



CMMI: Setting Up for Success

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Agenda

- Introductions
 - David Piper
 - Frank Johnstone
- The CMMI Framework: Background and overview of the 3 CMMI Constellations
- Selling, planning and implementing an improvement project that works
- Q&A



The CMMI Framework

Background and
overview of the 3 CMMI
Constellations

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Process is hard to see



We have a team of smart people but they work like individuals

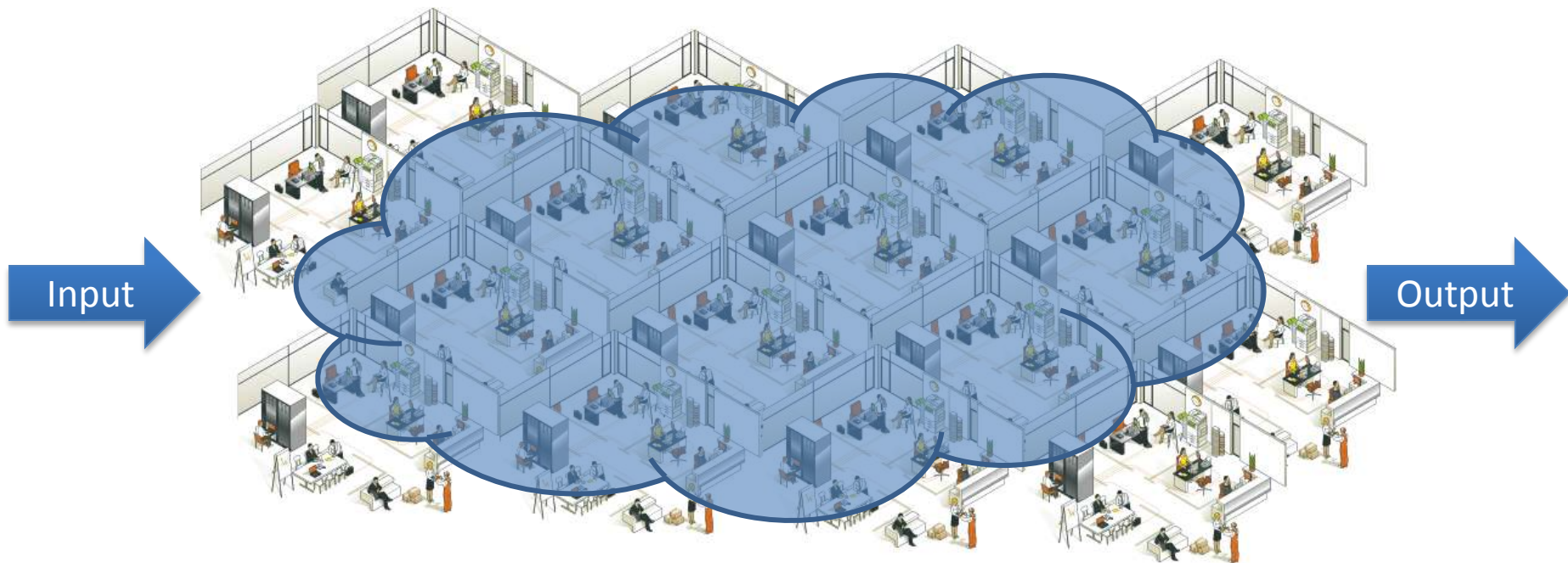
What's your job, what's my role?

We were on track last week, why have we slipped 6 months

Our delivery has been rejected again, why?



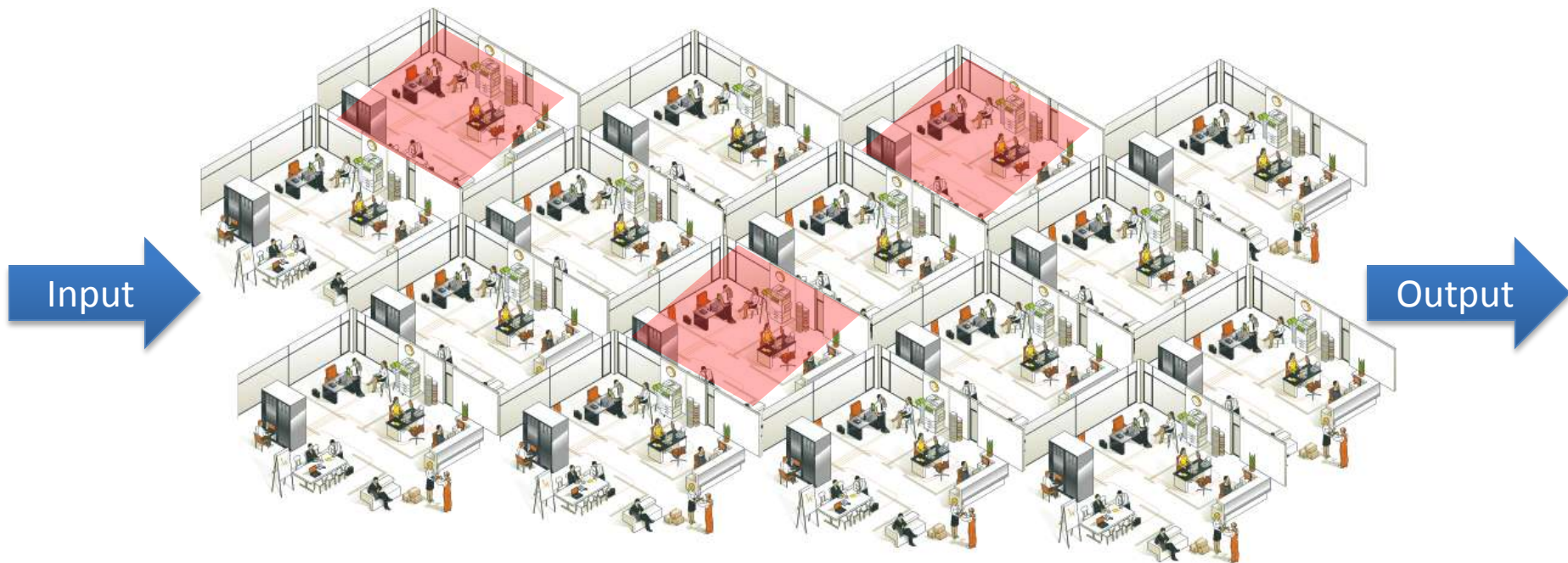
The office is like a “foggy factory”



How often is the output what we expect for the cost we expect?

How do you improve this when you can't “see” what's going on?

Point Solutions

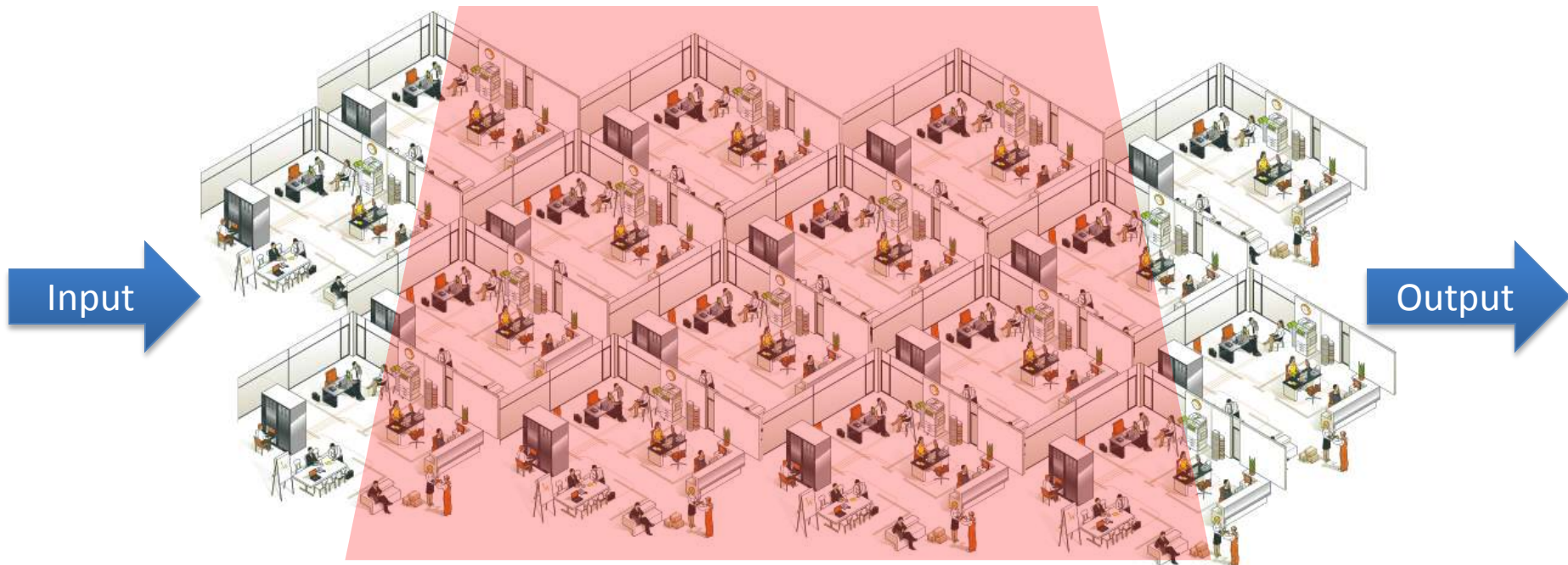


When you can't "see" the big picture it's hard to make some things work

Point improvements are easy but the benefits are limited

ISO Standards

9000, 20000, 27000



ISO give a larger and wider scope but the “bar” is so low it makes only a limited difference

Also, it fails to bring big benefits

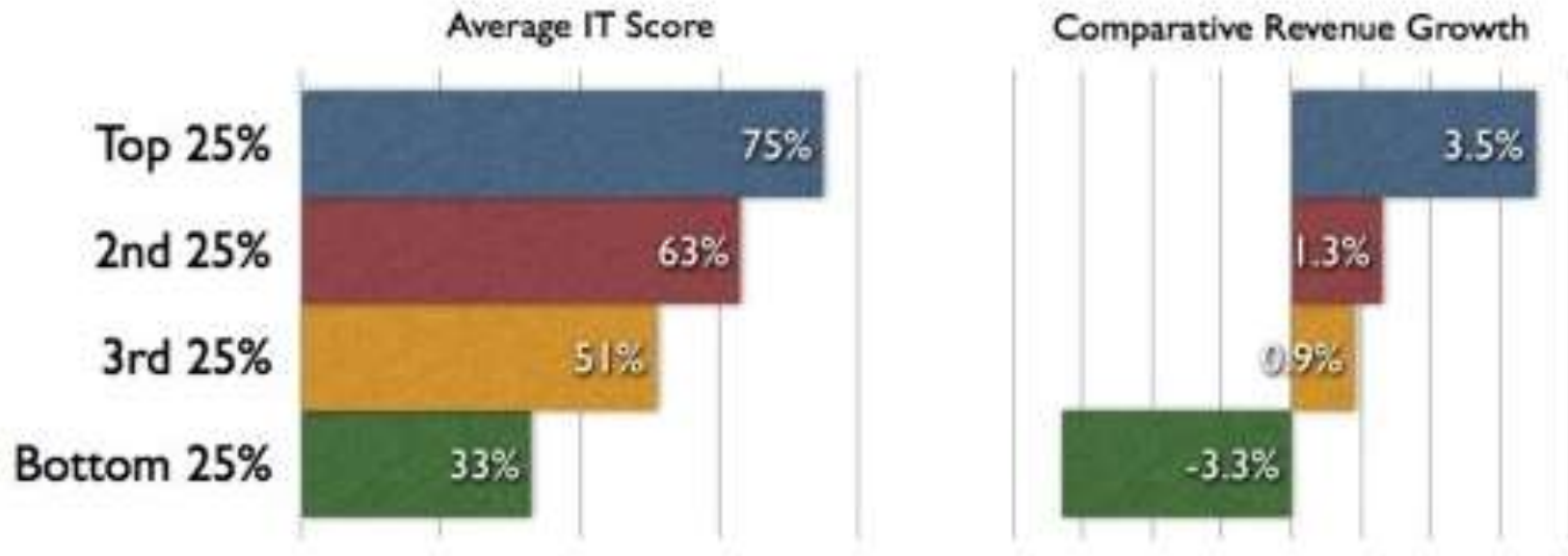
The main advantages of CMMI



- CMMI is not a standard - its an approach
- CMMI is a configurable set of requirements
- It does not assume the right structures are in place, it makes you put them in place
- It forces you to understand what you do and measure it – removing the fog across the whole team



Why does PI matter?



Source: Enterprise IT Capabilities and Business Performance, Keystone Strategy, Harvard Business School and Microsoft

CMMI[®] Constellations



Capability Maturity Model Integration

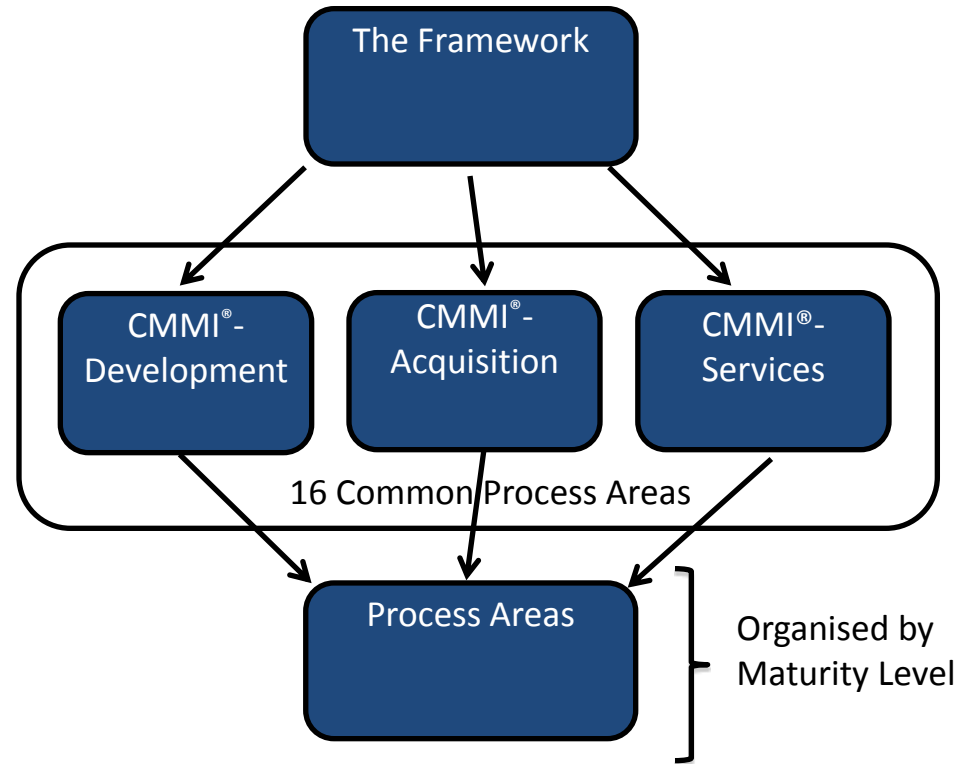


Appraisals – What?

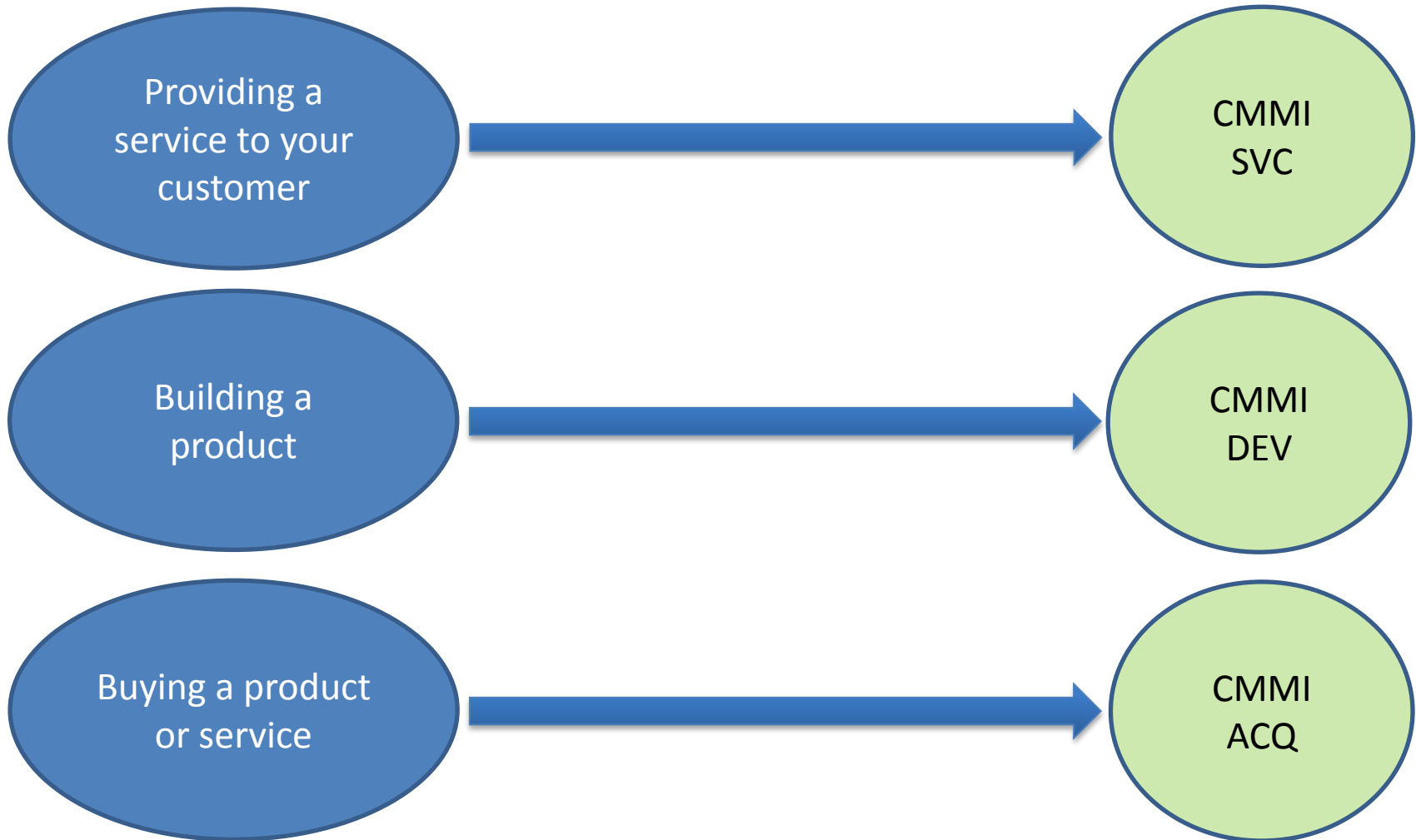
- Method called SCAMPI (3 Classes A, B, C)
- Lead Appraisers – trained & deeply experienced in its execution

Appraisals – Purpose?

- Benchmark the running Organisation
- Allows an Organisation to articulate the gaps between actual and desired practice



Applicability

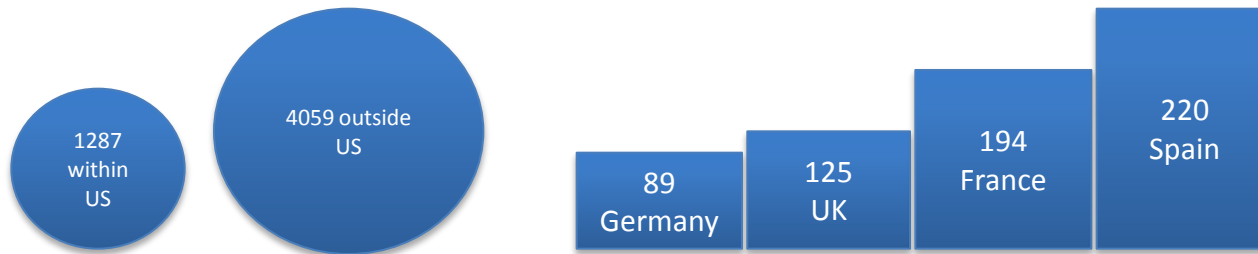


CMMI[®] Service - Provenance

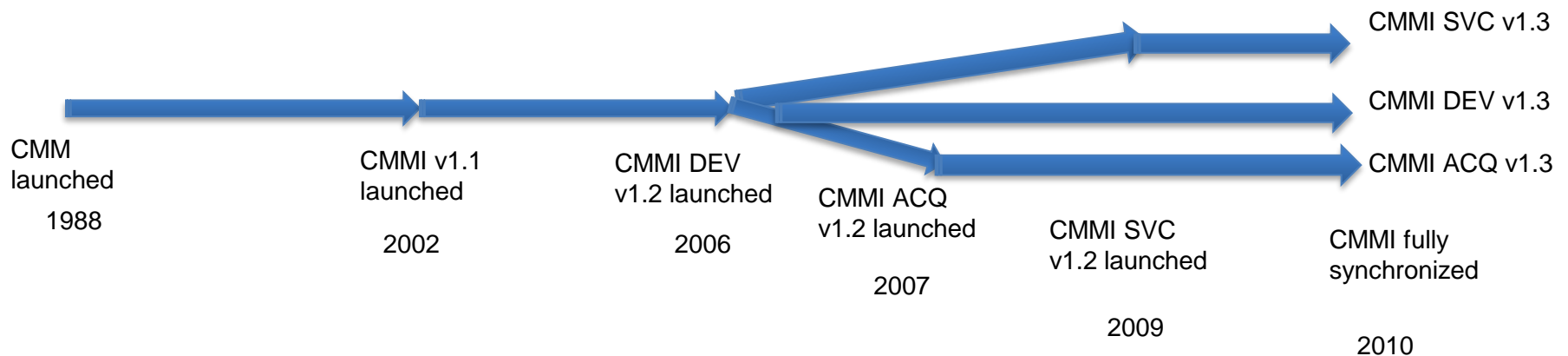


6808 class A appraisals – the number reported in the last 3 years

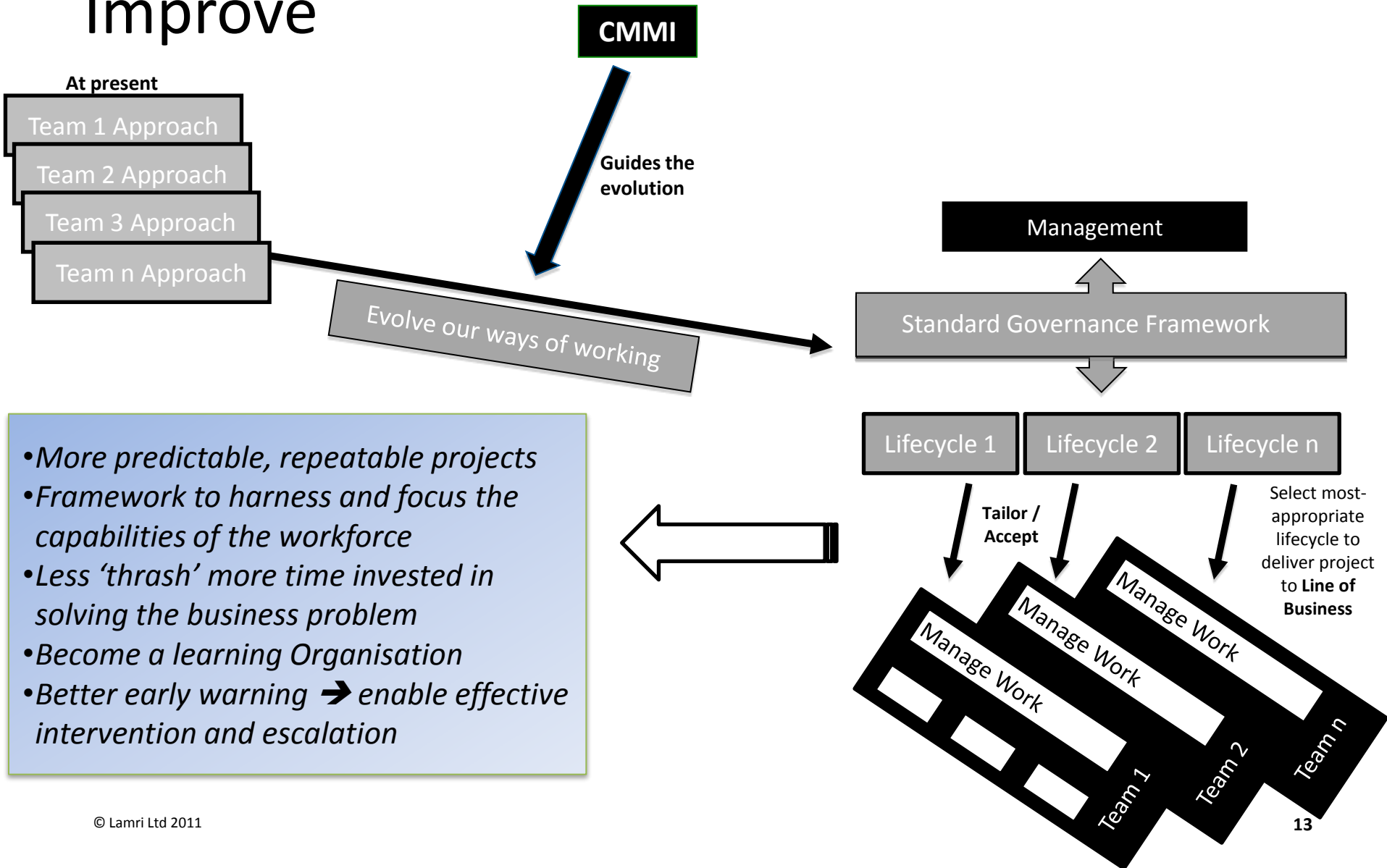
74 – the number countries reporting class A appraisals in the last 3 years



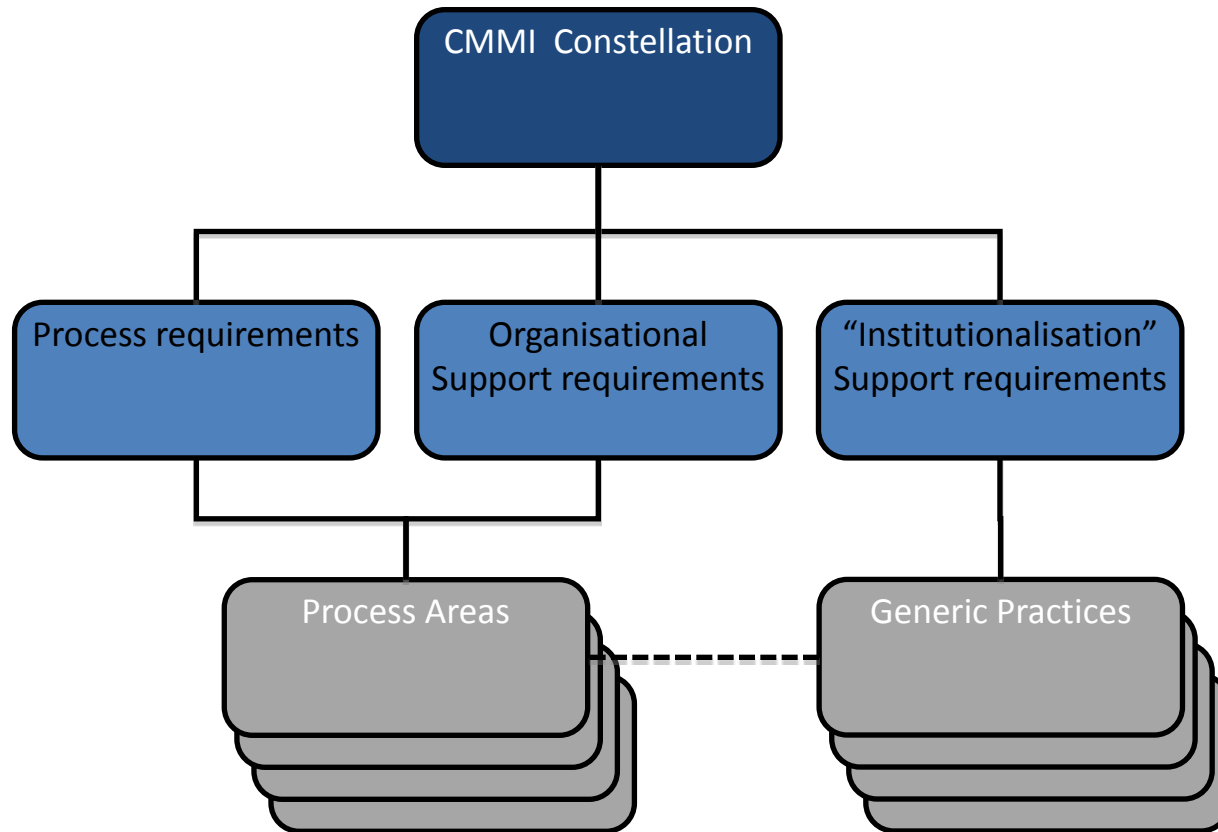
The size of the market
Class A appraisals – last 3 years



How CMMI[®] Can Help an Organisation Improve



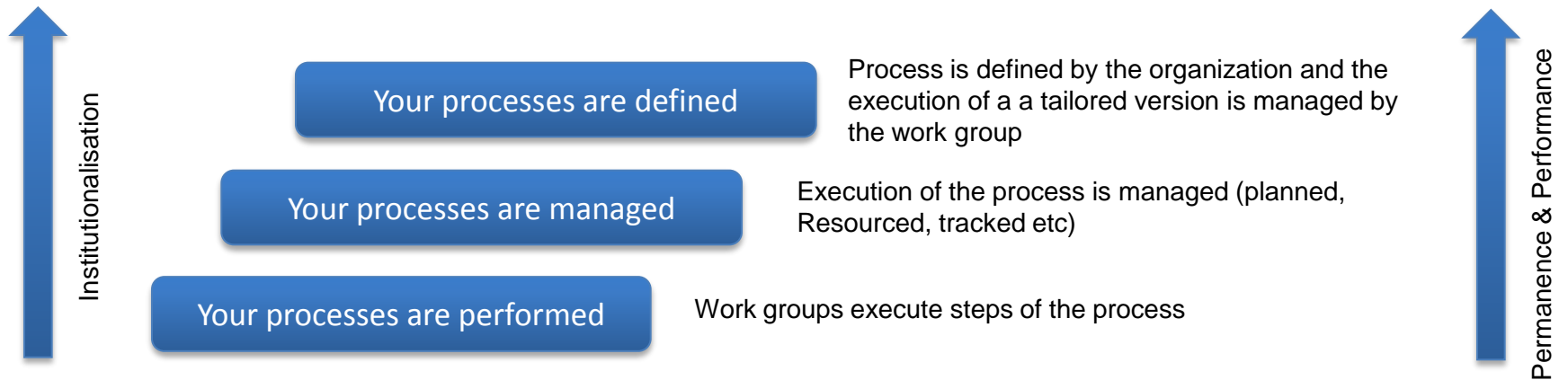
Basic Elements of the CMMI Model



CMMI sets requirements that an effective process should meet – each organisation can meet the requirements in the way that suits its objectives and context

Institutionalisation Support

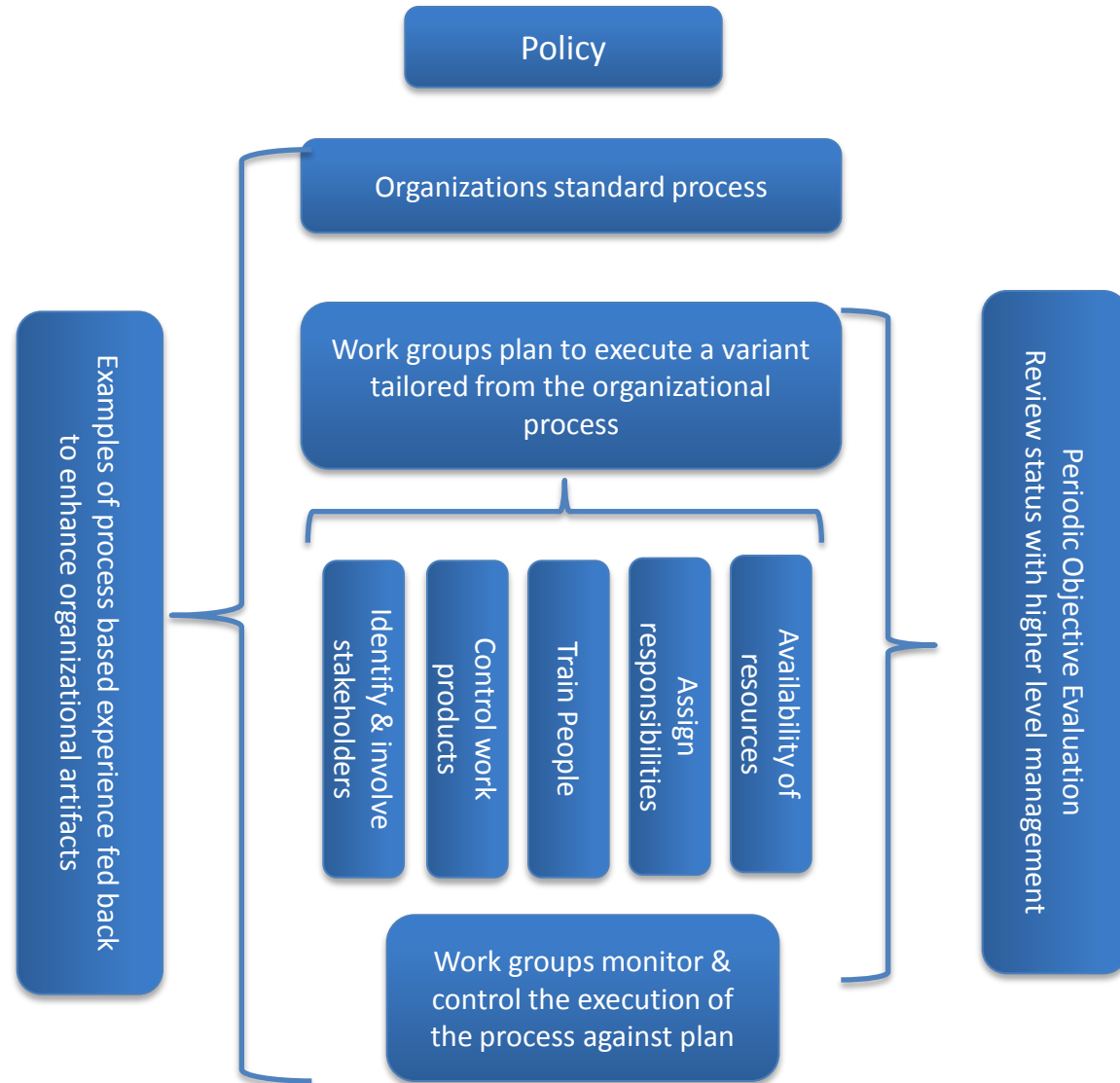
What is it's purpose?



Institutionalisation - Increases the chance that process remains part of the way the organization does business

Institutionalisation Support

how does it work in practice?



Organisational Support

sustaining and nurturing your ways of working

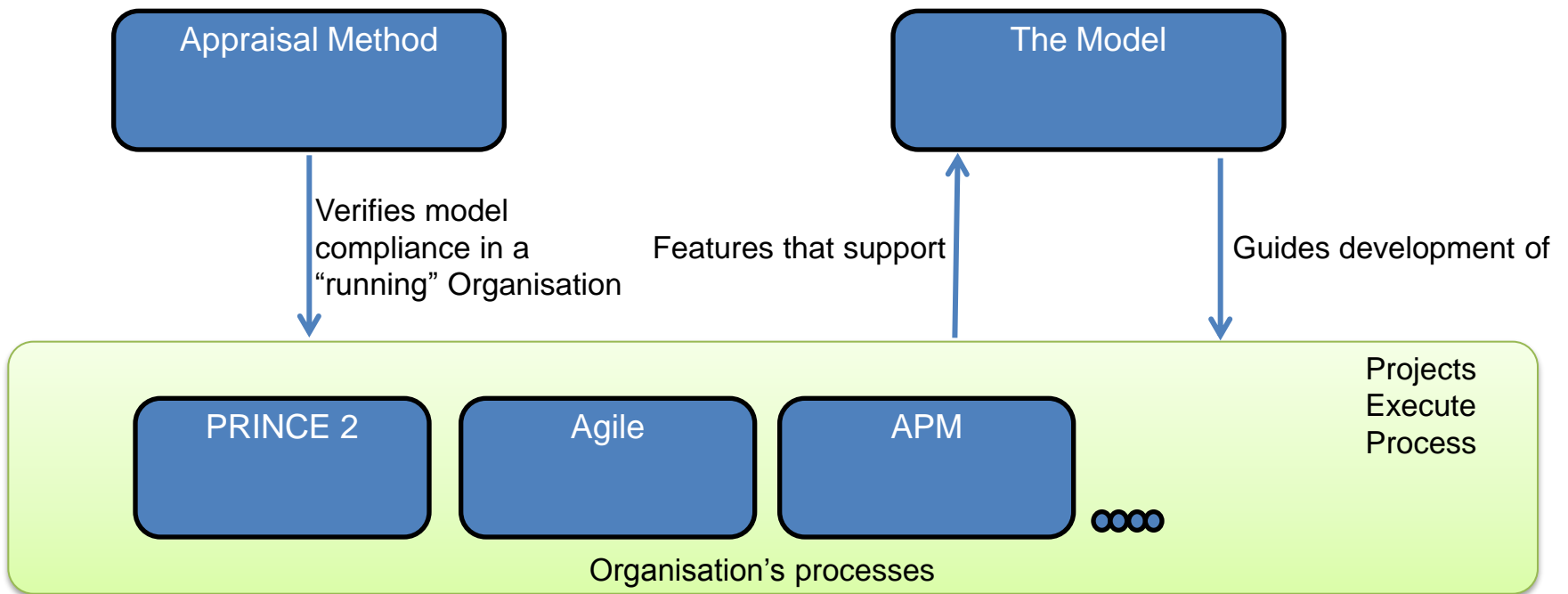


CMMI-DEV Process Requirements

The Process Areas

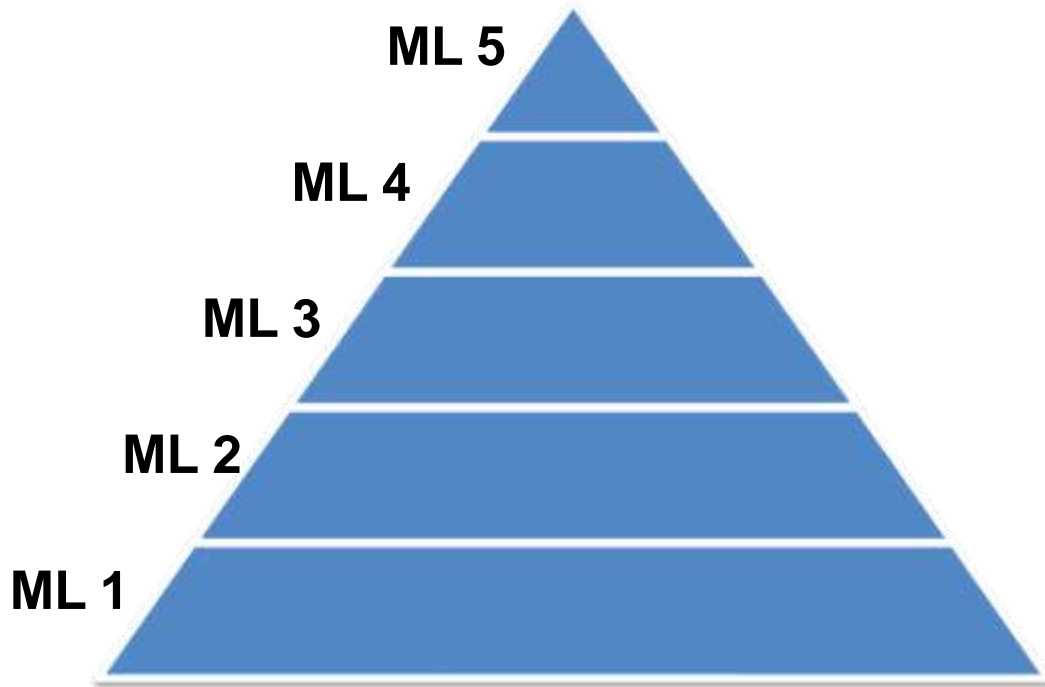
| MATURITY LEVEL | PROCESS AREAS | | | | | | |
|---------------------------|---------------------------------------|---------------------------------|------------------------------|-------------------------------|------------------------|-------------------------------------|--------------------------|
| 5- OPTIMISING | Organisational Performance Management | Causal Analysis & Resolution | | | | | |
| 4- QUANTITATIVELY MANAGED | Organisational Process Performance | Quantitative Project Management | | | | | |
| 3- DEFINED | Organisational Process Focus | Organisation Process Definition | Organisational Training | Integrated Project Management | Risk Management | | |
| | Technical Solution | Requirements Development | Product Integration | Validation | Verification | Decision Analysis & Resolution | |
| 2- MANAGED | Requirements Management | Project Planning | Project Monitoring & Control | Supplier Agreement Management | Measurement & Analysis | Process & Product Quality Assurance | Configuration Management |

How CMMI[®] Fits With Development Processes



Projects execute Organisation's processes – not the CMMI

Model Representations

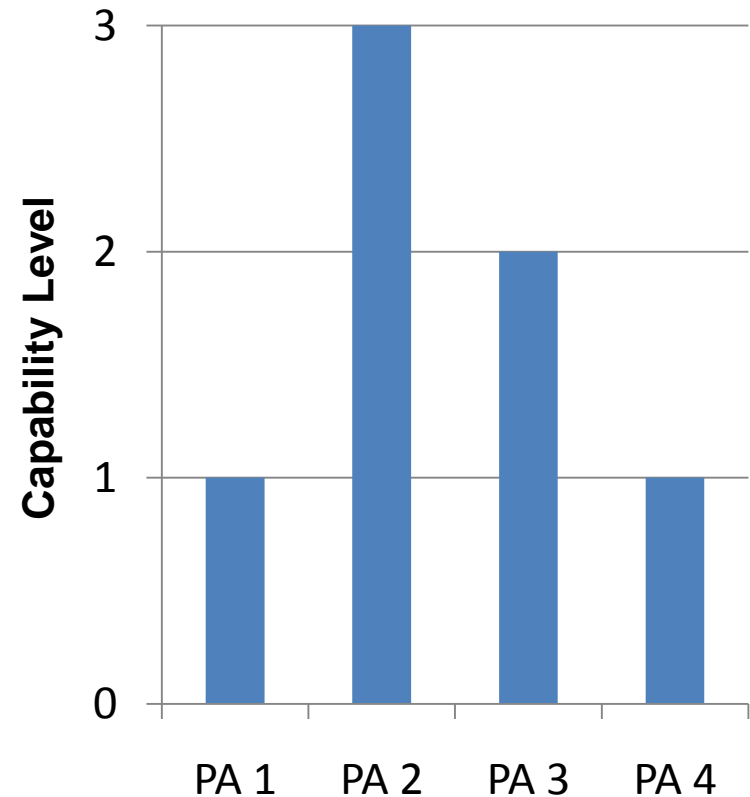


Staged

For measuring the Maturity Level : the same capability in a pre-defined set of Process Areas

Continuous

For measuring the Capability Level of one or more Process Areas



Maturity Level 1

Initial



How does CMMI level 1 feel?

Benefits

May be exciting, may be very successful (for a time)

Focus

All about key people (who start fires and fight them)

How does it feel?

- Reactive management – issues dominate agenda
- Constantly shifting priorities
- Rework: no time to do it right; but time to do it again and again
- Confusion
- Processes are theory – disconnected from how people work
- Inflexible – must keep key people in slots
- Things started but aren't finished (90% complete syndrome)

You are only as good as the people doing the work

Maturity Level 2

Managed



What does CMMI level 2 feel like?

Benefits

Deliver right first time, increase predictability

Focus

Control commitments and baseline

How does it feel?

- Meetings start on time and are managed
- People understand own and colleagues' roles
- Less time spent reacting to issues; people look forward more
- Tasks and deliverables are finished off
- Management becoming more objective
- Things become calmer

Good people are focused by good management

Maturity Level 3

Defined



What does CMMI level 3 feel like?

Benefits

Standard approaches, common language

Focus

Organisation wide improvement

How does it feel?

- All teams use a standard set of processes, which they adapt to fit their work (e.g. some processes might be adapted to fit a different technology)
- Process is no longer an imposition – people understand the benefits
- Lessons learned are incorporated in processes so that best practices are re-used and past mistakes avoided

Service delivery becomes a team sport

Benefits of CMMI

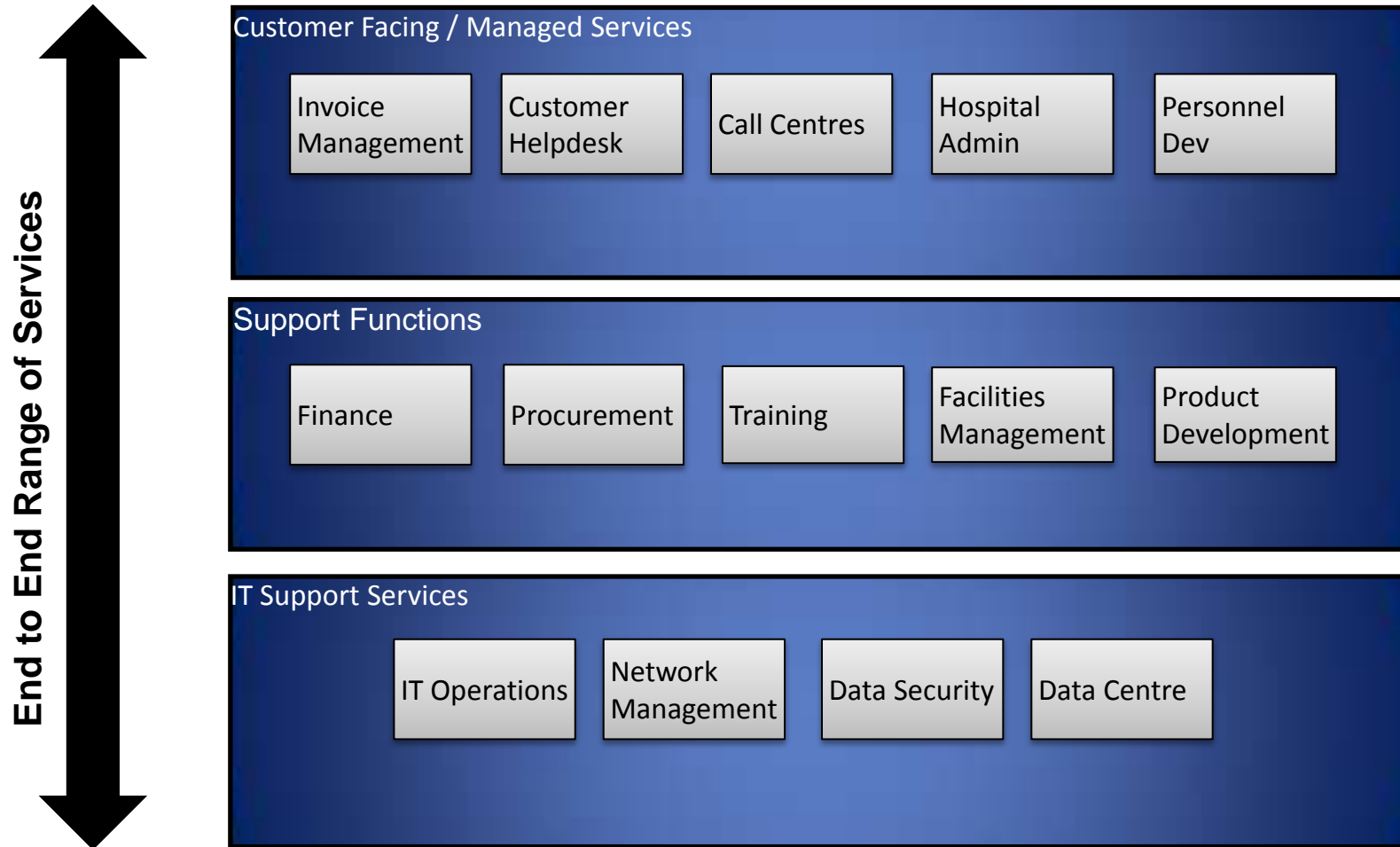
- **Accenture Financial Services Group – phase one**
 - \$3b revenue and 13,000 people
 - 3 years - CMMI level 3
 - Tripled predictability + quadrupled discipline
 - Reduced failure costs by nearly two thirds

- **Accenture Technology Group – phase two**
 - \$12b revenue and 110,000 people
 - 2 years – CMMI level 3 plus CMMI level 5
 - Doubled predictability + almost doubled discipline
 - Reduced failure costs by one third
 - Only one material surprise



CMMI for Services

CMMI[®] Services – not just for IT

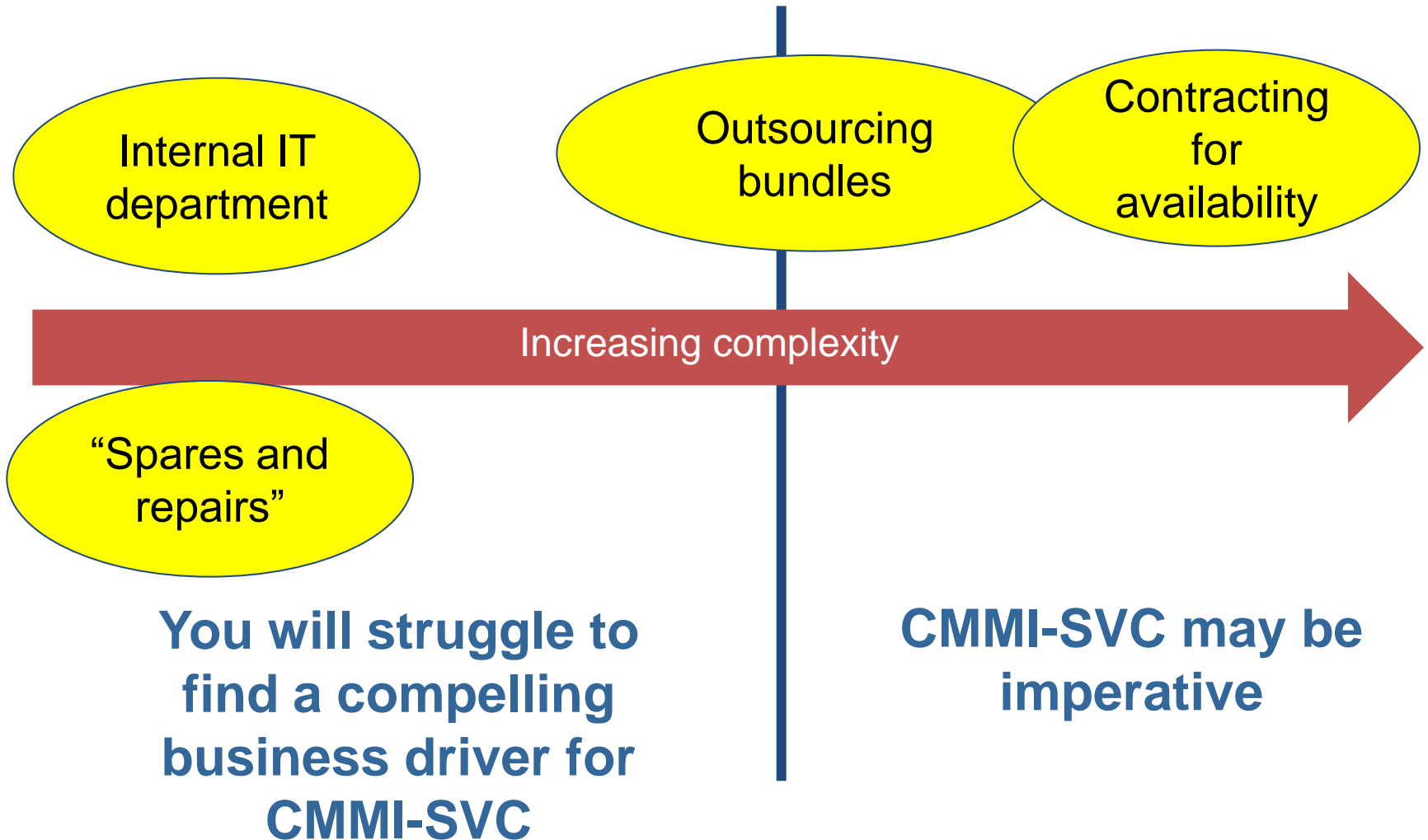


CMMI[®] for Services Model



| Process Category | Process Areas | | | | |
|------------------------------------|---------------------------------------|-----------------------------------|--------------------------------|------------------------------------|-------------------------------------|
| Service Establishment and Delivery | Incident Resolution and Prevention | Service Delivery | Service System Development | Service System Transition | Strategic Service Management |
| Work Management | Capacity and Availability Management | Integrated Work Management | Work Monitoring & Control | Work Planning | Requirements Management |
| | Risk Management | Quantitative Work Management | Service Continuity | Supplier Agreement Management | |
| Process Management | Organisational Performance Management | Organisational Process Definition | Organisational Process Focus | Organisational Process Performance | Organisational Training |
| Support | Causal Analysis & Resolution | Configuration Management | Decision Analysis & Resolution | Measurement & Analysis | Process & Product Quality Assurance |

Is CMMI-SVC worth it?

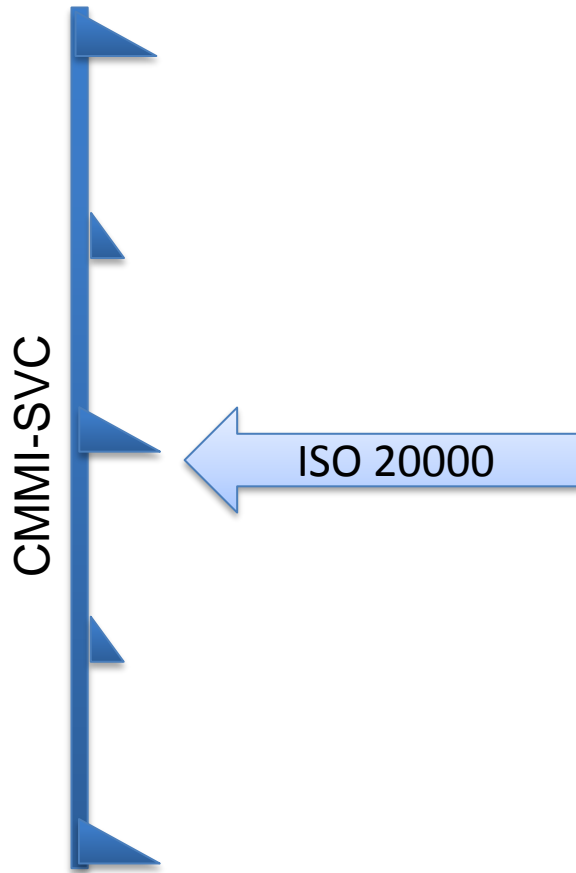


How does ISO20000 relate to CMMI-SVC?



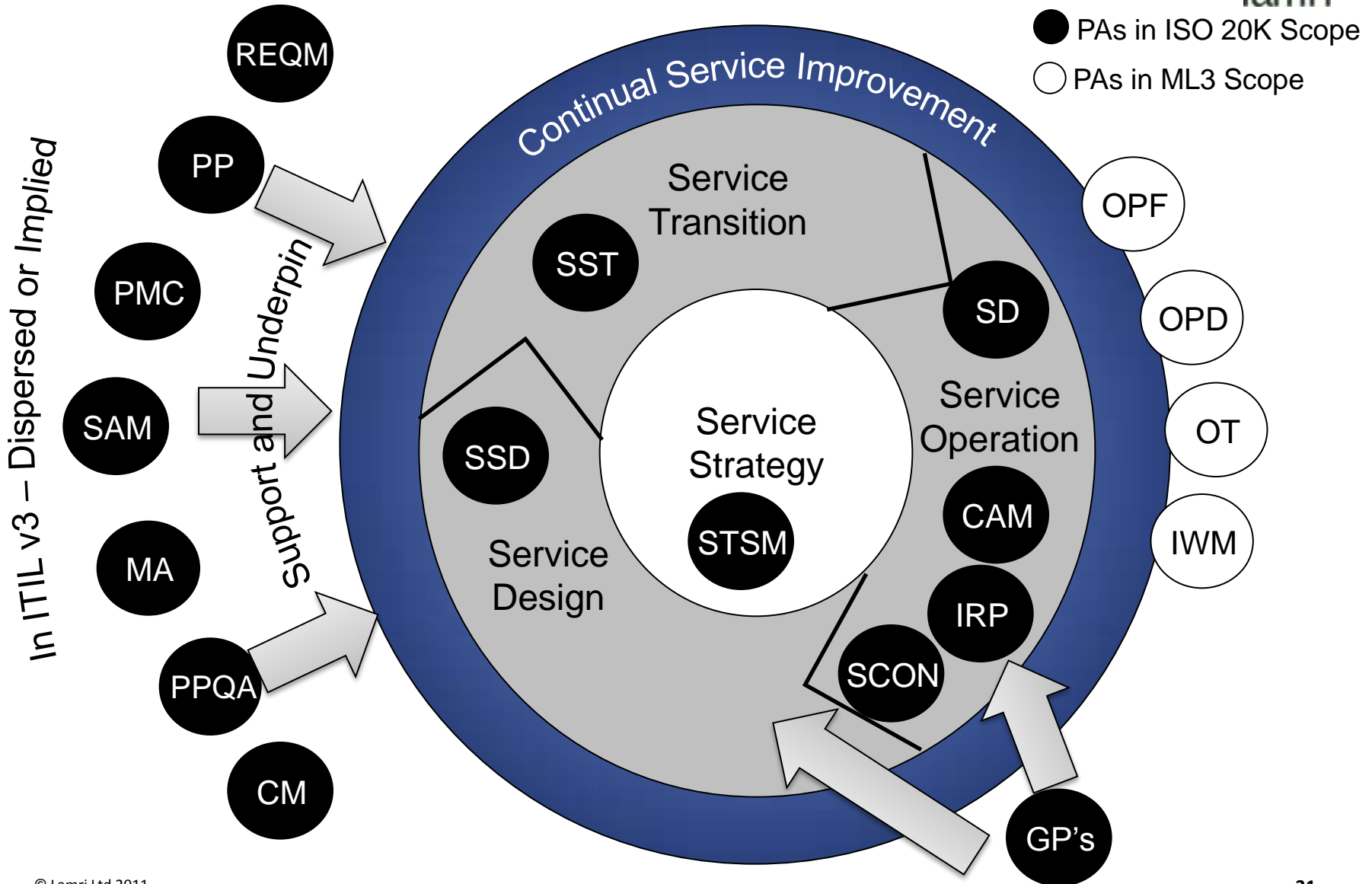
| MATURITY LEVEL | PROCESS AREAS | | | | | | |
|---------------------------|---------------------------------------|------------------------------------|----------------------------------|-------------------------------|------------------------|-------------------------------------|---|
| 5- OPTIMISING | Organisational Performance Management | Causal Analysis & Resolution | | | | | <div style="display: flex; align-items: center;"> <div style="width: 20px; height: 15px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></div> Not covered <div style="width: 20px; height: 15px; background-color: #003366; border: 1px solid black; margin-right: 5px; margin-left: 10px;"></div> ISO 20000 provides approximately this much CMMI-SVC coverage </div> |
| 4- QUANTITATIVELY MANAGED | Organisational Process Performance | Quantitative Work Management | | | | | |
| 3- DEFINED | Organisational Process Focus | Organisation Process Definition | Organisational Training | Integrated Work Management | Risk Management | Decision Analysis & Resolution | |
| | Strategic Service Management | Capacity & Availability Management | Incident Resolution & Prevention | Service System Transition | Service Continuity | Service System Development | |
| 2- MANAGED | Requirements Management | Work Planning | Work Monitoring & Control | Supplier Agreement Management | Measurement & Analysis | Process & Product Quality Assurance | |
| | Configuration Management | Service Delivery | | | | | |

CMMI[®] Services and ISO 20000



- ISO 20000 is a standard “a hurdle”
- CMMI is an approach, more like a configurable barometer which can be tuned to the needs of your business
- CMMI can take you further than ISO 20000
- CMMI-SVC covers most, but not all aspects of ISO 20000

Looking at CMMI from the ITIL perspective

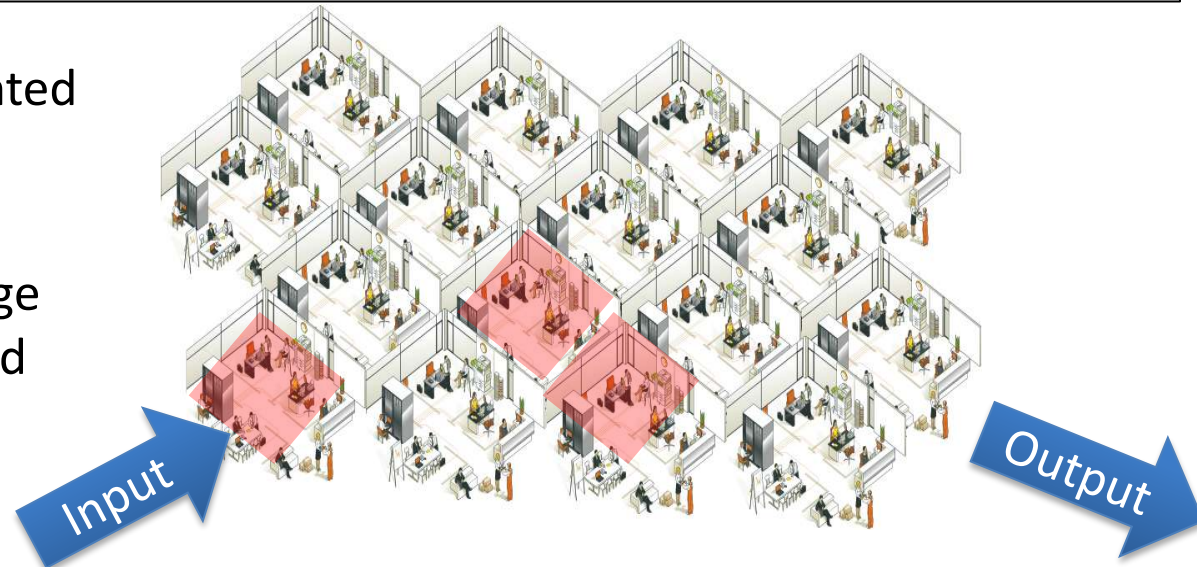


Risk of point improvements with ITIL



**The very ubiquity of ITIL is a challenge – encouraging a “we just do it” attitude that discourages focus on outcomes.
Without an outcomes focus improvement can become all about cost rather than benefit**

- ITIL is often implemented by mid-tier managers
- They often lack the “clout” to affect change across the lifecycle and across functions



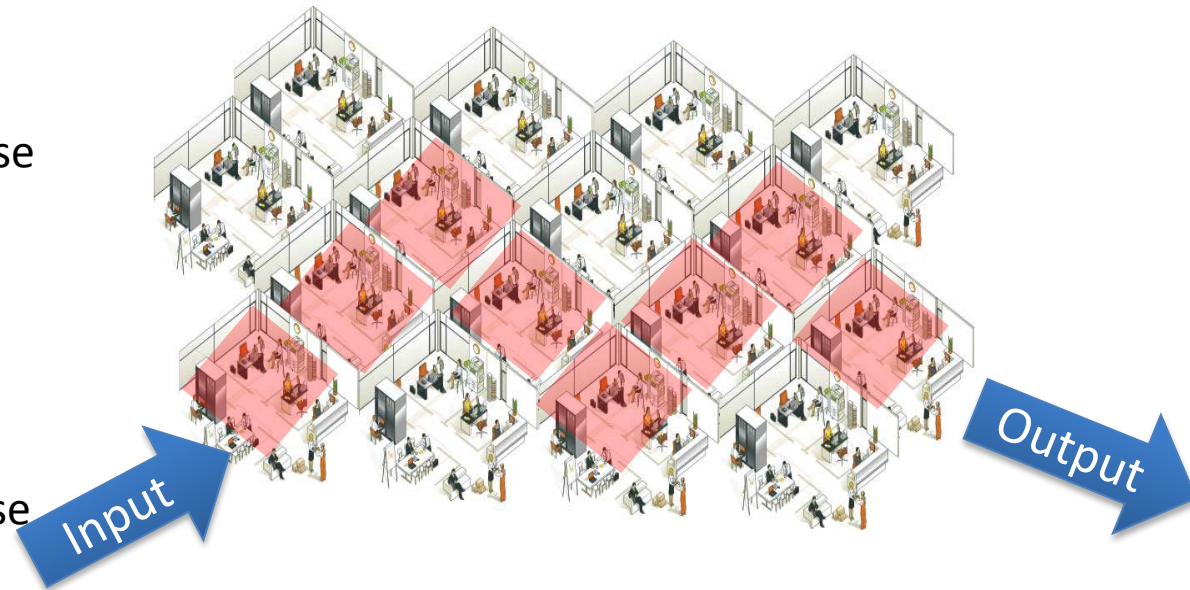
**When you can't “see” the big picture it's hard to make some things work
Point improvements are easy but the benefits are limited**

CMMI-SVC widens the scope of improvement



**CMMI appraisals require a clear scope, one that makes “sense”
You can’t just do the service desk!**

- Having a more complete scope means
 - Stronger improvement case required, can be harder to start
 - Greater senior management commitment to change when case approved



CMMI appraisals strongly support the case for end to end improvement



Benefits of CMMI

BT DFTS (Defence Fixed Line Telecommunications Service) is an 18 year agreement with the MoD valued at £3.5Bn to 350,000 end users around the world. BT DFTS targeted CMMI ML2.

| Measure Used By The Organization | Performance Result |
|---|--|
| Operating Costs | £13.2M Annualized Saving |
| Headcount | 23% Reduction |
| Service Credits | 93% Reduction |
| Customer Satisfaction (As measured by the Office of Government Commerce) | 25% Increase across Senior MoD Officials End user levels maintained |
| DFTS Employee Satisfaction | 6% Increase |



CMMI[®] for Acquisition (and outsourcing)

What is its purpose?

Provide you with a framework to properly
prepare for, engage with and manage
suppliers to provide you with new products
or services

Outsource and Acquisition



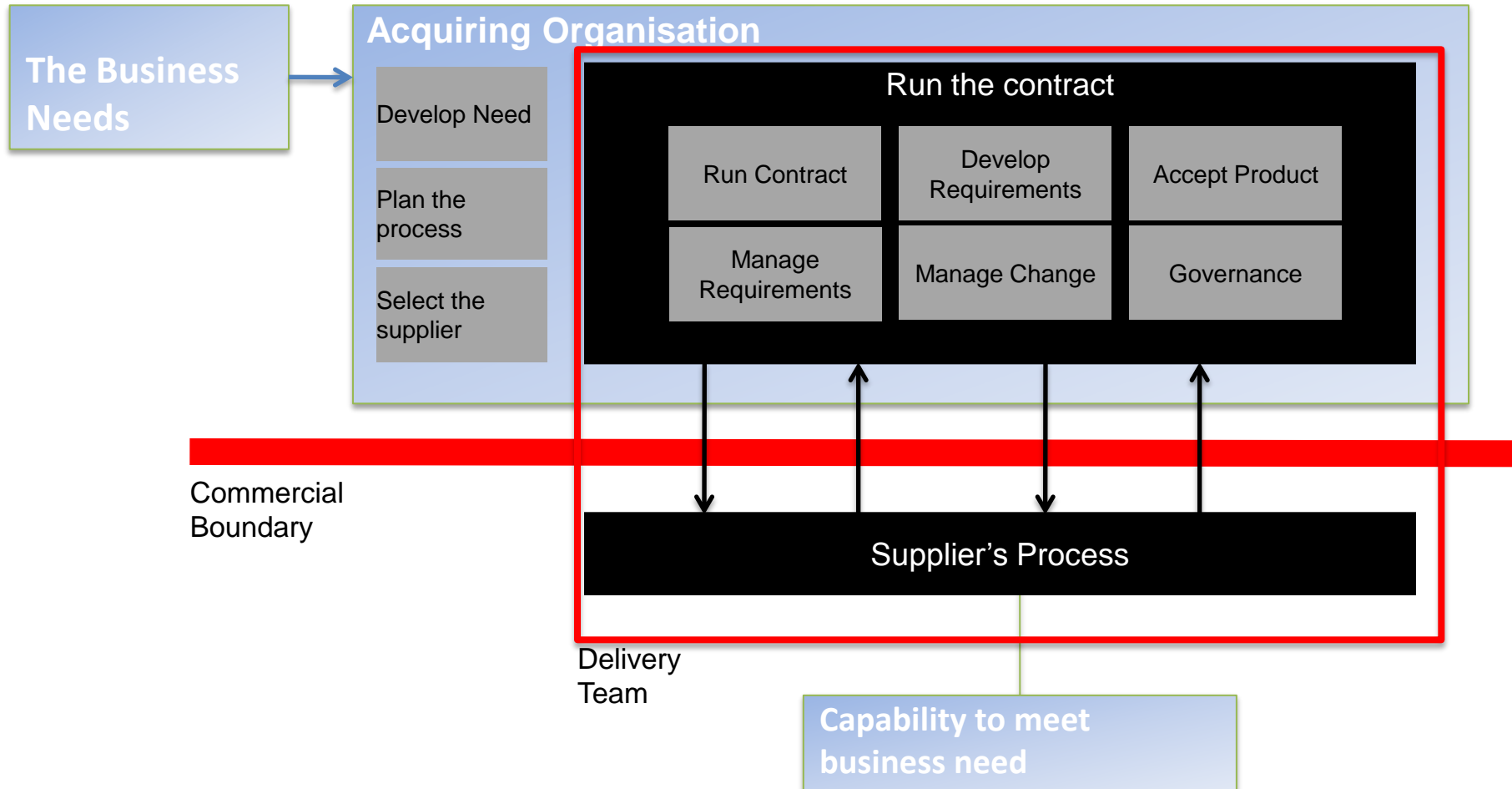
To outsource – to move an activity or package of work you already do to a third party provider

This is a fuzzy line

To acquire – to commission a new package of work or project on a third party provider

Third party provider can be a separate internal group

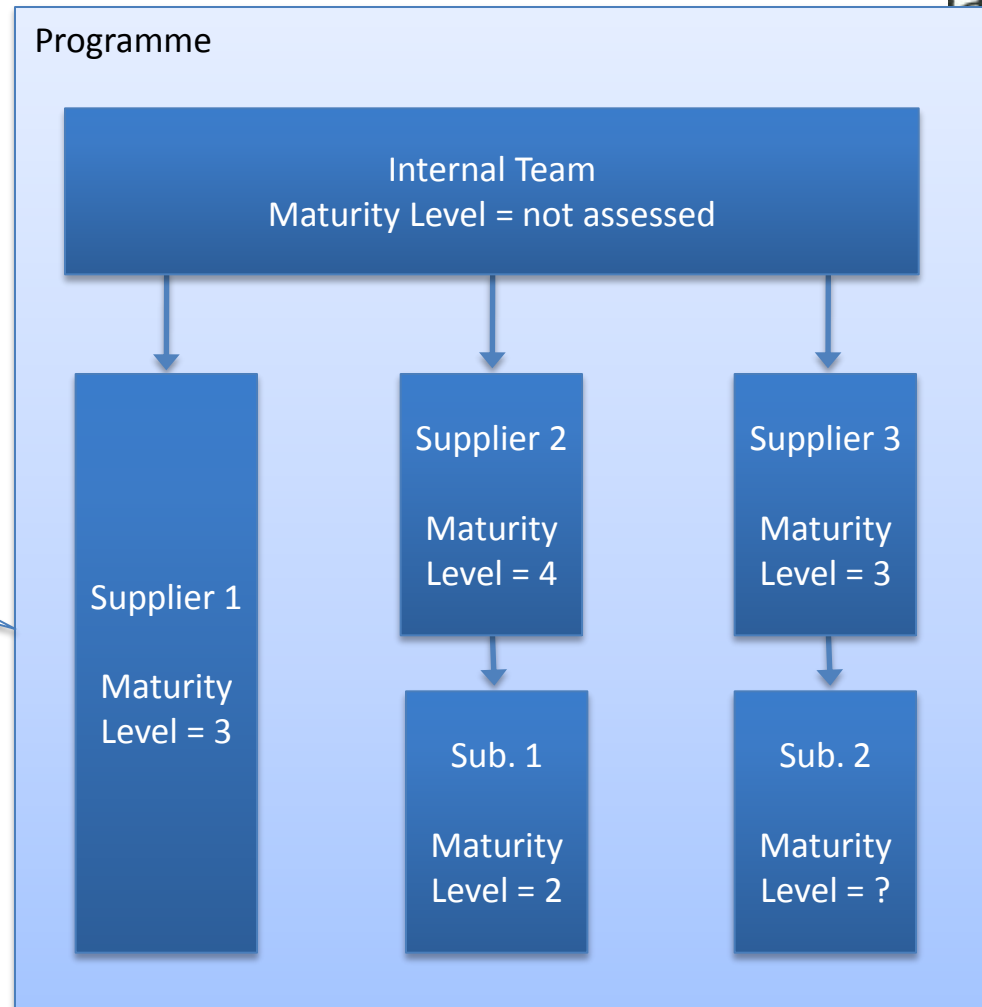
Acquisition



A Programme Capability

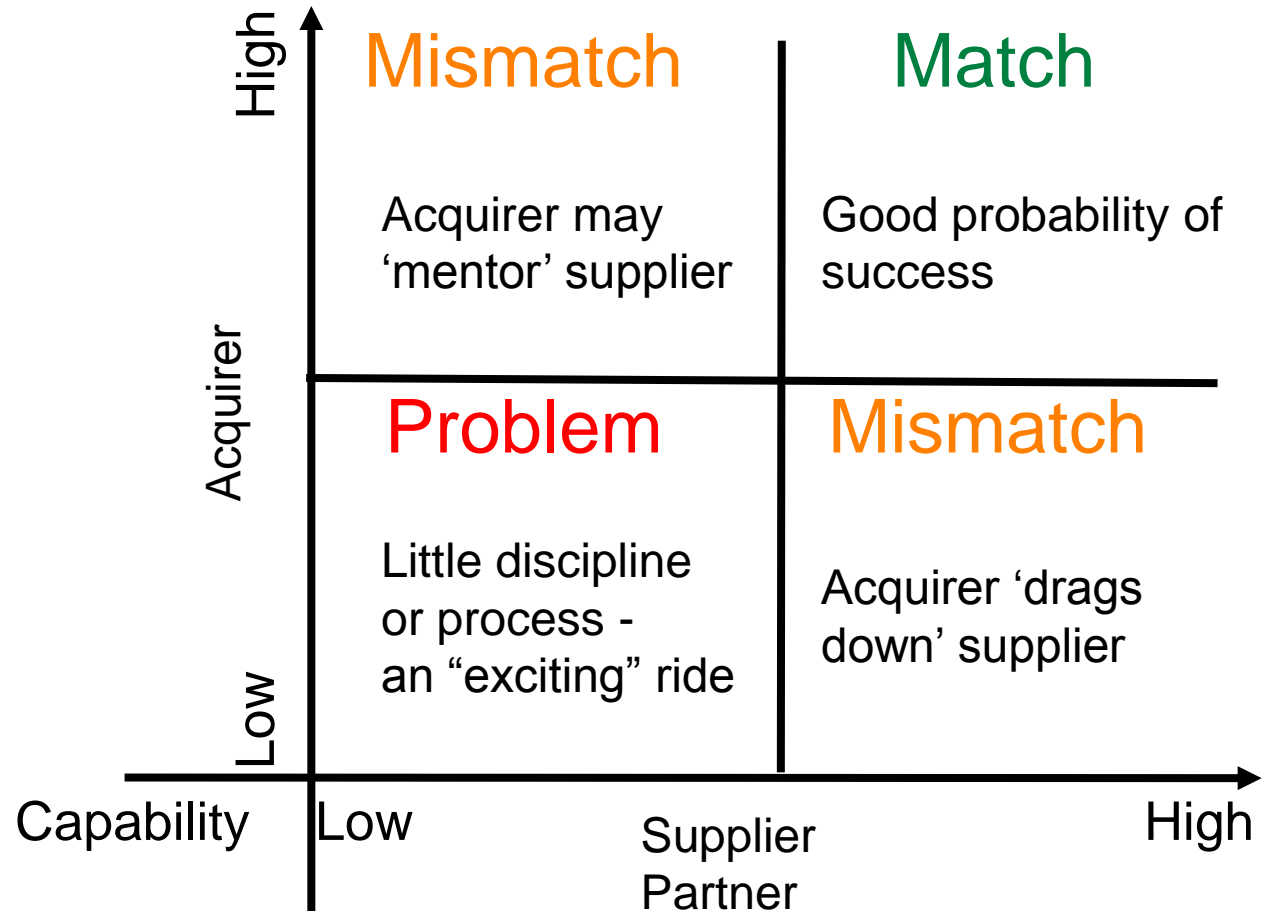
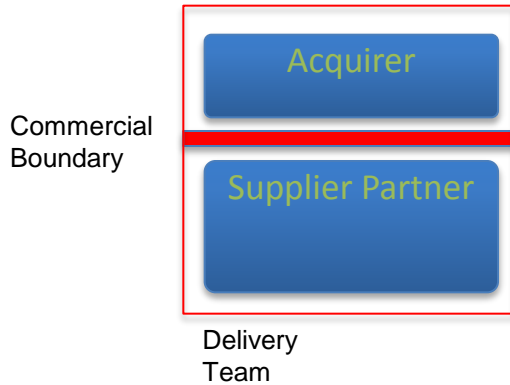


What's the Maturity of the Programme?
 $?+3+4+2+3+? = ?$



How confident would you feel about delivering this Programme?

Assure the value of the relationship



CMMI-ACQ Process Areas - Staged Representation



| MATURITY LEVEL | PROCESS AREAS | | | | | |
|---------------------------|---------------------------------------|--------------------------------------|---|-------------------------------|------------------------|-------------------------------------|
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| 4- QUANTITATIVELY MANAGED | Organisational Process Performance | Quantitative Project Management | | | | |
| 3- DEFINED | Organisational Process Focus | Organisation Process Definition | Organisational Training | Integrated Project Management | Risk Management | Decision Analysis & Resolution |
| | Acquisition Technical Management | Acquisition Verification | Acquisition Validation | | | |
| 2- MANAGED | Requirements Management | Project Planning | Project Monitoring & Control | Acquisition Management | Measurement & Analysis | Process & Product Quality Assurance |
| | Configuration Management | Acquisition Requirements Development | Solicitation & Supplier Agreement Development | | | |

What's the first step?

Understand your current capability

