



ITIL & ISO20000 Roadmap at Fermilab

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Agenda

- Motivations
- What is ITIL?
- What is ISO20000?
- ISO20000 Readiness Assessment
- ISO20000 Roadmap
- What have we completed?
- What is still to be done?
- Conclusions

Motivations

- In 2007, we began to take a serious look at work processes, efficiencies, tools, etc. for our Help Desk, which had not materially changed in a number of years.
- Found it is very difficult for overloaded operational staff to look carefully at “different ways of doing things” – yet this needs to be done!



"Here is Edward Bear, coming downstairs now, bump, bump, bump, on the back of his head, behind Christopher Robin. It is, as far as he knows, the only way of coming downstairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it."

— A.A. Milne (Winnie the Pooh and the House At Pooh Corner)

Motivations

- ~18 months ago, faced severe budget cutbacks w/ certainty of furloughs & voluntary layoffs & earlier retirements, and possibility of involuntary retirements.
- Needed to (rapidly) assess impacts on our (4-person) Help Desk & identify some easy wins for efficiency improvements.
- Invited a consultant to do an assessment of our Help Desk.

Motivation

- Among many useful suggestions, this assessment recommended moving from a “Help Desk” to an (ITIL) “Service Desk”.
- We had also been hearing quite a lot about ITIL from other consultants & vendors, and our friends at other Laboratories (thanks to NLIT!)
- Seemed like something to pay attention to!

Motivations

- Top ten concerns of IT Directors/CIO's
 - (cited by "ISO20000 Toolkit")
 - 1. Aligning IT strategy with business strategy.
 - 2. Meeting business and user needs.
 - 3. Coping with change.
 - 4. Dealing with senior management.
 - 5. Managing costs, budgets and resources.
 - 6. Keeping up with technology.
 - 7. Recruiting and retaining staff.
 - 8. Time and resource management.
 - 9. Infrastructure management.
 - 10. Maintaining skills and knowledge.

What is ITIL (v2)?

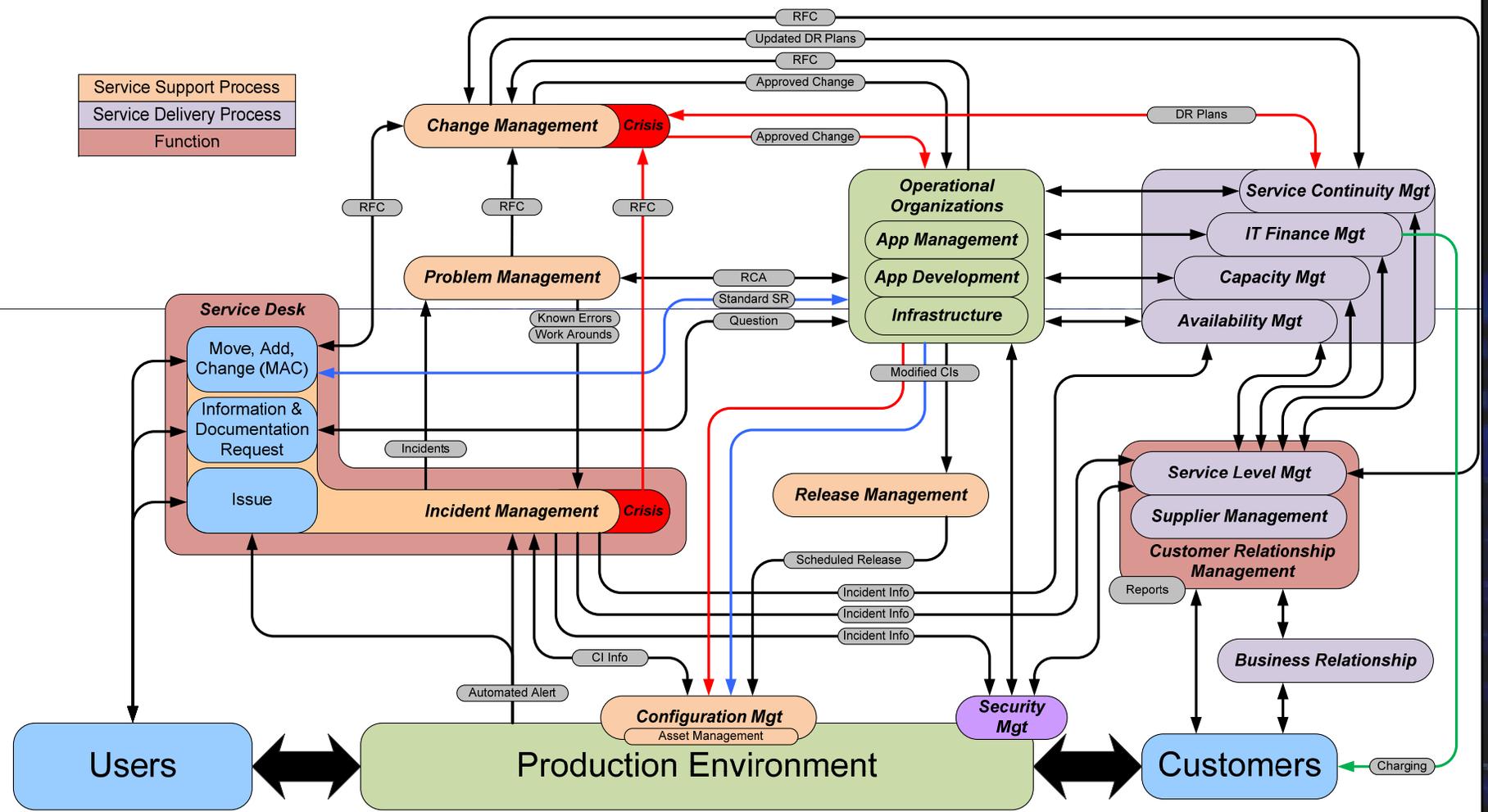
- Information Technology Infrastructure Library (ITIL) is a *framework* for delivering (and improving and managing) IT services.
 - *Not* a mandatory set of rules.
- Established and standardized in 1988 in the UK
 - now on v3.
 - Although we have chosen to implement v2.
- Focus on managing *services to customers*, not *technology to users*.
- Services must be *defined, controlled, measured and managed* in order to be *improved*.

What is ITIL (v2)?

- ITIL v2 consists of eleven processes in two IT service management areas, plus a function:
 - IT Service Support: Incident, Problem, Configuration, Change, Release Management
 - IT Service Delivery: Service Level, Financial, Capacity, Service Continuity, Availability
 - Service Desk
- These processes relate to and support one another.
 - Resource: Service Support and Service Delivery
- For more details, become ITIL Foundation certified!

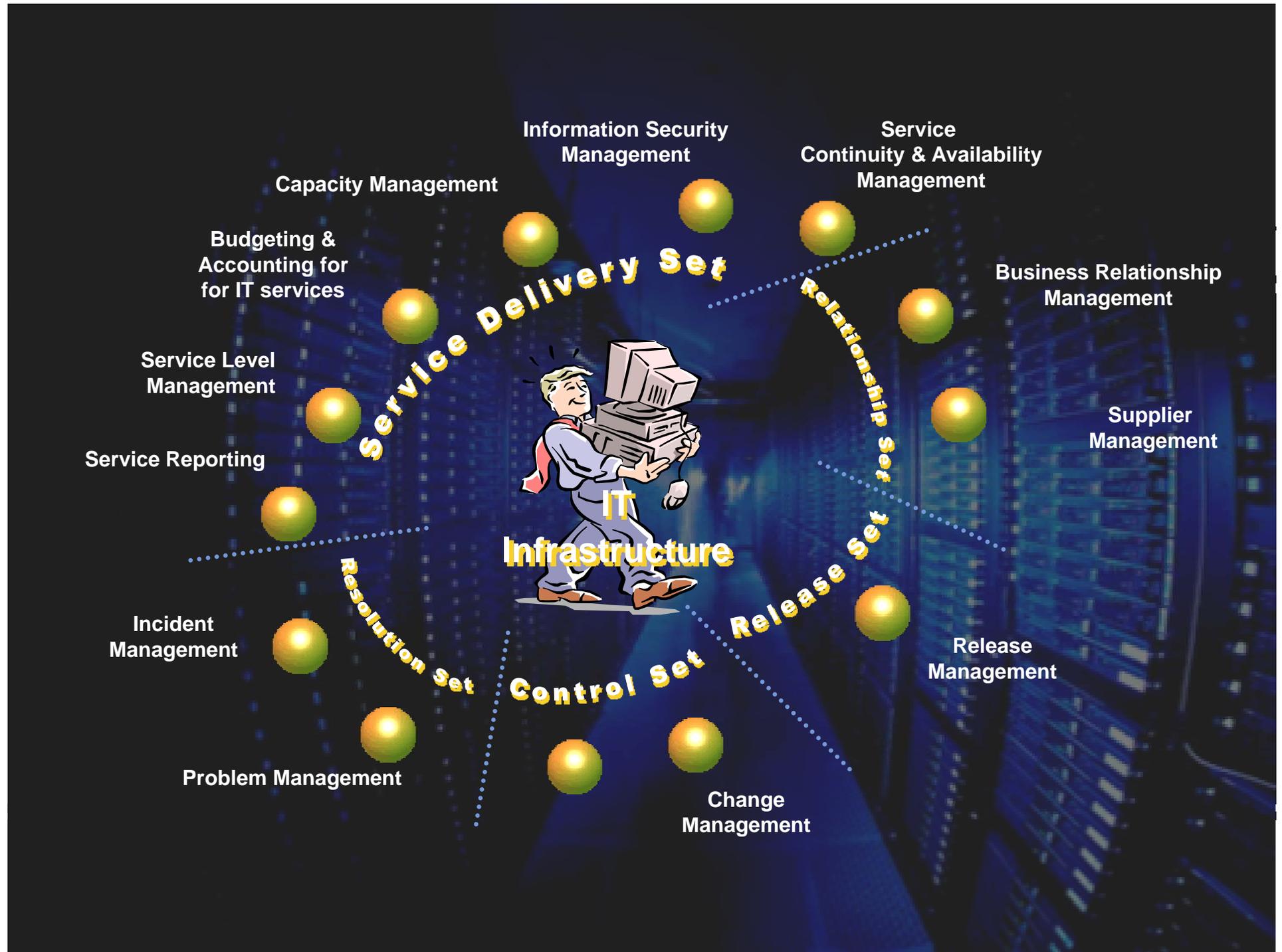
IT Service Management

Service Support Process
Service Delivery Process
Function



What is ISO20000?

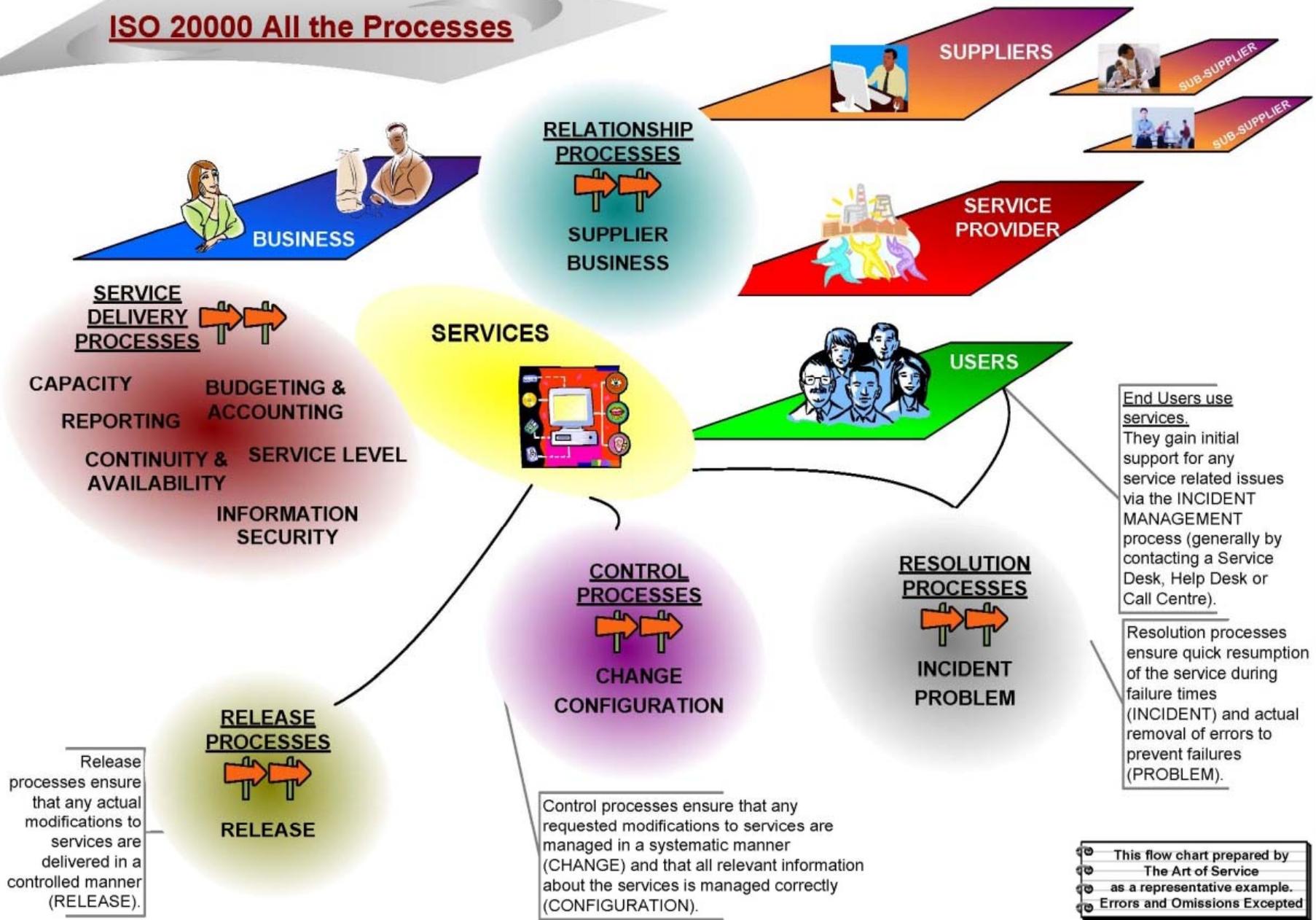
- ISO20000 is the international standard for IT service management.
 - “It describes an integrated set of management processes for the effective delivery of services to the business and its customers.”
 - Closely follows the ITIL framework.
 - While *individuals* are ITIL certified, *organizations* are ISO20000 certified.



What is ISO20000?

- ISO20000 looks at:
 - Requirements for a management system;
 - Planning and implementing service management;
 - Planning and implementing new or changed services;
 - Service delivery process;
 - Relationship processes;
 - Resolution processes;
 - Control processes;
 - Release processes.

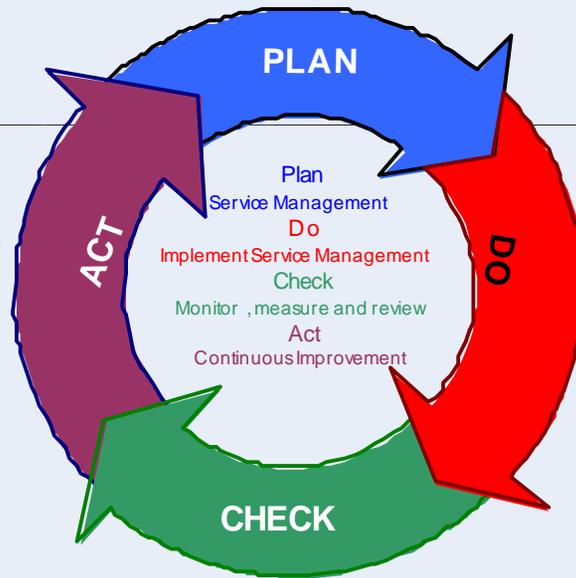
ISO 20000 All the Processes



This flow chart prepared by
 The Art of Service
 as a representative example.
 Errors and Omissions Excepted

Manage Services

Management Responsibility



Business requirements

Customer requirements

Request for new / changed service

Other processes e.g. business, supplier, customer

Service Desk

Other Teams e.g. Security IT operations

Business results

Customer satisfaction

New or changed service

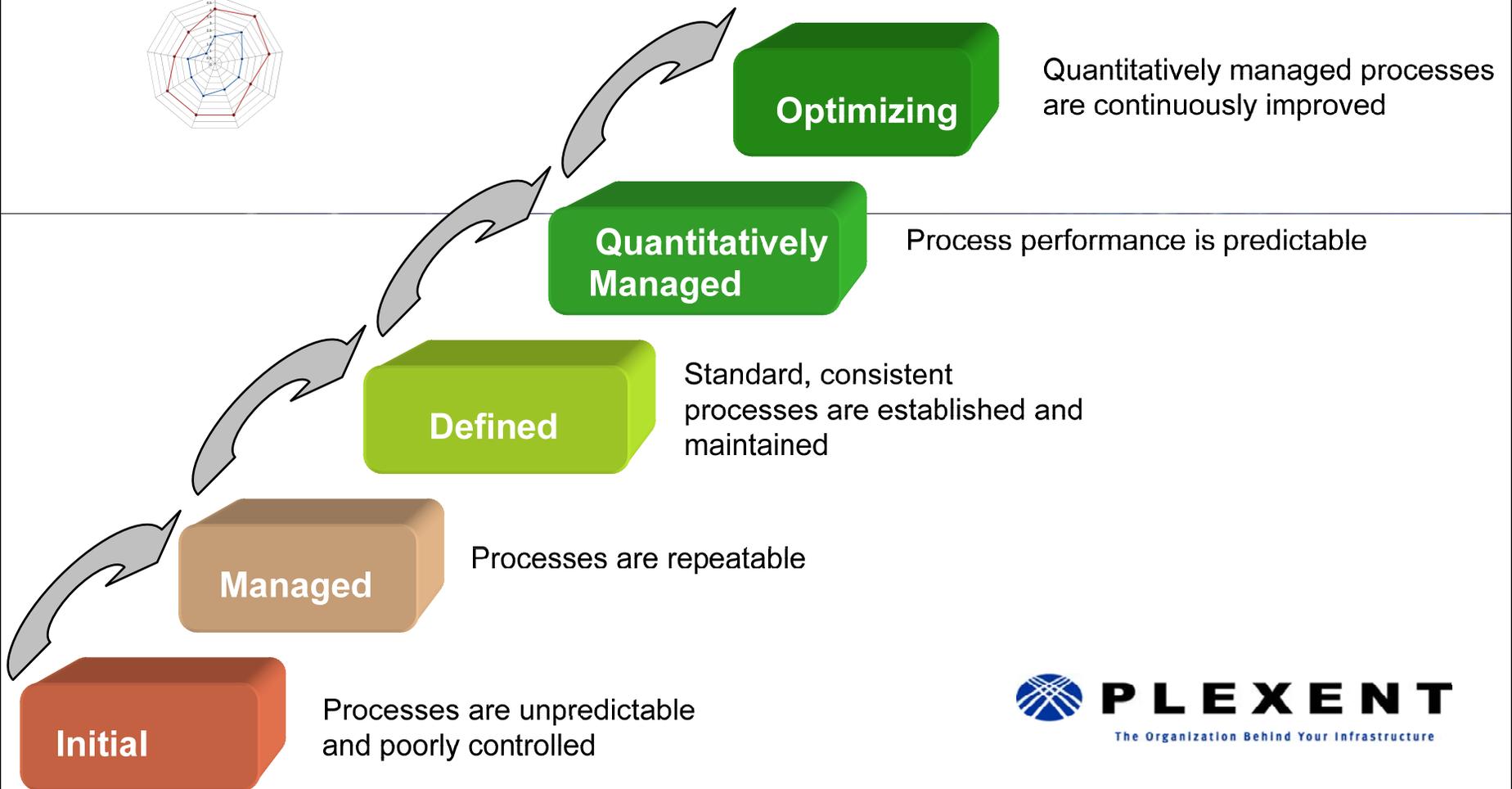
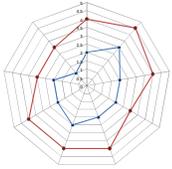
Other processes e.g. business, supplier, customer

Team and people satisfaction

ISO20000 Readiness Assessment

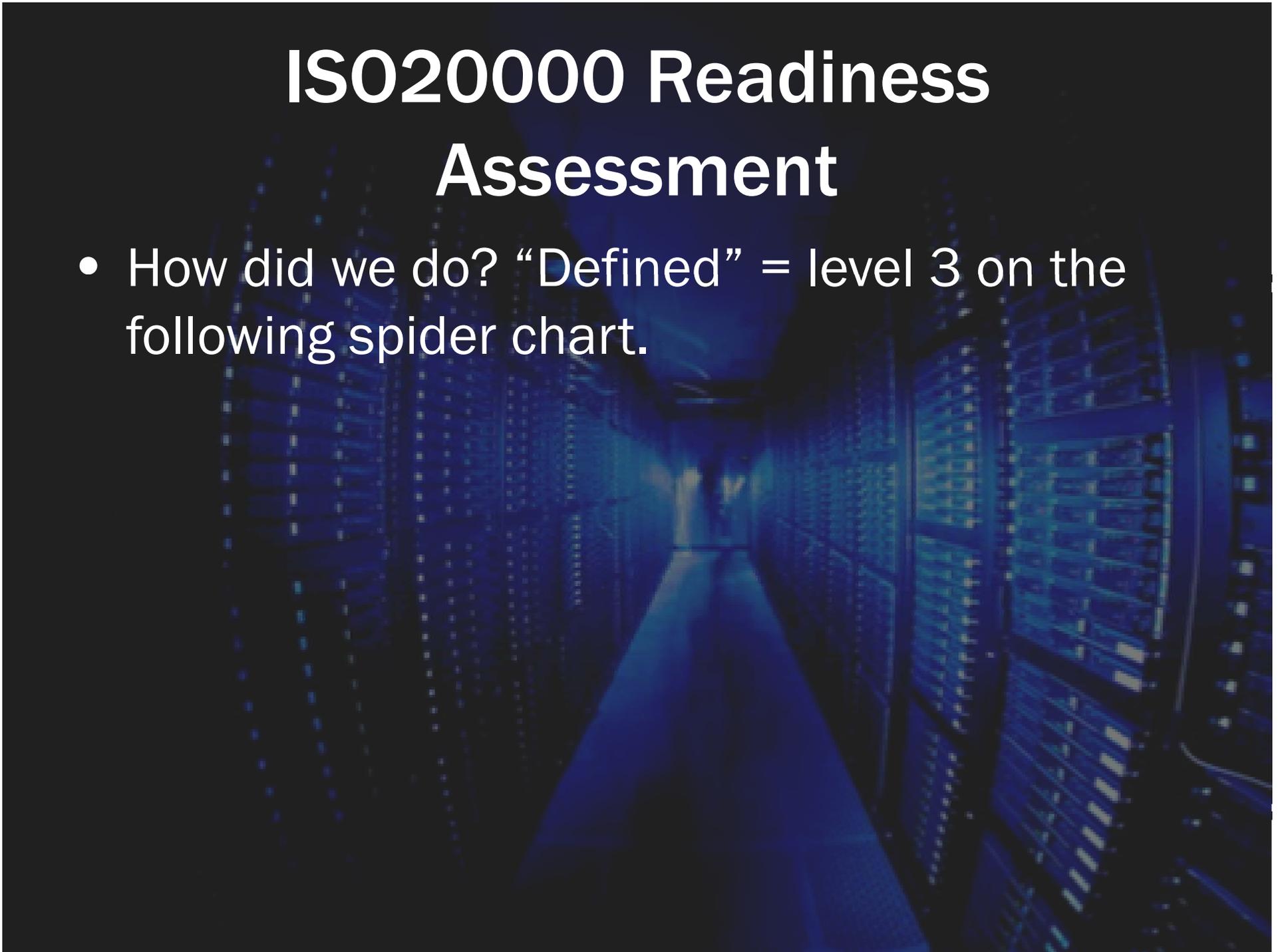
- Contracted with BMC/Plexent to do an ISO20000 readiness assessment and roadmap for ISO20000 certification.
 - Assessment conducted by interview and examination of documentation.
 - Results captured in final report (174 pages) as well as ITdna web portal.
- For ISO20000 certification, need at least CMM level “Defined” for all processes.

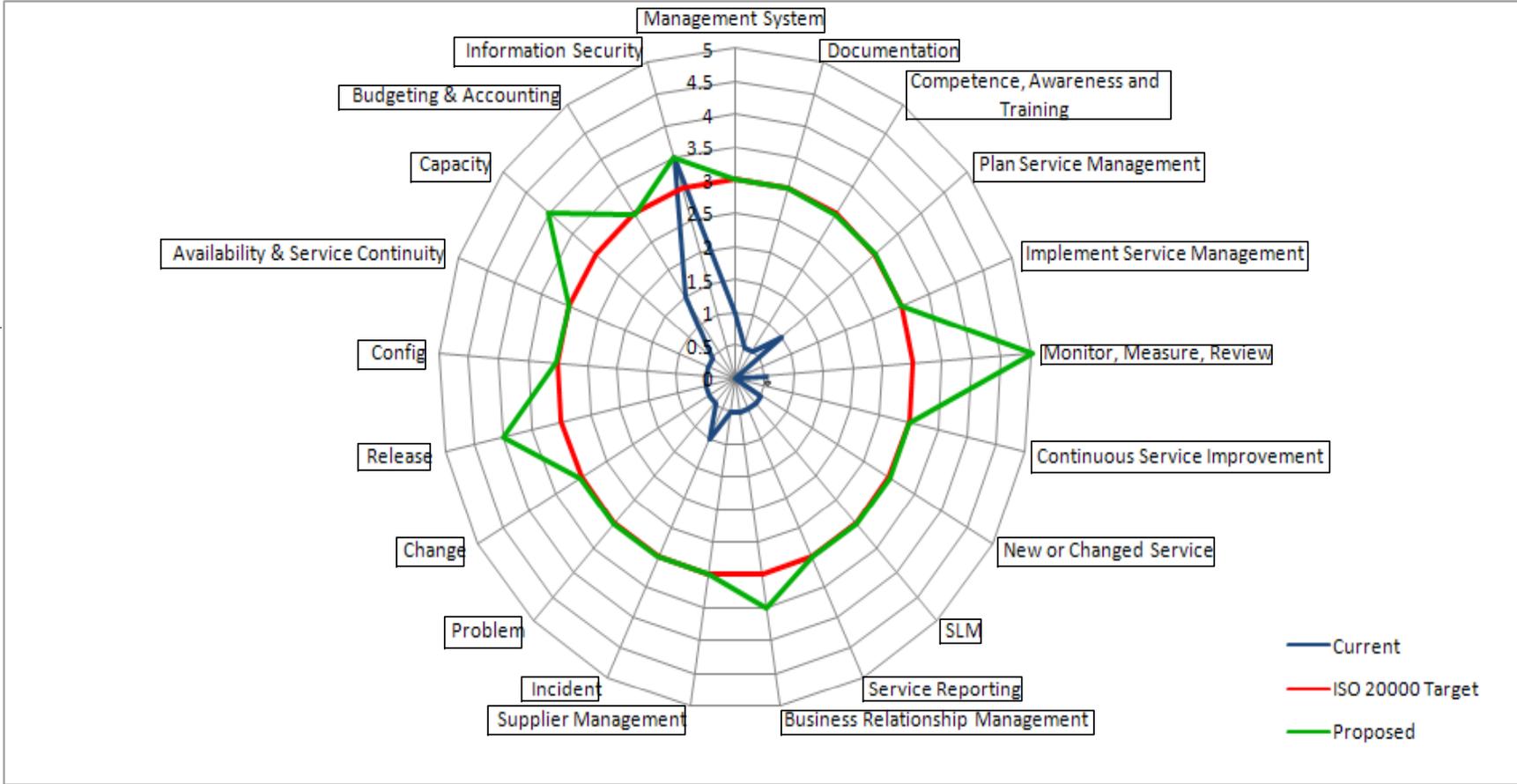
itDNA Maturity Scale



ISO20000 Readiness Assessment

- How did we do? “Defined” = level 3 on the following spider chart.





ISO20000 Readiness Assessment

- Well, now *that's* rather sobering, and a bit depressing, but not entirely unexpected.
 - In most cases, we had processes we followed, but they weren't documented in a way that they were repeatable.
 - Also, since processes depend on each other, you cannot do well on, e.g. change management if you don't have configuration management under control. Problem management requires incident management first. Etc.
- Anyway, let's move forward and improve all this...

ISO20000 Roadmap

- Asked for a roadmap to complete ISO20000 certification in two (maybe three) years.
- Assumes help from BMC/Plexent but budget means we'll still do a lot of work ourselves.
- Implement ITIL processes in a logical and manageable progression.
 - You can't eat an elephant all at once!

ISO20000 Program Plan

Assessment Home

November 2008

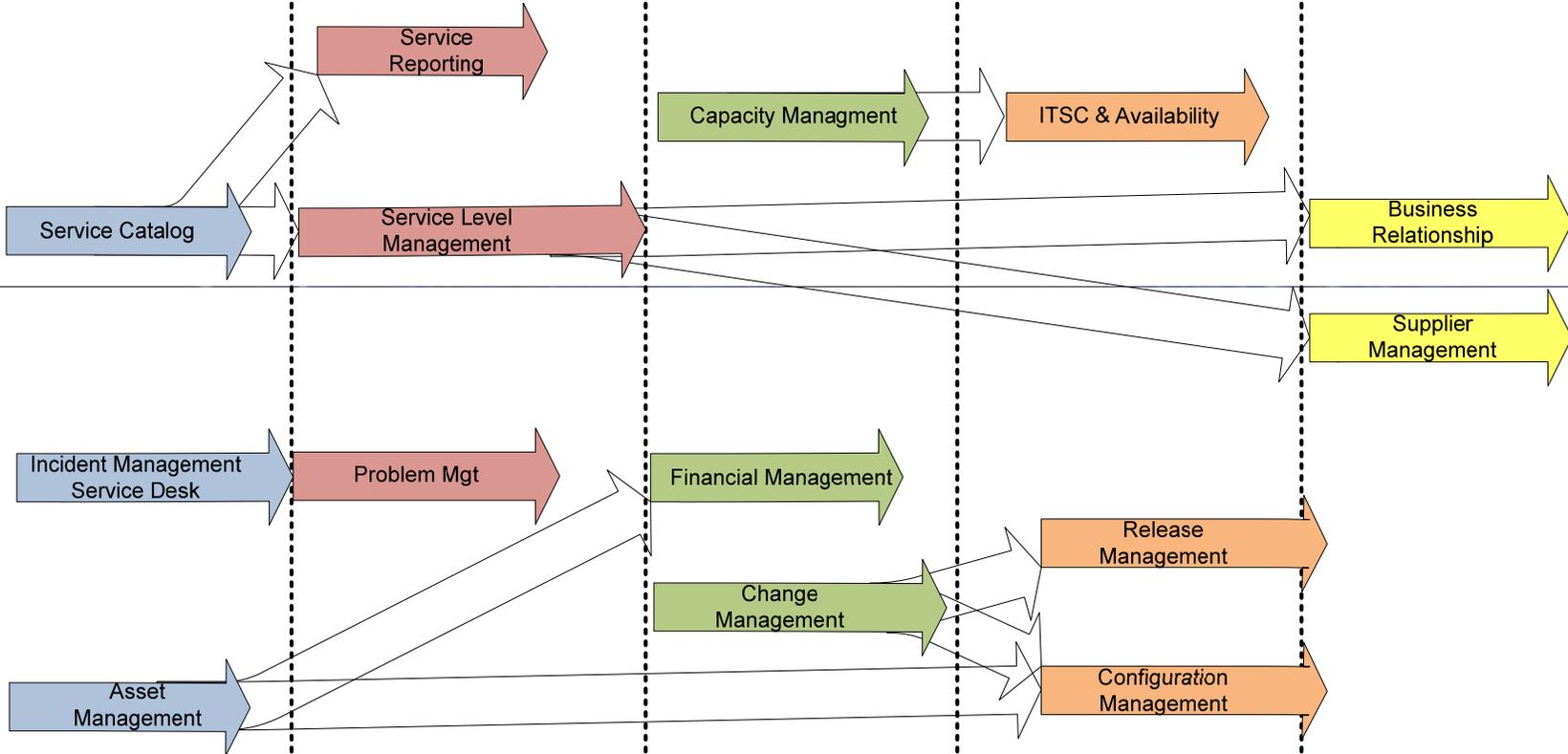
April 2009

September 2009

March 2010

August 2010

Current



Phase I

Phase II

Phase III

Phase IV

Phase V

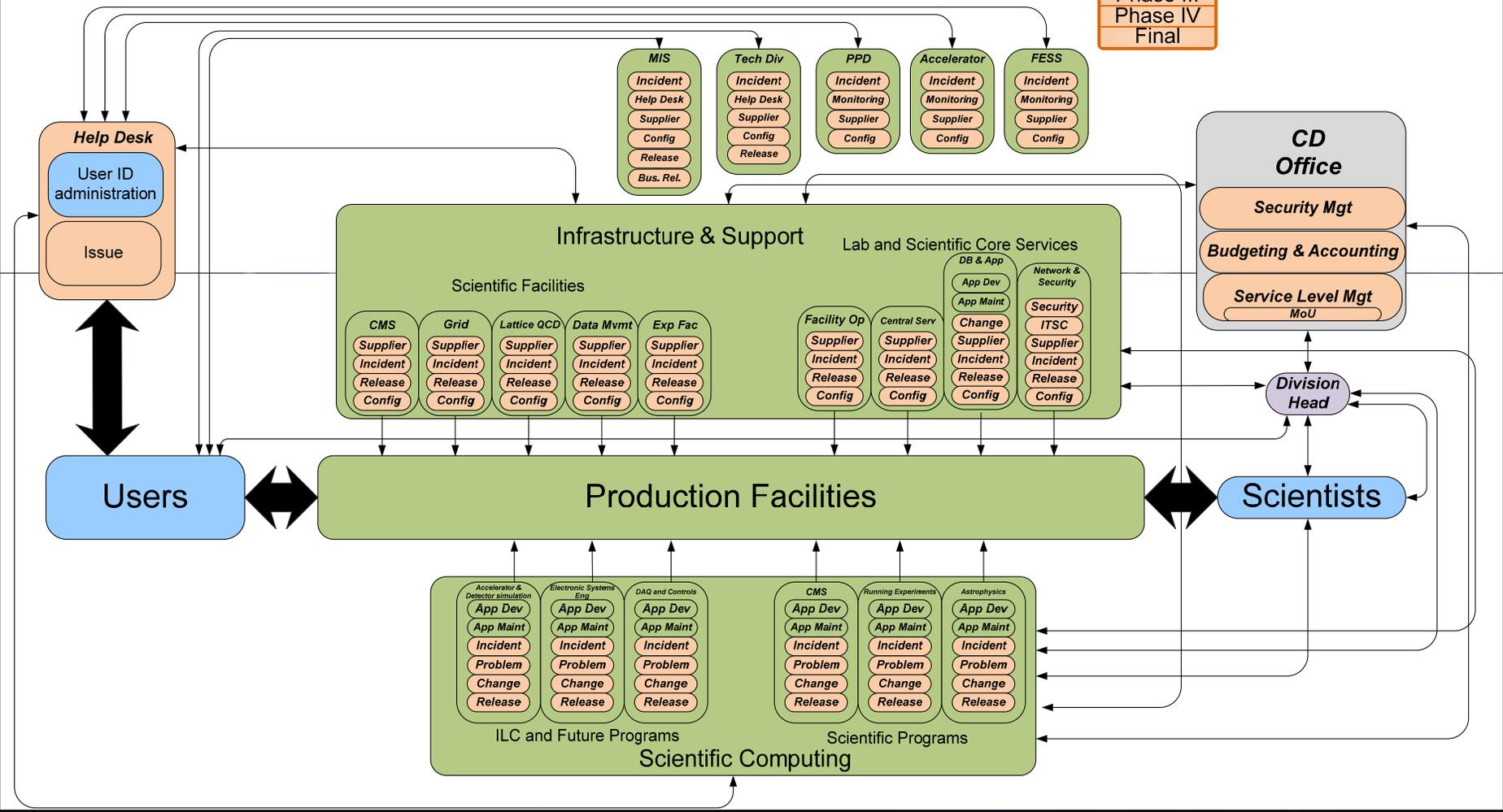
ISO20000 Roadmap

- In addition, there were recommendations on organization changes.
 - “As-is” to “To-be” in five easy steps.

Home

Current Environment

- Current
- Phase I
- Phase II
- Phase III
- Phase IV
- Final

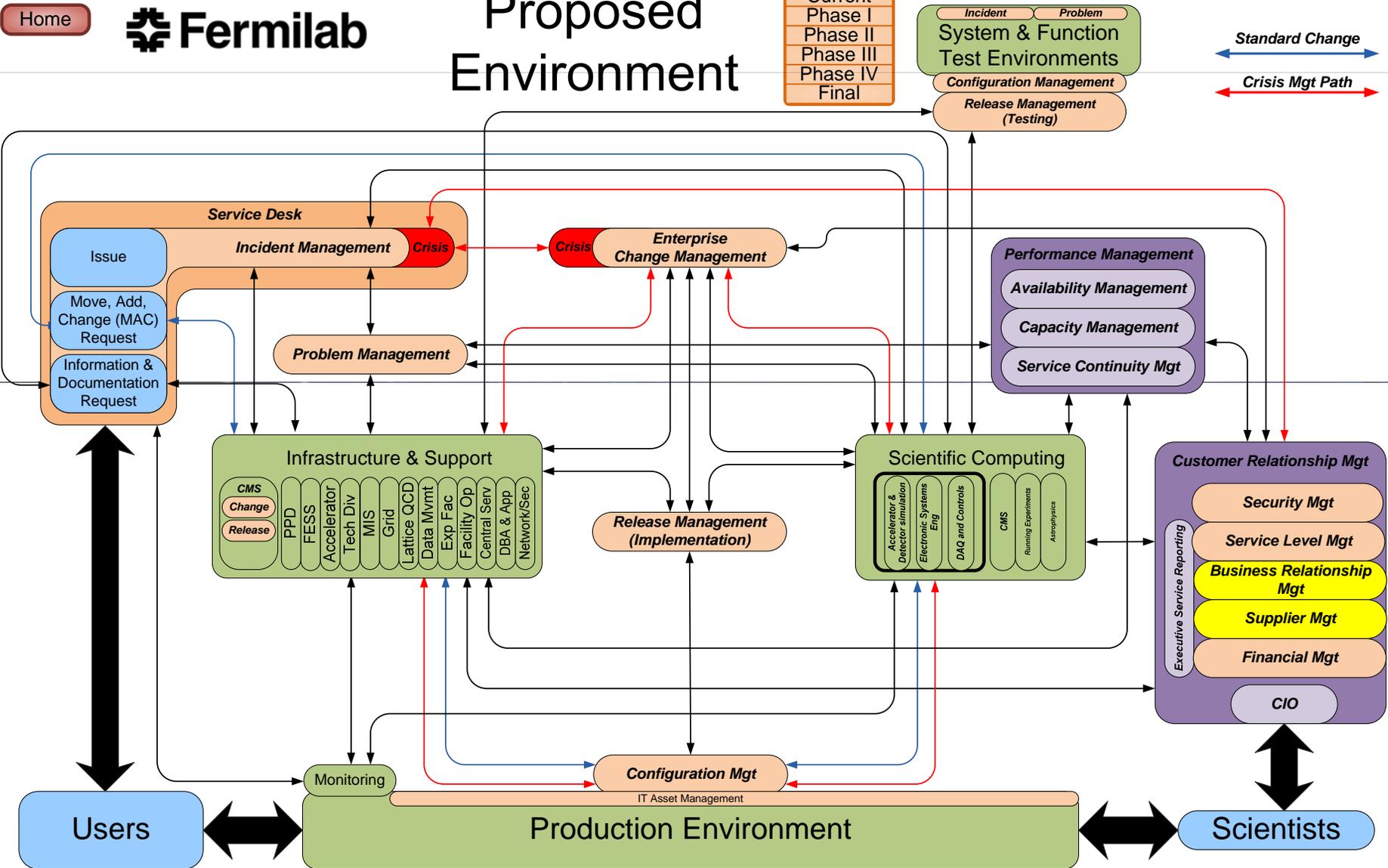


Home



Proposed Environment

- Current
- Phase I
- Phase II
- Phase III
- Phase IV
- Final



What have we completed?

- Phase I was begun in Oct 2008 and completed April 2009 –
 - Workshops were held for incident management, asset management and service catalog.
 - Remedy 7 was deployed.
 - An initial service catalog was completed and loaded.
 - An initial set of critical assets was identified and loaded.
 - Incident management processes are documented, loaded and followed.
 - The Service Desk was launched.
 - A large number of individuals have been ITIL Foundation trained and certified.

What have we completed?

- Organizational change came rather more quickly than expected –
 - Our MIS business systems silo was consolidated into Computing Division in February, 2009.
 - Director created CIO and AD for Computing positions with authority over all IT.

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Deputy Director
Young-Kee Kim
Chief Operating Officer
Bruce L. Chrisman

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Cynthia S. Conger

- [Finance Section](#)

What is still to be done?

- Phase II has just begun –
 - Workshops for problem management, service level management, and service reporting were held in mid-May.
- Organizational consolidation of business system department still underway.
- Some cleanup work from Phase I still remains –
 - Solidifying incident management processes.
 - Further configuration work of Remedy 7 service desk tool.
 - Tracking metrics and KPI's for service desk.

Conclusions

- ITIL actually works as an IT service management framework.
 - One unanticipated benefit is the use of common vocabulary with precise meanings – “Incident”, “Problem”, etc.
- ISO20000 is a useful means to measure success of IT service management and improvement.
 - Plus, it meshes well with certification efforts in ES&H, QA, etc., which helps upper management.
- ITIL has helped sharpen our thinking about:
 - IT governance and architecture
 - Roles, responsibilities, authorities, accountabilities (R2A2)
 - Organizational structures
- BMC/Plexent has been a strong partner for us.
 - But don't underestimate the amount of work involved!
- Strong upper management support is vital to success!