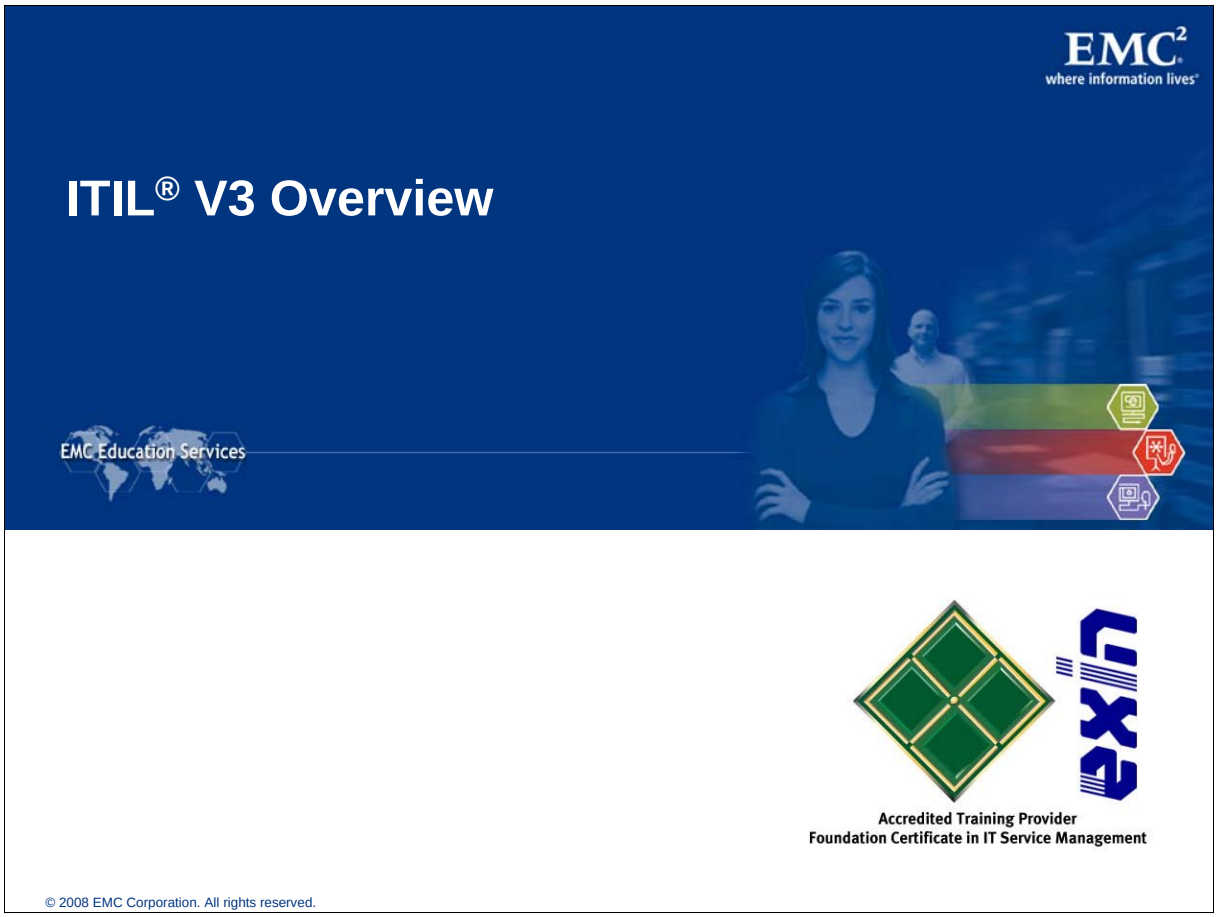
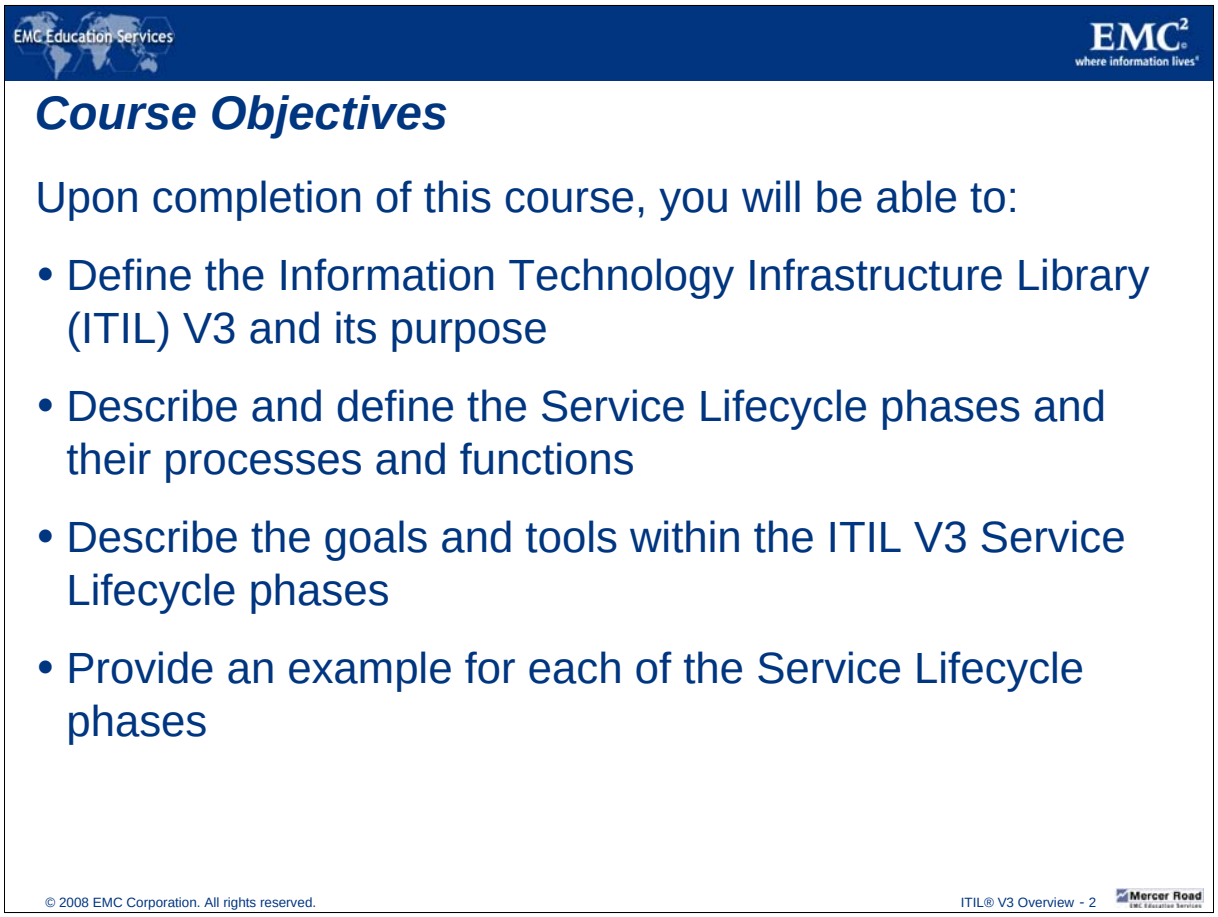


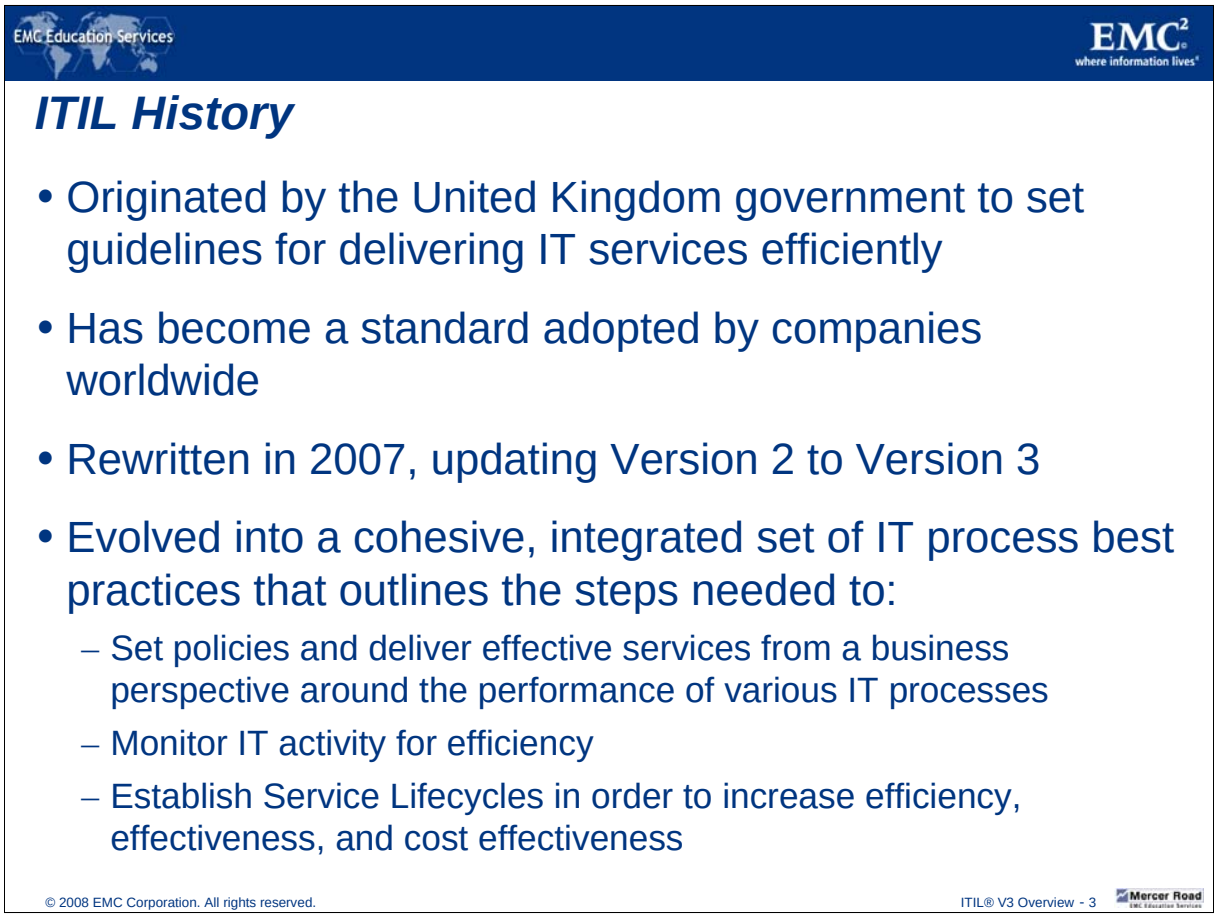

Welcome to ITIL® V3 Overview.




The objectives for this course are shown here. Please take a moment to read them.

**Note**: This course does NOT replace the *ITIL V3 IT Service Management Essentials* (or *ITIL Version 3 Foundations*) course offered in preparation for the ITIL Version 3 Foundation Certificate in IT Service Management.

**Note**: This course, *ITIL® V3 Overview*, is designed for individuals without former knowledge of or experience with ITIL. A companion Impact module, *ITIL® V2 to V3 Differences*, is designed for those individuals who have already completed study or have been certified in ITIL V2 and wish to understand how ITIL concepts have changed in Version 3 (released spring 2007).

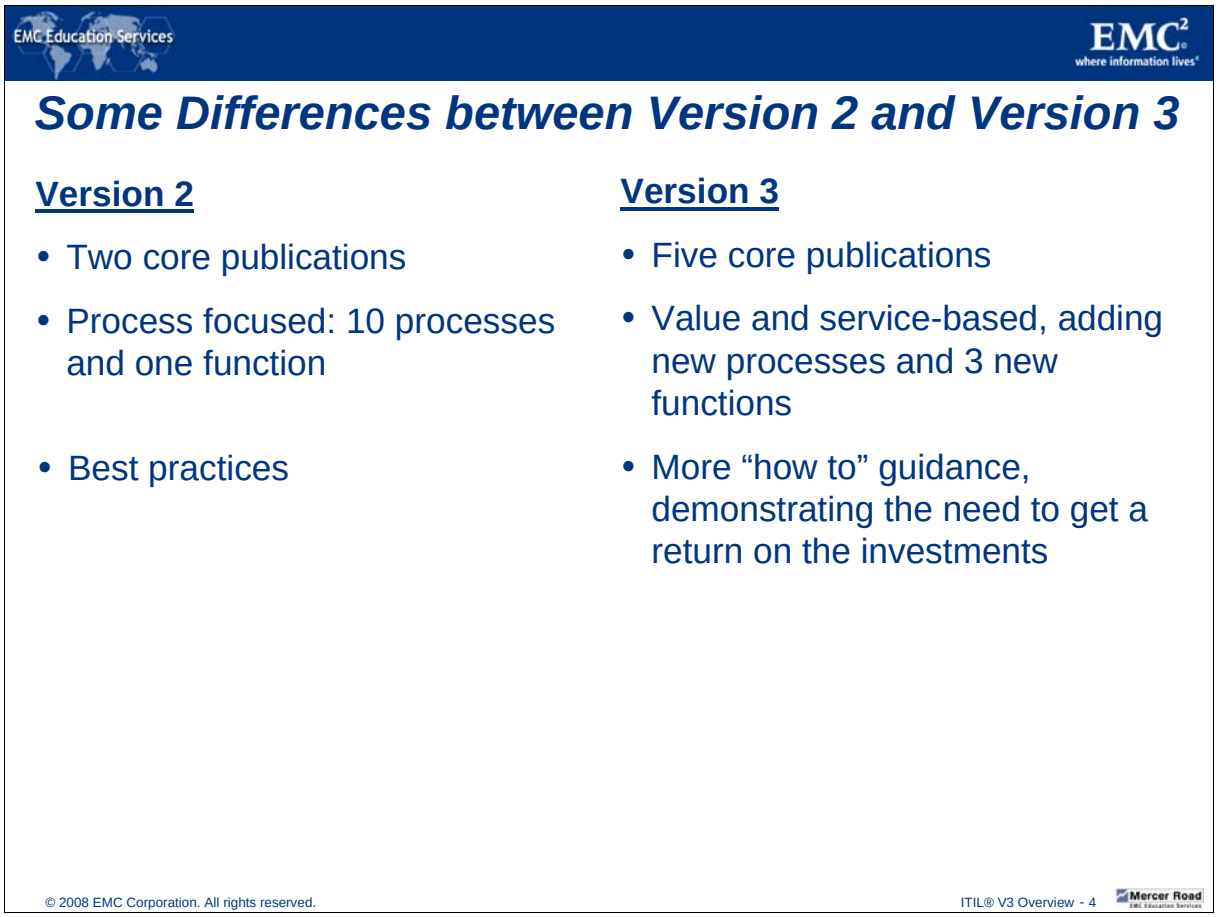



The United Kingdom's Office of Government Commerce (OGC) developed ITIL in the 1980s as a set of guidelines for efficiently delivering IT services across an organization. These guidelines were originally created to improve IT service management in the UK government's IT centers. ITIL has been widely adopted worldwide, including the Unites States, and has widespread acceptance with new government compliance regulations. From the late 1990s, ITIL has been recognized as the standard for IT service management worldwide.

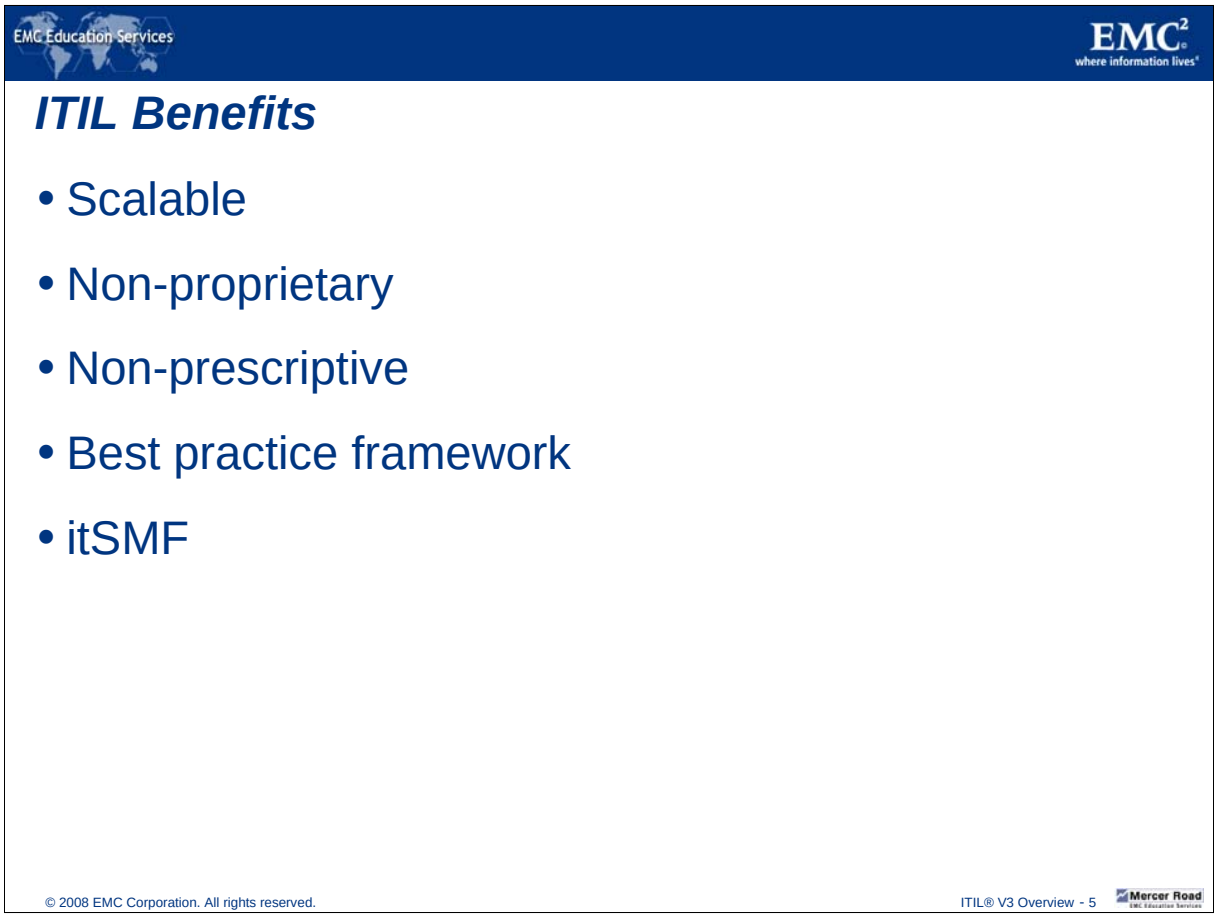
ITIL is based on the collective experience of commercial and governmental IT organizations worldwide. This experience has been distilled into a reliable, coherent, integrated approach which is fast becoming the de facto standard. The guidance provided in ITIL helps enterprises understand what is needed to implement a holistic approach to IT infrastructure management.

Since its origination, ITIL has been supported by a comprehensive certification program, accredited training organizations, and implementation and assessment tools. It is important for EMC to be comfortable with the ITIL framework because it allows EMC to "speak the customer's language" when it comes to assessing their processes and offering solutions to their challenges.

Many IT organizations that use ITIL try to bridge the gap between technology and business. There were some inconsistencies in the original ITIL publications. With the new release, there is a change from a process-centric approach to a business service lifecycle approach. The new release, ITIL Version 3 (V3), has business relevance that uses IT as a resource and therefore represents an integrated, business-oriented framework of best practices needed to manage key IT processes.




The main difference from V2 to V3 is the shift from an IT process performance to more of a business focus to deliver more value to the customer. More attention was given to designing services for the business and creating a strategy around those services and expanding continual service improvements. There was a growing realization that the older version was aligning business with IT as the main focal point. In the new version, the shift is to integrate IT with the business. The new version, V3, looks at all the services offered by IT, covering each one from inception to retirement to form the Service Lifecycle of that service.




ITIL offers the following benefits to organizations:

- **Scalable** – ITIL can be adapted to any size organization. Individual businesses can use the framework offered instead of adhering to a set of strict rules.
- **Non-proprietary** – ITIL Service Management practices are applicable in any organization because they are not based on any particular technology platform or industry type. ITIL is owned by the UK government and is not tied to any commercial proprietary practice or solution.
- **Non-prescriptive** – ITIL offers robust, mature, and time-tested practices that have applicability to all types of service organizations. It continues to be useful and relevant in public and private sectors, internal and external service providers, small, medium, and large enterprises, and within any technical environment.
- **Best practice** – ITIL Service Management practices represent the learning experience and thought leadership of the world's best-in-class service providers.
- **itSMF** – The itSMF (IT Service Management Forum) was established to support and influence the IT Service Management industry, supporting industry best practices and driving updates to ITIL.

# ITIL Version 3 – Service Lifecycle

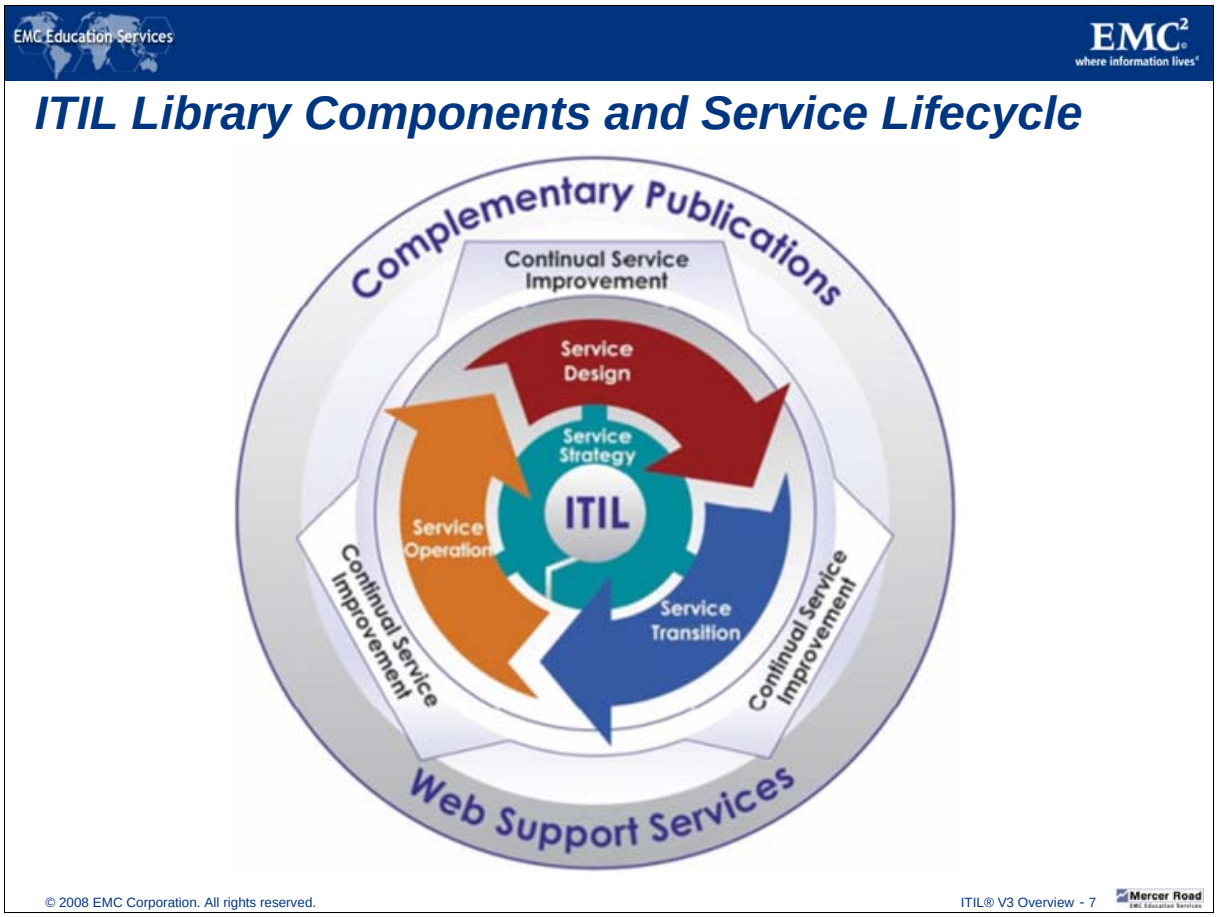




In this course, we look at the five core publications that comprise the Service Lifecycle. These core publications cover each phase of the Service Lifecycle, from the initial definition and analysis of business requirements, through migration into the live environment, to live operation and improvement. A sixth book, *The Official Introduction to the ITIL Service Lifecycle*, offers an overview of the five publications plus an introduction to IT Service Management.

Five publications comprise the Service Lifecycle:

- **Service Strategy** – Guidance on how to view Service Management as a strategic asset. Looks at the overall business aims and expectations to ensure IT strategy maps back to them.
- **Service Design** – Guidance for the design and development of services and Service Management practice. Starts with a set of new or changed business requirements and ends with the development of a solution designed to meet the documented needs of the business.
- **Service Transition** – Guidance for the development and improvement of capabilities for transitioning new and changed services into live service operation. It is concerned with managing change, risk, and quality assurance. Its objective is to implement service designs so that service operations can manage the services and infrastructure in a controlled manner.
- **Service Operation** – Guidance of the delivery and support of services to maintain stability while at the same time allowing for changes and improvement. It is also concerned with management of business's day-to-day activities.
- **Continual Service Improvement** – Guidance in creating and maintaining value for customers through better design, transition, and operation of services. It provides an overview of all other elements and looks for ways that the overall process and service provision can be improved.

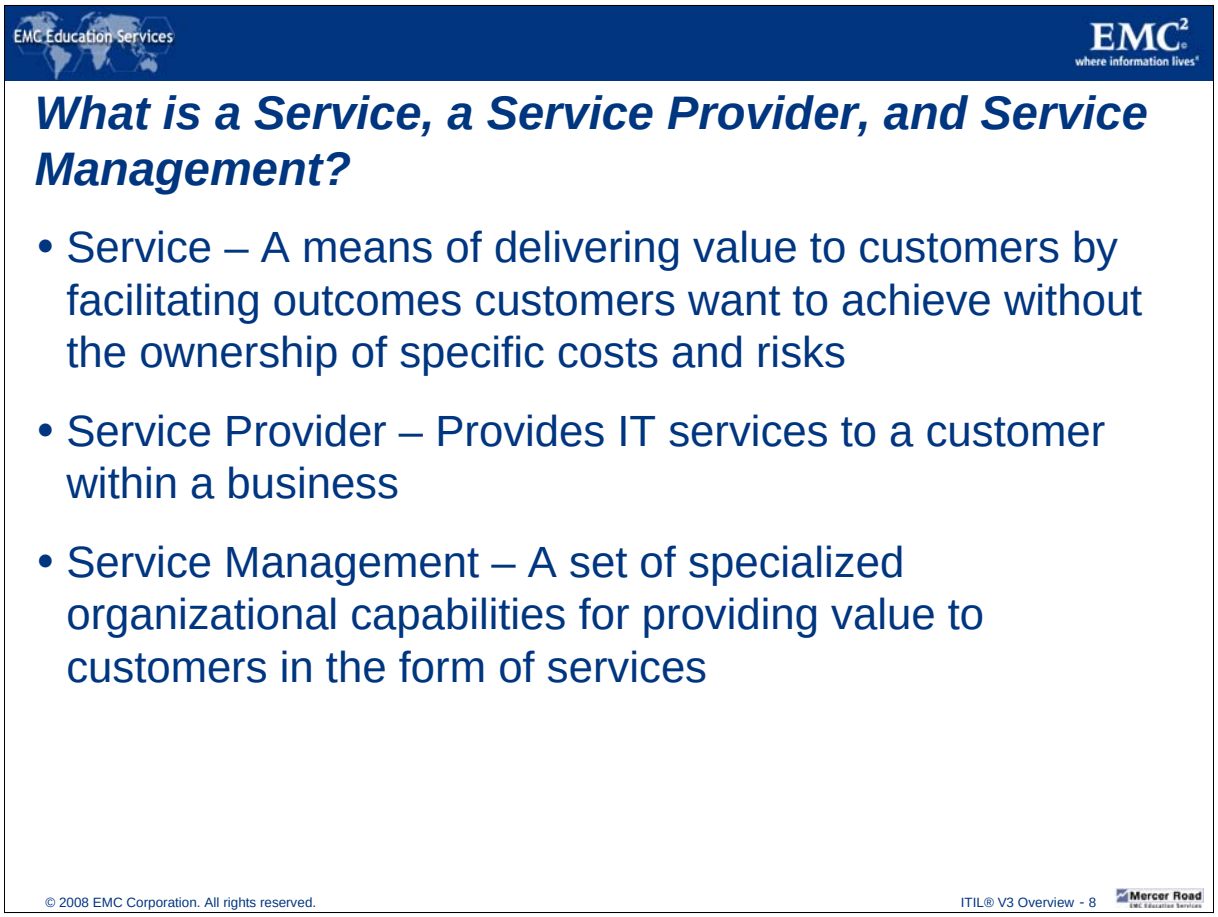



The five publications of the Service Lifecycle make up the core of the ITIL library. These publications offer best-practice guidance applicable to all types of organizations that provide services to a business. It is intended that the content of these core publications will be enhanced by additional complementary publications and by a set of supporting web services.

The Complementary Publications provide guidance specific to industry sectors, organization types, operating models, and technology architectures. They will be available to support the core publications as well as Web Support Services.

ITIL Web Support Services include interactive services, a glossary of terms and definitions, Interactive Service Management Model, online subscriber services, case studies, templates, and ITIL Live®, an interactive expert knowledge center where users can access IT Service Management experts to pose questions, discuss issues, and seek advice.

These publications provide the guidance necessary for an integrated approach as required by the ISO/IEC 20000 standard specification. Each publication of the Service Lifecycle addresses capabilities having direct impact on a service provider's performance.

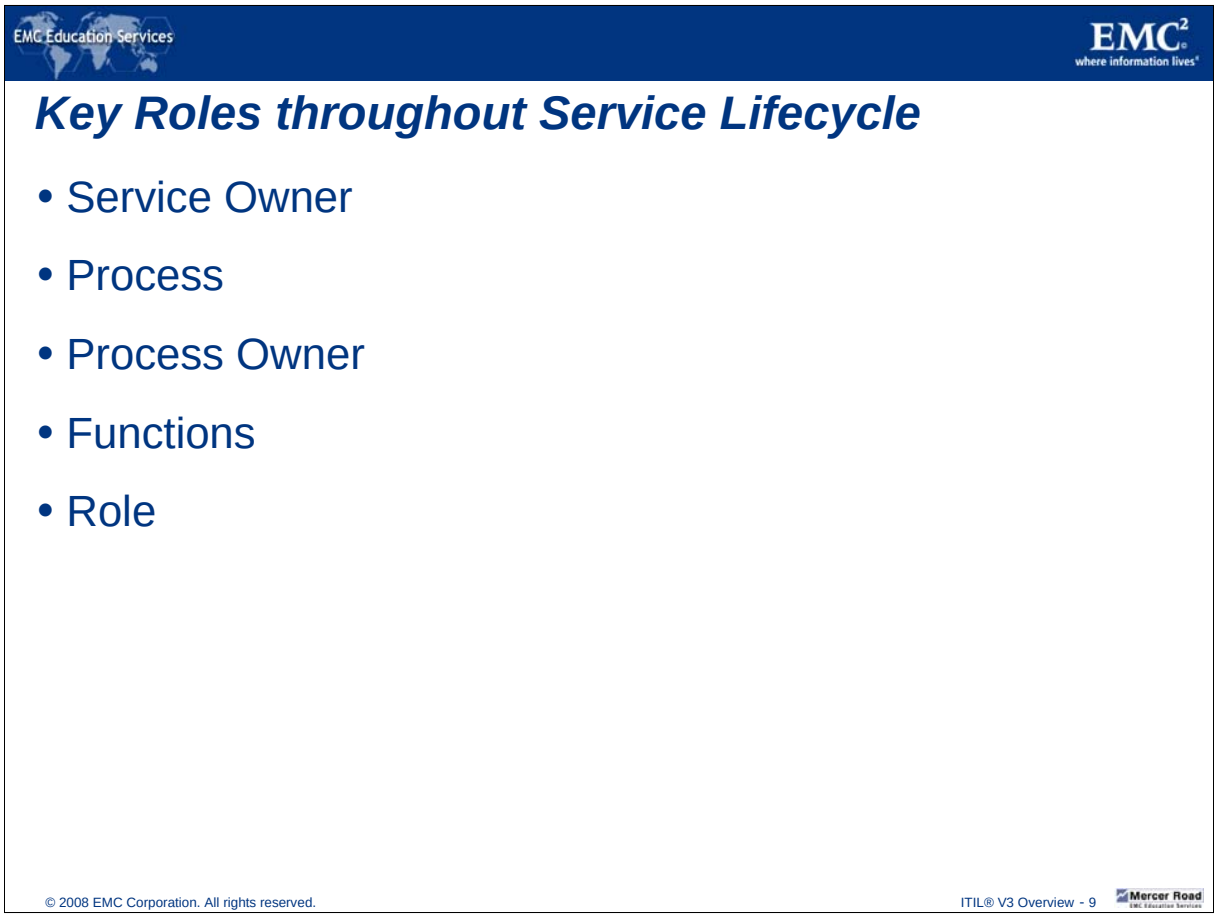



To understand Information Technology Service Management (ITSM), there must be an understanding of some basics. The outcome the customer desires to achieve is one with success and value and they need the services to be performed and facilitated well.

A service is a means of delivering value to customers by facilitating outcomes that customers want to achieve without the ownership of specific costs and risks.

A service provider is responsible to understand the services they are providing, to ensure that the services really do facilitate the outcomes their customers want to achieve, to understand the value of the services to their customers, and to understand and manage all of the costs and risks associated with those services.

Service management offers a set of processes, methods, functions, roles, and activities, that when accomplished, provides value to the customer. They go beyond just delivering services, but take each service, process or component through its Lifecycle. They are part of the Lifecycle from the design to transition to operation to continual improvement of all the concepts. Service Management aligns IT services to the business needs and then supports them. IT needs to underpin the business process so that the business is successful.




There are several key roles that are repeated throughout the Service Lifecycle.

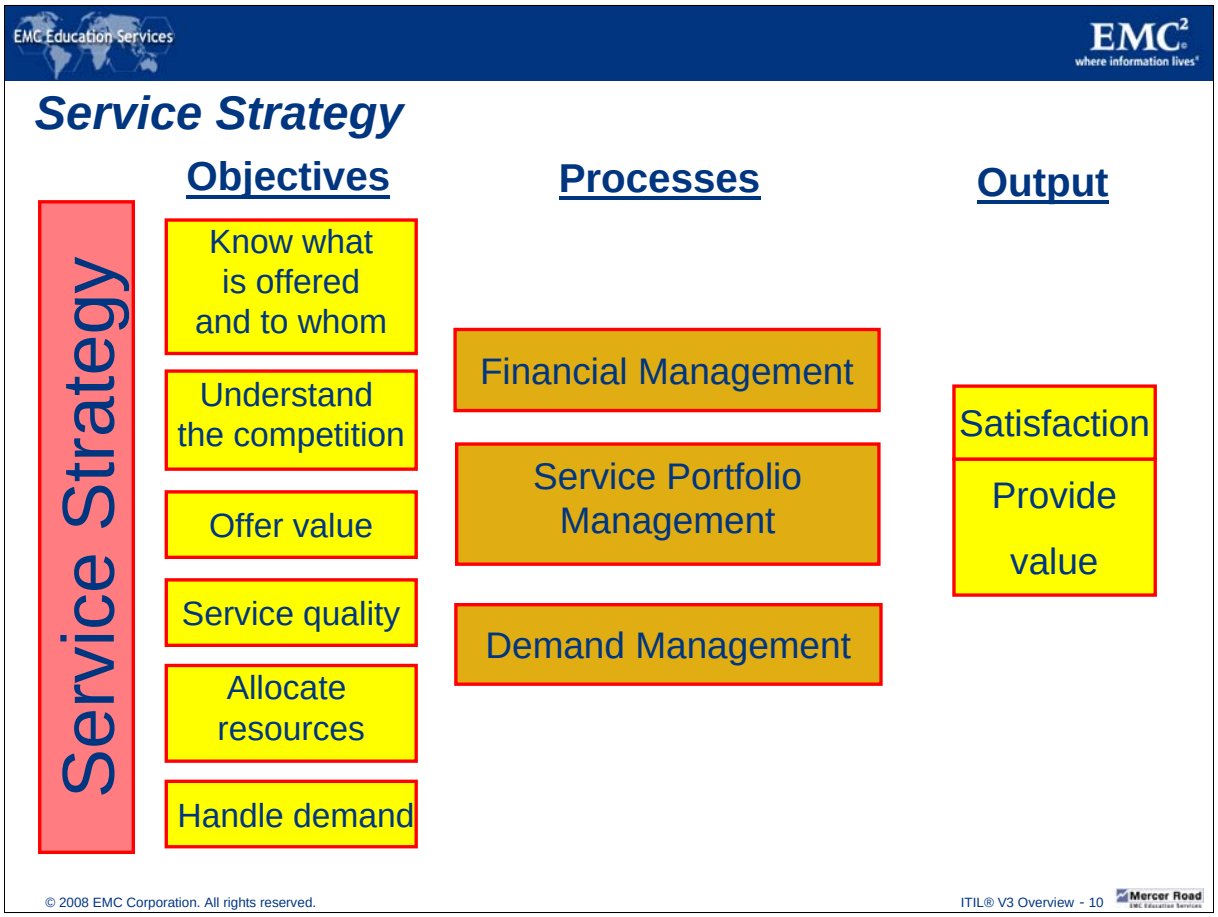
**Service Owner** – The primary stakeholder, accountable for the delivery of a specific IT service.

**Process** – A structured set of activities designed to accomplish a specific objective. A process takes one or more defined inputs and turns them into specific outputs.

**Process Owner** – A role responsible for ensuring that a Process is fit for purpose. Also included is Sponsorship, Design, Change Management, and continual improvement of the Process and metrics.

**Functions** – Units that perform certain types of work and are responsible for specific outcomes. They are self-contained with capabilities and resources necessary for their performance and outcomes.

**Role** – A set of responsibilities, activities, and authorities granted to a person or team. A Role is defined in a Process. One person or team may have multiple Roles.

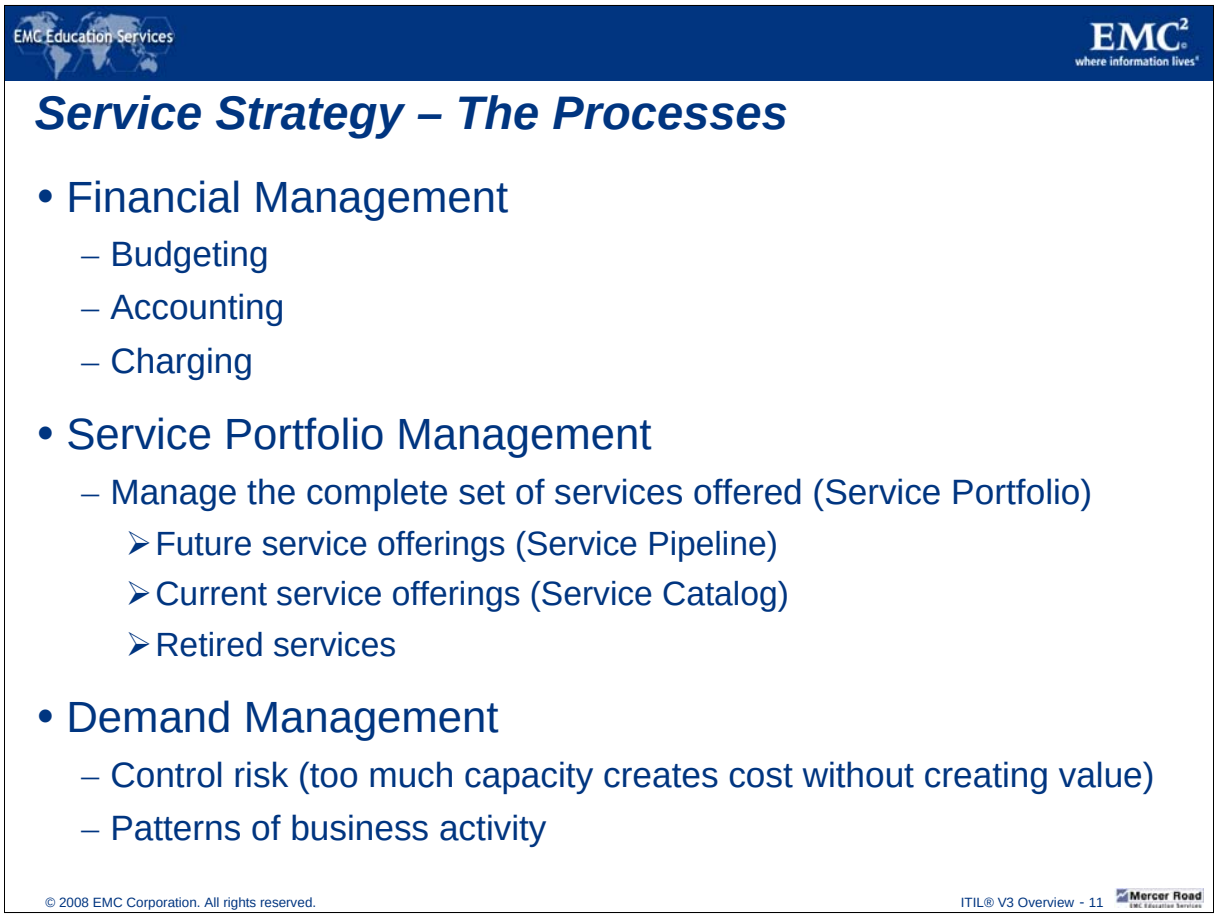



In Service Strategy, the first ITIL publication, Service Management is viewed not just as a resource, but as a strategic asset. This is the core of the ITIL Version 3 Service Lifecycle. Guidance is given to Service Management providers on how to design, develop, and implement by setting objectives and expectations of services for the customers and market spaces. Service Providers are encouraged to think before acting, to design their plans, and to consider the actions they plan to implement—all in a strategic manner.

Some of the objectives of Service Strategy that should be considered are:

- What services should be offered and to whom?
- How does Service Management differentiate itself from the competition?
- How can they provide value to the customer?
- How should Service Management define service quality?
- How does Service Management efficiently allocate resources across a portfolio of services?
- How do they resolve conflicting demands for shared services?

These questions can be answered through the management of the processes in Service Strategy. Any service delivered must be valuable to the customer. Everyone in the IT organization must know their specific role and responsibility.




There are three processes in Service Strategy.

**Financial Management** manages the service provider's budgeting, accounting, and charging requirements. All are in place to help with decision making and ensure proper funding for the delivery and consumption of services. It also provides the business and IT with the quantification, in financial terms, of the value of IT services, the value of the assets underlying the provisioning of those services, and the qualification of operational forecasting.

**Service Portfolio Management** is responsible for managing the Service Portfolio. The Service Portfolio is the complete set of services the Service Provider manages. It is used to manage the entire Lifecycle of all Services, and includes:

- Service Pipeline (in development phase)
- Service Catalog (current or available offerings)
- Retired Services

Service Portfolio Management considers Services in terms of the business value that they provide.

**Demand Management** understands and influences the customer's use of services. Underused or overused services can translate into greater risk and lower value for the customer. A strategic view of Demand Management involves the analysis of business demand patterns. From a tactical view that would be encourage differential charging to influence customer use of IT services at non-peak times.

## Service Strategy – Example: Opening a Gourmet Restaurant

- What type of restaurant (know what is offered)
  - Similar restaurant in the area (understand the competition)
- Special deals (offering value to the customer)
- Financial means needed (Financial Management)
- Menu, bar, and décor (Service Portfolio Management)
- The right price, staffing, and hours of operation (Demand Management)





Let's apply Service Strategy concepts to an example of opening a gourmet restaurant. We must consider the strategies and processes that are needed to run a business and how that business can succeed (by using ITIL concepts). The first step is to stop and think about what we are trying to do in our business before we start (the main goal of Service Strategy). At the very beginning we need to determine the style of restaurant we want to open (know what is to be offered). Then we need to survey the location and discover if there are other restaurants in the area, or similar ones (which is part of understanding the competition).

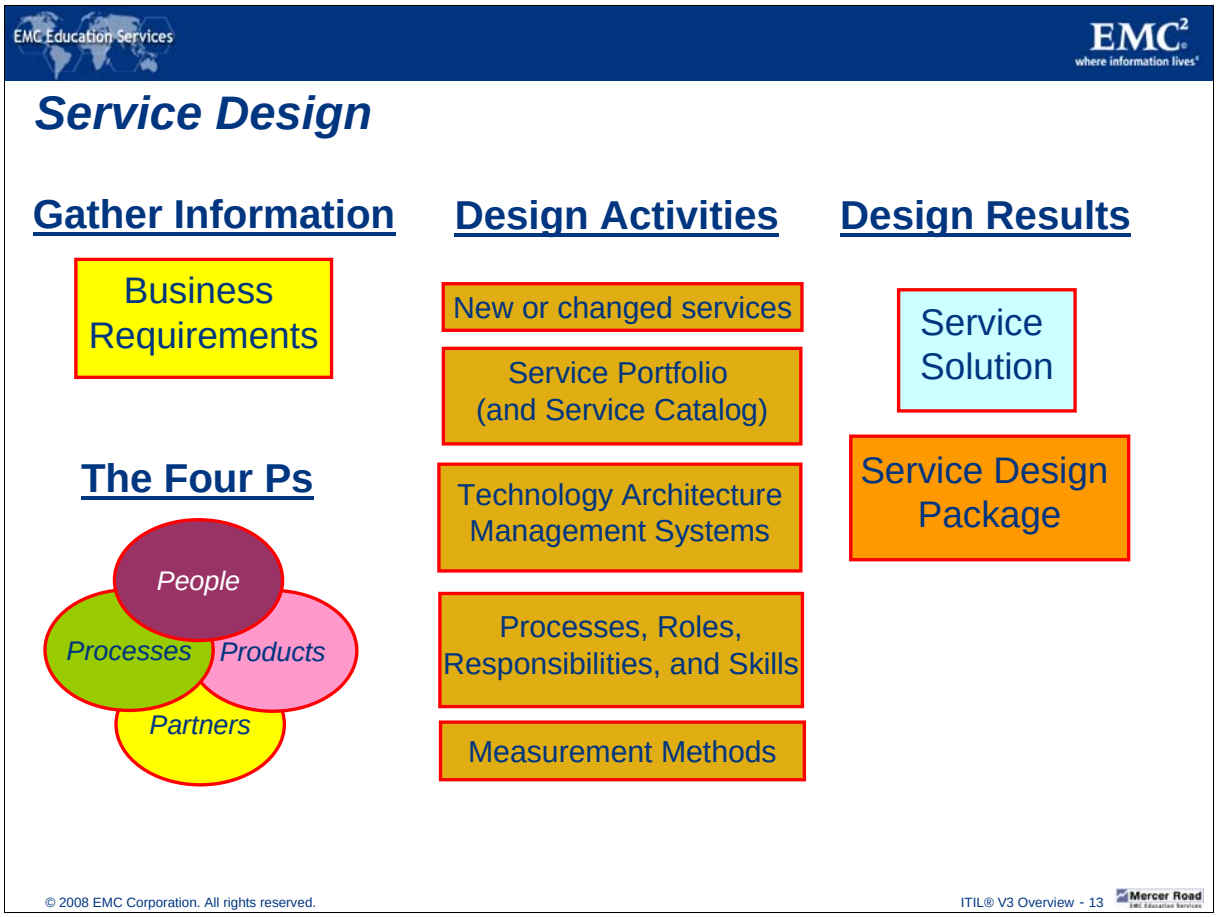
The restaurant management team needs to entice customers to come to the restaurant. There must be a specific style of cuisine, special meals, or discount coupons that offer value to the customer to attract them to our restaurant.

The investors of this restaurant need to know if there is an opportunity to succeed. They want to have their investment validated and see if running a restaurant will get them something in return—a profit! There must be proper accounting, budgeting, and charging (Financial Management) for starting up and running a restaurant.

There must be a motivation to continually bring the customers back into the restaurant. An intriguing menu might be the answer. The kitchen staff is in charge of keeping the menu up-to-date with fresh new ideas, preparation of all the meals, and pantry inventories (Service Portfolio and Service Catalog). Printing a menu, determining the décor of the restaurant or the type of bar (a regular or martini style) is the responsibility of the manager or host (Service Portfolio Management).

Daily business patterns must be analyzed. Looking at when the restaurant is busy can assist in setting up the staffing ratios and hours of operation (Demand Management). A discussion must take place to review the overall costs to support the price structure for the menu.

All of this must be explored before we open our restaurant.



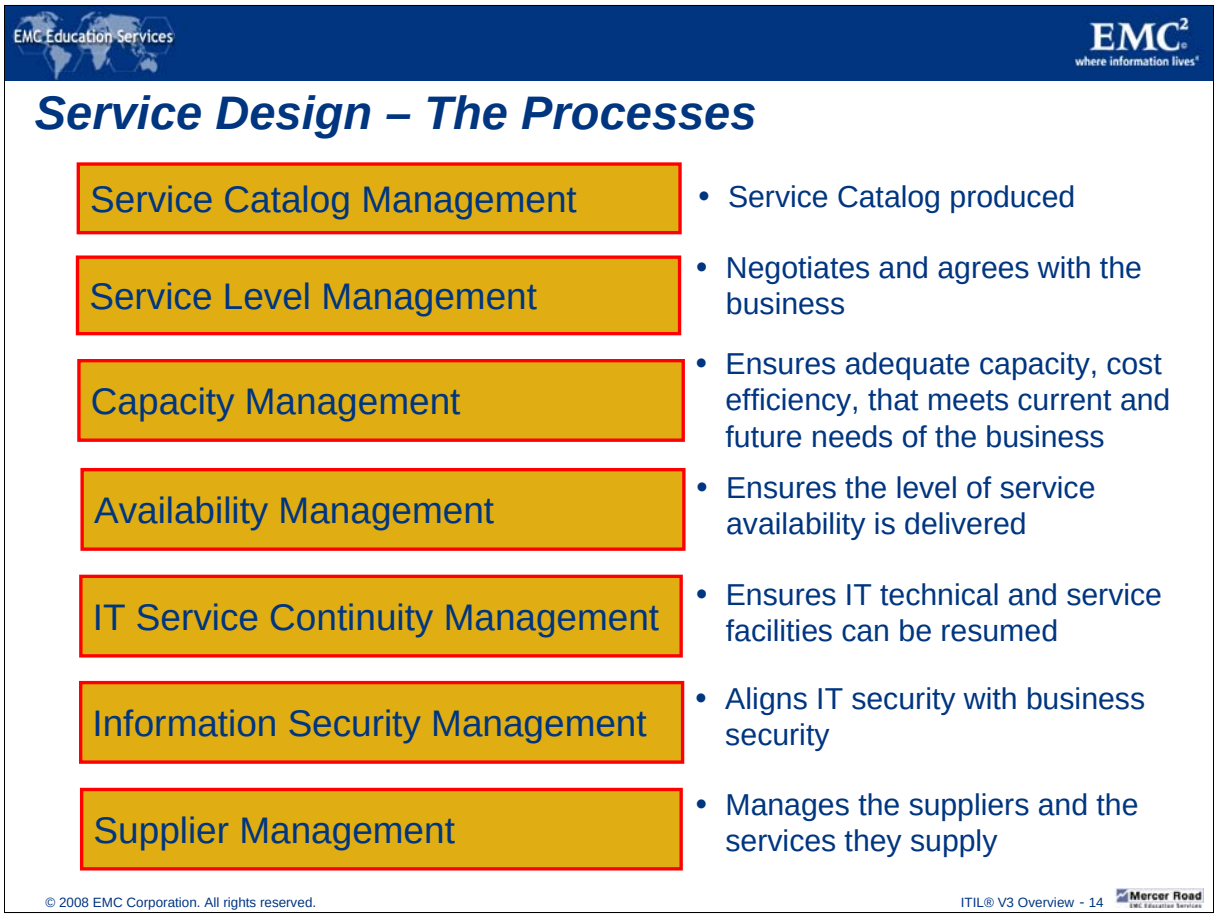

Service Design identifies accurate business requirements and then defines a solution to meet those requirements. This must be looked at from a holistic view and not just the individual view. One component integrated by adding or changing could affect other components. The goals of Service Design include:

- Designing services that satisfy business objectives
- Designing processes
- Identifying and managing risks
- Designing secure, resilient, and complete IT infrastructures
- Designing measurement methods
- Producing and maintaining complete IT solutions
- Developing skills and capabilities within IT

Good Service Design is dependent on effective and efficient use of the four Ps: People, Processes, Products (such as services, technology, and tools) and Partners (such as suppliers, manufacturers, and vendors). Each one of these four types of resources has to be prepared, planned, and coordinated to achieve an optimal Service Design.

There are five individual activities in Service Design. They include the design of new or changed services, the design of the Service Portfolio (including the Service Catalog), the design of technology architecture and management systems, the design of the processes, roles, responsibilities, and skills required, and the design of measurement methods. Service Design starts with a set of business requirements and ends with the development of a service solution from these business needs.

The Service Design Package (SDP) is a document defining all aspects of an IT service and the requirements through each stage of its Lifecycle. There is an SDP for each IT Service, major change, IT Service Retirement, or a change to the SDP itself. The SDP is passed on to Service Transition to evaluate, build, test, and deploy. At the end of this set of activities, it is passed on to the Service Operation stage of the Service Lifecycle.




Service Design includes the following set of processes.

**Service Catalog Management** (SCM) is the process that ensures that the Service Catalog is produced, maintained and is the single source of information of what IT Services offers. The information must be accurate and current on all the operational services and which ones are available.

**Service Level Management** (SLM), negotiates, agrees, and documents IT service targets and then reports on the delivery of these services with the customer. They need to provide and improve the relationship and communication with the business and customer. This information comes from the Service Level Agreements (SLA) arranged with the business, Operational Level Agreements (OLA) from the internal departments and from other external support agreements, Underpinning Contracts (UC).

**Capacity Management** ensures adequate capacity to meet business needs that are matched with the current and future agreed needs of the business, in a timely and cost-effective manner. It needs to produce and maintain an appropriate and up-to-date Capacity Plan, which reflects the current and future needs of the business. It needs to ensure that service performance meets or exceeds all the agreed performance targets.

**Availability Management** ensures that the agreed levels of service availability delivered in all services to the business are delivered. They need to meet or exceed the current and future needs of the business and it needs to be conveyed in a cost-effective manner.

**IT Service Continuity Management** (ITSCM) ensures that all the business IT technical and service facilities needs are maintained, available or can be restored in an agreed business timeframe.

**Information Security Management** (ISM) aligns the business and IT to ensure information security. The information should be accessible only to those who have the right to access it. All information should be accurate and secure in its content so that there is integrity with the information. Information should be available when it is required. All transactions concerning information must be trusted to be authentic.

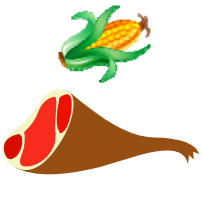
**Supplier Management** oversees that the suppliers meet their contractual commitments to the needs of the business, ensuring that value for the money is obtained.

## Restaurant Example – The Blueprint

- What will we serve? (SCM)
- What can patrons expect? (SLM)
- Kitchen and dining room design (Capacity Mgmt)

- Delivery of meals (Availability Mgmt)
- What happens when the restaurant is full and the kitchen gets backed up? (ITSCM)

- Using credit cards safely and securely (Security)
- Managing food and material suppliers (linens, food supplies, beverages) (Supplier Mgmt)






Continuing our restaurant example and using Service Lifecycle processes, there must be a design of how this restaurant will operate. Referring to the Four Ps (People, Processes, Products, and Partners), all of our plans need to refer to these concepts. The menu must be established, and just as in Service Catalog Management, there must be a determination of what can and will be served. The patrons expect certain services to be explained, specifically the hours of operation and which credit cards are accepted. This is similar to Service Level Management.

The management team, along with the owner and chef, must decide how the kitchen and dining room tables will be set up (Capacity Management).

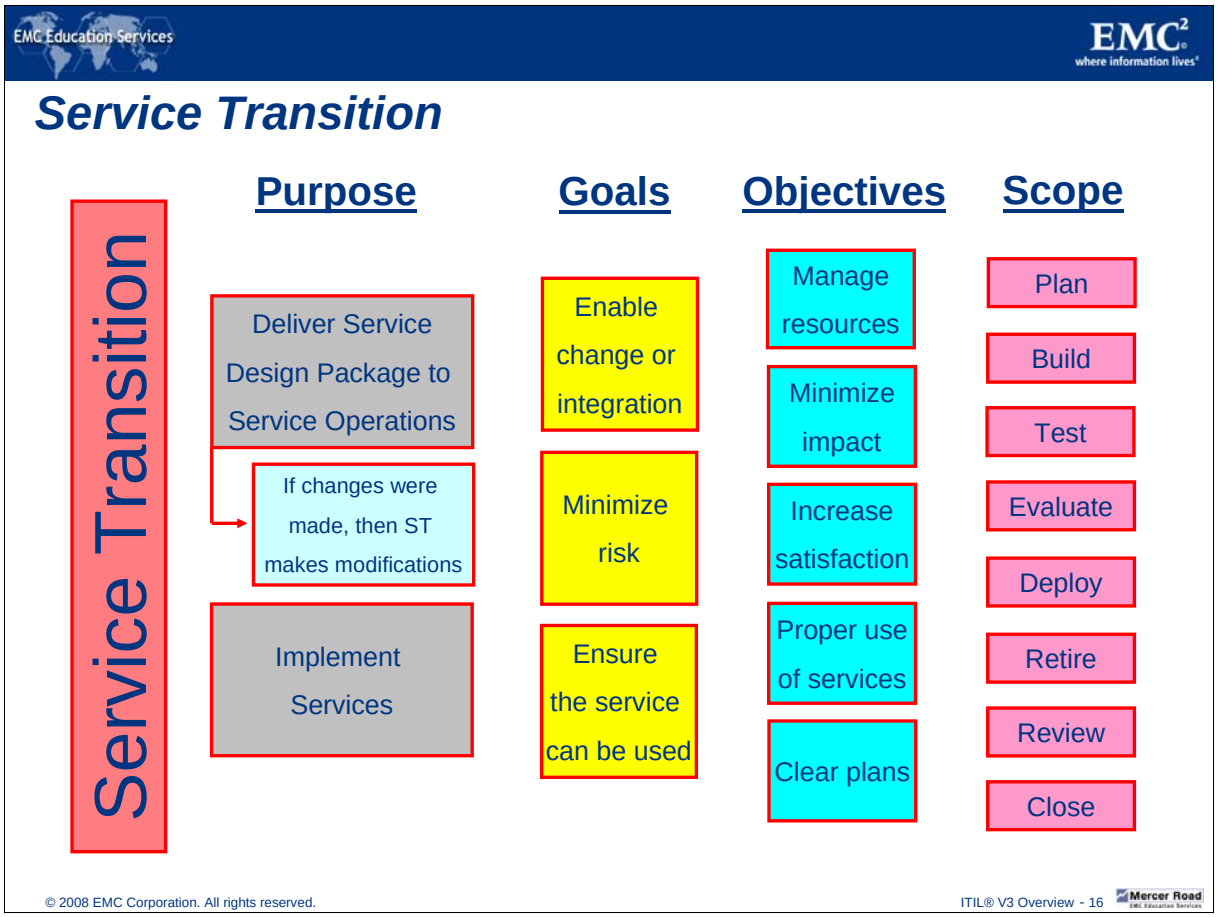
The time it takes to fully prepare and cook the dishes must be determined so that the kitchen and wait staff can better orchestrate the dining experience they want the customers to have (Availability Management).

There must be a plan when the business gets really busy. There must be a contingency plan for when the kitchen gets demanding so that it can manage the situation under pressure (Service Continuity Management). As an example, perhaps extra tables can be brought out to the dining room or the wait staff could move parties out more quickly from the dining room.

Credit cards are a common method for payment. Customers must have a level of confidence and security when using this form of payment knowing that there will not be any security breaches when using their cards (Information Security Management).

As supplies are consumed there must be a plan for restocking items. Establishing a good rapport with suppliers and vendors sets up reliable communication and will be crucial for the operation to run smoothly (Supplier Management).

All of these processes must be designed and planned in advance for all of this to work.



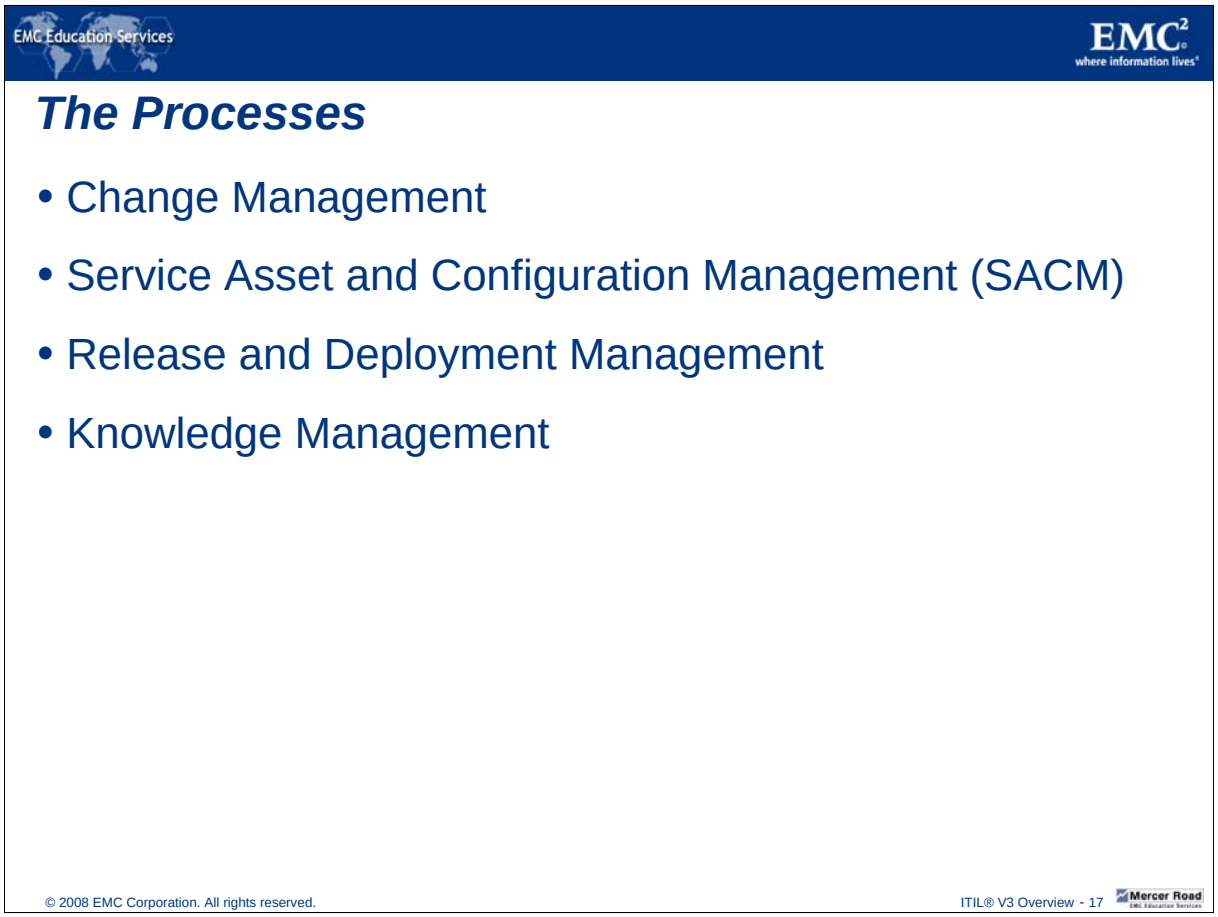

The role of Service Transition is to deliver services that are required by the business into operational use. Service Transition is supported by underlying principles that evolve from Service Strategy considerations. It exists so that the services needed by the business are delivered and put into operational use. By taking the inputs from the Service Design Package, which has the business's requirements, Service Transition can implement the services. Should there be any changes since the design was first made, then modifications can be made during this stage in order to deliver the corrected service. There is also guidance on developing and improving the means for transitioning new and changed services.

The main goals of Service Transition are to enable change or integration into the IT environment, to minimize risk from these changes and integrations, and to ensure that the service, change, or integration can be used based on the requirements gathered from the business.

Service Transition has several main objectives.

- A plan to manage the resources—to ensure that a new or changed service is within the confines of the predicted cost, quality, and time estimates.
- To ensure minimal unpredicted impact on production, operation, and/or support.
- It must increase customer, user, and staff satisfaction with the Service Transition practices (such as knowledge transfer).
- Increase proper use of the services and core applications and technology.
- Comprehensive plans must be provided so the customer and the business are able to change projects and align their activities with the Service Transition plans.

The scope of Service Transition includes the management and coordination of the processes, systems, and functions from the packaged plan, build, test, deploy into production, retire, review the requirements, and close.



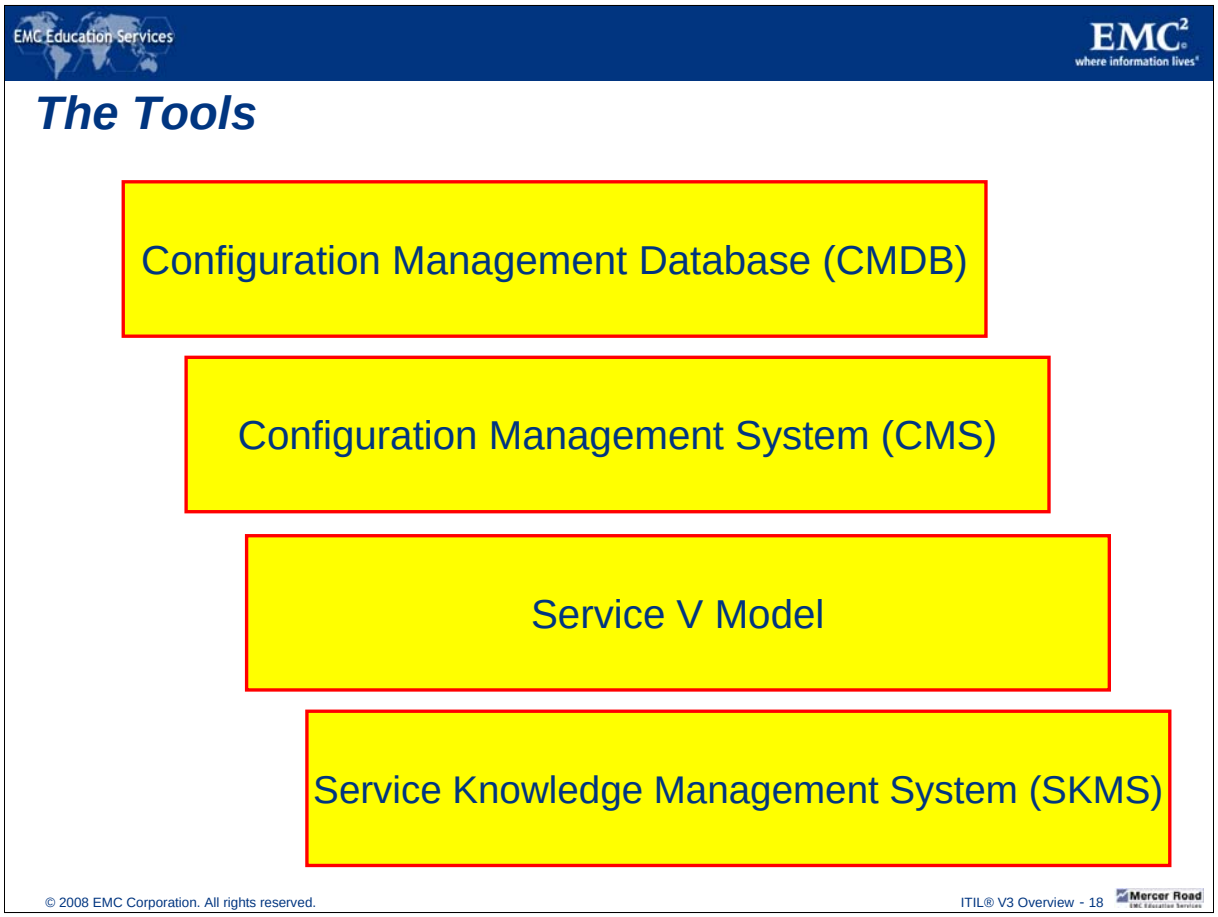

The processes for Service Transition necessary to manage and track change and/or implement services are:

**Change Management** is responsible so that any of the changes that occur are recorded, evaluated, authorized, prioritized, planned, tested, implemented, documented, and reviewed in an organized manner. All actions must be according to standard operating procedure so that the methods are followed and recorded.

**Service Asset and Configuration Management** must account for all the components (assets and Configuration Items) that are used with the services that are delivered to the business and the components in the infrastructure. A Configuration Item (CI) is any asset or service component that needs to be managed in order to deliver an IT Service. CIs can be all hardware, software, documentation, and support staff.

**Release and Deployment Management** assembles and positions all aspects of services into production and establishes effective use of the new or changed services in order to deliver value to the customer. Then it should be able to hand it over to service operations.

**Knowledge Management** delivers the right information to the right person so that the right decision can be made. This improves efficiency by reducing the need to rediscover knowledge. The decision making process should be improved by this process.




**Configuration Management Database (CMBD)** – A database used to store configuration records throughout their lifecycle. The Configuration Management System (CMS) maintains one or more CMDBs. Each CMDB stores attributes of CIs and relationships with other CIs. Often, several physical CMDBs are combined to form a "federated CMDB."

**Configuration Management System (CMS)** – A set of tools and databases that are used to manage an IT Service Provider's Configuration data. The CMS holds all the information about incidents, problems, known errors, changes and releases. It may also contain corporate data about employees, suppliers, locations and business units, customers and users. The CMS includes tools for collecting, storing, managing, updating, and presenting data about all CIs and their relationships. The CMS is maintained by Configuration Management and is used by all IT Service Management Processes.

**Service V Model** – Builds in service validation and testing early in the Service Lifecycle. The key purpose of service validation and testing is to provide objective evidence that the new or changed service supports the business requirements, including the agreed SLAs. It is tested against the Service Design Package (from Service Design) including business functionality, availability, continuity, security, usability and regression testing.

**Service Knowledge Management System** (SKMS) – An effective way to communicate essential required knowledge and information. This tool uses databases to manage knowledge and information. The tool incorporates other tools, such as the Configuration Management System, to help manage the Lifecycle of IT Services so that it can store, manage, update, and present all information that an IT Service Provider needs to manage the full Lifecycle of IT Services.

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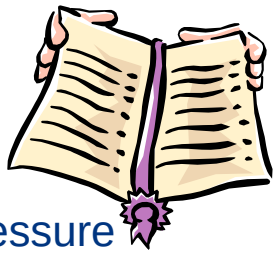
## Restaurant Example – Move it Forward

- Get the plans from the designs and implement. How?
  - Set up the kitchen (Release and Deployment Management)
  - Hire a top-rated chef (Knowledge Management)
    - Assess the plan for adequate staffing levels (Change Management)
  - Arrange the equipment for success

- Change in the menu
  - Taste testing of new items (Release and Deployment Management)
- Keeping track of what we have and used
  - Inventories of food and all equipment (SACM)
  - Control and replenishment process (SACM)



- Keep the business running when under pressure



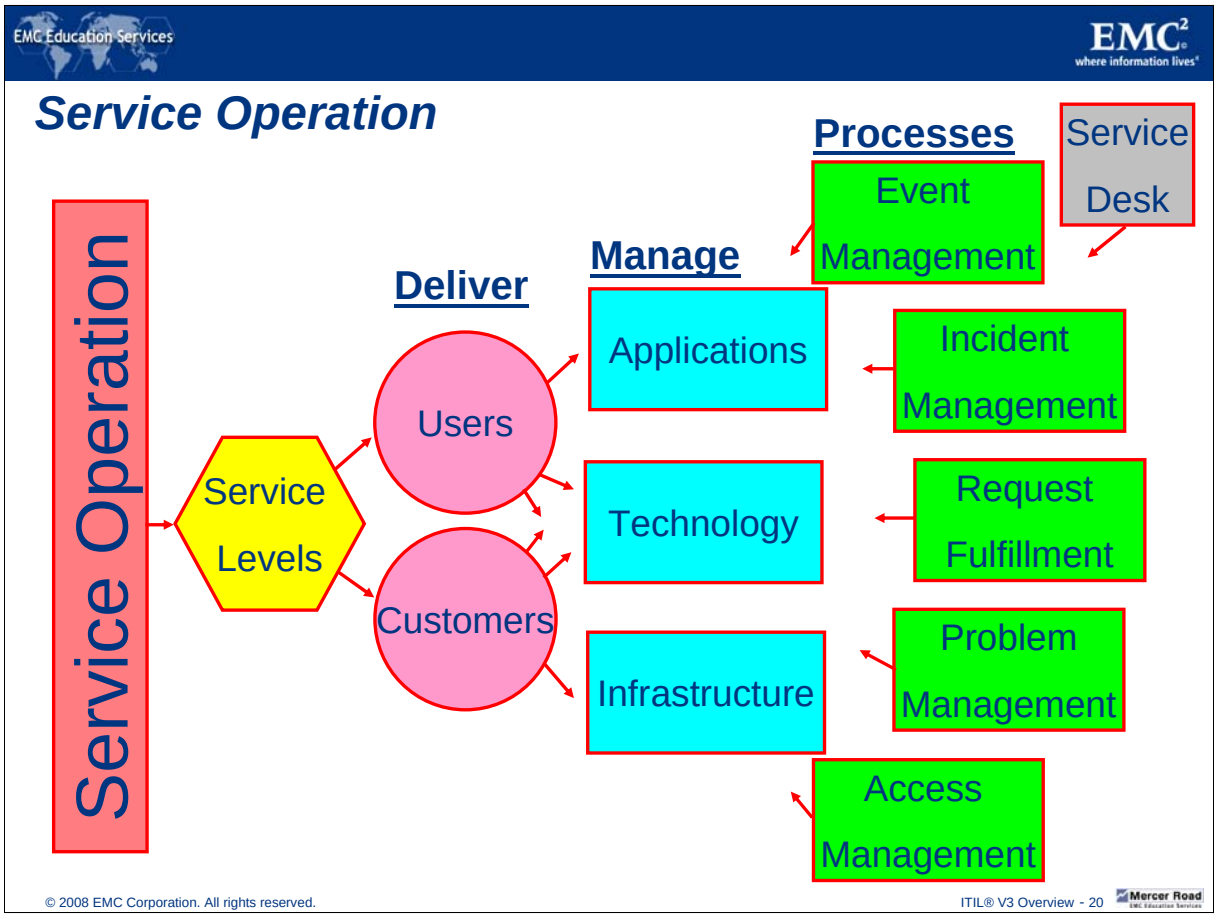


We now need to take the plans (Service Design Package) that were put together in the design stage and put them into operation. The concepts of how the kitchen should be designed, to how the tables in the dining room should be laid out, now need to take place. As in the Service Design stage, the restaurant now needs to implement the plan.

The plan calls for staff needed both in the kitchen and in the dining room. When the restaurant opens this must be reviewed as changes might be needed.

Keeping track of which equipment (Configuration Item) was installed would be advantageous if any possible warranty work might be necessary. Arranging the kitchen equipment for an efficient setup, and having a successful and resourceful food preparation station, are good examples of looking at the whole picture of a first-class working kitchen. Any changes or alterations from the initial plan must be recorded and tracked (Change Management and Service Asset and Configuration Management).

Once the restaurant is operating, changes need to be reviewed and assessed. A change in the menu is an example. What would the impact be on the restaurant with any kind of a change? It could determine whether customers return. The restaurant must evaluate if the original plan can operate under foreseeable extreme or abnormal circumstances, and that support for those circumstances is available. The business value to the customers will be judged by them and that outcome will affect the restaurant. The original service design might need to be modified, and it is in this stage where that adaptation takes place.

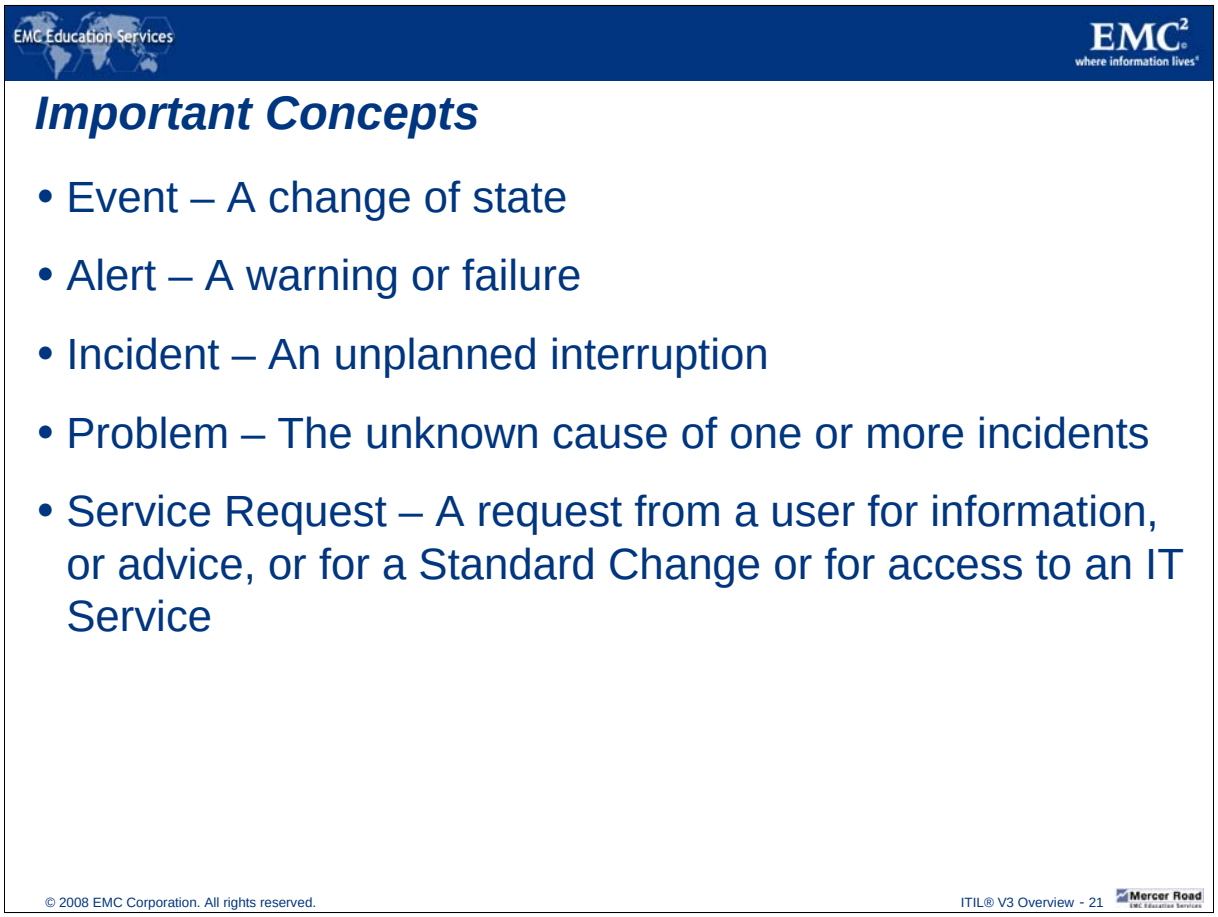



In ITIL Service Management, we have seen some key concepts: Strategy, Design, and Transition. Each one of these expresses how they work toward Service Quality. In the next stage, Service Operation, the customer will see the value and quality of the strategy. The design and the transition come to life in everyday use of the services.

The main purpose of Service Operation is to deliver agreed levels of service to the users and customers, and to manage the applications, technology, and infrastructure that support delivery of the services. It is day-to-day management of IT operations, which includes common activities around managing events, responding to changing business needs, and ensuring that there are minimal disruptions and that the Service Levels are being met.

Well-designed and well-implemented processes that are properly conducted, controlled, and managed offer great value and quality to the users and customers. Service Operation also must coordinate and carry out these activities and processes, and be responsible for the ongoing management of the technologies that are used to deliver and support these services.

The concepts, processes, and functions of Service Operation are discussed in the pages that follow.




Here are some important Service Operation concepts:

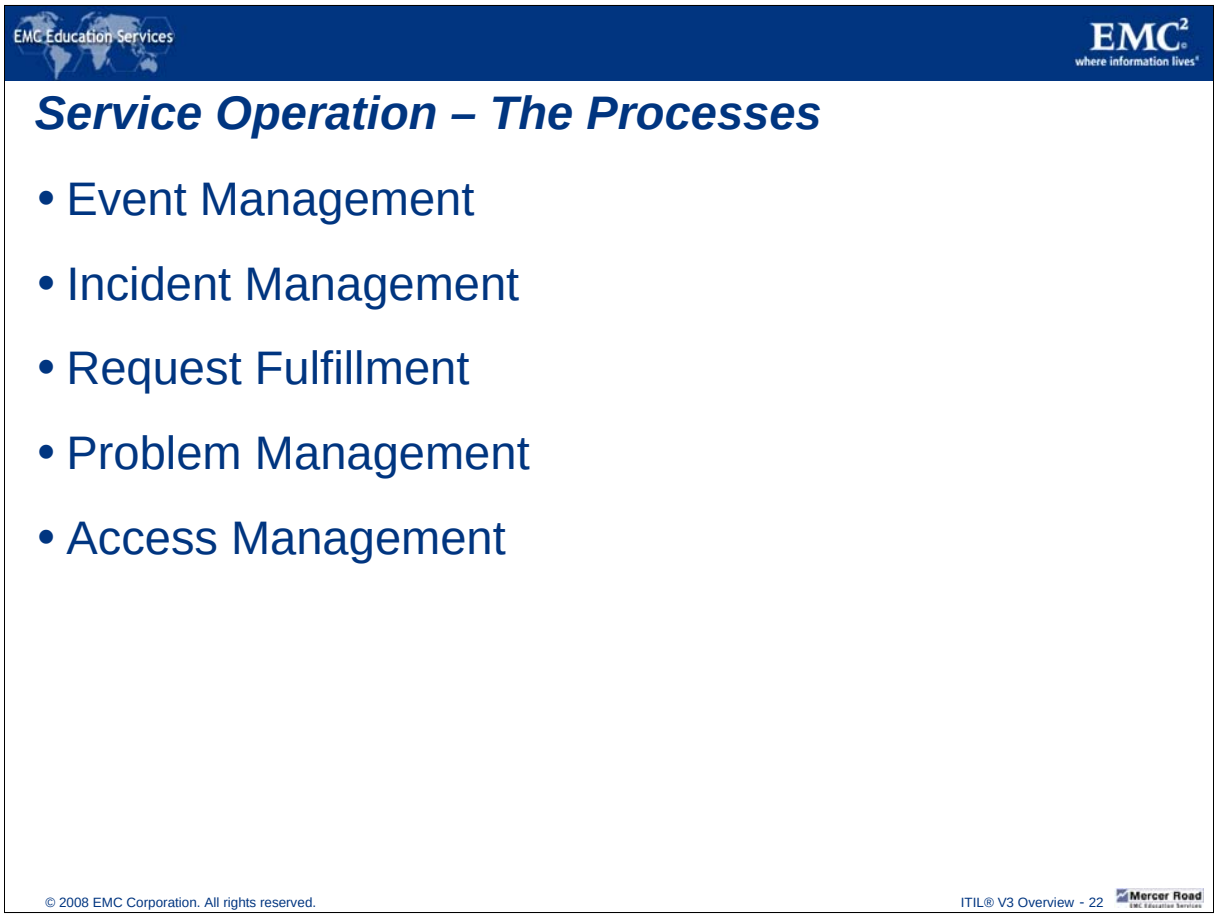
**Event** – Any detectable or discernible occurrence or change in state, which has significance for the management of the IT Infrastructure or the delivery of IT service. Events are typically notifications created by an IT service, Configuration Item (CI) or monitoring tool. Events typically require IT Operations personnel to take actions, and often lead to incidents being logged.

**Alert** – A warning or notification created by any IT Service, CI, or monitoring tool, which indicates a threshold has been reached, something has changed, or a failure has occurred.

**Incident** – An unplanned interruption to an IT Service or a reduction in the quality of an IT Service. Failure of a CI that has not yet impacted Service is also an incident.

**Problem** – The unknown cause of one or more incidents that requires further investigation.

**Service Request** – Small changes that are low risk, frequently occurring, and low cost. They are small in scale and frequency and can be considered to be a minimal threat that can be handled by a separate process, rather than a larger management process. For example, a user requests to reset a password. This can also be the standard for IT Services to establish a new user.




The five processes within the Service Operation Lifecycle are:

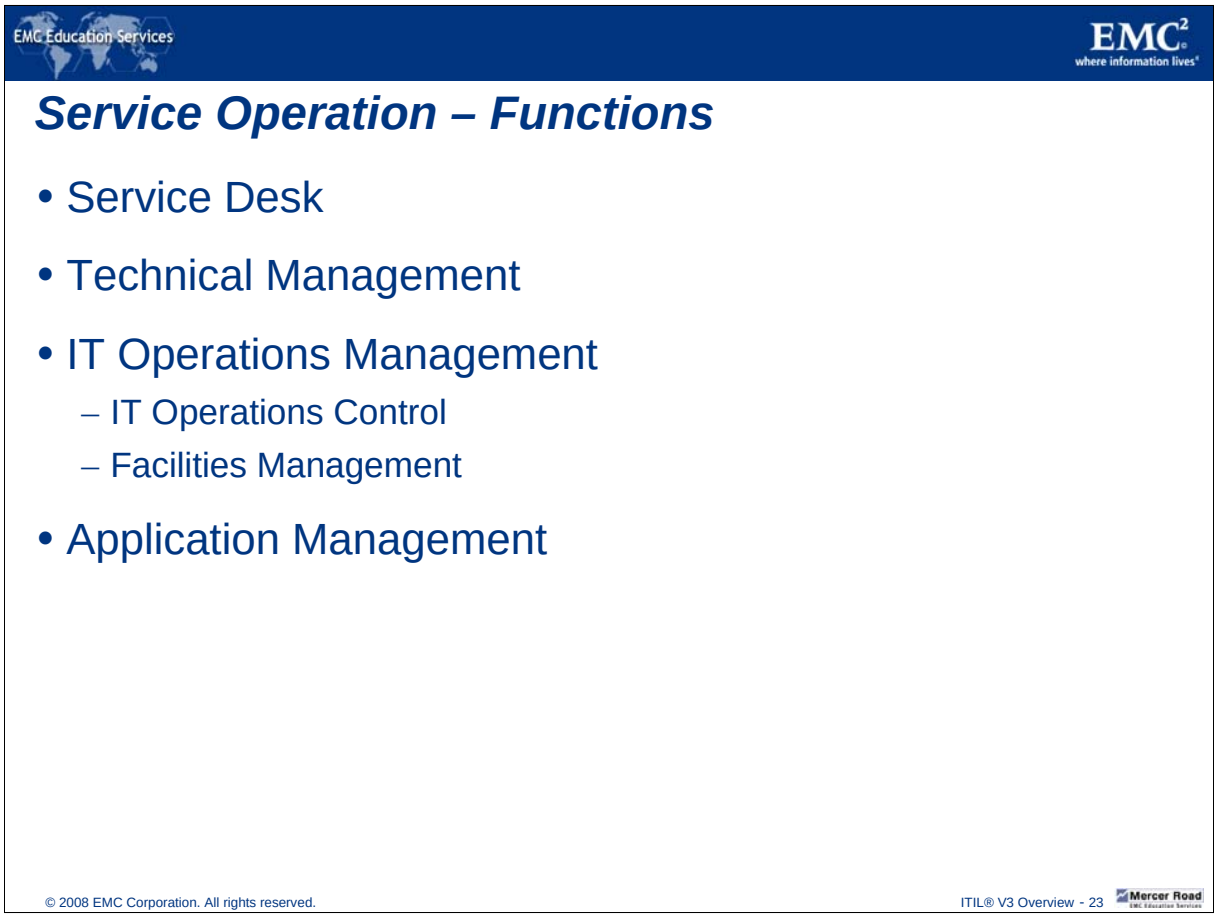
**Event Management** – The process that monitors all events that occur through the IT infrastructure to allow for normal operation and also to detect and escalate exception conditions.

**Incident Management** – Concentrates on restoring the service to users as quickly as possible, in order to minimize business impact.

**Request Fulfillment** – Enables users to request and receive standard services and to source and deliver these services. It provides information to users and customers about how services and procedures are obtained. It also assists with general information, complaints, and comments.

**Problem Management** – Involves root-cause analysis to determine and resolve the cause of events and incidents, proactive activities to detect and prevent future problems/incidents.

**Access Management** – Granting authorized users the right to use a service, while preventing access by non-authorized users.




Four key functions in the Service Operation Lifecycle are:

**Service Desk** – The single central point of contact for all users of IT and usually logs and manages all incidents, service requests and access requests, and provides an interface for all other Service Operation processes and activities.

**Technical Management** – All personnel that provide technical expertise and management of the IT infrastructure. They help to plan, implement, and maintain a stable technical infrastructure and ensure that required resources and expertise are in place to design, build, transition, operate, and improve the IT services and supporting technology.

**IT Operations Management** – Personnel responsible for the management and maintenance of the IT infrastructure required to deliver the agreed upon level of IT services to the business. The two sub-functions are:

- **IT Operations Control** – Usually consist of shifts of operators who carry out routine operational tasks. They provide centralized monitoring and control, usually from an operations bridge or network operations centre.
- **Facilities Management** – Responsible for management of data centers, computer rooms, and recovery sites. This sub-function also coordinates large-scale projects, such as data center consolidation or server consolidation.

**Application Management** – Personnel that focus on software applications and provide technical expertise and management of applications.

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## Restaurant Example – The Day-to-Day Process

- Problem
  - The food was prepared improperly (Event Management)
    - The customer want to speak with the manager (Request Fulfillment)
    - The food is sent back to the kitchen (Incident Management)
      - Is there a quick fix (work-around)?
    - Many meals are being returned; is there a bigger problem? (Problem Management)
    - Maybe there is a request for a substitution? (Change Management)
  - Unruly customers (Access Management)
- Help on hand
  - Wait Staff (Service Desk)
  - Staff with technical background (Technical Management)
  - Outsourced technical (IT Operations Management)





Our restaurant is now fully operational. But as with any operation, daily "events" occur. Service Levels that keep the restaurant running smoothly must be maintained. There must be procedures for when issues occur to resolve them and to prevent them from recurring.

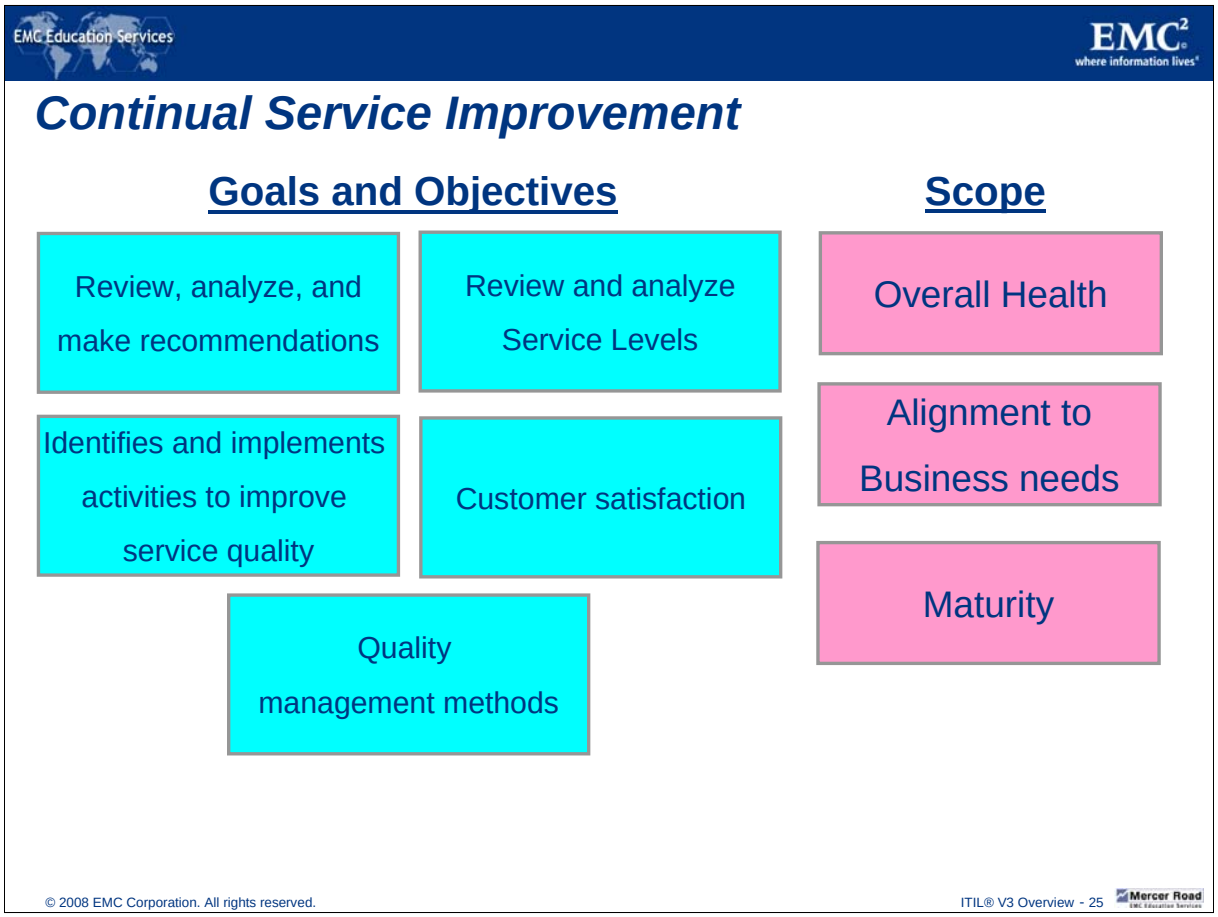
There are certain expectations the customers have. Properly prepared dishes are one of them. When that does not occur, the customer will want to register a complaint (Request Fulfillment). With Event Management, the wait staff can be "alerted" to something that has happened or has failed to happen. Incident Management requires service to be restored back to "normal" as quickly as possible, to make the customer happy. However, what would be the case if there were multiple meals being sent back to the kitchen? There could be a bigger problem. As an example, faulty kitchen equipment or improperly stored foods could be the reason, the root case, making this a bigger problem that can't be resolved quickly (Problem Management). Maybe a guest asks for a substitution that needs to be approved? The kitchen has to be willing to make the change (Change Management).

The problem could require an escalation. During that time the wait staff (the Service Desk) could be the single point of contact between the customer and the management. The problem may require more troubleshooting, or at least restore the confidence back to the customer that the restaurant can deliver quality to its patrons.

There may be a staff member with limited knowledge to repair the kitchen equipment (Technical Management). If it is beyond his/her scope, then an outsourced technical support service needs to be called in (IT Operations Management).

Another problem the restaurant might experience could be with their customer's behaviors and should they be allowed to remain. No one has the right to gain access to any restaurant if they are not behaving well. They might need to be prevented from access to the restaurant and the bouncer will handle that.

All these can be day-to-day issues, and all of them need to be managed in some way. Efficient and effective processes and procedures are needed to have a smooth operation in the restaurant business.



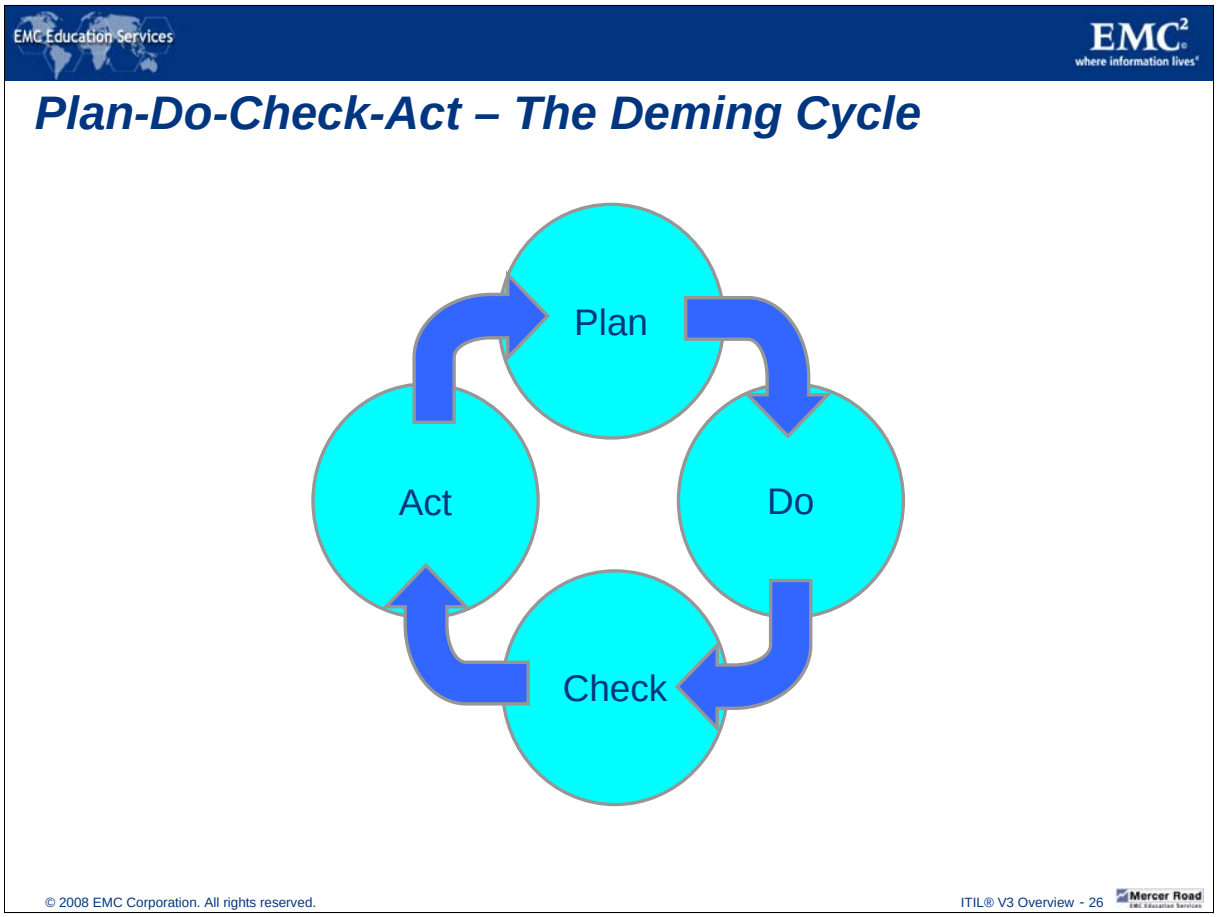

Continual Service Improvement (CSI) is concerned with maintaining value for customers through the continual evaluation and improvement of the quality of services and the overall maturity of the ITSM service lifecycle and underlying processes. It continually works towards improving each phase in the Service Lifecycle: Service Strategy, Service Design, Service Transition, and Service Operation. For CSI to be successful, it must be embedded within the organizational culture and become a routine activity. CSI is looks for ways to improve IT Service Management process effectiveness and efficiency.

CSI has several goals and objectives:

- Review, analyze, and make recommendations on improvement opportunities in each lifecycle stage. There is a need to review and analyze Service Level achievement results to make sure business requirements are being realized.
- Identify and implement individual activities in order to improve service quality and improve the efficiency and effectiveness of enabling Service Management processes. Customer satisfaction must not be sacrificed by limiting delivery of service in an effort to improve cost effectiveness.
- Ensure applicable quality management methods are used to support continual improvement activities.

CSI needs to address three main areas:

- The overall health of Service Management as a discipline.
- The continual alignment of the service portfolio with the current and future needs of the business.
- The maturity of enabling processes for each service in a continual Service Lifecycle model.



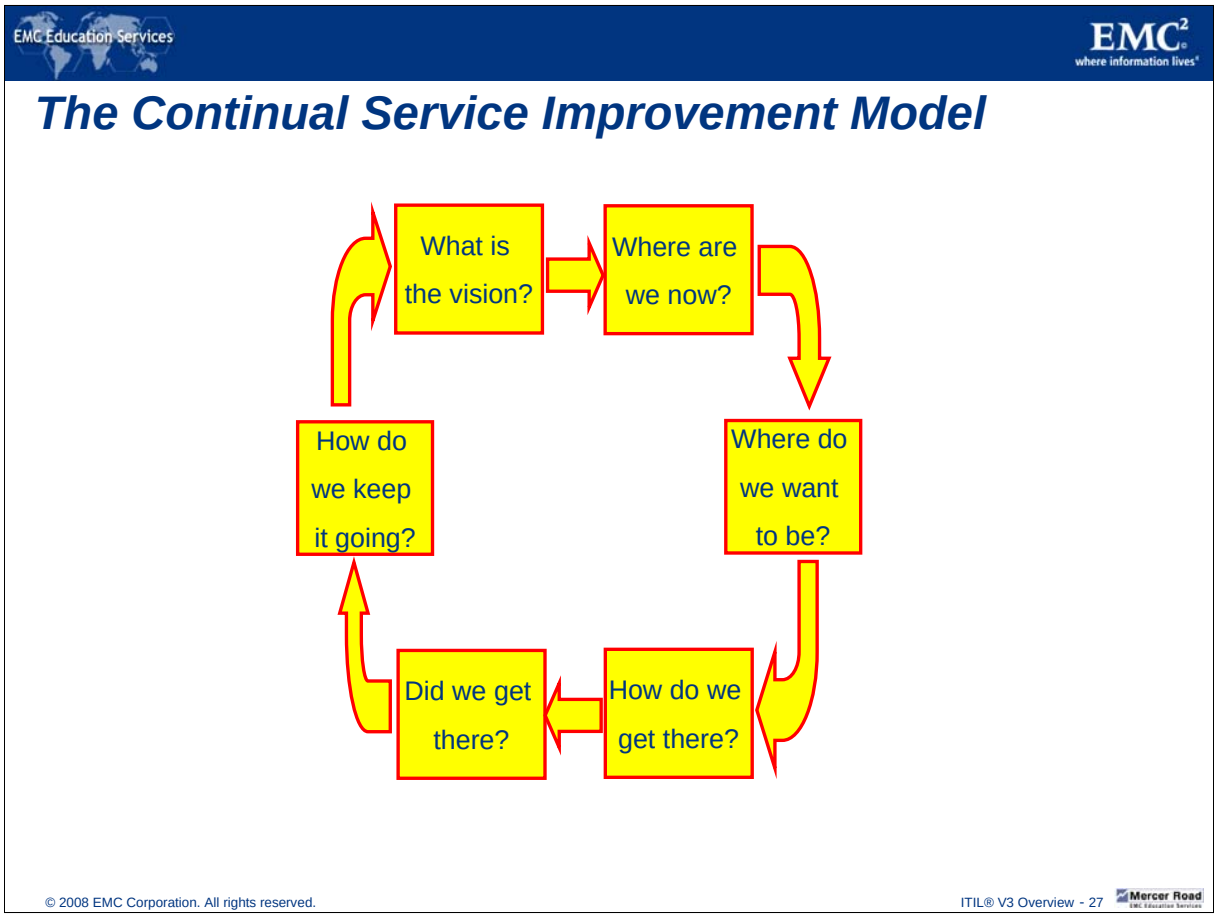

One of the tools CSI uses is the four stage cycle for process management, by W. Edwards Deming, known as the Plan-Do-Check-Act (PDCA) model. This is a method for continual improvement in effort. Steady and ongoing improvement is the basis for the Deming Cycle.

In the **Plan** stage, setting goals for improving and project planning are measured for success and a gap analysis is performed. By definition, the action of the steps is to close the gap and establish and implement measures to assure that the gap has been closed.

The next stage of the model is **Do**. This stage concentrates on the development and implementation of a project to close the identified gaps, implementation of the improvement to the Service Management process, and establishment of the smooth operation of the process.

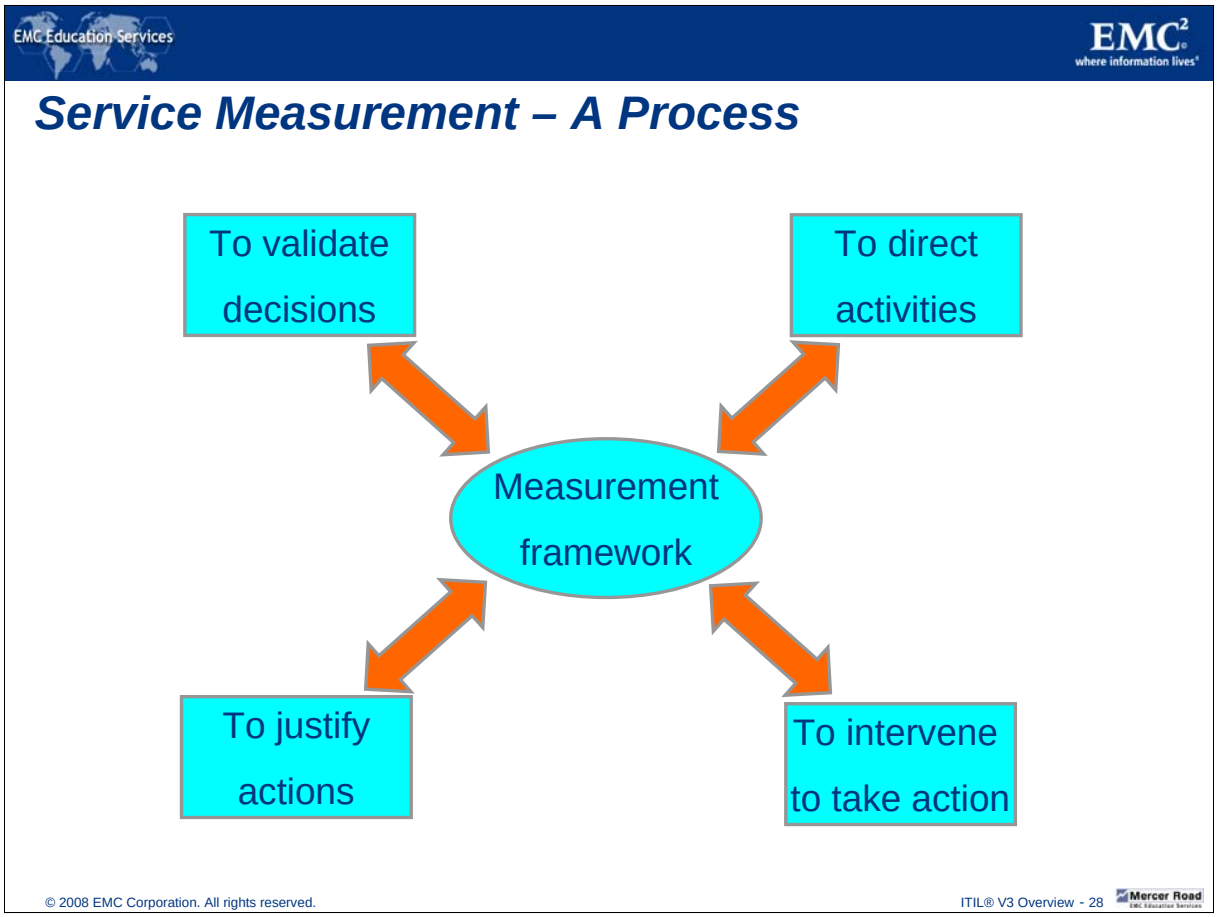
The **Check** stage is where the implemented improvement is compared between the implementation stage, the Do stage, and the measure of success established in the Plan stage.

In the last stage, "**Act**," the actual services are implemented, as well as the Service Management process improvements. A decision to determine if further work is required to close the remaining gaps, or allocate more resources necessary to support other rounds of improvement, is needed at this stage. Project decisions are the input for the next phase of the PDCA cycle, closing the loop as input in Plan stage.




The Continual Service Improvement model is an example of the Deming Cycle. This model illustrates continuous cycles of improvement. The improvement process can be summarized in six steps:

1. Embracing the business vision by understanding the high-level business objectives.
2. Assessing the current situation to establish a baseline assessment of where the business is today.
3. Understanding and agreeing on the priorities for improvement, measurable targets, based on the principle in the vision.
4. Detailing the CSI plan to achieve higher quality service by developing and implementing IT Service Management processes.
5. Verifying that the measurements and metrics are in place to ensure that milestones were achieved.
6. Keeping the momentum for quality improvement maintained by assuring the changes are embraced in the organization.




Service Measurement looks to manage the services and processes and offer valuable reporting to the business. There are four basic reasons to measure:

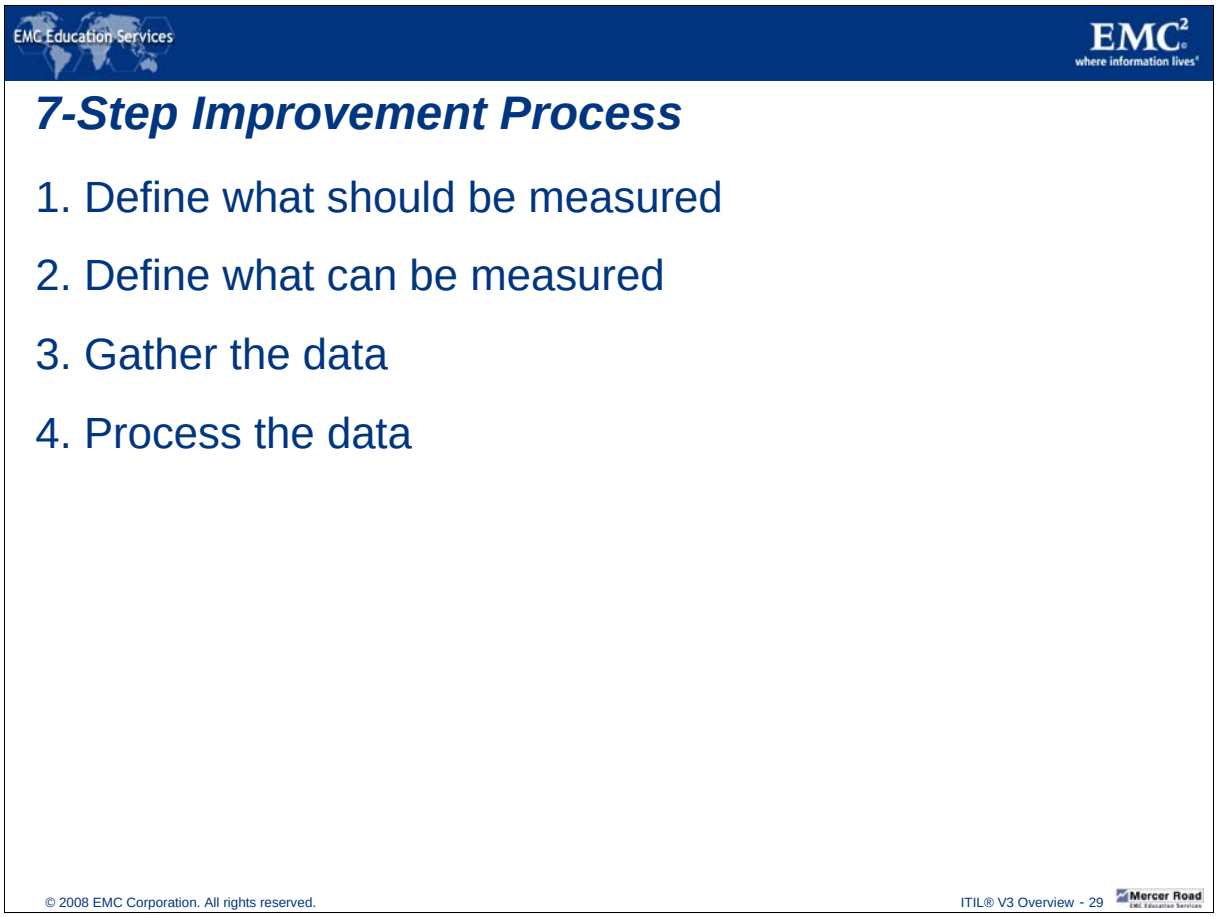
- Validate the previous decisions that were made
- Set direction for activities in order to meet set targets
- Justify, with factual proof or evidence, that a course of action is required
- Identify a point of intervention which includes appropriate changes and corrective actions

This leads to three key questions:

- Why are we doing this?
- When do we stop?
- Is anybody looking at the data gathered?

Too often measurements are continued well past their need. Another question to ask is:

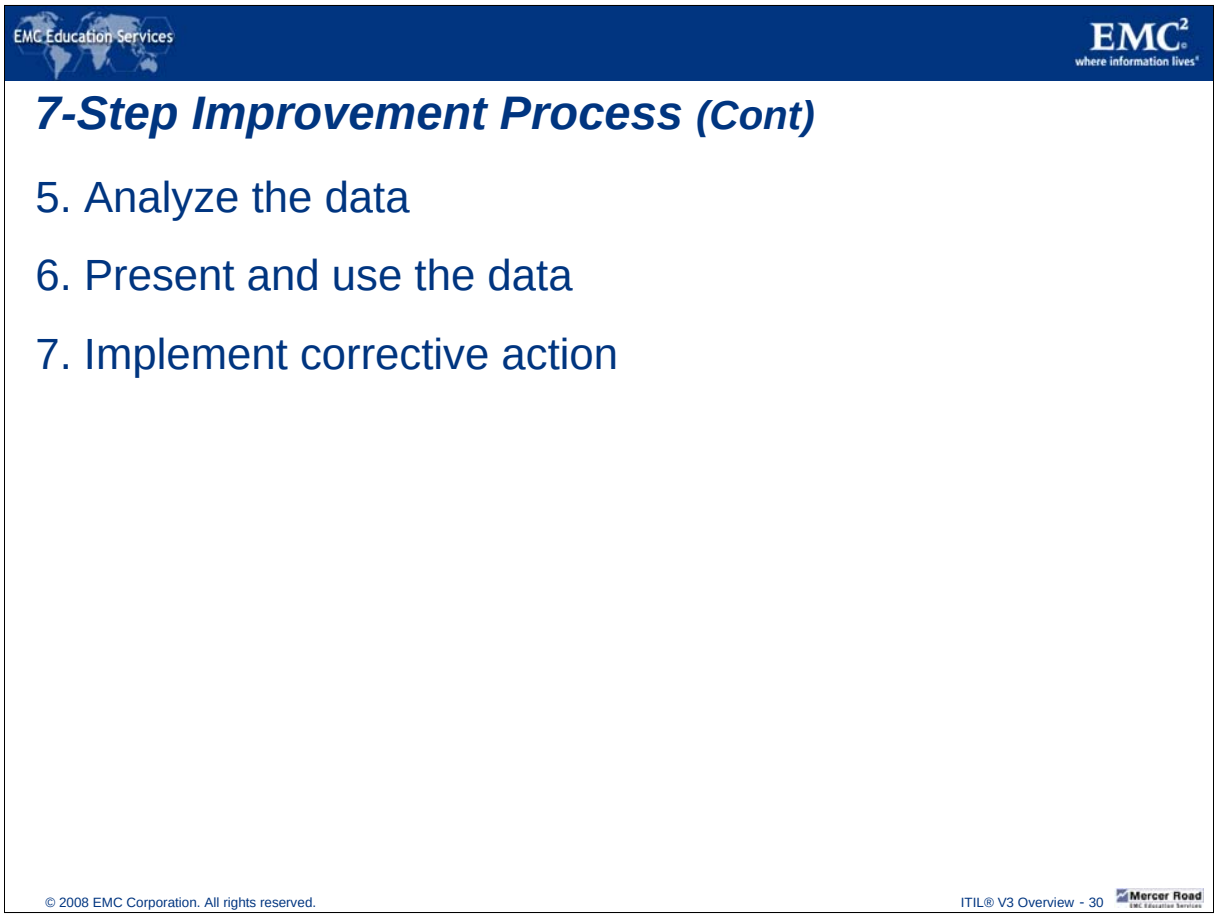
- Is this measurement is still necessary?




CSI is based on the concept of monitoring and measuring. CSI uses the 7-Step Improvement Process which covers the steps required to collect meaningful data, analyze this data to identify trends and issues, present the information to management for their prioritization and agreement, and implement improvements. Each step is driven by the strategic, tactical, and operational goals defined during Service Strategy and Service Design:

1. Define what should be measured – Compiling a list of measurements that fully support the goals of the organization. It is not important what the data is but what is to be measured should be clearly defined.
2. Define what can be measured – Compiling a list of what each tool can measure. It is not always easy to identify (through Service Design) but it is useful to recognize what can be measured and what cannot. Knowing what cannot be measured can help determine the risk. Steps can be taken to reduce that risk—through Service Transition.
3. Gather the data – Collecting data (usually through Service Operation). To achieve this, monitoring is essential. Monitoring includes examining the effectiveness of a service, a process, a tool, an organization or a CI. There is an emphasis on identifying where improvements can be made to the existing level of service or IT performance.
4. Process the data – Formatting the data into a readable format, that delivers information on the performance of services and/or processes. This step, often overlooked, allows understanding of the impact of a component on the infrastructure and IT Service.

The remaining steps are discussed on the next slide.




The remaining steps of the 7-Step Continual Service Improvement process include:

5. Analyze the data – Transform the collected data into useful knowledge of events that affect the organization. Once the data is processed into information, the results can be analyzed to answer questions such as: are targets being met? are there any clear trends? are corrective actions required? at what cost?
6. Present and use the data – Present the data in a format that is understandable, at the appropriate level that is most useful to the target audience. The organization can move forward with this knowledge and use it in a strategic and tactical manner.
7. Implement corrective action – List the knowledge gained to optimize, improve and correct services.

The 7-Step Continual Service Improvement process continues through each stage of the Service Lifecycle.

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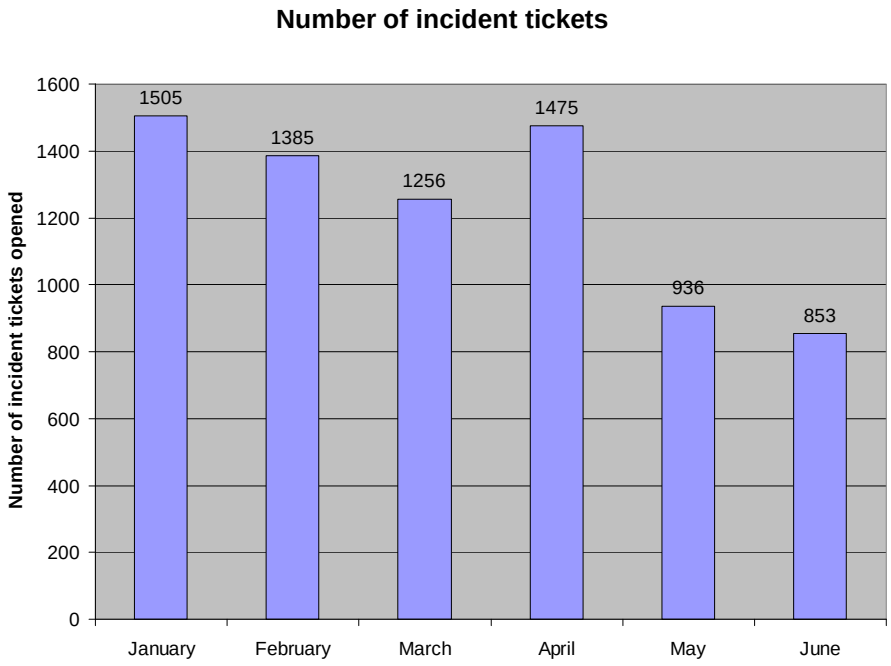
# Service Reporting – A Process





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The reporting processed throughout all the phases of IT Service Management can be more suitable to the internal IT Management use. The business wants to see historical representation of the past period's performance, but could be more concerned with those historical events that continue to be a threat going forward, and how IT intends to defend against such threats.

In **Service Reporting**, useful information needs to be analyzed so that the same errors do not continue and become a threat to the organization. The reporting must address important areas such as:

- What happened?
- What did IT do?
- How will IT ensure the issue does not impact again?
- How is IT working to improve service delivery generally?

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# Restaurant Example – Making Improvements

- Looking for continual improvements
  - What should be reviewed and what do we do with the results? (CSI goals)
  - Create a new dish, serve it, did the customer like it? (Deming Cycle)
  - Is the restaurant the establishment originally intended? Did we achieve that? Are we at where we want to be? Can we still get there? (Continual Service Improvement Model)
  - Was that the right meal, décor, or service? (Service Measurement)
  - What should be measured – number of customers, number of meals'
  - What can be measured – number of credit card purchases?
  - Reviewing the data – which nights are busy, how many gift cards were purchased?
  - What does it all mean? Can we improve? (Parts of the 7-Step Improvement Process)

- Some improvements can come from reviews (from magazines, radio or television shows)
  - Was the Mystery Connoisseur visiting our restaurant?





Our restaurant is in operation and is running well. Now you, the other principal owners, and the chef need to review the entire enterprise to see if operations can be improved.

What needs to be reviewed? There were original goals and concepts stated. These goals can be reviewed as well as the other service levels, including customer satisfaction. Customers will let you know! The overall health check of the restaurant could be reviewed to see how well the establishment is doing – the total of daily receipts and how much stock re-ordering, customer advance reservation lists, wait times for tables, and the number of repeat customers.

The menu needs to be reviewed and assessed. Reviewing the types of dishes served, that were part of the original cuisine concepts, need to be examined as to how well they are selling. Customers might have provided feedback on these dishes and those dishes may need a change. The chef can adjust these dishes and offer a new dish on the menu. A tool to manage this would be the Deming Cycle: Plan-Do-Check-Act.

Many factors of the restaurant could be reviewed to assess if it is within the original concepts and designs of the restaurant. A review of these concepts must take place to see if they were part of the vision of the restaurant. They still might be attained, but would need an assessment to get to where they want to be. A continual review must be done as the Continual Service Improvement Model offers.

There could be an evaluation of the dishes served, the décor, or the service. Check to see if the original decisions on how to run the restaurant are correct and working. There could be a few of these that need to change and make the restaurant more effective and efficient (Service Measurement).

Monitoring and measuring the course of actions in the restaurant must occur if any improvement is to take place. Measurements could be based around how many customers come in and visit the restaurant or the number of certain types of dishes served. Management needs to know what they can and cannot measure. Processing information can help determine proper staffing based on trending (busiest times) or the right equipment to be used in the kitchen. Presenting the information to the right personnel can help implement improvements for the restaurant. This is the 7-Step Improvement Process.

The reviews on the restaurant from contemporaries, critics, magazines, or broadcasted shows could reveal if the restaurant is a success. Maybe a "Mystery Connoisseur" has done an anonymous review. Those reviews can better inform the restaurant if it is on a successful path. The targeted improvements can make the restaurant even better than before.

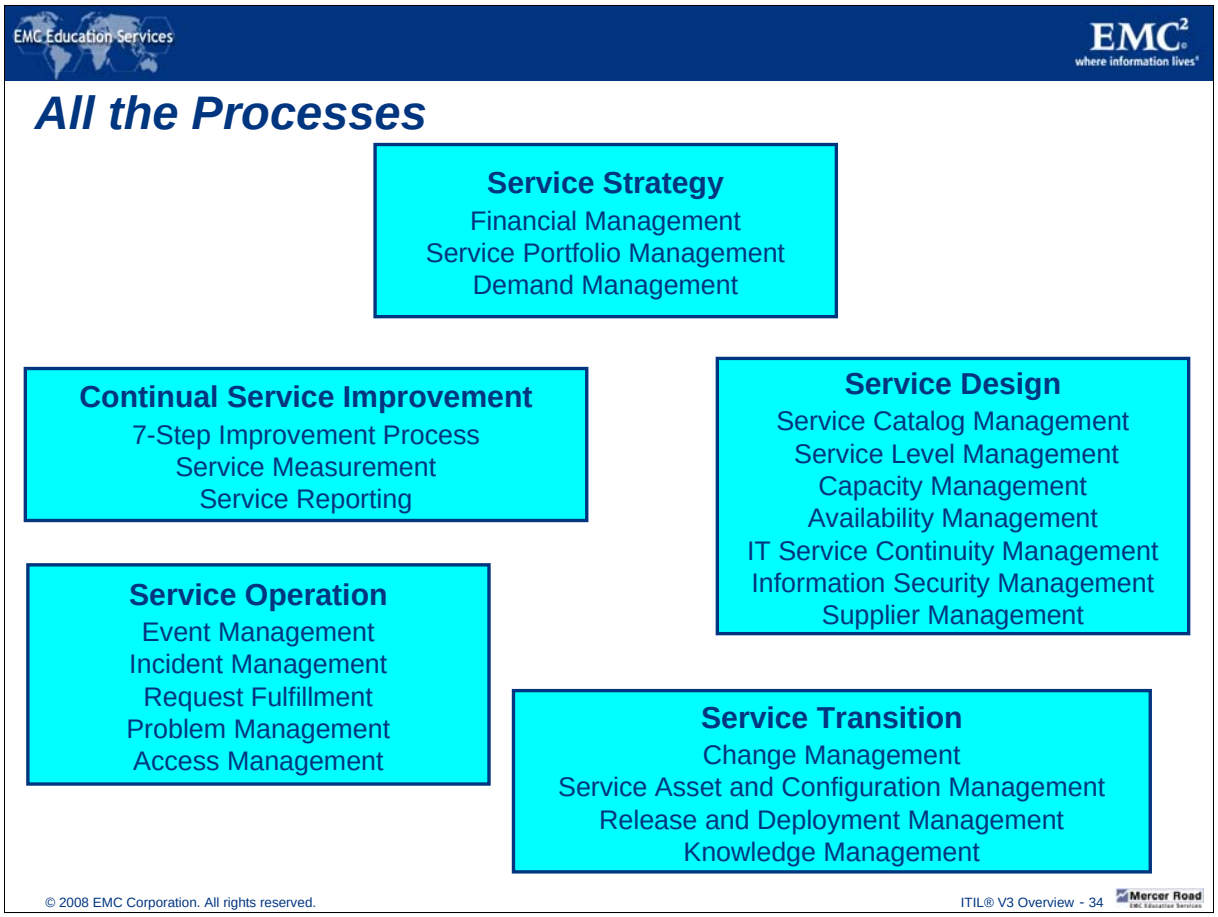
## How It All Fits Together



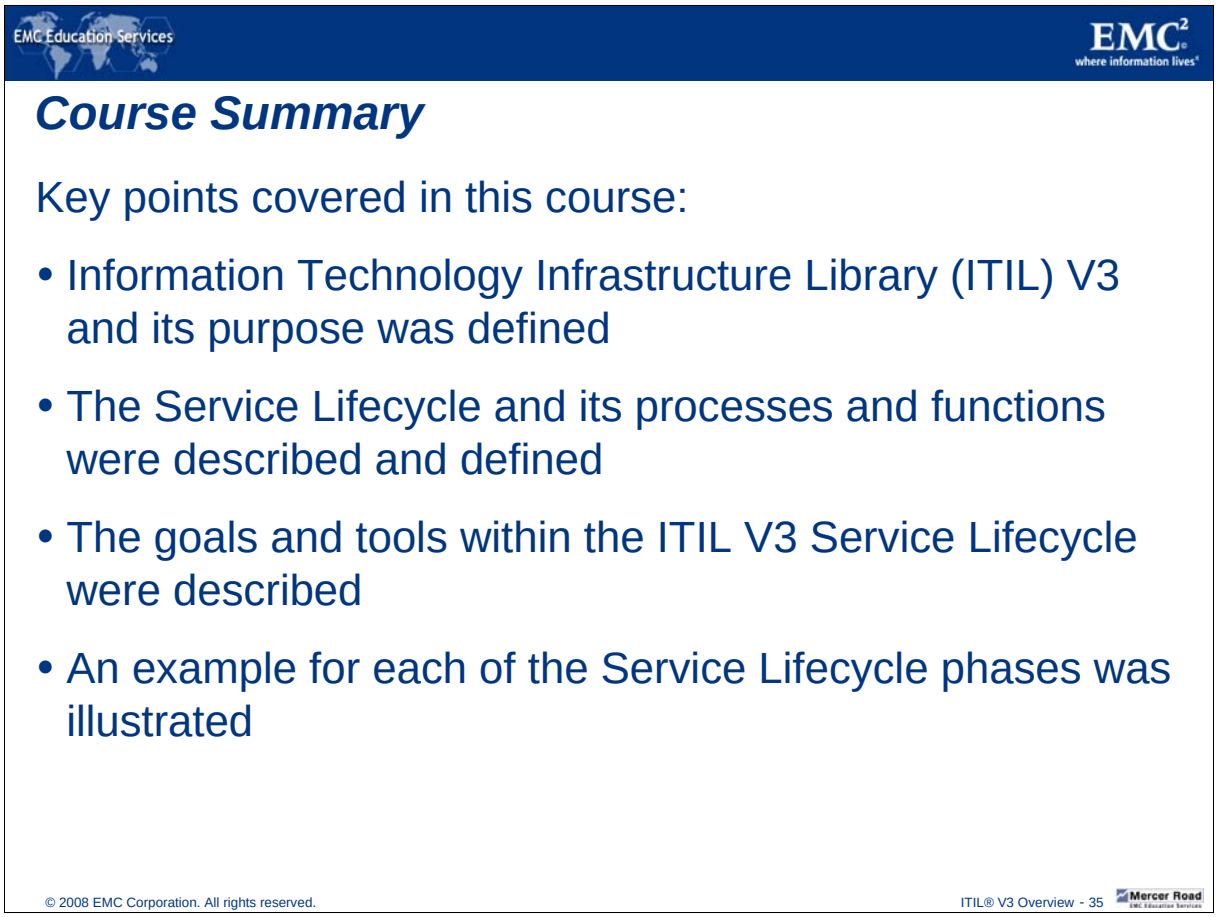


Businesses still view IT Service Management as a resource that only concerns itself with technology issues. With the use of the Service Lifecycle there can be a better approach to IT Service Management. IT Service Management systems can now become more focused on business needs and more closely integrated with business processes. Better management allows less dependence on specific technology and more "service centric."

This slide illustrates how IT can accomplish all of these areas and how they can provide end-to-end Service Management. Looking at this as a continual cycle and not the traditional "silos" or "islands," benefits not only the business but makes the IT organization a much more efficient and effective group.




This slide provides a list of all the processes in the Service Lifecycle presented in this Impact module.




These are the key points covered in this training. Please take a moment to review them.

This concludes the training. Please proceed to the Course Completion slide to take the assessment.