SERVICE TRANSITION

ITIL - Part 3

CONNECTING BUSINESS & TECHNOLOGY

DEVOTEAM SOLUTIONS

AGENDA

- Introduction do ITIL
- Service Operation
- Service Transition
  - Change Management
  - Release Management
  - Configuration Management
  - Knowledge management
- Service Design
- Service Strategy

SERVICE TRANSITION

- A Service Transition includes the management and co-ordination of processes, systems and functions required for the building, testing and deployment of a ‘release’ into production, and establish the service specified in the customer and stakeholder environment.

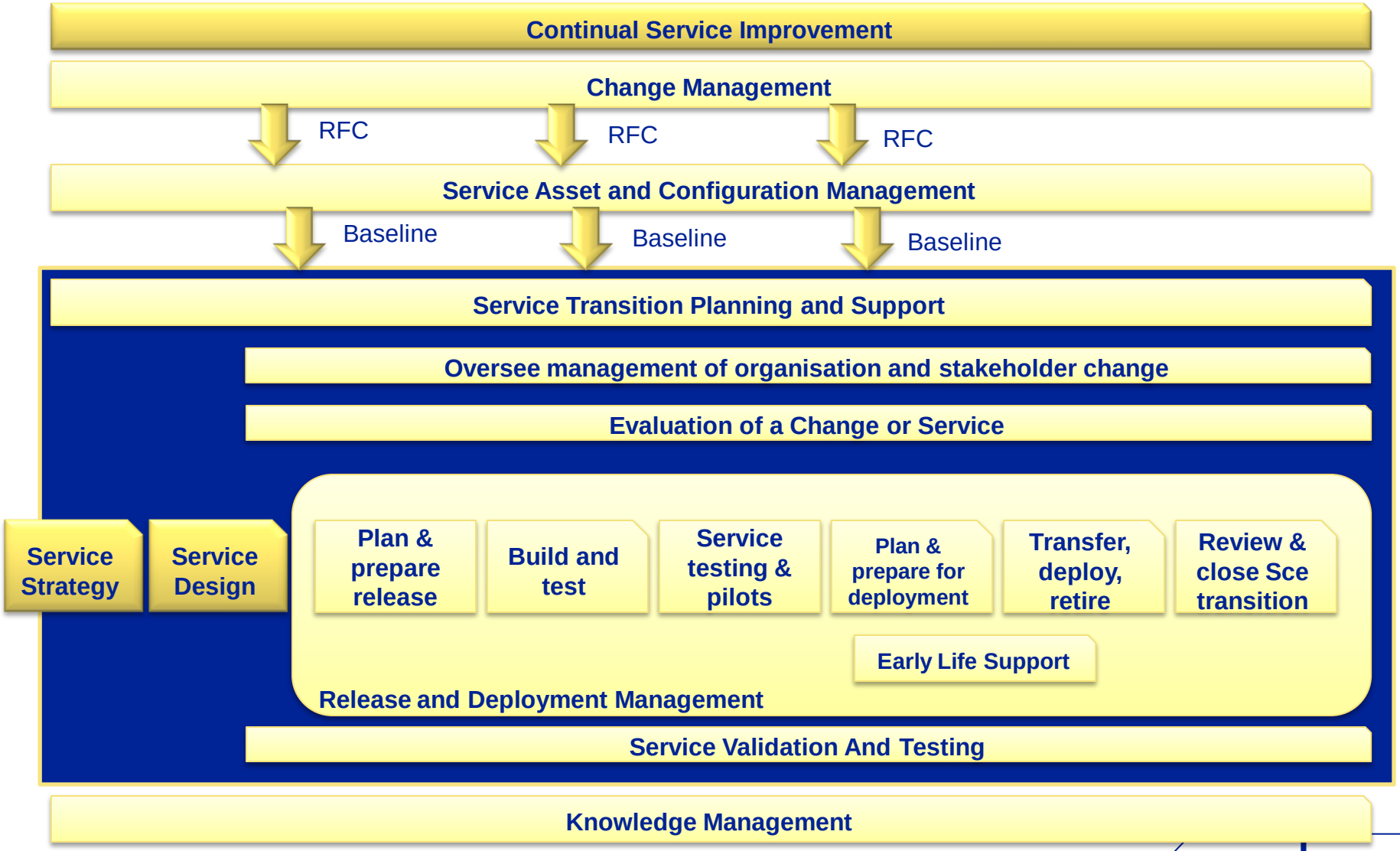
SERVICE TRANSITION

- Taking the design and transitioning the Service into operations – focused on Service
- Delivering in the actual circumstances
- Practices to make it easier for to adopt and manage change:
  - Standardize transition activities
  - Maintain the integrity of configurations as they evolve
  - Expedite effective decisions
  - Ensure new / changed services will be deployable, manageable, maintainable, cost-effective

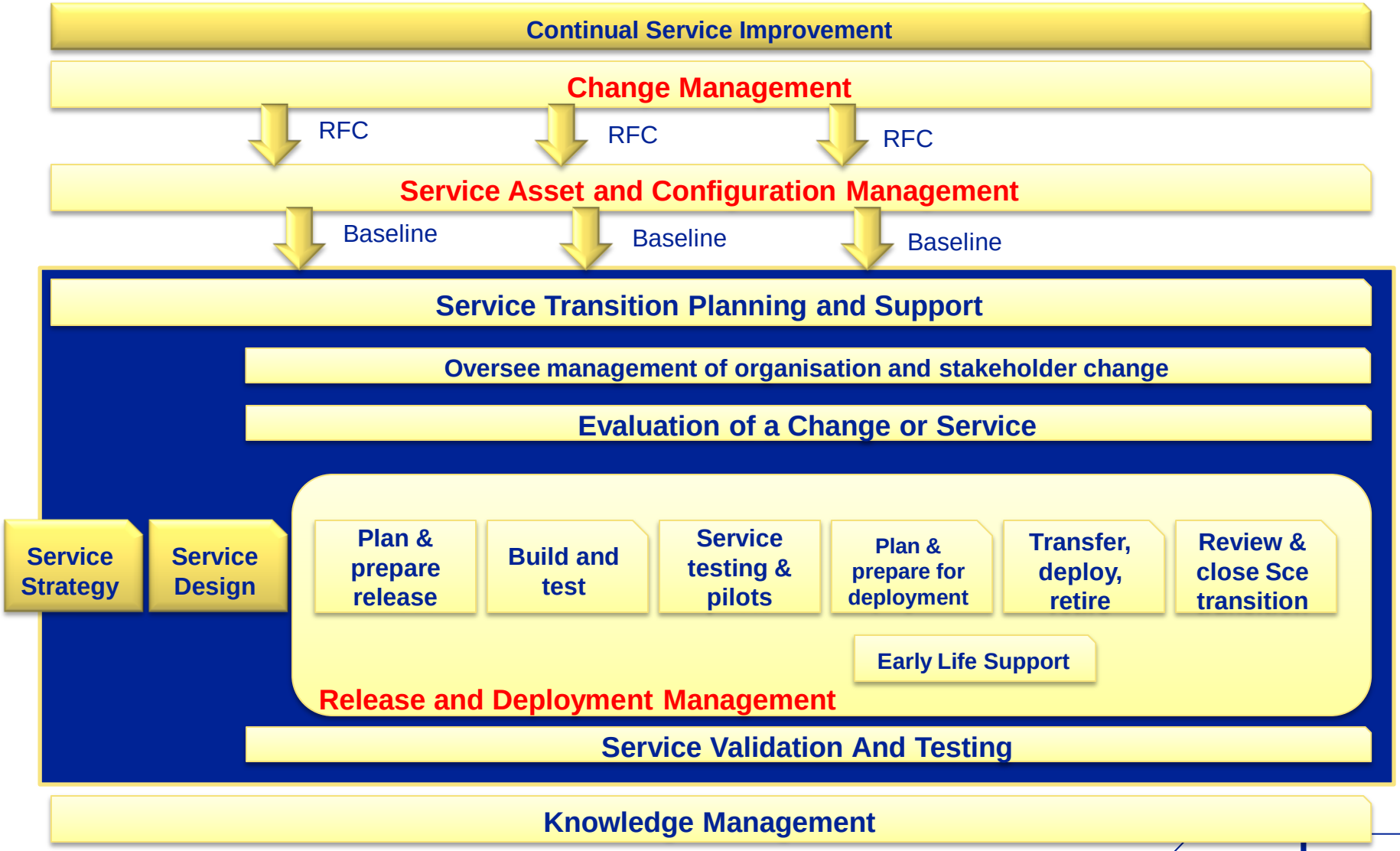
SERVICE TRANSITION

- The purpose of Service Transition is to:
  - Plan and manage the capacity and resources required to package, build, test and deploy a release into production and establish the service specified in the customer and stakeholder requirements
  - Provide a consistent and rigorous framework for evaluating the service capability and risk profile before a new or changed service is released or deployed
  - Establish and maintain the integrity of all identified service assets and configurations as they evolve through the Service Transition stage
  - Provide good-quality knowledge and information so that change, Release and Deployment Management can expedite effective decisions about promoting a release through the test environments and into production
  - Provide efficient repeatable build and installation mechanisms that can be used to deploy releases to the test and production environments and be rebuilt if required to restore service
  - Ensure that the service can be managed, operated and supported in accordance with the requirements and constraints specified within the Service Design.

SERVICE TRANSITION SCOPE



SERVICE TRANSITION PROCESSES

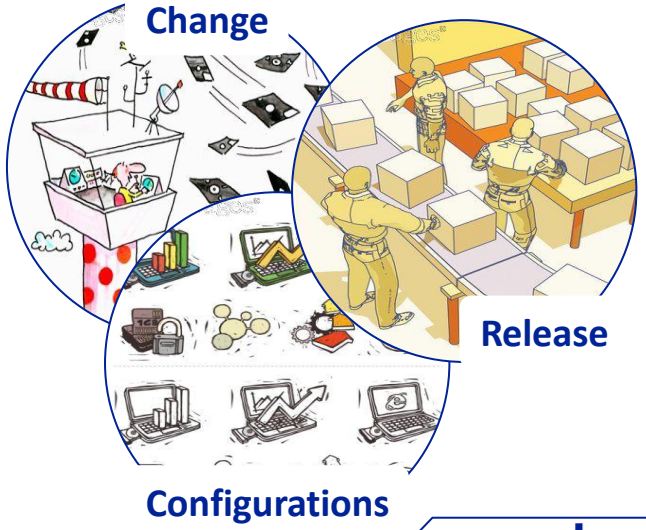


CHANGE + CONFIGURATION + RELEASE

- Extract of « ITILv3 – Service Transition » -

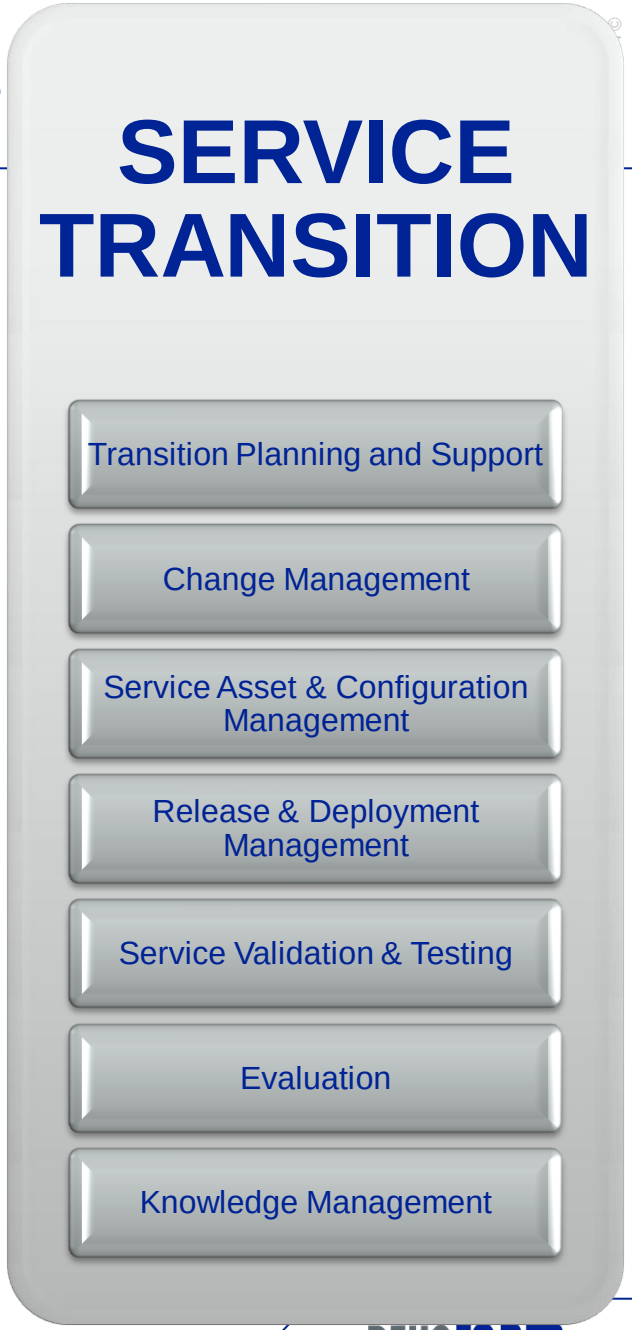
> “The relationship with change and release and deployment is synergistic, with these processes benefiting greatly from a single coordinated planning approach. Configuration control is synonymous with change control – understanding and capturing updates to the infrastructure and services.”

- The 3 main processes (and the processes owners) could be shared in a central function.

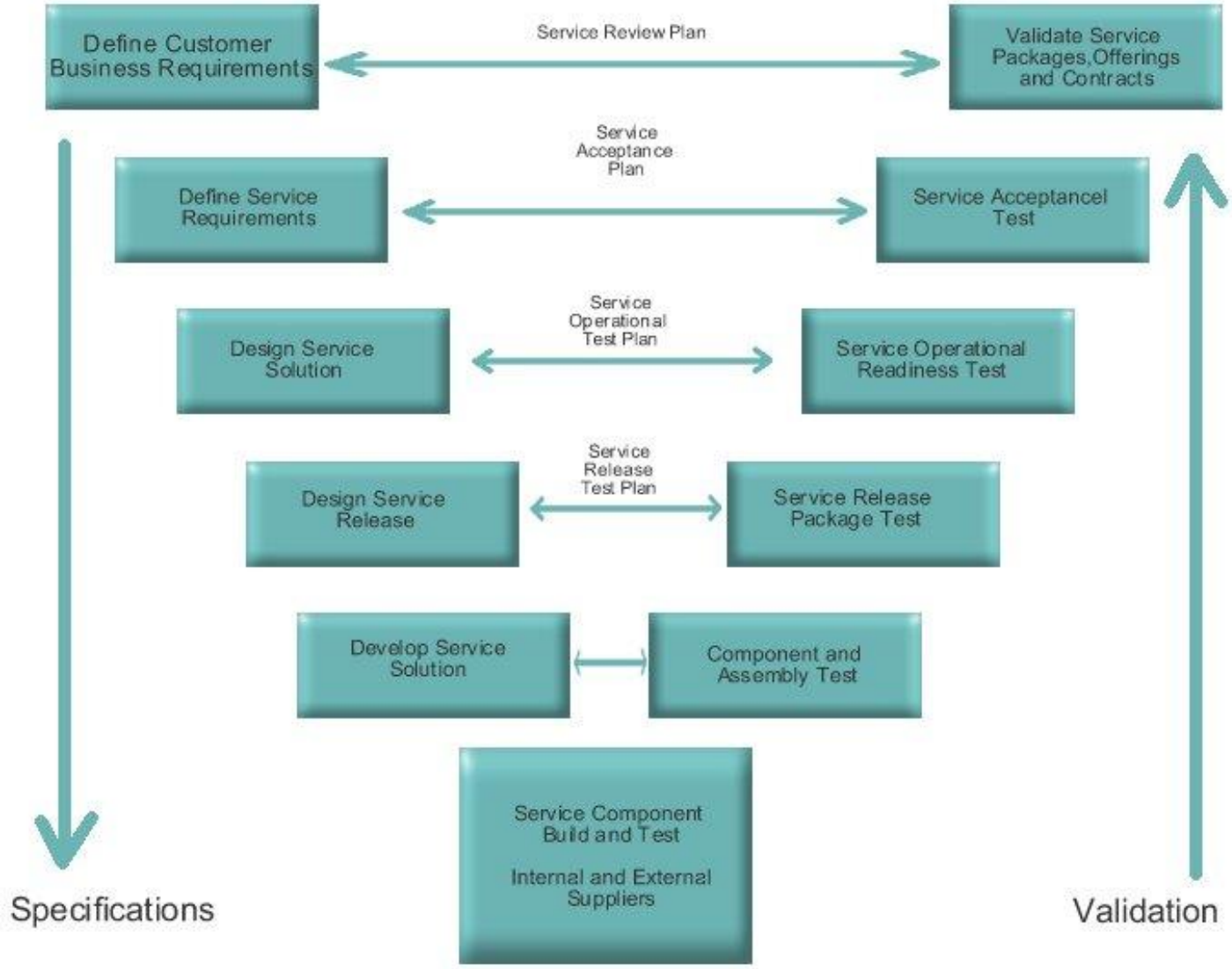


SERVICE TRANSITION PROCESSES

- Service Transition Planning And Support
- Change Management
- Service Asset & Configuration Management
- Release and Deployment Management
- Service Validation And Testing
- Evaluation
- Knowledge Management



SERVICE TRANSITION KEY CONCEPTS

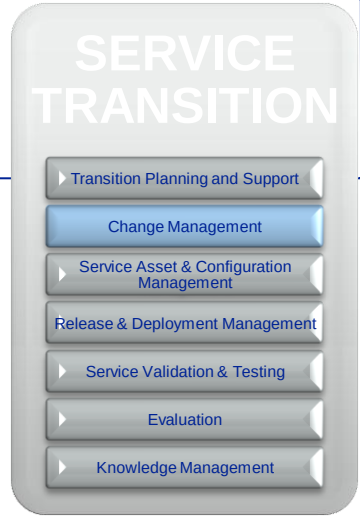


SERVICE TRANSITION

“

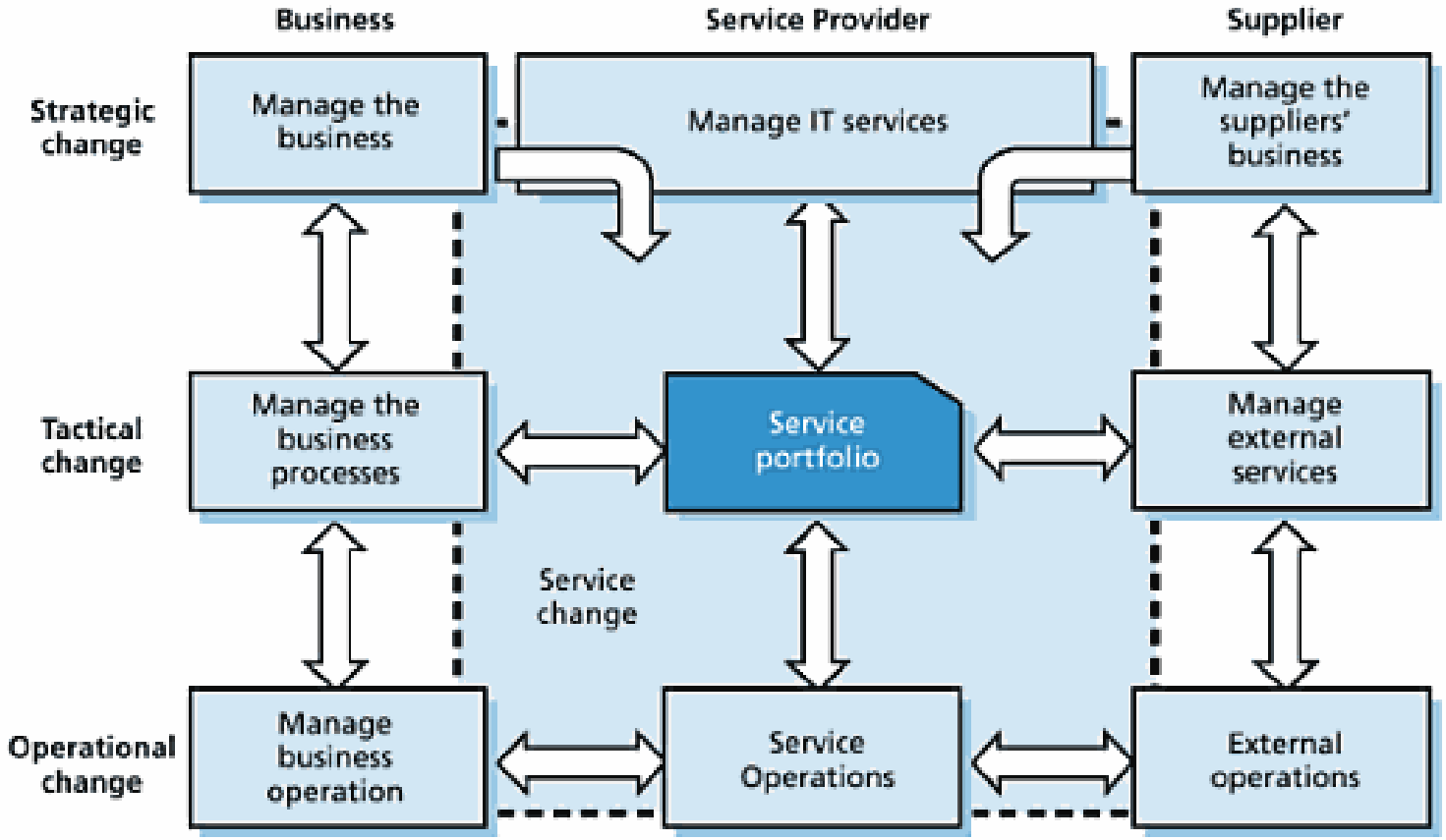
CHANGE MANAGEMENT

CHANGE MANAGEMENT



- What is a Change?
  - Move from a controlled state to another controlled state
- What's a Service Change?
  - Adding, modification or removal of authorized, planned or supported service or service component and its associated documentation.
- RFC
  - Request for Change: Entry point for any change in the Change Management Process

CHANGE MANAGEMENT SCOPE



CHANGE MANAGEMENT

- Objectives:
  - Respond to changing business requirements
  - Minimize impact of implementing changes
  - Optimize business risk
  - Implement changes successfully
  - Implement changes in times that meet business needs
  - Use standard processes
  - Record all changes

CHANGE MANAGEMENT

- Value to the business:
  - Prioritizing and responding to requests
  - Implementing changes in required times
  - Meet agreed service requirements while optimizing costs
  - Reducing failing changes and rework
  - Correctly estimating quality, time and cost
  - Assessing and managing risks
  - Managing staff time

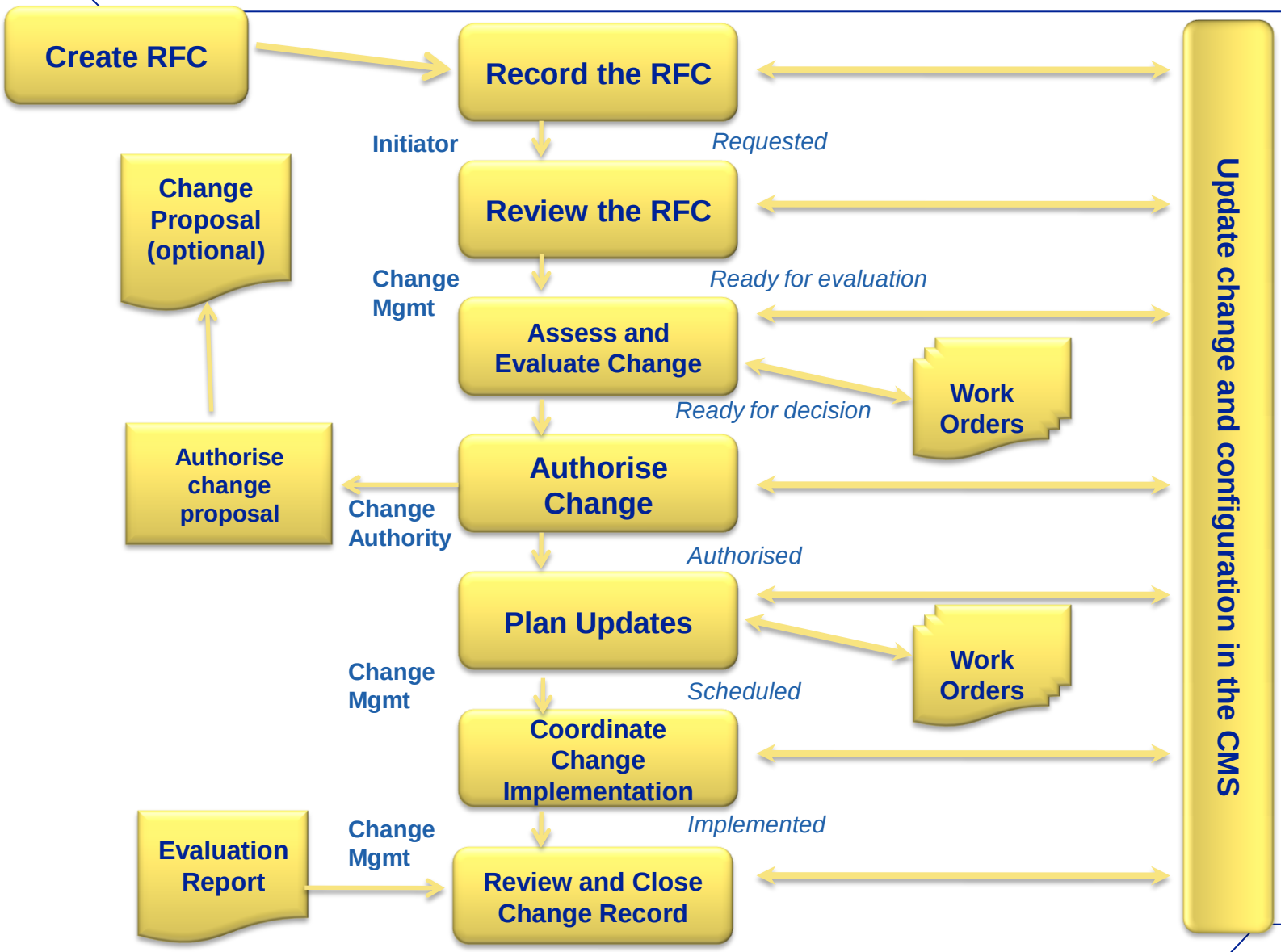
CHANGE MANAGEMENT CONCEPTS

- Change Types
- Types are specific to the organization
- Type determines what assessment is required
- Standard Changes
  - Pre-authorized with an established procedure
- Emergency Changes
  - Business criticality shows there is no sufficient time for normal handling
  - Should use normal process but speeded up

CHANGE MANAGEMENT CONCEPTS

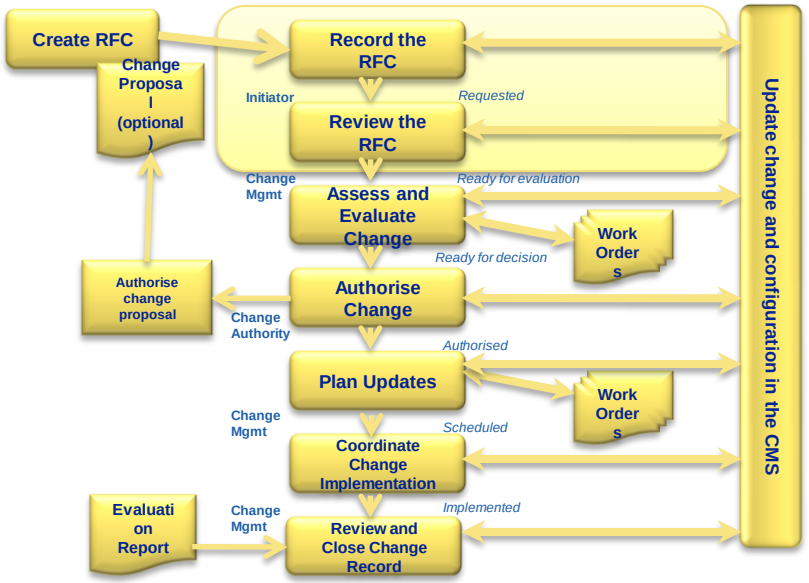
- Service change
  - ‘The addition, modification or removal of authorized, planned or supported service or service component and its associated documentation.’
- Change, configuration, release and deployment:
  - Should be planned together
  - Should have coordinated implementation
- Remediation plans:
  - Every change should have a backout plan
  - Sometimes a change cannot be backed out
    - But you should still have a plan – what to do!

CHANGE ACTIVITIES



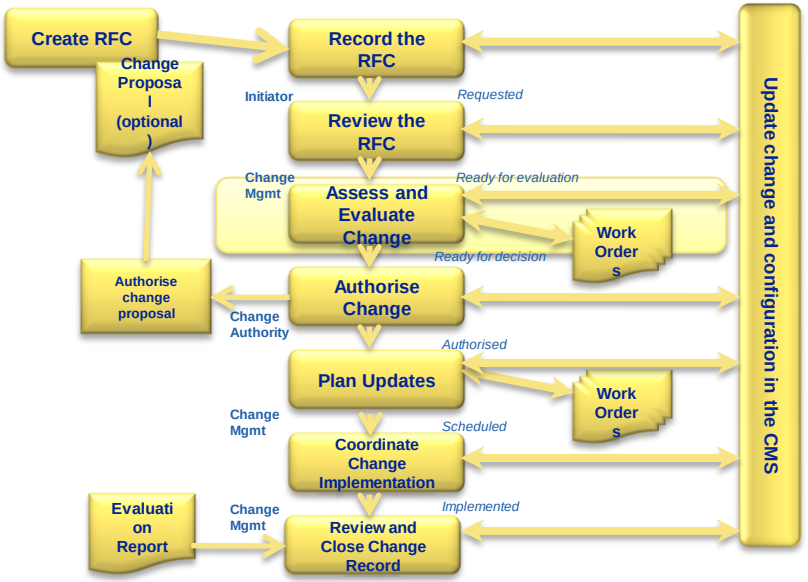
CHANGE ACTIVITIES

- Raising and Recording:
  - Initiator Closed List?
- Logging and Filtering:
  - Procedure for documenting RFCs to be decided
  - Reference to Problem record if linked to
  - Change Type 1st assessment
  - Filtering decision



CHANGE ACTIVITIES

- Assess and Evaluate:
  - Risk Categorization
  - Evaluation of the Change
  - Allocation of priorities
  - Change planning and scheduling
  - Assessing remediation
- Get advice from a CAB

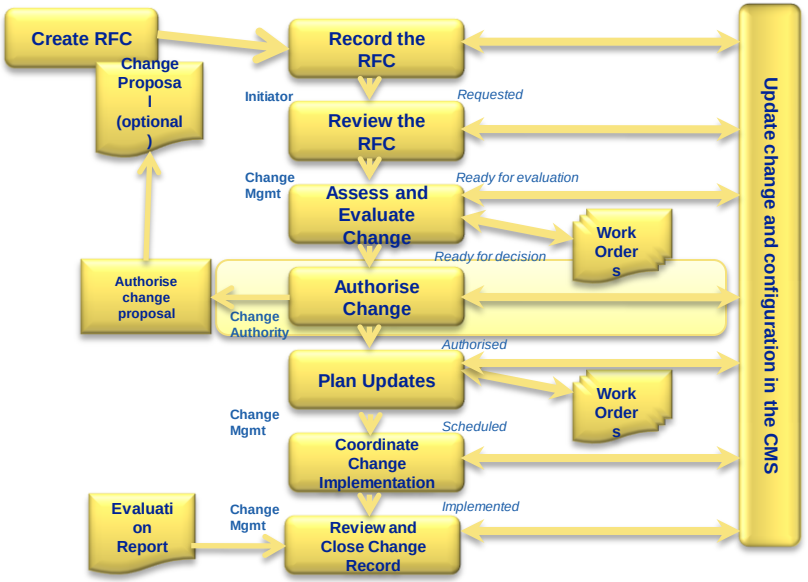


CHANGE MANAGEMENT 7 RS

- Who **RAISED** the change?
- What is the **REASON** for the change?
- What is the **RETURN** required for the change?
- What are the **RISKS** involved in the change?
- What **RESOURCES** are required to deliver the change?
- Who is **RESPONSIBLE** for the build, test and implementation of the change?
- What is the **RELATIONSHIP** between this change and other changes?

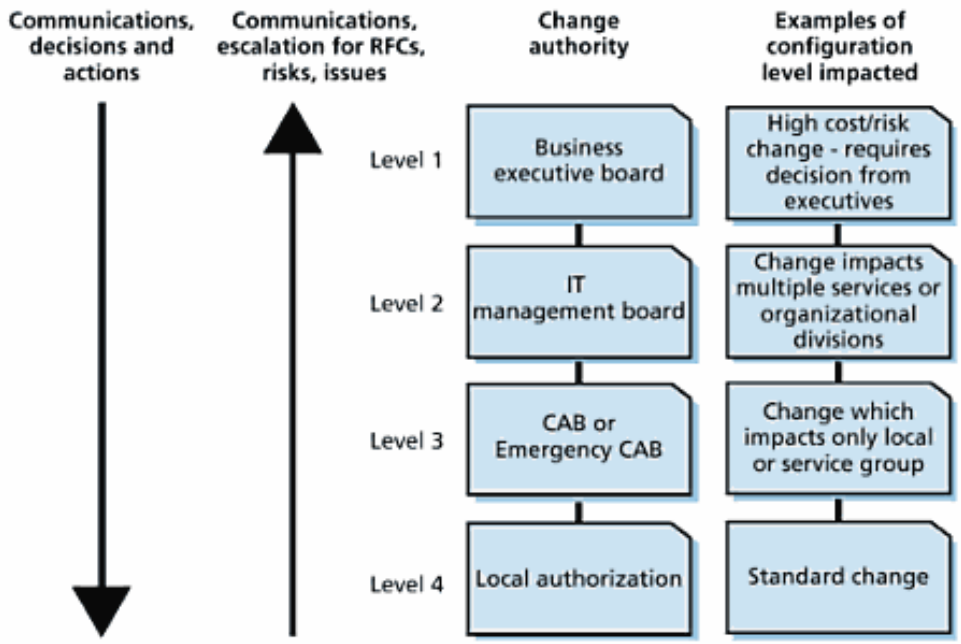
CHANGE ACTIVITIES

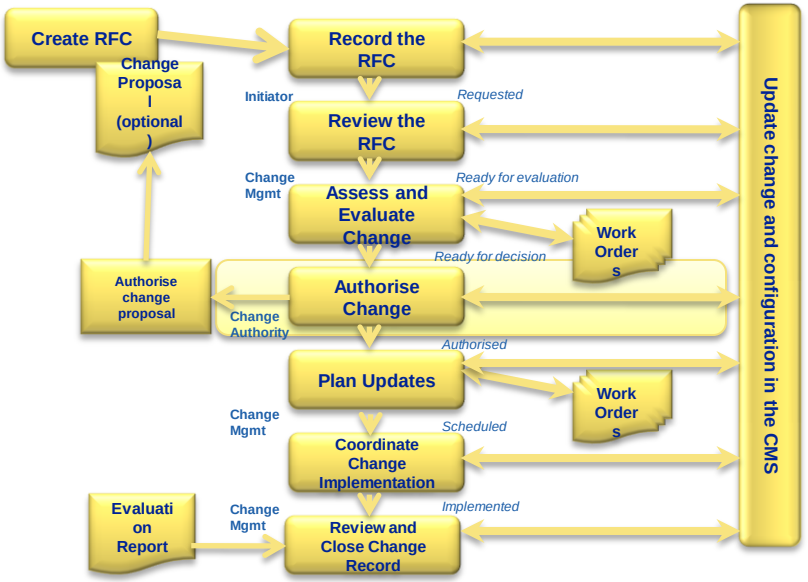
- Authorize the Change:
- Change Authority: a role, a person, or a group of people making the decision
- May be delegated according to:
  - Anticipated business risk
  - Financial implications
  - Scope of the change



CHANGE ACTIVITIES

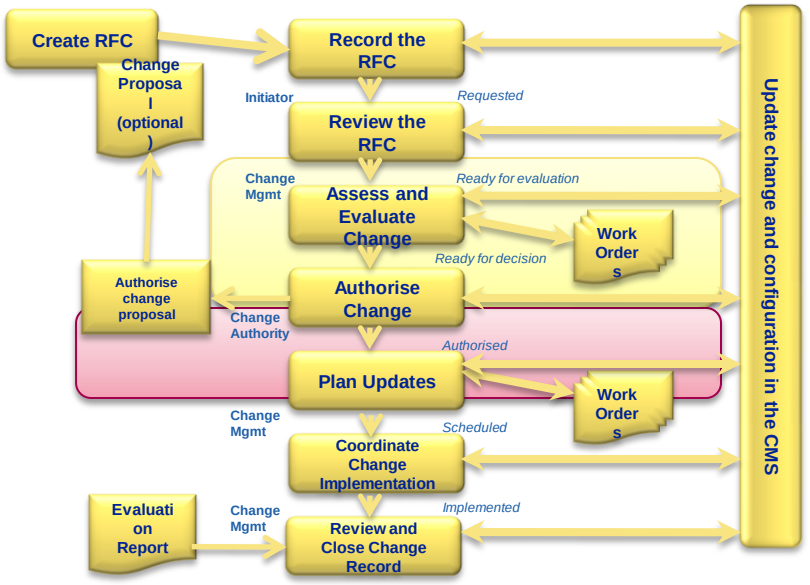
Authorization Models





CHANGE ACTIVITIES

- Coordinate Change Implementation
  - RFCs splited into work orders for change building
  - Ensure changes are planned (FSC, SOP) and built (Release) for an on-time implementation
- Review And Close Change Record
  - PIR (Post Implementation Review)



CHANGE MANAGEMENT ROLES

- Change Manager:
  - Ensures that the process is followed
  - Usually authorizes minor changes
  - Coordinates and runs CABs meetings / actions
  - Produces change schedule
  - Coordinates change / build / implementation
  - Reviews / closes changes

CHANGE MANAGEMENT ROLES

- Change Advisory Board
  - Supports the Change Manager
  - Consulted on Significant Changes
  - Composition may vary, but Release & Deployment Manager should be in
- Emergency CAB (ECAB, former CAB/EC)
  - Subset of the standard CAB
  - Membership closely depends on specifics

CHANGE MANAGEMENT KEY METRICS EXAMPLES

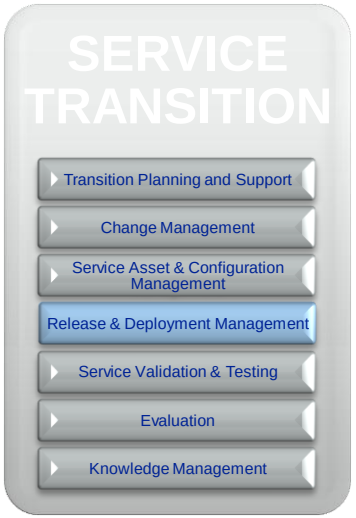
- Compliance
  - Reduction in unauthorised changes
  - Reduction in emergency changes
- Effectiveness
  - % of changes meeting requirements
  - Reduction in disruptions, defects, rework
  - Reduction in changes failed, rollbacks
- Efficiency
  - Benefits (value compared to cost)
  - Average time to implement (by urgency/priority/type)
  - % accuracy in charge estimates

SERVICE TRANSITION

RELEASE MANAGEMENT

RELEASE AND DEPLOYMENT MANAGEMENT

- Release and Deployment Management aims to build, test and deliver the capability to provide the services specified by Service Design and that will accomplish the stakeholders' requirements and deliver the intended objectives.



RELEASE AND DEPLOYMENT MANAGEMENT

- Objectives / Value
- Clear, comprehensive release & deployment plans
  - Supporting customer and business change projects
- Release packages that can be built, installed, tested and deployed Efficiently, successfully and on schedule
  - With minimal impact on production services, operations and support teams
  - Enabling new or changed services to deliver agreed service requirements
- Skills and knowledge transfer to enable
  - Customers and users to optimise service usage
  - Operations and support to run and support the service

RELEASE AND DEPLOYMENT CONCEPTS

- Release: one or many changes packaged and tested together for release at the same time
- Release Unit:
  - CIs that are normally released together
  - Typically includes sufficient components to perform a useful function (eg. fully configured desktop with Documentum)
  - Consider: ease & amount of charge to deploy, resources needed to build, test & deploy, interfaces

RELEASE AND DEPLOYMENT CONCEPTS

- Deployment Options:
- Big Bang vs. Phased Approach
  - Phased approach can be by users, locations, functionality

- Push vs. Pull Deployment
- Automated vs. Manual Deployment

- Release Package
  - Single Release or many related Releases
  - Can include hardware, software, utility, warranty, documentation, training…

RELEASE MANAGEMENT – ACTIVITIES (1)

- Release planning
  - gaining consensus on the Release contents
  - agreeing to the phasing over time and by geographical location, business unit and customers
  - producing a high-level Release schedule
  - conducting site surveys to assess existing hardware and software in use
  - planning resource levels (including staff overtime)
  - agreeing on roles and responsibilities
  - obtaining detailed quotes and negotiating with suppliers for new hardware, software or installation services
  - producing back-out plans
  - developing a quality plan for the Release
  - planning acceptance of support groups and the Customer.

RELEASE MANAGEMENT – ACTIVITIES (2)

- Designing, building and configuring a release
  - Instructions to assemble a Release, write automated installation routines, tests plans… are a part of the Release (as a Ci)
  - All software, parameters, test data, run-time… should be under Configuration Management control
  - Design, build and configure outputs:
    - Build instructions (sequence of operations)
    - Purchase orders, licences and warranties for software and hardware
    - Automated installation scripts and associated test plans
    - Master copies of the installation media and installation instructions (stored in the DSL)
    - Back-out procedures.

RELEASE MANAGEMENT – ACTIVITIES (3)

- Release acceptance
  - Performed by independent business staff (function of the final system)
  - Verify change procedures by IT staff (installation procedures)
  - Tested back-out procedures
  - Outputs of release acceptance
    - tested installation procedures
    - tested Release components
    - tested back-out procedures
    - test results and known defects
    - support documentation including the system overview; updated support procedures; diagnostic aids
    - operating and administration instructions
    - contingency and back-out plans
    - a training schedule for Service Management, support staff and Customers
    - acceptance test documentation signed by all relevant parties
    - authorisation to implement the Release (Change Management)

RELEASE MANAGEMENT – ACTIVITIES (3)

- Rollout planning
  - producing an exact, detailed timetable of events (resource plan)
  - listing the CIs to install and decommission (redundant equipment and software ?)
  - documenting an action plan by site
  - producing Release notes and communications to end users
  - planning communication
  - purchasing plans
  - acquiring hardware and software where (procedures to be followed for the secure storage prior to rollout and the mechanisms to trace the deployment during the implementation)
  - scheduling meetings for managing staff and groups involved in the Release

RELEASE MANAGEMENT – ACTIVITIES (4)

- Communication, preparation and training
  - Inform customer liaison staff and support staff (series of rollout meetings)
  - Training sessions
  - Problems during the rollout phase need to be communicated to all parties
  - publicise the release mechanism and the contraints to end users
  - Communication from release management and from service desk
- Distribution and installation
  - build environment => test environment => live environment
  - processes for procurement, storage, dispatch, receipt and disposal of goods
  - distributing software, checking that the Release is complete
  - bringing application software Releases into active use
  - updating the CMDB
  - perform a final acceptance test for the end user

RELEASE AND DEPLOYMENT ROLES

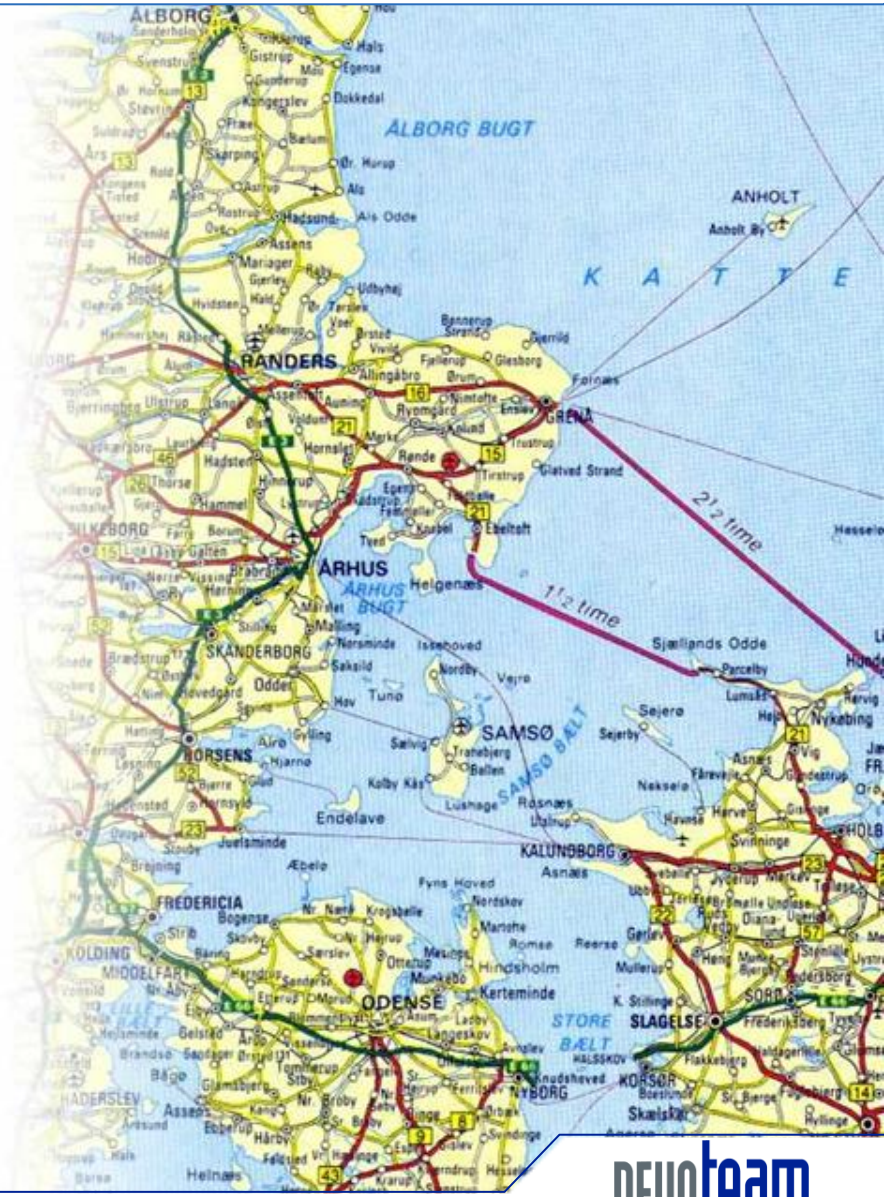
- Release Package and Build Manager
  - Establishes final release configuration
  - Builds final release
  - Tests final delivery prior to independent testing
  - Establishes and reports known errors and workarounds
  - Provides input to final implementation sign-off

RELEASE AND DEPLOYMENT ROLES

- Deployment Manager
  - Final physical delivery of the service implementation
  - Co-ordinates documentation and communications
  - Including training, service management and technical release notes
  - Plans deployment with Change, SKMS and SACM
  - Technical application guidance and support
  - Feedback on the effectiveness of the release
  - Records metrics for deployment to ensure it is performed within agreed SLAs

SERVICE TRANSITION

CONFIGURATION MANAGEMENT



SERVICE ASSET AND CONFIGURATION MANAGEMENT

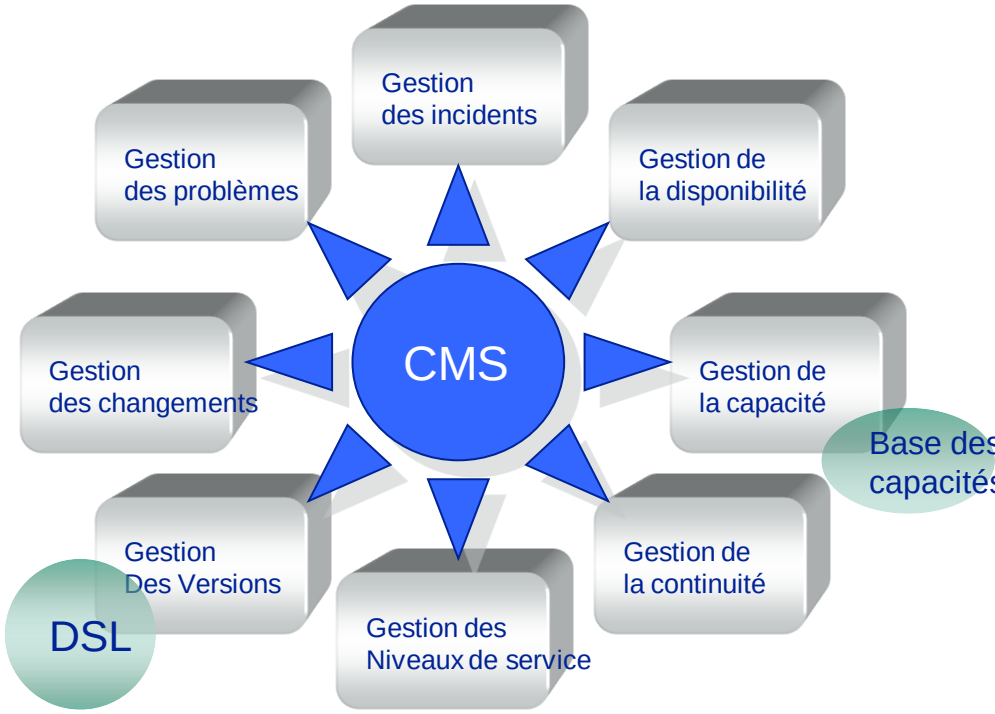
- SACM Objectives:
  - Protect integrity throughout the SA/CI/CA lifecycle
  - Provide accurate information to support business and service management
  - Establish and maintain a Configuration Management System as part of an overall SKMS

- SACM Scope:
  - Service Assets, Configuration Items and, where appropriate, Customer Assets

CMS

- « *Si vous avez une horloge dans votre maison, vous savez l'heure – mais dès que vous en avez deux, vous n'êtes plus sûr de rien.* » (Proverbe Danois). CMS must be the unique clock of all the processes.

- CMS profides a common and shared referential. CMS doesn't distribute information: each process could be autonomous.



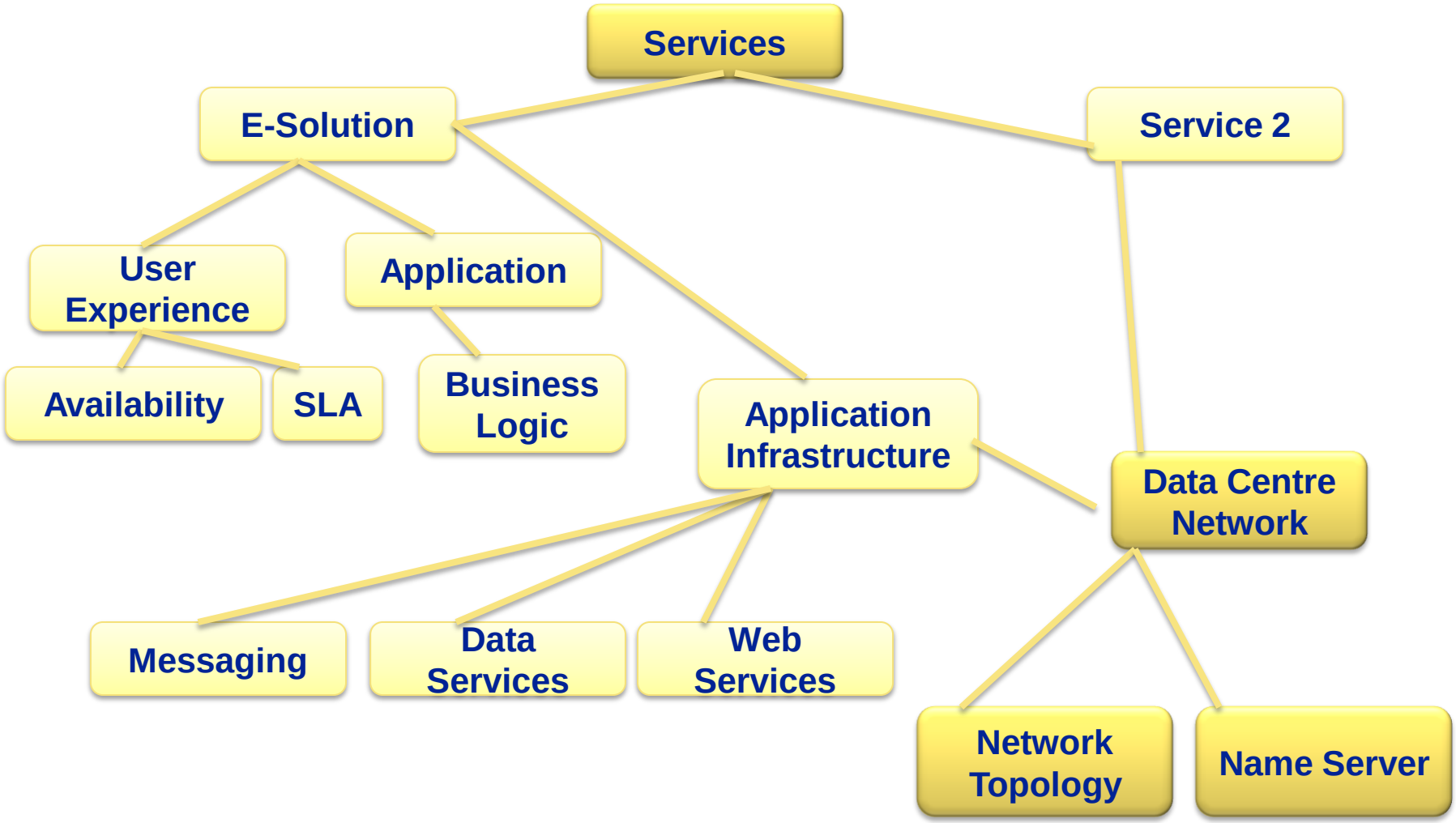
SACM CONCEPTS – CONFIGURATION ITEMS

- Configuration Items (CIs)
  - Anything that needs to be managed in order to deliver an IT Service
  - CI information is recorded in the Configuration Management System
  - CI information is maintained throughout its Lifecycle by Configuration Management
  - All CIs are subject to Change Management control
  - CIs typically include
    - IT Services, hardware, software, buildings, people and formal documentation such as Process documentation and SLAs.

SACM CONCEPTS

- Service Lifecycle CIs:
  - Business Cases, Plan, Design Package
- Service CIs:
  - Service Packages, Acceptance Criteria
  - Service Assets: management, organization, process, knowledge, people, information, applications, infrastructure, financial capital
- Organization CIs
- Internal / External CIs

SACM LOGICAL MODEL – HIERARCHY AND RELATIONSHIP BETWEEN CIS

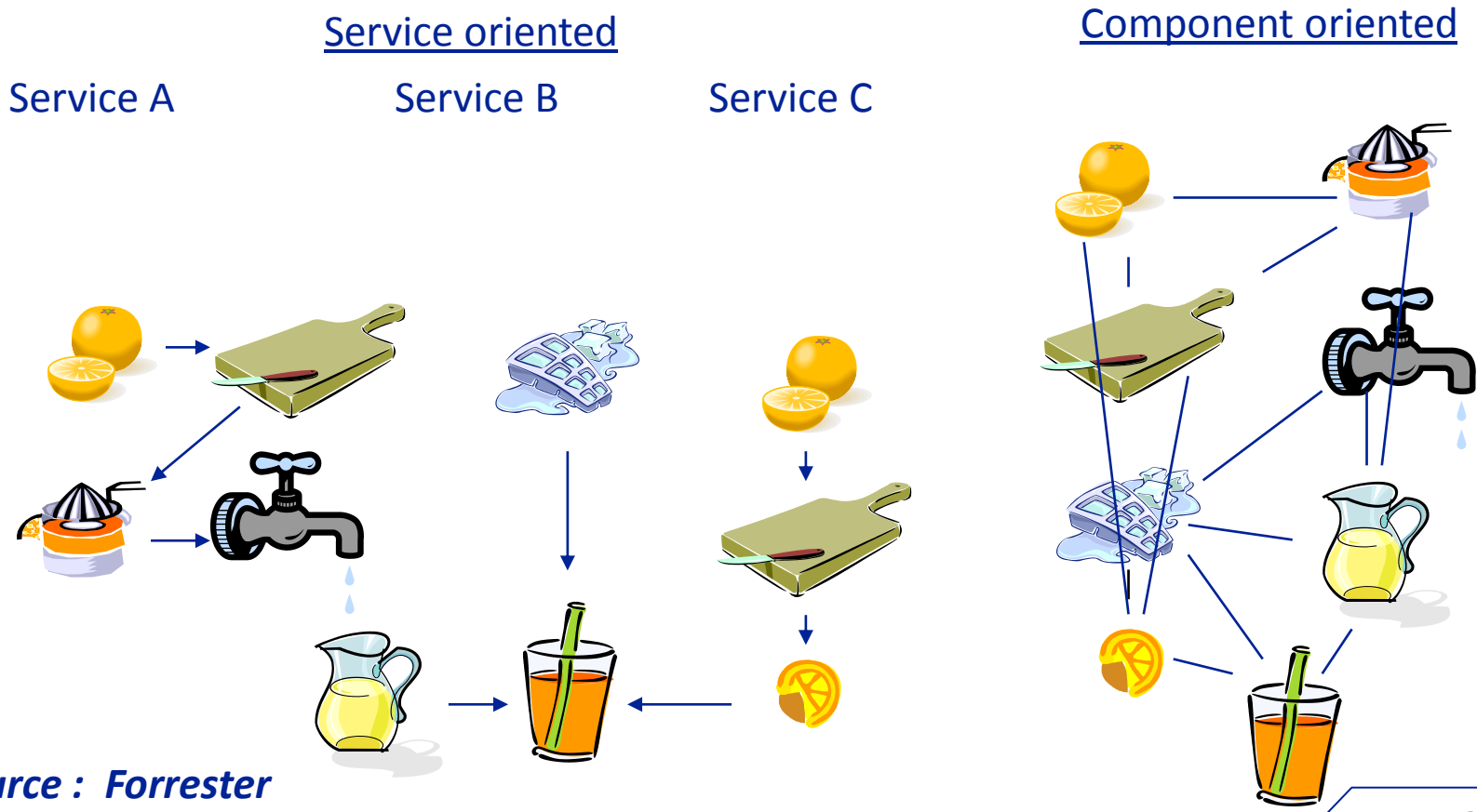


CONFIGURATION MANAGEMENT – CI RELATIONSHIPS

- Relationships between Cis
  - 'parent/child‘ (software module is part of a program)
  - ‘connected to’ (a desktop computer is connected to a LAN)
  - ‘uses another CI’ (a business service uses an infrastructure server)

ESTABLISH MORE A SERVICE MODEL THAN A TECHNICAL MODEL

- Linking the CIs not creates a service model ⇨ Building a business approach



Source : Forrester

SERVICE MODEL

THE LINK BETWEEN IT RESOURCES AND BUSINESS SERVICES

Business Services supplier

IT Services supplier

Infrastructures supplier

IT Business Services :

- Embedded IT services, that support business processes and defined by the business with a business context and semantic

IT Services :

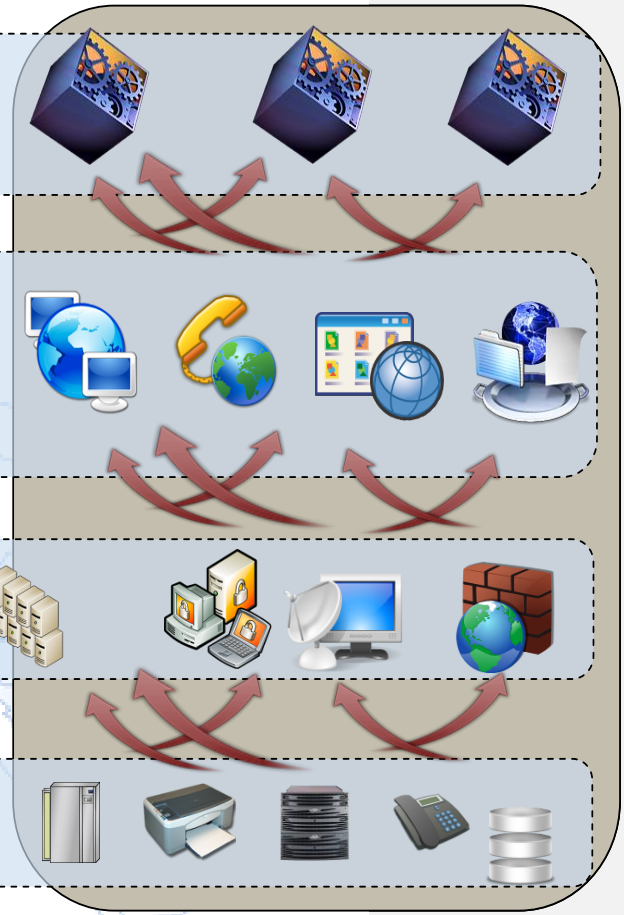
- Deliver value to the business in facilitating outcomes the business want to achieve.
- Business value created by the combination of Service Utility (what the Service does) and Service Warranty (how well it does it)

IT System : - not a service

- IT applications, IT infrastructures as platforms

IT Resources

- IT Components



CONFIGURATION MANAGEMENT – EXEMPLE OF ATTRIBUTES (1)

- **CI Name** : the unique name by which this type of **CI** is known.
- **Copy or Serial Number** : the number that uniquely identifies the particular instances of this **CI** - for example, for software the copy number, for hardware the serial number.
- **Category :** Classification of a CI (e.g. hardware, software, documentation etc).
- **Type** : description of CI type, amplifying 'category' information (e.g. hardware configuration, software package, hardware device or program module).
- **Model Number** (hardware) : model of CI (corresponding, for example, to supplier's model number e.g. Dell model xxx, PC/aa model yyy).
- **Warranty expiry date** : date when the supplier's warranty expires for the CI.
- **Version Number** : the version number of the CI.
- **Location** : the location of the CI, e.g. the library or media where the software CIs reside, the site/room where a service is located.

CONFIGURATION MANAGEMENT – EXEMPLE OF ATTRIBUTES (2)

- **Owner Responsible** : the name and/or designation of the owner responsible for the CI.
- **Responsibility Date :** date the above owner became responsible for the CI.
- **Source/supplier :** the source of the CI, e.g. developed in-house, bought in from company xxxxx etc.
- **Licence** : licence number or reference to licence agreement.
- **Supply Date** : date when the CI was supplied to the organisation.
- **Accepted Date** : date when theCI was accepted by the organisation as satisfactorily tested.
- **Status (current)** : the current status of the CI; e.g. under 'test', 'live', 'archived'.
- **Status (scheduled)** : the next scheduled status of the CI (with the date or indication of the event that will trigger the status change).

CONFIGURATION MANAGEMENT – EXEMPLE OF ATTRIBUTES (3)

- **Parent CI(s) relationships** : the unique CI identifier(s) - name/copy/number/model/number/ of the 'parent(s)' of thisCI.
- **Child CI(s) relationships** : the unique CI identifier(s) of all 'children' of this CI.
- **Relationships** : the relationship of the CI with all CIs other than 'parent' and 'child' (e.g. this CI 'uses' another CI, this CI 'is connected to' another CI, this CI is 'resident on' another CI, this CI 'can access' another CI).
- **RFC Numbers** : id. number of all RFCs affecting this CI.
- **Change Numbers** : the identification number of all Change records affecting this CI.
- **Problem Numbers** : the identification number of all Problem records affecting this CI.
- **Incident Numbers** : the identification number of all Incident records affecting this CI.
- **Comment** : a comment field to be used for textual narrative; for example, to provide a description of how this version of the CI is different from the previous version.

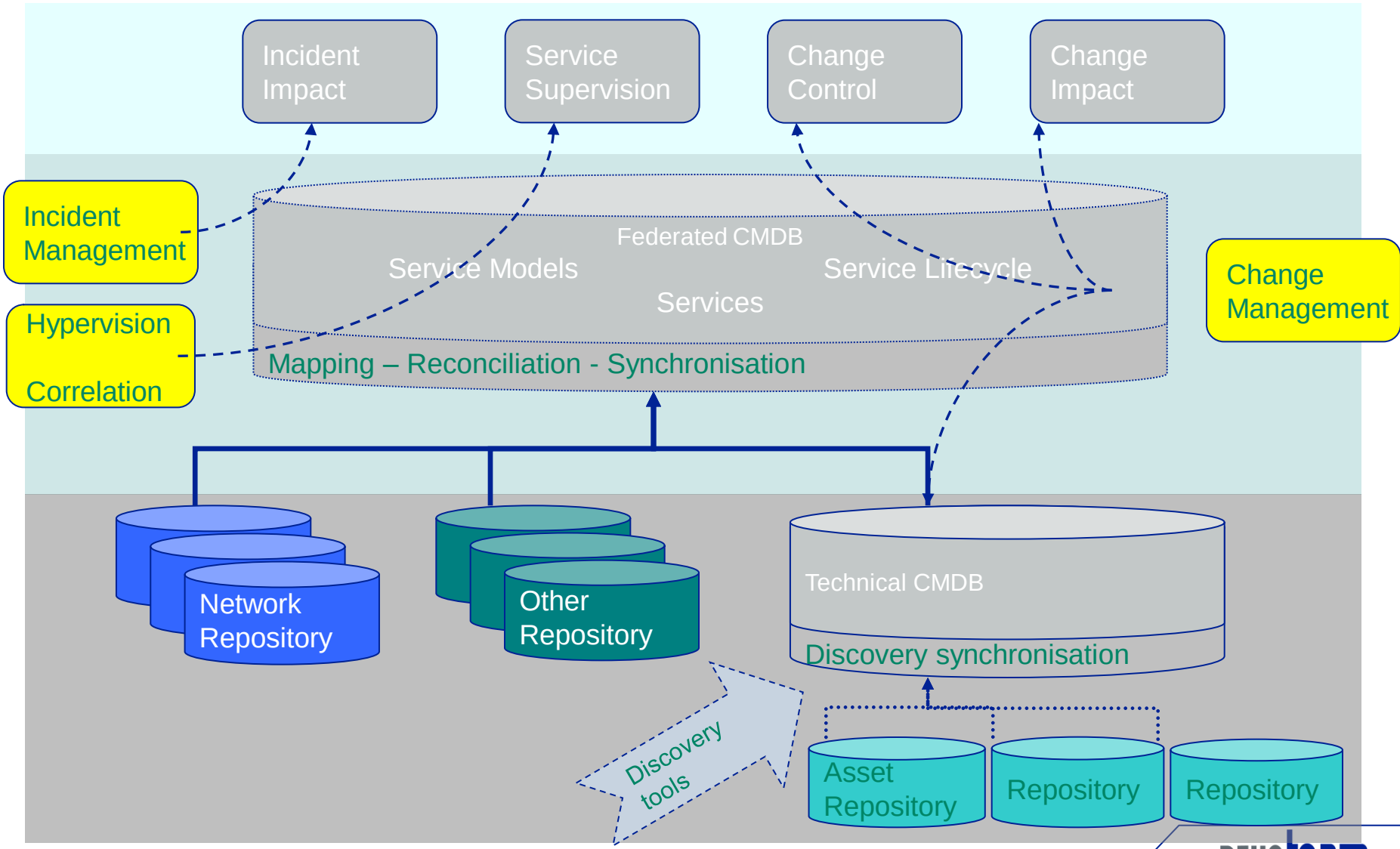
SACM CONCEPTS – CONFIGURATION BASELINE

- A Configuration baseline
  - Configuration of a service, product or infrastructure formally reviewed and agreed on, that serves as the basis for further activities.
  - Captures structure, contents and details of a configuration and represents a set of configuration items that are related to each other.
- Establishing a baseline provides the ability to:
  - Mark a milestone in the development of a service, e.g. Service Design baseline
  - Build a service component from a defined set of inputs
  - Change or rebuild a specific version at a later date
  - Assemble all relevant components in readiness for a change or release
  - Provide the basis for a configuration audit and back out, e.g. after a change.

SACM CONCEPTS – CONFIGURATION BASELINE

- Configuration Management System (CMS)
  - Information about all Configuration Items
    - CI may be entire service, or any component
    - Stored in one or more databases (CMDBs)
  - CMS stores attributes
    - Any information about the CI that might be needed
  - CMS stores relationships
    - Between CIs
    - With incident, problem, change records…
  - CMS has multiple layers
    - Data sources and tools, information integration, knowledge processing, presentation

CMS SAMPLE



SACM CONCEPTS - DML

- DML – Definitive Media Library
  - Master copies of all software assets
  - Quality checked
  - The only source for build and distribution

SACM ACTIVITIES

SERVICE ASSET AND CONFIGURATION MANAGEMENT-VALUE FOR BUSINESS

- Better forecasting and planning of changes
- Changes and releases to be assessed, planned and delivered successfully
- Incidents and problems to be resolved within the service level targets
- Service levels and warranties to be delivered
- Better adherence to standards, legal and regulatory obligations (less non-conformances)
- More business opportunities as able to demonstrate control of assets and services
- Changes to be traceable from requirements
- The ability to identify the costs for a service.

SERVICE ASSET AND CONFIGURATION MANAGEMENT-VALUE FOR BUSINESS

- Challenge
  - Persuading technical support staff to adopt a checking in/out policy
  - Attracting and justifying funding for SACM, since it is typically out of sight to the customer units empowered with funding control;
  - An attitude of ‘just collecting data because it is possible to do’; this leads SACM into a data overload which is impossible, or at least disproportionately expensive, to maintain
  - Lack of commitment and support from management who do not understand the key role it must play supporting other processes.

SACM ROLES

- Service Asset Manager
- Configuration Manager
  - Similar roles, different bias

- Configuration Analyst
- Administrator / Librarian
- CMS / Tools administrator

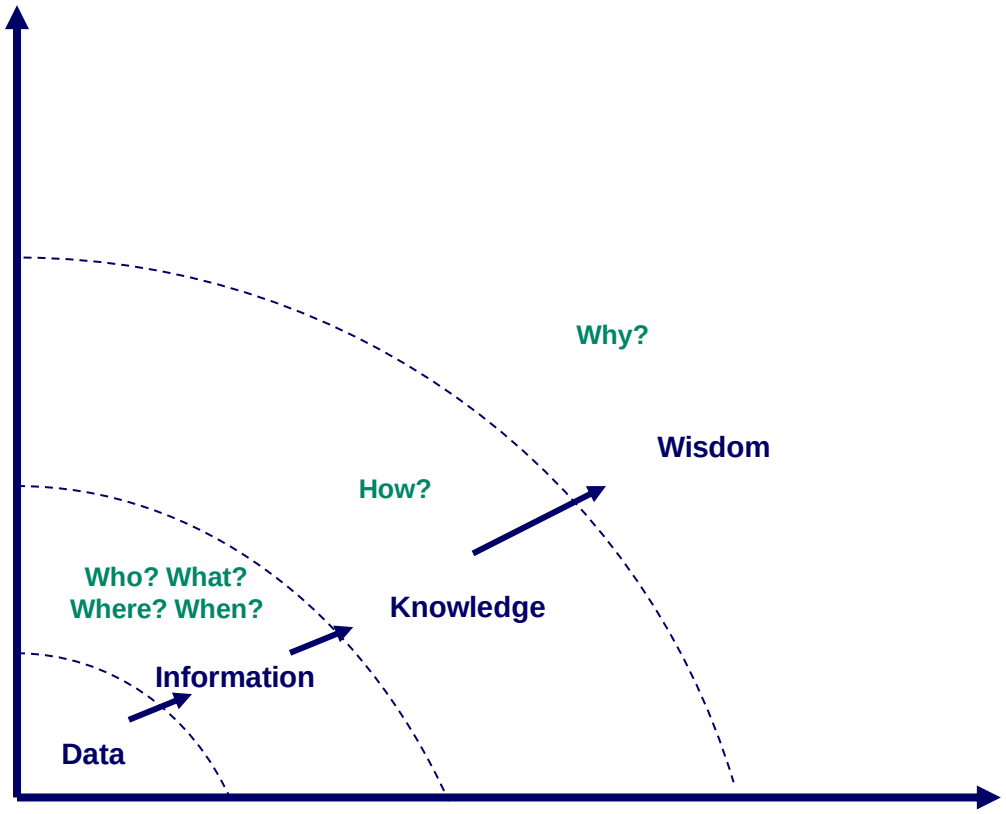
SERVICE TRANSITION

KNOWLEDGE MANAGEMENT

- The process responsible for gathering, analysing, storing and sharing knowledge and information within an organisation

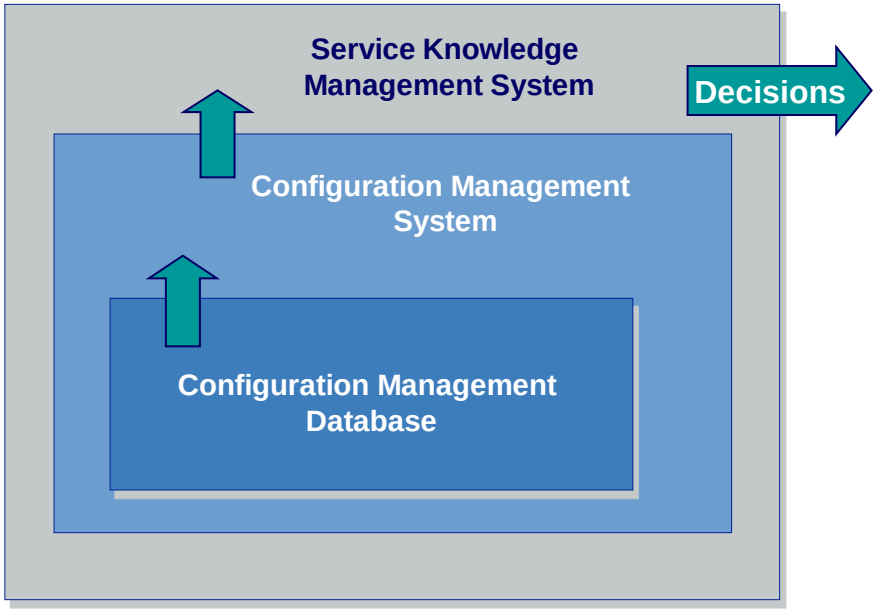
- The primary purpose of Knowledge Management is to improve efficiency by reducing the need to rediscover knowledge.

KNOWLEDGE MANAGEMENT

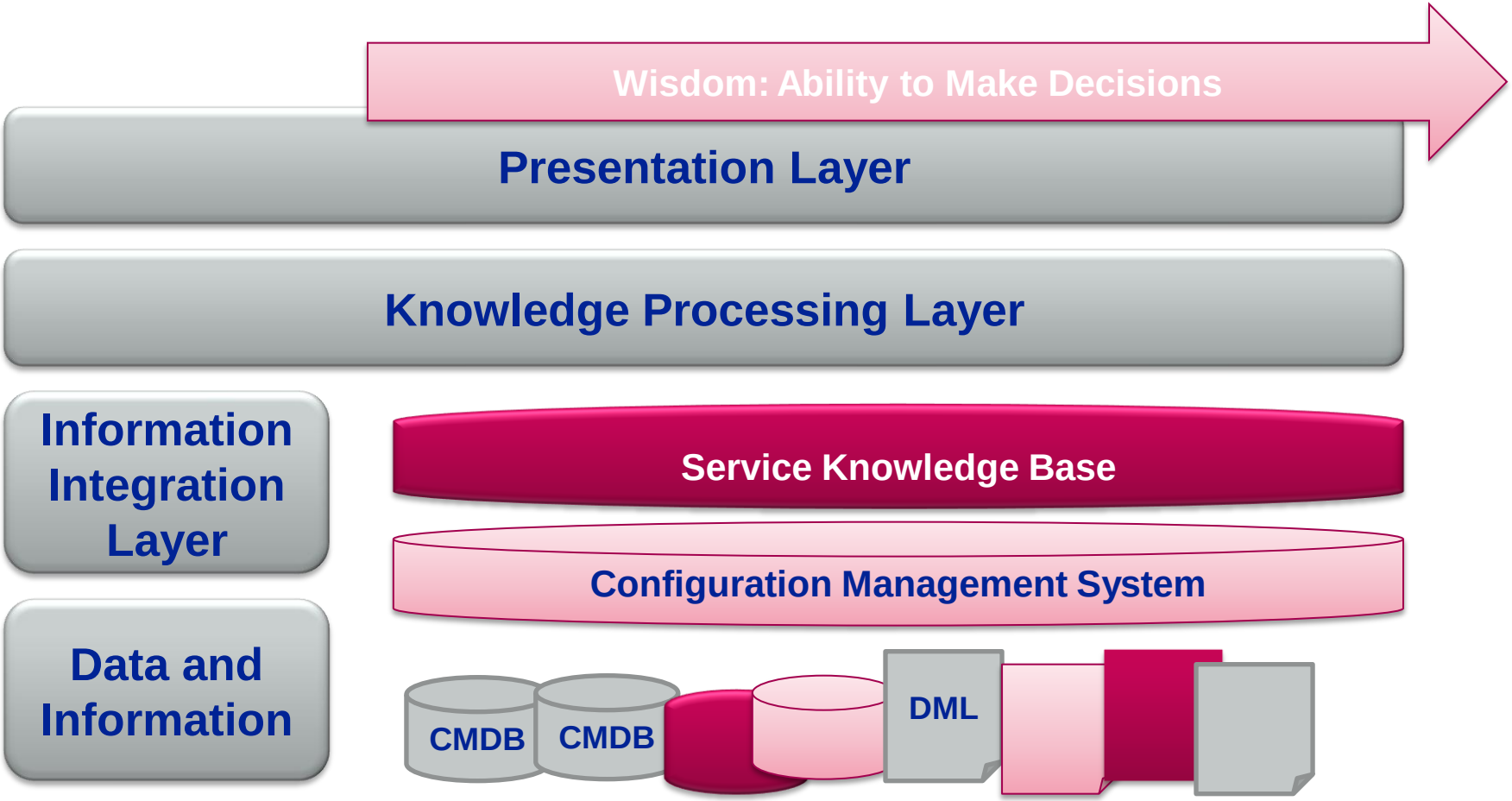


KNOWLEDGE MANAGEMENT ACTIVITIES

- KM Strategy
- Knowledge identification, capture and maintenance
- Knowledge transfer
- Data and Information Management
- Use of the Service Knowledge Management System



SKMS



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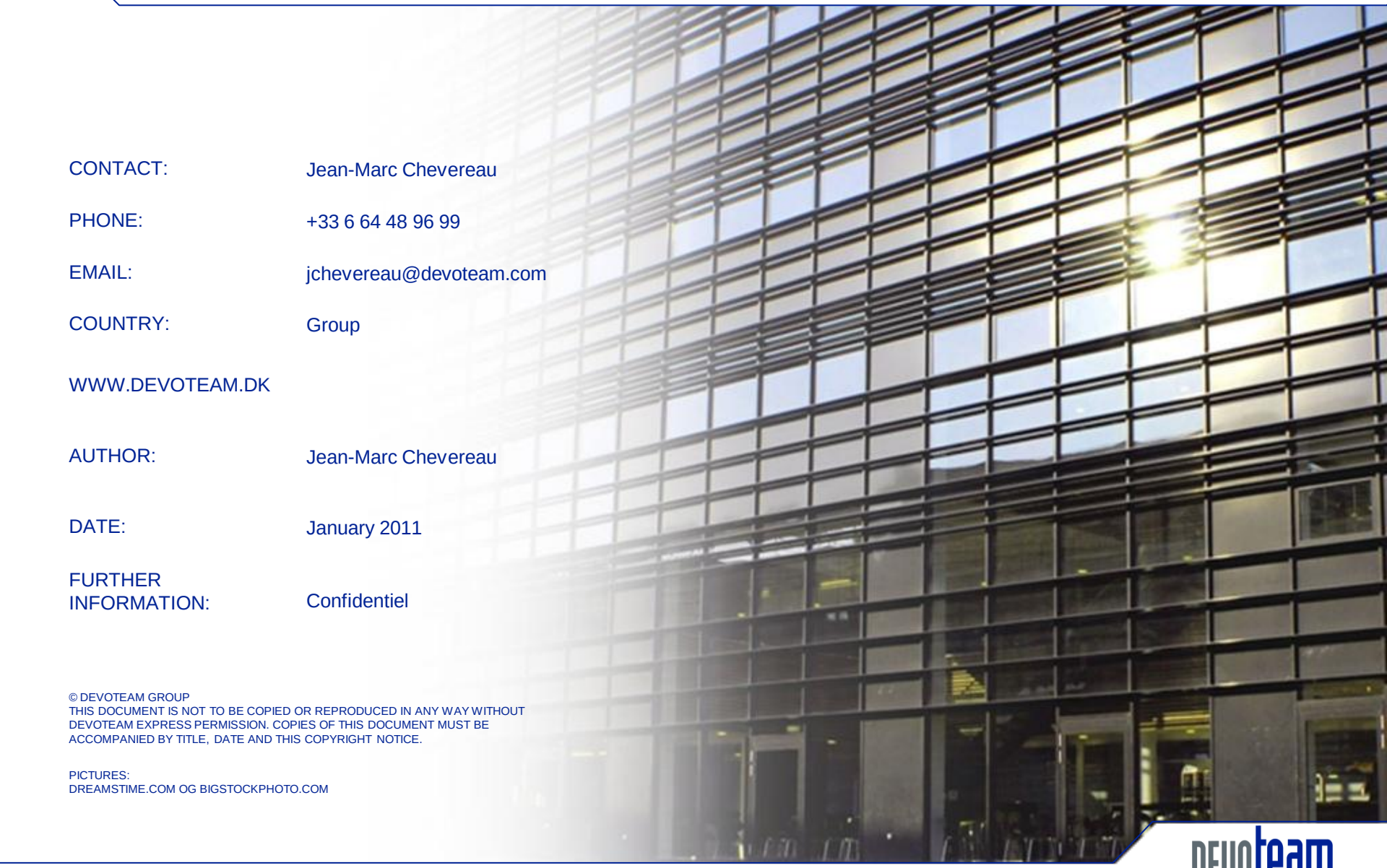

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FURTHER INFORMATION: Confidentiel

PICTURES:
DREAMSTIME.COM OG BIGSTOCKPHOTO.COM