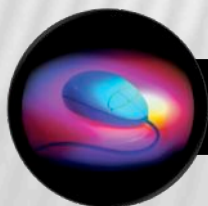




Ally Gill, SEPG EUROPE 2009

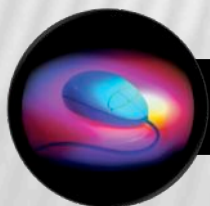
WHY SOFTWARE PROCESS IMPROVEMENT IS NOT ENOUGH



ALLYGILL.CO.UK — Software Process Management made Easier

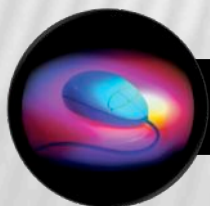
*“Organisations churn through
one technique after another and
at best get incremental
improvement on top of business
as usual”*

Richard Pascale (1938-, consultant, author and educator)



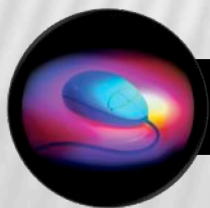
OBJECTIVES

- ❑ Understand the problem and consider an alternative
 - Why do SPI programmes fail?
 - What is Software Process Management?
- ❑ Define a solution
 - PROMISE (Process Management in Software Engineering)
- ❑ Implement the solution
 - Manage Processes using key PROMISE principles





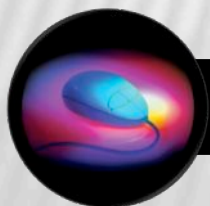
UNDERSTAND THE PROBLEM



ALLYGILL.CO.UK – Software Process Management made Easier

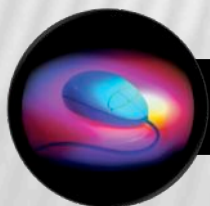
WHY SPI PROGRAMMES FAIL

- ❑ Many Software Process Improvement (SPI) programmes fail to deliver on their potential because:
 - SPI tends to generate waves of improvement initiatives which are often subject to early termination because of financial or organisational changes
 - Less mature organisations do not have the expertise or awareness to perform other activities necessary to support process improvement
 - Requirements are assumed not elicited



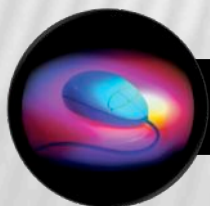
WHY SPI PROGRAMMES FAIL

- ❑ Even seemingly successful SPI initiatives sometimes fail to become operational
 - Insufficient time is given before the next initiative starts
 - Organisations still fail to manage change
- ❑ Process Improvement is an admirable goal, but it demands a degree of maturity to begin with
 - Build in management of change and project management
 - Shift the focus from Process Improvement to Process Management



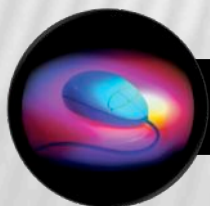
SOME TELL-TALE SIGNS THAT ALL'S NOT WELL

- ❑ Lots of activity –
 - but little real improvement
- ❑ Lots of measures –
 - but no analysis or actions
- ❑ Lots of tools –
 - but poorly understood, used or integrated
- ❑ Lots of talking –
 - but no communication (especially at senior levels)



A MATTER OF SEMANTICS?

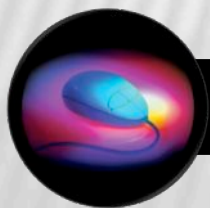
- ❑ “Process Improvement” fails to adequately describe all the activities required to establish and sustain an effective process infrastructure
- ❑ Process Management encompasses:
 - Process Management Infrastructure
 - Process Definition and Implementation
 - Process Control and Monitoring
 - Process Compliance and Assurance
 - Process Improvement



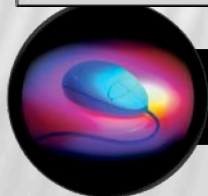
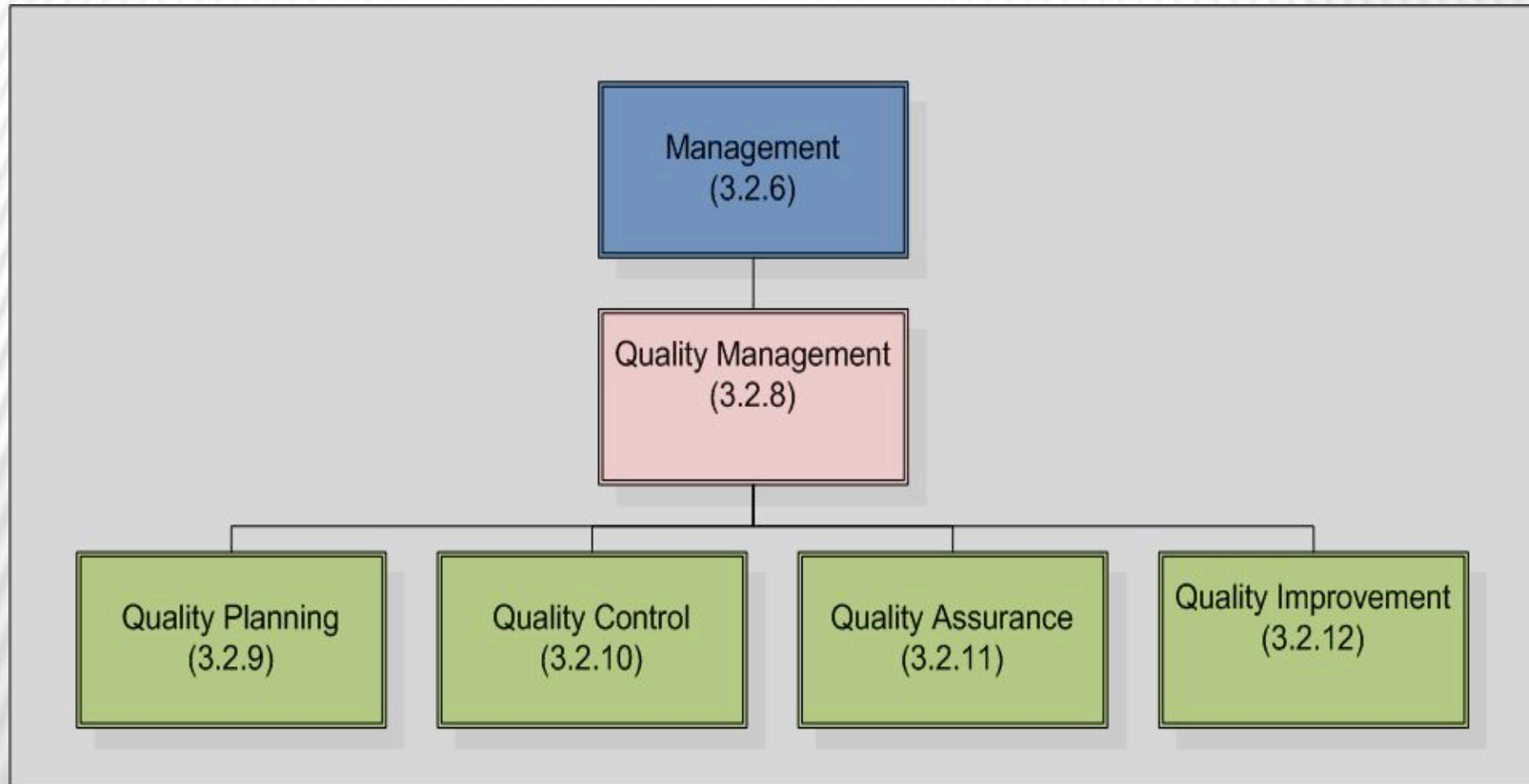
WHY SOFTWARE PROCESS MANAGEMENT ?

Software Process Management:

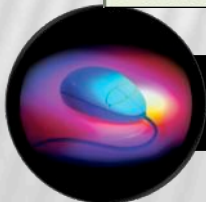
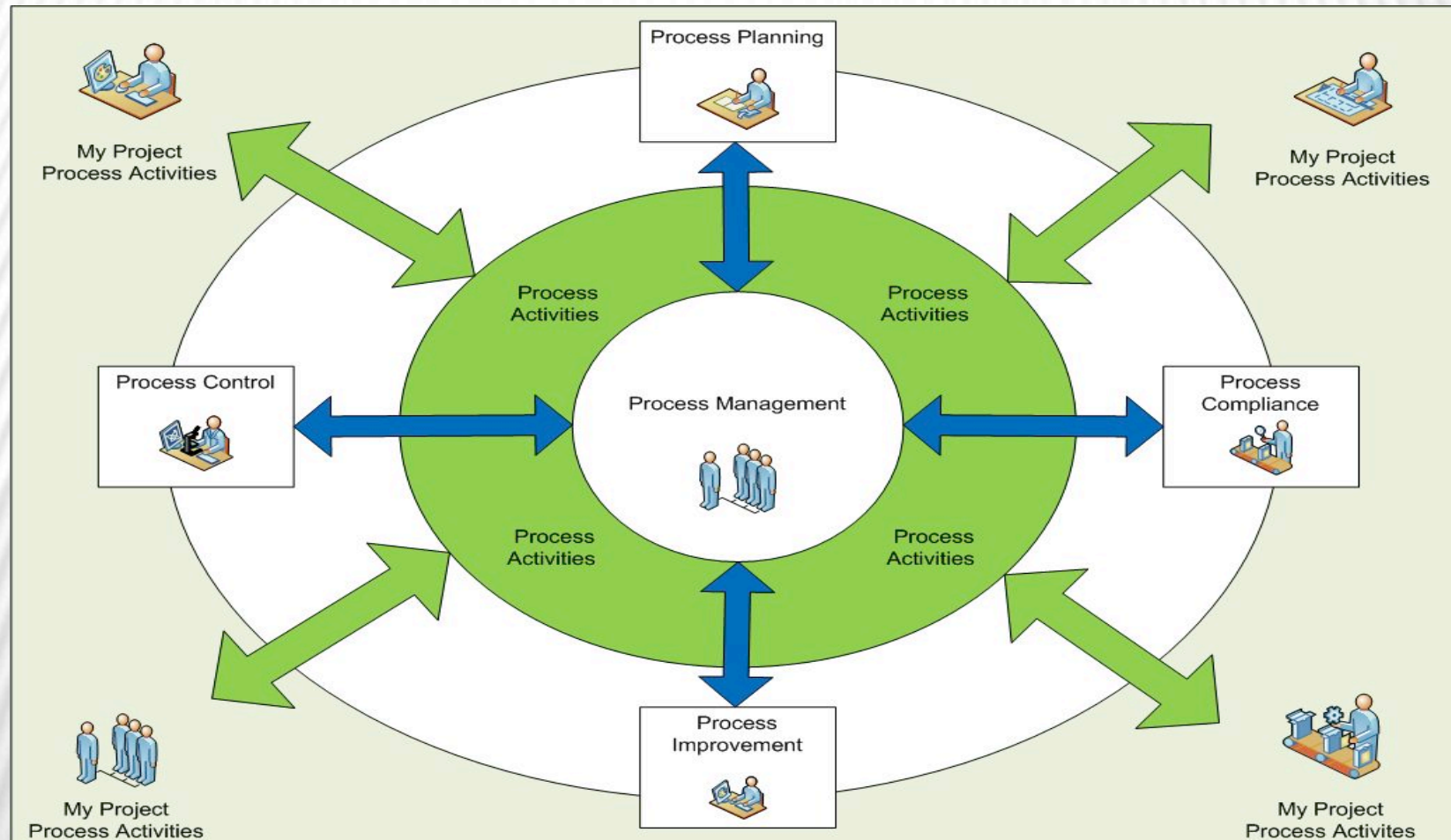
- ❑ reinforces the idea of a long term strategic focus for organisations who want to perform better
- ❑ builds a platform for sustained performance
- ❑ allows the enterprise to create the foundations for all future improvement opportunities
- ❑ promotes a culture of process and quality awareness



QUALITY MANAGEMENT – ISO 9000

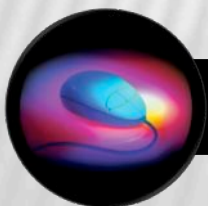


PROCESS MANAGEMENT ROUND TABLE





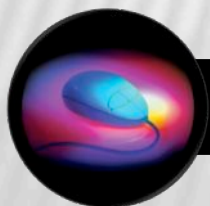
DEFINE A SOLUTION



ALLYGILL.CO.UK – Software Process Management made Easier

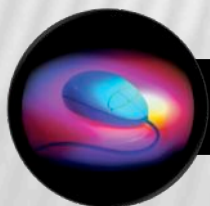
PROMISE – AN INTRODUCTION

- ❑ PROMISE - **P**rocess **M**anagement **i**n **S**oftware **E**ngineering – is a model for designing, building and running a Process Management Function within a Software Development enterprise
- ❑ PROMISE focuses on People, Infrastructure and Activities associated with Process Management
- ❑ PROMISE can be tailored and applied to single or multiple reference models in any size of organisation



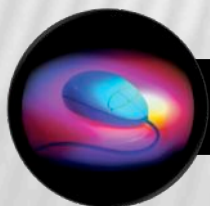
THE PREMISE FOR PROMISE

- ❑ Software Process Management is an essential full time function within the software development and maintenance environment
- ❑ PROMISE has been designed for Process and Quality Management leaders and teams, and their managers and executives
- ❑ PROMISE will make a Software Process Management function easier to build, run and sustain

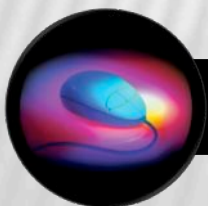
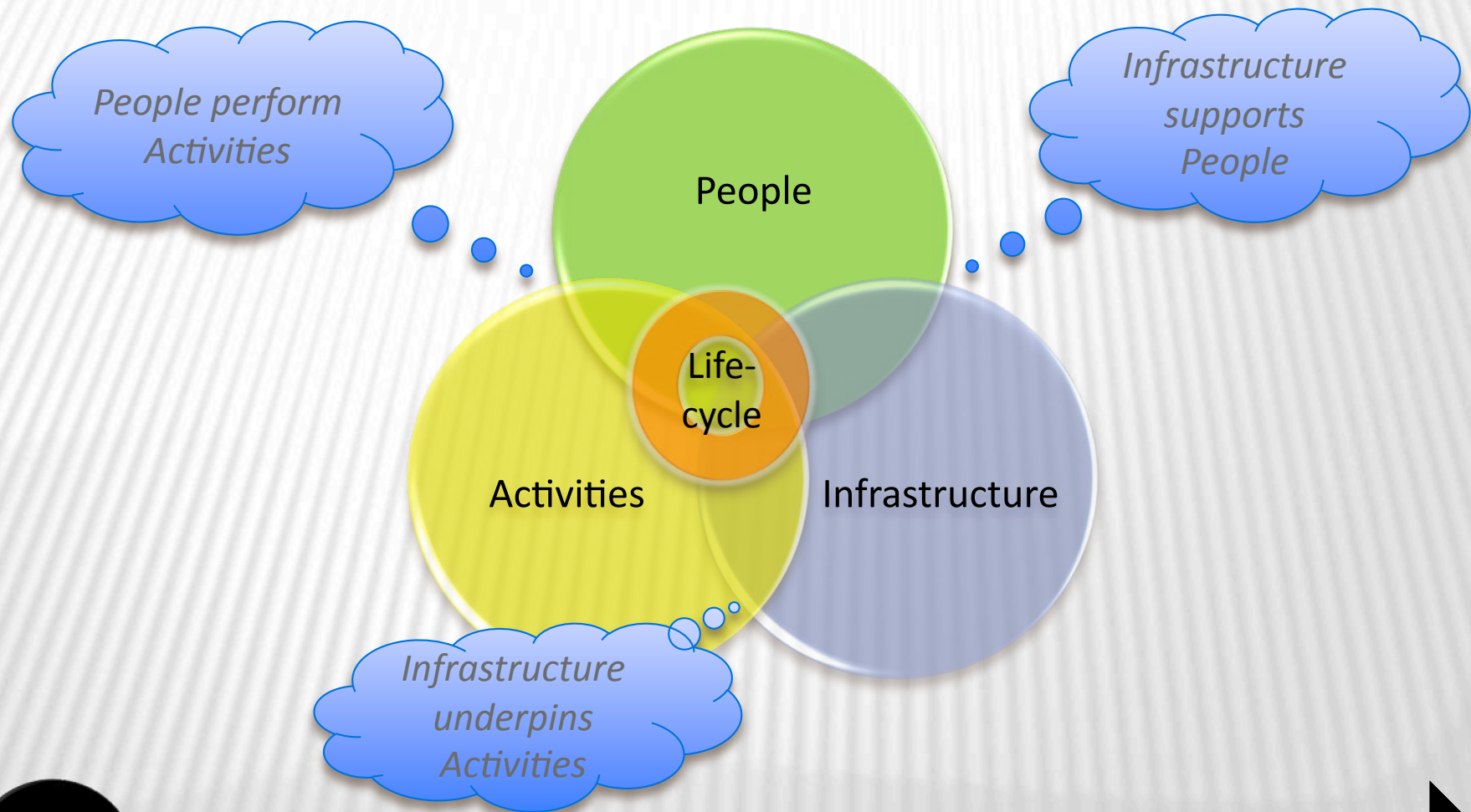


PROMISE – A CAVEAT

- ❑ PROMISE – is the product of twenty five years of experience in Software Engineering, Project Management, Quality Management, Change Management and Process Improvement & Management
- ❑ PROMISE is a work in progress

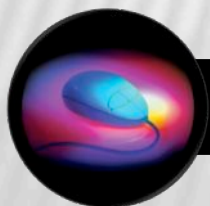


PROMISE - ARCHITECTURE



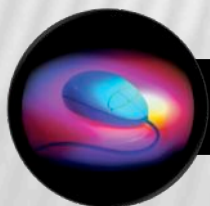
PEOPLE – PERFORM ACTIVITIES

- ❑ People are at the heart of PROMISE activities
- ❑ Roles and responsibilities are not widely understood even in organisations with a history of SPI
- ❑ PROMISE defines roles and responsibilities independently of other corporate job titles and codes
- ❑ SPM skills are required across the organisation not just within the SEPG or Quality Forum
- ❑ SPM skills must be understood and used by all levels of management



INFRASTRUCTURE – UNDERPINS ACTIVITIES

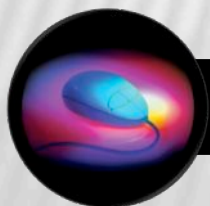
- ❑ Infrastructure refers to the IT and organisational support required to maintain an SPM function
- ❑ A solid infrastructure facilitates the execution of SPM activities
- ❑ Infrastructure includes process libraries, documentation, data repositories and other supporting tools
- ❑ PROMISE helps support an integrated SPM environment
- ❑ Within PROMISE infrastructure includes reference models and methodologies



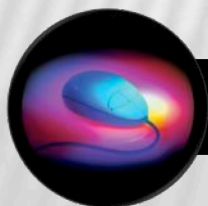
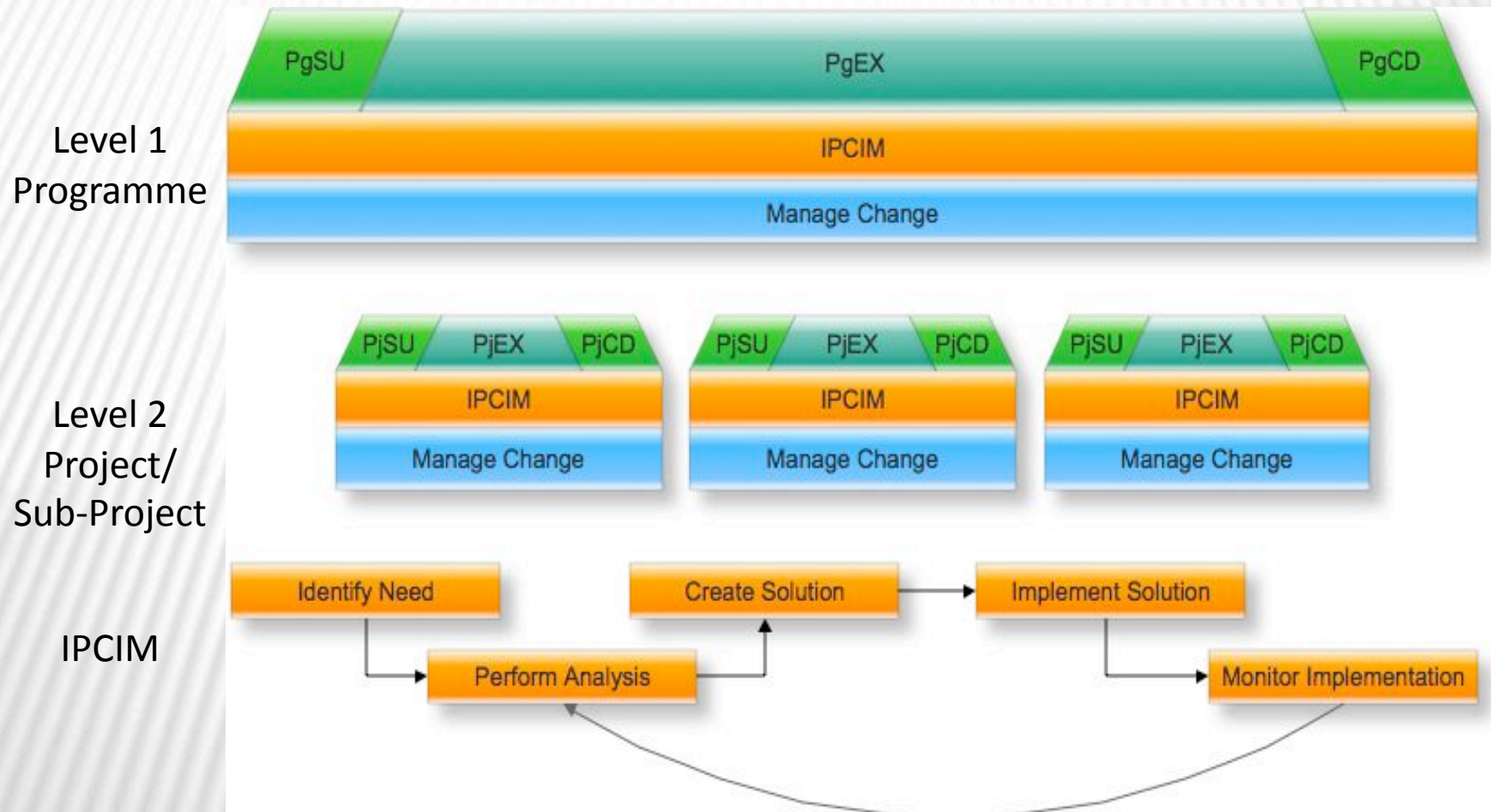
ACTIVITIES – OPERATIONAL TASKS IN SPM

❑ PROMISE facilitates the following sets of activities:

- Process Requirements and Definition
- Planning, Management and Governance
- Implementation and Deployment
- Monitoring, Measurement and Control
- Improvement
- Compliance and Assurance
- Management of Change

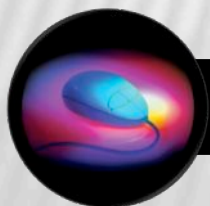


PROMISE – THE LIFECYCLE



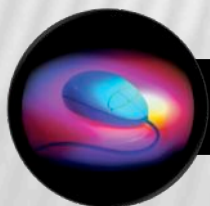
INTERPRETING THE LIFECYCLE

- ❑ The IPCIM process is at the heart of all programmes, projects and sub-projects
- ❑ Programmes, projects and sub-projects have three elements :—
 - ❑ Programme/Project Management (PgM/PjM)
 - ❑ IPCIM
 - ❑ Management of Change (MoC)
- ❑ PgM/PjM and MoC elements can use existing corporate methods if they exist



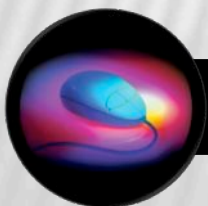
UNDERSTANDING IPCIM

- ❑ **Identify Need** – establish programme or project drivers and business requirements
- ❑ **Perform Analysis** – understand and define the as-is and to-be models and high level transition plan
- ❑ **Create Solution** – build the processes and associated solution definition and pilots
- ❑ **Implement Solution** – deploy the solution into the live environment
- ❑ **Monitor Implementation** – monitor key performance indicators, measure success and create lessons learned





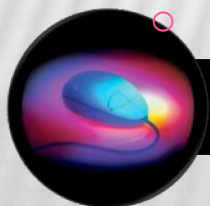
IMPLEMENT THE SOLUTION



ALLYGILL.CO.UK — Software Process Management made Easier

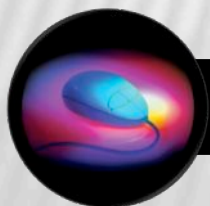
MANAGING PROCESS PEOPLE

- ❑ People create, manage and execute processes so people skills are a pre-requisite
 - Management of Change
- ❑ SE techniques are not always suitable for process management
 - Product and Process Implementation are different
 - Project and Process Management skills are different
- ❑ Technical skills cannot solve non-technical issues
 - Find the right people and train them in missing skills
 - Change Agents and Communicators
 - Process Champions



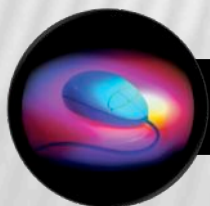
CREATE THE RIGHT INFRASTRUCTURE

- ❑ Train your executive team from day zero
- ❑ Build on your existing processes and culture
- ❑ Acquire a “management of change” method and use it
- ❑ Keep things small and simple
- ❑ Consider your audience
- ❑ Define and reward “appropriate” behaviour



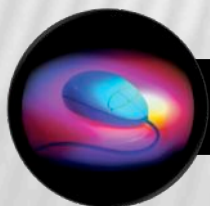
MANAGING THE CULTURE

- ❑ Develop a process management culture
 - Roles and Responsibilities
 - Explicit Management Goals and Objectives
 - Process and Quality Synergy
 - Everybody's Responsibility
- ❑ Build a risk based approach to process management
 - Where is the pain ?
 - What keeps the Chief Executive awake at night ?
 - What prevents Delivery Managers from Delivering ?



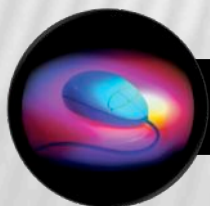
GET THE GOVERNANCE RIGHT

- ❑ You need to get the right people
 - Balance managers and practitioners with SPM staff and non-IT staff (HR, Finance etc.)
- ❑ Set up the most appropriate forums
 - Get the appropriate level of granularity
- ❑ Define and Publish the forum objectives
 - Ability and authority to make decisions
- ❑ Create a Shared Understanding of what you're trying to achieve



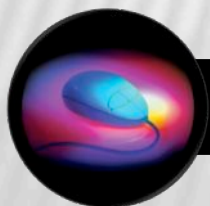
BUILD A BEST IN BREED TOOLKIT

- ❑ Understand the wider quality practices and alternative models
 - ISO standards (ISO 9000, 10005, 10006, etc.)
 - SPICE (ISO 15504), AutoSPICE
 - Six Sigma
 - ITIL v3
 - IEEE Standards
- ❑ Look outside IT for process tools and techniques (BPM)
- ❑ Use a pick and mix approach to create an integrated toolkit



“Learn all you can from the mistakes of others. You won’t have time to make them all yourself”

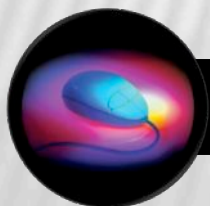
Anon



For more information please contact :

Ally Gill,
Owner and Managing Director
ALLYGILL.CO.UK
ally@ally.gill.co.uk
info@ally.gill.co.uk
www.allygill.co.uk

FURTHER INFORMATION



ALLYGILL.CO.UK – Software Process Management made Easier