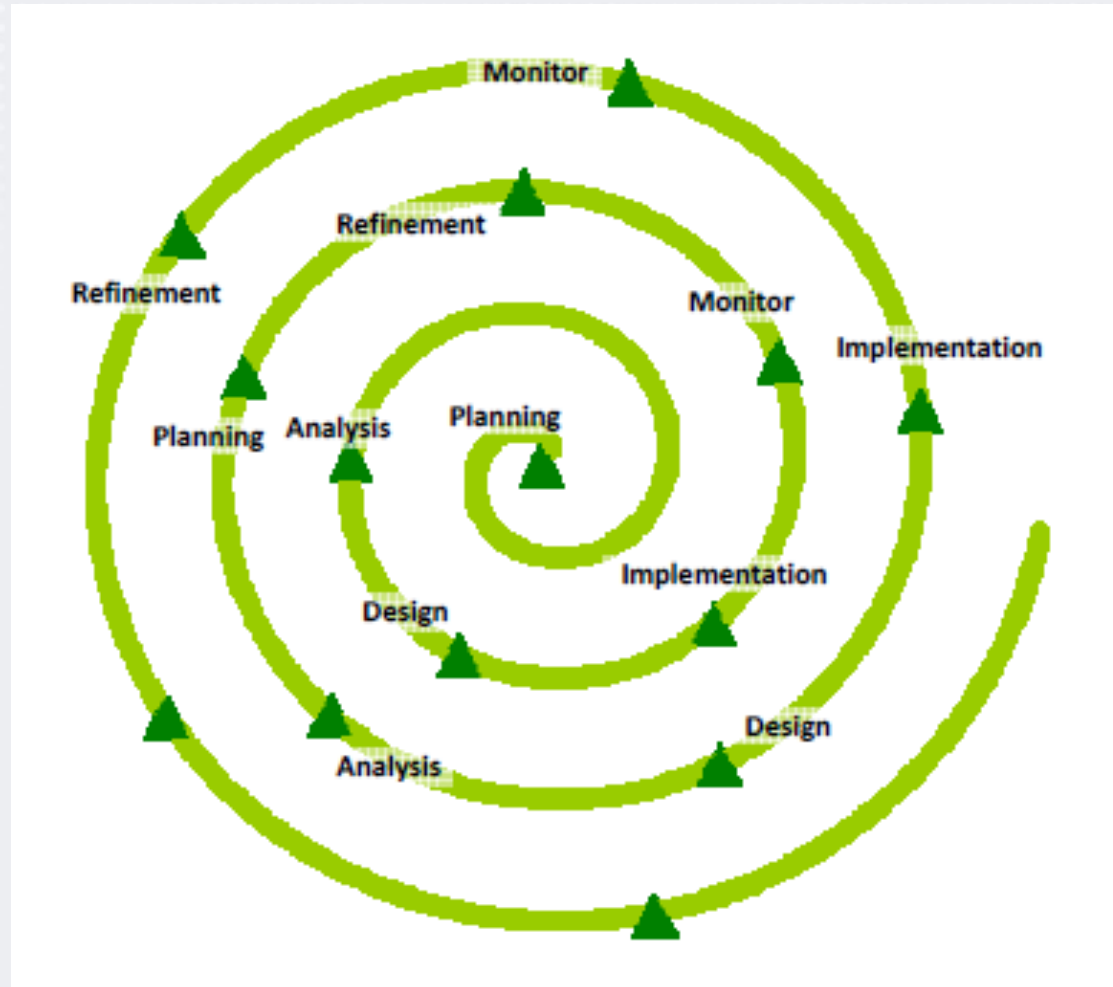
Its main processes and functions

BPM Lifecycle (1)



- The BPM activities are affected by several factors: leadership, values, culture and beliefs factors

BPM Lifecycle (2)



- Iterative, phased set of activities

Process Planning and Strategy

- Sets the strategy and direction for the BPM process
- Plan starts with an understanding of organisational strategies and goals
- Provides a foundation for a holistic BPM approach to ensure the alignment with organisational strategy and the integration of strategy, people, processes and systems across functional boundaries
- Identifies appropriate BPM organisational roles and responsibilities, executive sponsorship, goals and expected performances measures and methodologies

Analysis of Business Processes

- Takes information from strategic plans, process models, performance measurements, changes in the environment and other factors
- Then aims to understand the business processes in the context of the overall organisation

Design and Modelling of Business Processes

- Records the sequence of activities, including
 - the design of what work is performed,
 - at what time,
 - in what location,
 - by what actors
- Defines the process “to- be” and answers
 - the what, when, where, who and how questions of how end-to-end work is executed
- Defines management controls and measures for compliance and performance measurement

Process Monitoring and Controlling

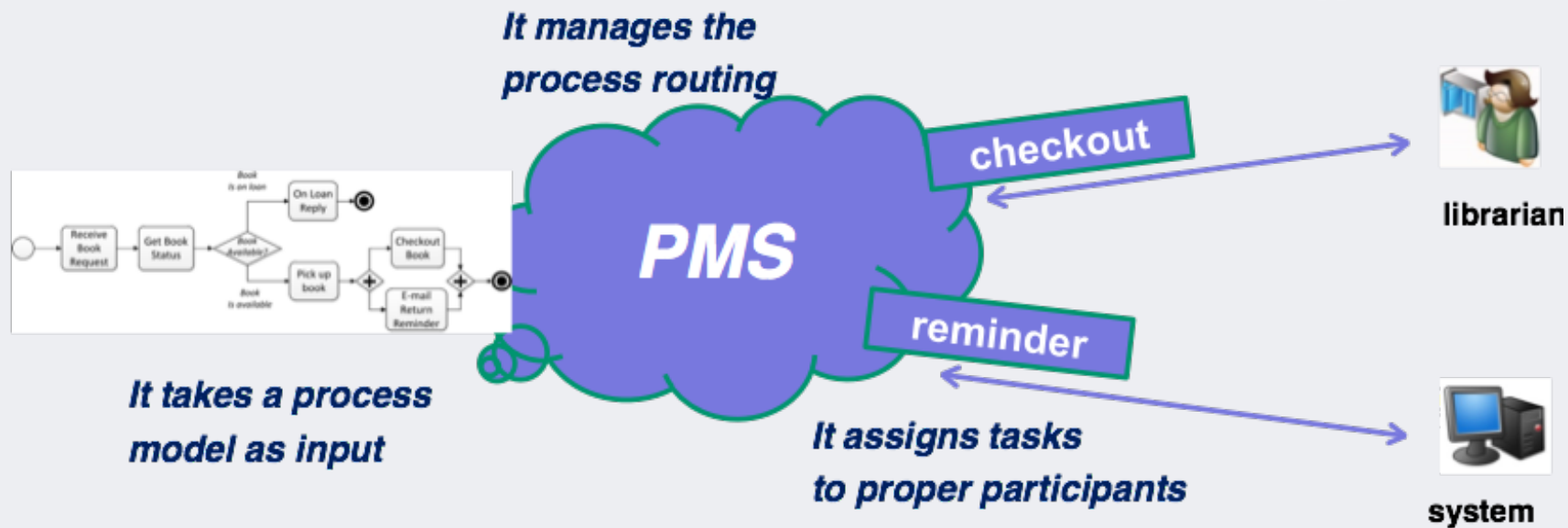
- Continuous measuring and monitoring of business processes provides the information necessary to adjust resources in order to meet process objectives
- Measuring and monitoring also provides critical process performance information through key measurements related to goals and value to the organisation
- Analysis of process performance information can result in improvement, redesign or reengineering activities

Process Refinement

- Implements the output of the iterative analysis and design cycle
- Addresses organisational change management challenges
- Aimed at continuous improvement and process optimisation

Process Management System

- **Process Management System (PMS)** : *“A PMS is a generic software system that is driven by explicit process representations to coordinate the enactment of business processes”*. (Weske, 2012)
- A PMS is driven by a specific business process model.



BPI vs BPM

BPI (Business Process Improvement)

**One-time exercise
Fix or design process**

Vs.

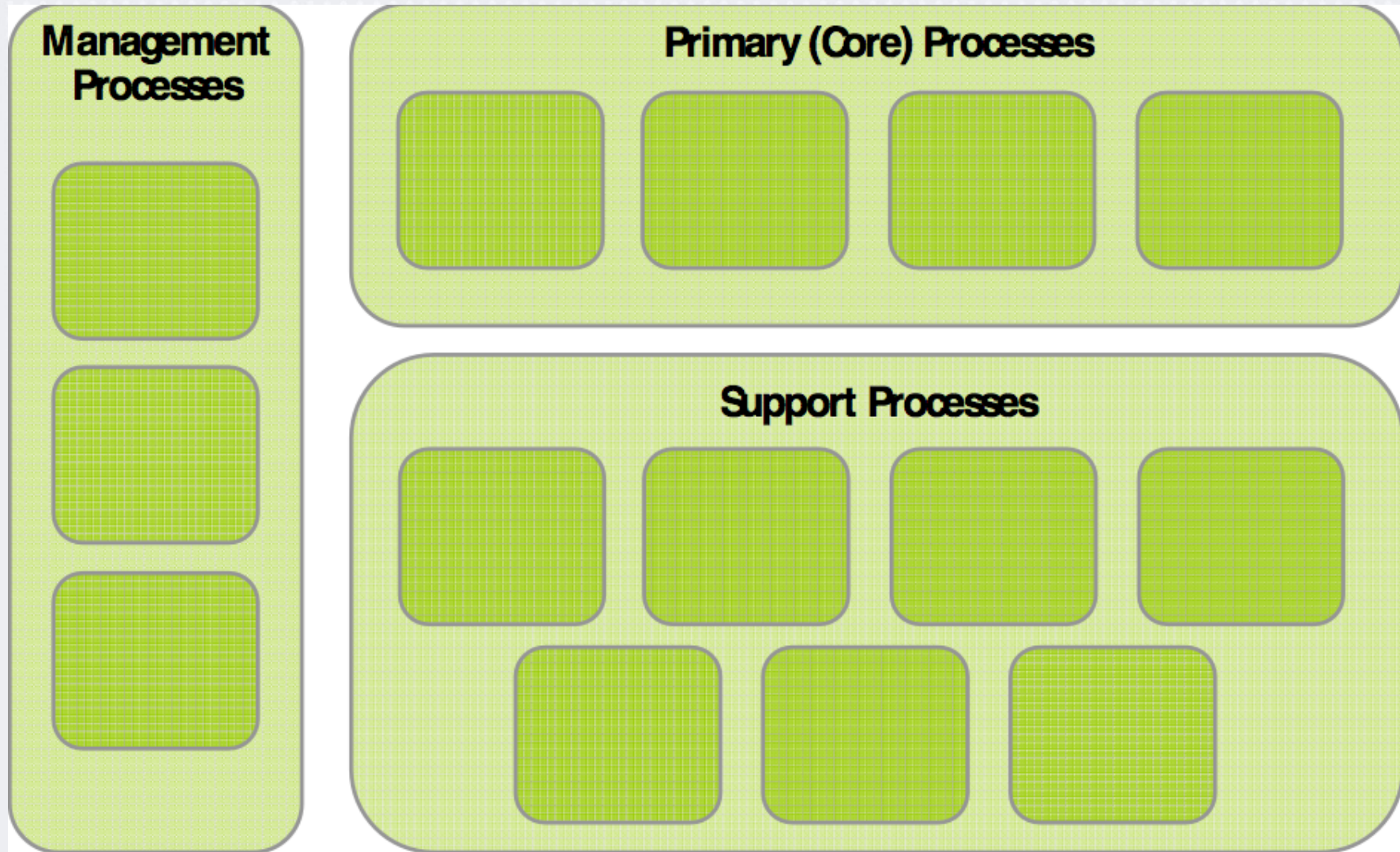
BPM (Business Process Management)

Ongoing and continuous

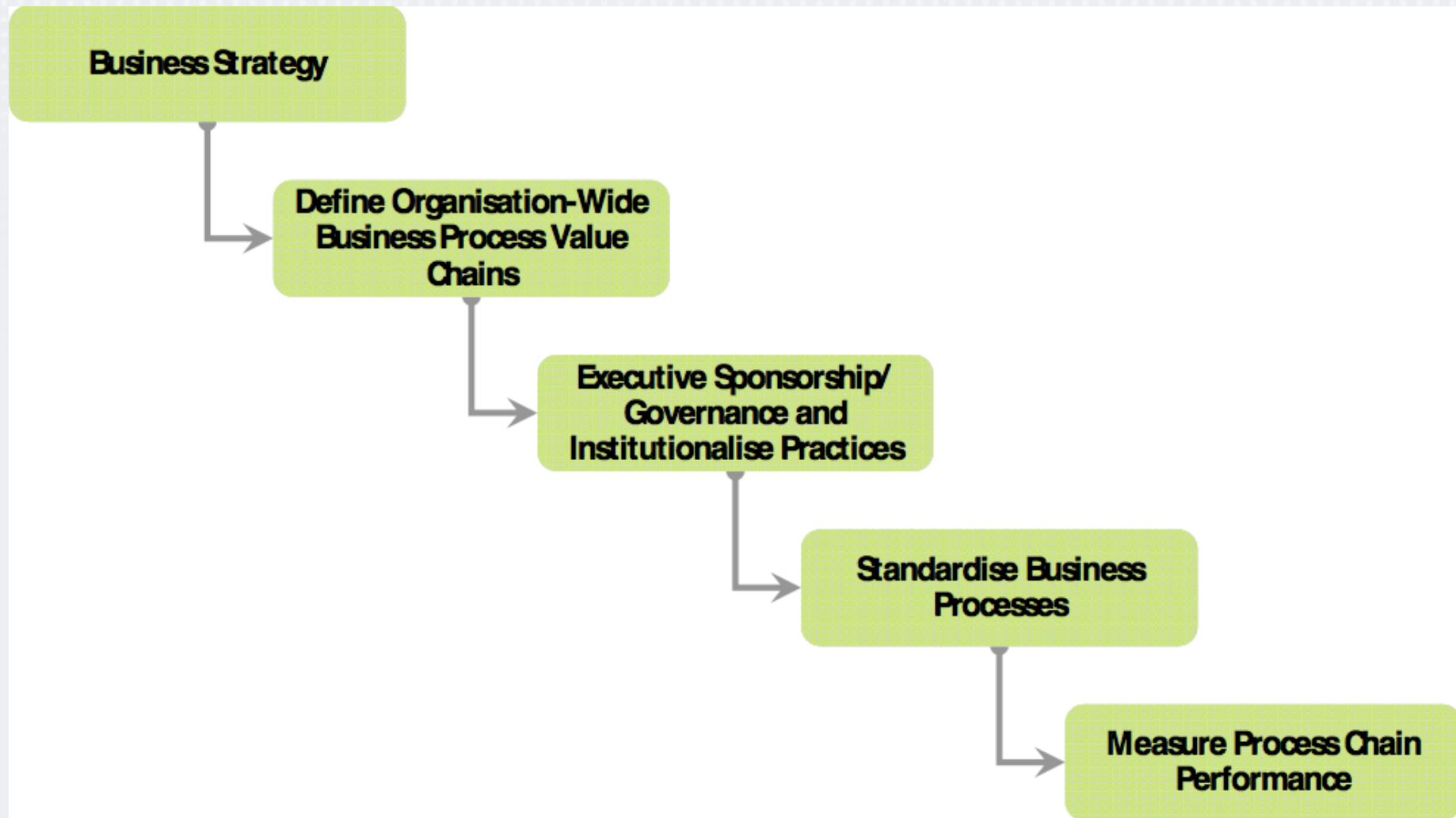
BPM Activities

- Involves a continual ongoing managing of organisation processes
- Includes
 - Modelling
 - Analysis
 - Process design
 - Performance measurement
 - Process transformation
 - feedback loop to ensure business processes are aligned to an organisation strategy and performing to expectations

Type of Processes



BPM Critical Success Factors



References

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Thanks!
Any questions?

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