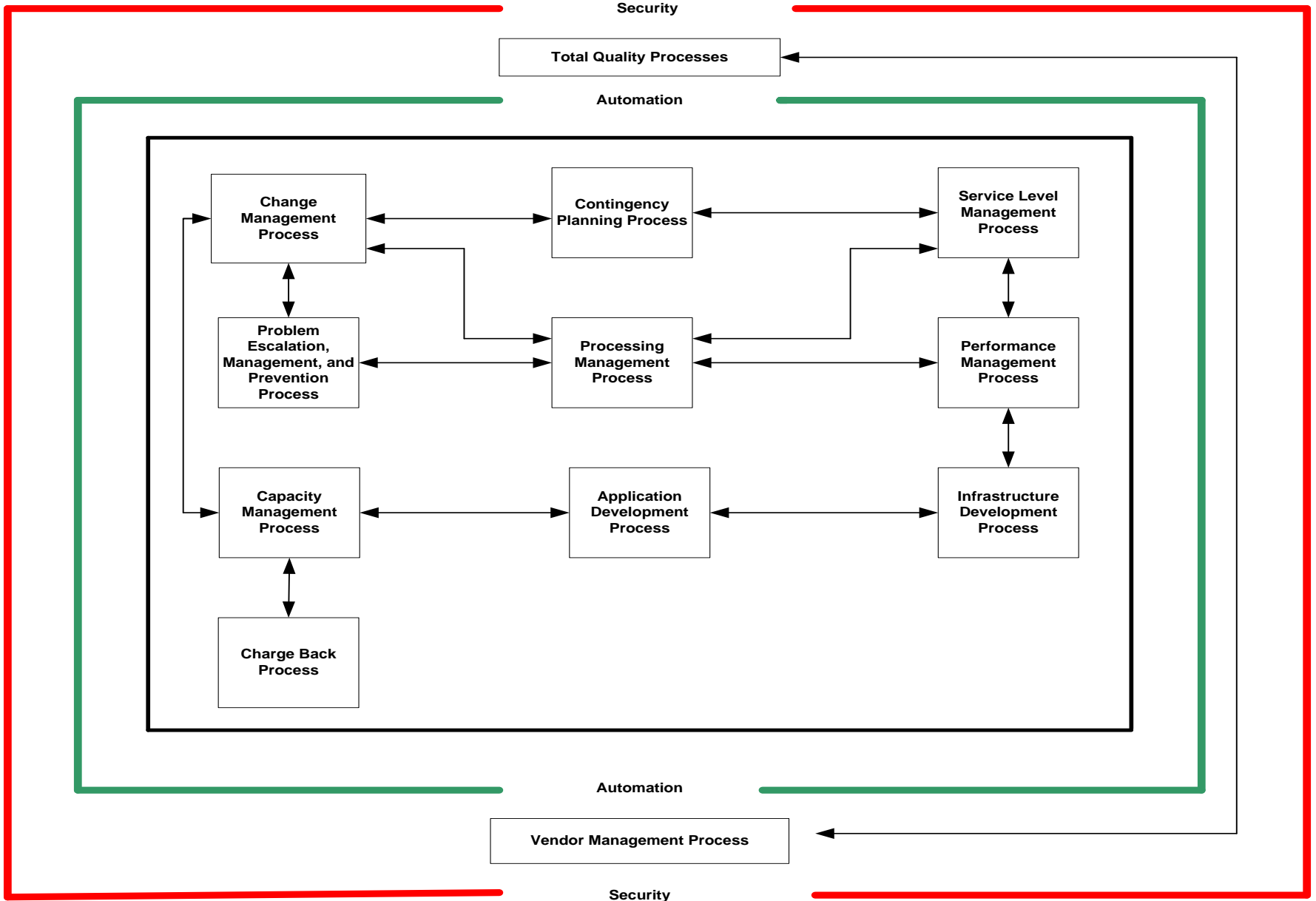
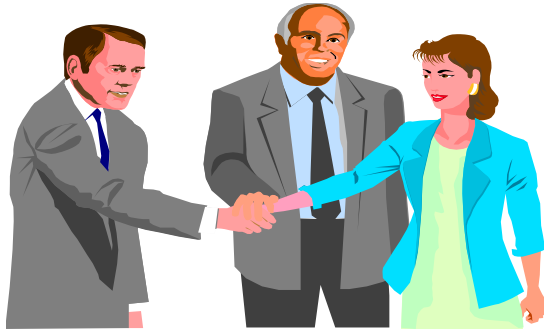


The System Management Disciplines How They Fit Together



Service Level Agreements Service Level Statements

YES

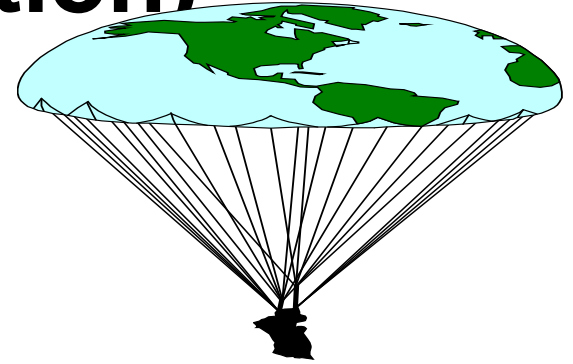
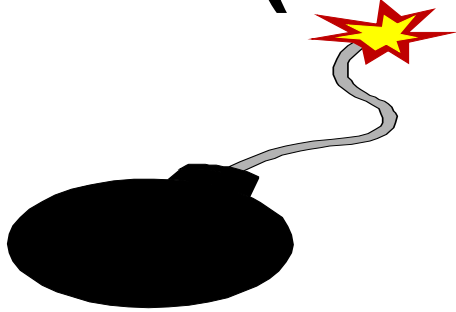


NO



The process of negotiating and defining the levels of user service (service levels) required from the infrastructure owner. This includes reaching agreement between user management and infrastructure management on the service levels, needed to support the business and the cost of this service.

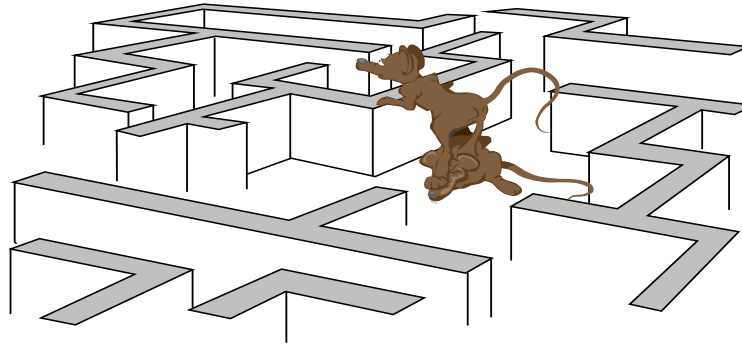
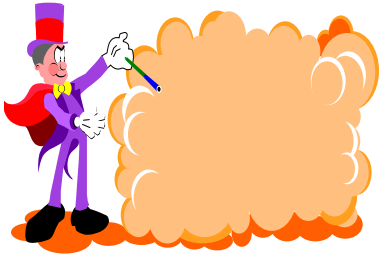
Problem Management (Problem Prevention)



The process of detecting, reporting, escalating and correcting problems impacting services while collecting and analyzing problem data. These include systems and network hardware and software, telecommunication links, human error, information asset security, applications and environmentals. The objective is to reduce failures to an acceptable level at an acceptable cost ensuring service levels are met.

Organizations who reward Firefighters often breed Arsonists!"

Change Management

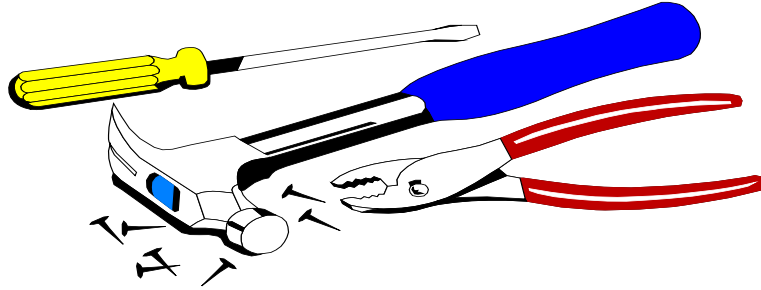


The process of planning, coordinating, and monitoring changes affecting I/S Infrastructure and applications. These include but are not limited to changes such as system and network hardware and software, procedural, environmental, relocation, application, etc. The objective is to ensure that changes are made with an **acceptable level of risk** and to ensure service levels continue to be achieved.

“Everything is connected to everything else.”

“A perfect change surprises no one.”

Contingency Planning Operational Recovery



The process of planning, establishing, and testing the recovery procedures required to provide services to users in the event of a problem or failure. The intent is to anticipate and minimize the impact of failure through the development of predefined, documented, and tested recovery capabilities.

Sequence of failure

Applications

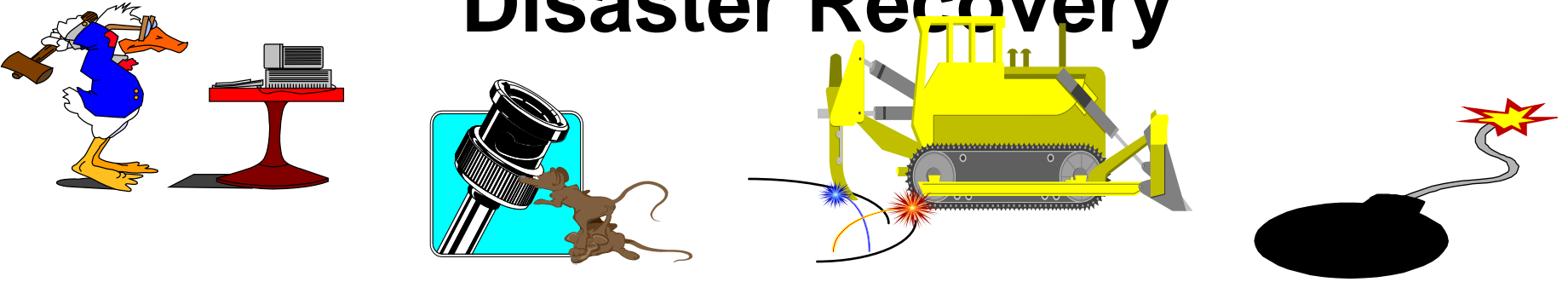
Components

CPU s

Site

A test that worked the first or second time was not a test!

Contingency Planning Disaster Recovery



The process of planning, establishing, and testing the recovery procedures required to provide computing services to users in the event of a failure. The intent is to anticipate and minimize the impact of failure through the development of predefined, documented, and tested recovery capabilities.

Think about

Out of cycle processing

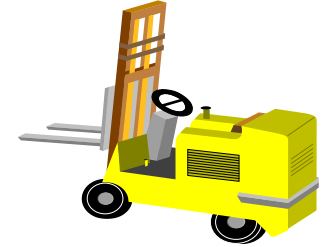
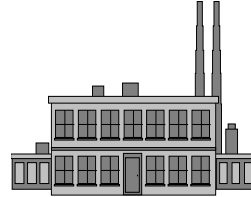
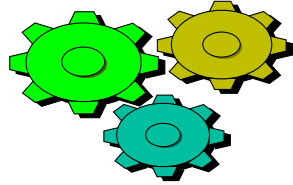
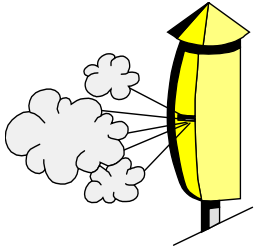
Offsite Storage

Media refresh

Office space

A test that worked the first or second time was not a test!

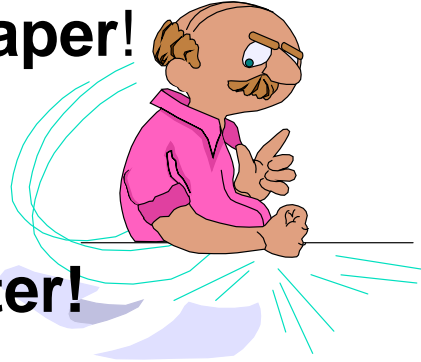
On-Line & Batch Processing Management



The process of controlling production on-line and batch work including the scheduling of resources, the processing of data and transactions and the distribution of data and information between users and facilities. This includes coordinating the appropriate skills, information, tools, and procedures required to manage on-line networks and their supporting hardware and software systems.

Performance Management

Cheaper damn you cheaper!



More damn you more!

Faster damn you faster!

The process of planning, defining, measuring, analyzing, reporting and tuning the performance of resources, including hardware, control software, application software, people and services. (See Service Level Agreements)

The Four Block Model

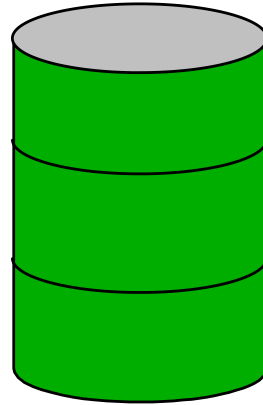
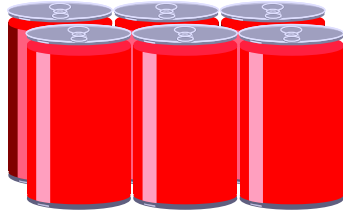
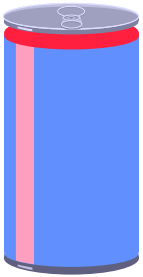
**Customer
(End Users)**

Business Owner

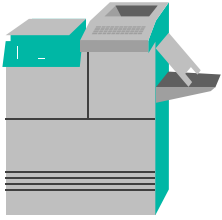
**Application
support owner**

**Infrastructure
Owner**

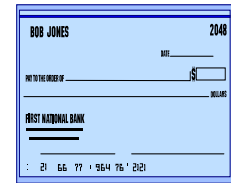
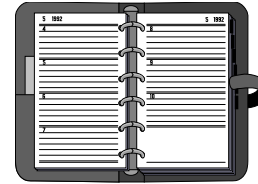
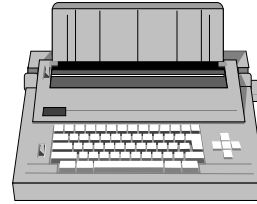
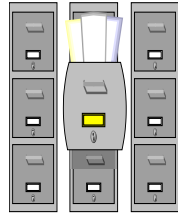
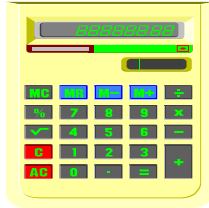
Capacity Planning



The process of planning and controlling the quantity of each system resource that will satisfy users' future requirements. Also includes forecasting the quantities of facilities (power, HVAC, water, raised floor, etc.) and operating personnel needed to properly install and operate additional systems resources.



Application Development



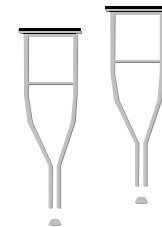
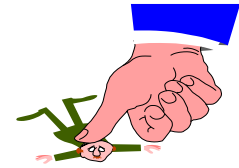
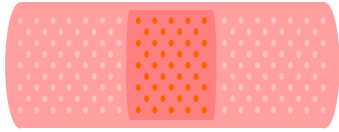
Do we build? Do we buy? (SOP 98-1)

In either case how do we integrate into the existing infrastructure or do we need to adjust the infrastructure?

Operations has the responsibility to “push back” on application developers to ensure that new systems do not disrupt the existing business and can be properly automated.

Business Leadership Teams must set project priorities among themselves with the help of I/S / I/T.

Application Support



Acceptance Criteria:

Development

Transition

Support

Automate

Contingency planning:

Application Health Assessment:

How often does it break

How long does it take to fix

Does it deliver business results (**value**)

Metrics

Infrastructure Design

Vital



Production and mission critical systems, they run or the company doesn't. (cash flow, health, safety)

You will be surprised how small it is.

Critical



Ad hoc reporting, decision support, etc.

You will be surprised how big it is and yes you will need to duplicate some data.

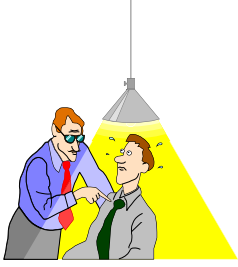
Important



Application and control software testing

You will be surprised how small it is.

Vendor Management



No



No



Hopefully



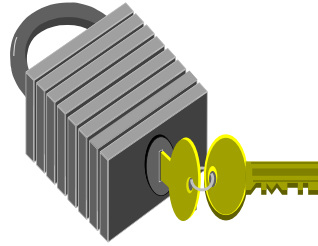
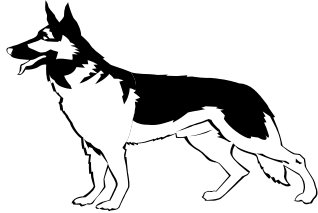
Globally

The process of working with vendors of Information Systems products (hardware, software, applications, tools, environmentals, etc.) in a business like manner. This means using the existing Purchasing Department's process, procedures, and personnel to help negotiate contracts and finalize transactions. The vendors should have a **single point of contact** within the enterprise. The enterprise should have a set of primary and secondary vendors selected. The set should be reviewed on a regular basis.

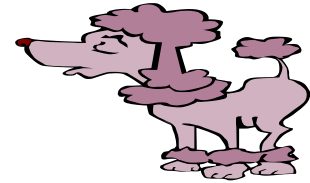
Try to use the minimum number of vendors possible!
Remember vendors are wildly optimistic about the capabilities of their products!

SECURITY

Yes



NO



The process of providing physical and logical access or denial of access to facilities, hardware, software, data, networks, etc. based on the business need of the user.

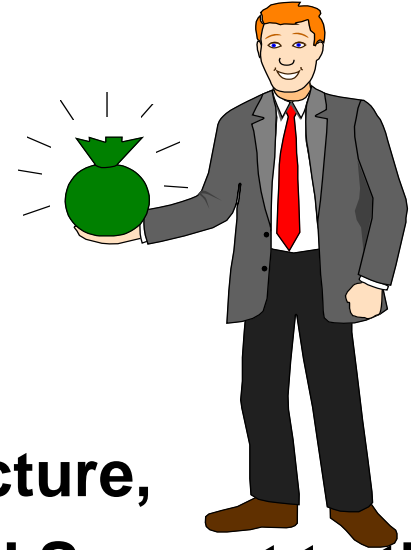
Prevention

Detection

Repair (Problem Management / Change Management)

Better Prevention

CHARGE BACK



The process of passing the cost of Infrastructure, Applications (development and support), and Support to the business units using the services.

The intent is to ensure that resources are not wasted and the business understands the cost to the enterprise of their needs and wants.

Avoid **“IS / IT welfare”** where anyone can get what they want and do not have to take cost and benefit into consideration.

Keep it simple, Use capacity planning data to see what is being used and charge accordingly.