Welcome to your Study Guide. This document is supplementary to the information available to you online, and should be used in conjunction with the videos, quizzes and exercises.

After your subscription to the course has finished online, you will still have the study guide to help you prepare for the PPO exam - if you’ve not taken the exam by the time your subscription expires.

Each Module of your course has its own study guide, including a review of the Module information, exercise answers and any additional diagrams or material mentioned. By the end of the course, you’ll have 8 chapters that build up into the full guide.

This Chapter contains the study guide information for Module 1 – Introduction to PPO.

Use this study guide in conjunction with your own notes that you make as you progress through the course. You may prefer to print it out, or use it on-screen.

After each Lesson, you can consolidate what you have learnt whilst watching the videos and taking the quizzes by reading through the chapter of the study guide. If you progress on to do the PPO exam, your study guide will provide you with vital revision information.

Remember, your study guide is yours to keep, even after your subscription to the PPO Course has finished.

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Text in “*italics and quotation marks*” is drawn from the ITIL core volumes

Quoted ITIL text is from Service Strategy, Service Design, Service Transition, Service Operation and Continual Service Improvement

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<tr>
<td><img src="image" alt="Tip Icon" /></td>
<td><strong>Tip</strong> – this will remind you of something you need to take note of, or give you some exam guidance.</td>
</tr>
<tr>
<td><img src="image" alt="Definition Icon" /></td>
<td><strong>Definition</strong> – key concept or term that you need to understand and remember.</td>
</tr>
<tr>
<td><img src="image" alt="Role Icon" /></td>
<td><strong>Role</strong> – a job title or responsibility associated with a process or function.</td>
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<tr>
<td><img src="image" alt="Exercise Solution Icon" /></td>
<td><strong>Exercise Solution</strong> – suggested solution to one of the exercises you will complete throughout the course.</td>
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<tr>
<td><img src="image" alt="Purpose or Objective Icon" /></td>
<td><strong>Purpose or Objective</strong> – for a particular process or core volume.</td>
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</tbody>
</table>
This Module introduced the Planning, Protection and Optimization processes.

We studied:

- The purpose, objectives and value of Service Design
- The Service Lifecycle
- The basics of Service Design
- The interfaces of Design Coordination
The Purpose and Objective of Service Design

The Service Design core volume defines the purpose of Service Design as:

“... to design IT services, together with the governing IT practices, processes and policies to realize the service provider’s strategy and to facilitate the introduction of these services into supported environments ensuring quality service delivery, customer satisfaction and cost-effective service provision”

Service Design is not just about the services themselves, it’s also about how those services are designed, transitioned and operated – in other words, how they are managed.

The definition of the purpose of Service Design provides a concise statement of the relationship between Service Design and Service Strategy – Service Design exists to “realize the service provider’s strategy”.

The purpose of Service Design is also to ensure success in the downstream stages of Transition and Operation. Both of those stages work within the constraints of the design which can help or hinder them.

All too often service designers work in isolation from the rest of IT and deliver services that are difficult to operate and support. A poorly designed service will cause more calls to the Service Desk and generate the need for more costly day-to-day support.

“The objective of Service Design is to design services so effectively that minimal improvement during their lifecycle will be required”
Designers should address all aspects of the new service so that there will be little need for re-engineering or enhancement when the service is operational.

Some consequences of not getting it right first time are:

- Delays in getting the full value of the service
- Extra costs – it’s more expensive to change operational services
- Disruption to business caused by downtime needed to deploy enhancements
- Losses due to incomplete designs

**The Scope of Service Design**

The scope of Service Design is not limited to designing new services. Its practices may also be applied to the design of service enhancements and other changes.

Service Design might also be applied to retiring services. When we retire a service we do not simply stop using it – there is hardware to be de-commissioned; software to be uninstalled; support contracts to be terminated; data to be archived or disposed of. There are often dependencies between services; data flows that cannot simply be turned off. Service Design might be needed to understand this complexity and plan the retirement to avoid disruption.

**In this course we shall usually refer to new services.** You must remember that our discussions also apply to changed and retired services.

Remember that for Service Design, as well as all ITIL practices, a fundamental principle is that processes and practices should be appropriate to the particular needs of the business.
The PPO Processes
The ITIL Service Design book describes the eight processes listed below:

- Design Coordination
- Service Catalogue Management
- Service Level Management
- Availability Management
- Capacity Management
- IT Service Continuity Management
- Information Security Management
- Supplier Management

This course is concerned with Availability Management, Capacity Management, IT Service Continuity Management and Information Security Management.

Because of its close connection with Capacity Management, the course also covers Demand Management which is described in the ITIL Service Strategy book.

Don’t forget that these processes are not confined to the Service Design stage of the lifecycle. They have activities that are performed in each of the other stages. Capacity Management, for example, collects workload and performance measures for operational services and their supporting infrastructure.
The Value of Service Design

Service Design will:

- Reduce the total cost of ownership by considering all aspects of the service and supporting processes and infrastructure
- Improve the quality of service by identifying all requirements and designing services that match those requirements
- Improve the consistency of service across all services and technologies by using standard architectures and repeatable processes
- Ease the implementation of new or changed services by considering the requirements of Service Transition when producing the design
- Improve service performance by identifying the warranty requirements at the outset and then designing a service that will deliver those requirements.
- Improve IT governance by defining design policies and building controls into the design lifecycle
- Improve the effectiveness of Service Management and IT processes by the use of formal methods to design processes that are appropriate to the needs of the business
- Improve decision-making by ensuring that comprehensive metrics are produced by the services, processes and technology
- Improve alignment with customer values and strategies such as environmental responsibility
The Service Lifecycle

Service Design Fig. 1.1 The ITIL service lifecycle
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Service Strategy

In the Service Strategy stage of the lifecycle the Service Provider develops a deep understanding of the business and its objectives. It uses that understanding to answer questions such as:

- What business outcomes must we support?
- What services should we offer?
- How should we develop our capabilities?

Service Strategy makes all the high level decisions that influence everything we do within Service Management:

- It sets policies and objectives for the rest of the lifecycle
- It makes decisions about services: what new services to offer, and which existing services to enhance or retire
- It decides how to develop Service Management capabilities. It might recognise, for example, that Service Transition capabilities are particularly important for an organisation and develop policies that enhance those capabilities
Service Design

Although Service Strategy has set the core policies, it is Service Design that then creates blueprints for services to deliver the policies.

This lifecycle phase ensures that services work individually, as well as within the environment they will eventually be deployed into.

If the design is poor, management further on in the lifecycle will be much more difficult. For example, a poorly designed service could cause more calls to the Service Desk, or generate the need for more costly day-to-day support.

Service Transition

Service Transition is responsible for seamlessly and smoothly deploying new or changed services into the live environment.

Service Transition also looks to protect the live environment and ensures that the new or changed service works correctly from day one.

Vital knowledge transfer to Service Operation is also carried out here.

Service Operation

Service Operation encompasses all the routine activities that are necessary to keep live services up and running. Many of these activities relate to processes that first appear in other stages of the lifecycle.

Service Operation is where strategies are realized. It’s where the services deliver value to the business, but it’s also where deficiencies in strategy, design and transition will be encountered. It’s fair to say that Service Operation is the beneficiary or victim of everything that happens upstream.
Continual Service Improvement

Continual Service Improvement interfaces with every other stage of the lifecycle, and is responsible for making sure that we are always improving.

Continual Service Improvement looks for improvements to services and Service Management processes across the Service Lifecycle. It works to understand where quality improvements can be made through efficiencies, more effective use of existing resources and the reduction of the effects of constraints.
The Benefits of Processes in Service Design

Service Design is built upon eight processes. These processes represent eight groups of activities that should be carried out in a defined, systematic manner. A standard, systematic way of working brings a number of benefits, including:

- Accurate estimation of costs, resources and schedules
- The ability to successfully handle more changes
- Easier for staff to follow agreed practices
- Easier to share resources across projects
- Fewer delays from reworking during transition
- Better management of expectations of all stakeholders
- Increased confidence that a new service will be delivered as promised
- New services will be maintainable and cost-effective

The Service Design Package

The key deliverable of Service Design is the Service Design Package. This refers to a collection of documents that completely define a new service through its lifecycle.

The Service Design Package is handed over to Service Transition and describes how the new service should be built, tested, deployed and operated.

The table below indicates the possible contents of the Service Design Package.
<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description of what is in the SDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements</td>
<td>Business requirements</td>
<td>The initial agreed and documented business requirements</td>
</tr>
<tr>
<td></td>
<td>Service applicability</td>
<td>This defines how and where the service would be used. This could reference business, customer and user requirements for internal services</td>
</tr>
<tr>
<td></td>
<td>Service contacts</td>
<td>The business contacts, customer contacts and other stakeholders in the service</td>
</tr>
<tr>
<td>Service design</td>
<td>Service functional requirements</td>
<td>The changed functionality (utility) of the new or changed service, including its planned outcomes and deliverables, in a formally agreed statement of requirements (SoR)</td>
</tr>
<tr>
<td></td>
<td>Service level requirements</td>
<td>The service level requirements (SLR), representing the desired warranty of the service for a new or changed service. Once specific service level targets have been agreed and validated, the revised or new service level agreement (SLA), including service and quality targets</td>
</tr>
<tr>
<td></td>
<td>Service and operational management requirements</td>
<td>Management requirements to manage the new or changed service and its components, including all supporting services and agreements, control, operation, monitoring, measuring and reporting</td>
</tr>
<tr>
<td></td>
<td>Service design and topology</td>
<td>The design, transition and subsequent implementation and operation of the service solution and its supporting components, including:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The service definition, service model, packaging and service options</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• All service components and infrastructure (including hardware, software, networks, environments, data, applications, technology, tools, documentation), including version numbers and relationships, preferably within the configuration management system (CMS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• All user, business, service, component, transition, support and operational documentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Processes, procedures, measurements, metrics and reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Supporting products, services, agreements and suppliers</td>
</tr>
<tr>
<td>Organizational readiness assessment</td>
<td>Organizational readiness assessment</td>
<td>‘Organizational readiness assessment’ report and plan, including: business benefit, financial assessment, technical assessment, resource assessment and organizational assessment, together with details of all new skills, competences, capabilities required of the service provider organization, its suppliers, supporting services and contracts</td>
</tr>
<tr>
<td>Category</td>
<td>Sub-category</td>
<td>Description of what is in the SDP</td>
</tr>
<tr>
<td>--------------------------</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Service lifecycle plan   | Service programme       | An overall programme or plan covering all stages of the lifecycle of the service, including the timescales and phasing, for the transition, operation and subsequent improvement of the new service including:  
  - Management, coordination and integration with any other projects, or new or changed activities, services or processes  
  - Management of risks and issues  
  - Scope, objectives and components of the service  
  - Skills, competences, roles and responsibilities  
  - Processes required  
  - Interfaces and dependencies with other services  
  - Management of teams, resources, tools, technology, budgets, facilities required  
  - Management of suppliers and contracts  
  - Progress reports, reviews and revision of the programme and plans  
  - Communication plans and training plans  
  - Timescales, deliverables, targets and quality targets for each stage                                                                                                                                 |
<p>| Service transition plan  |                         | Overall transition strategy, objectives, policy, risk assessment and plans including:                                                                                                                                                  |</p>
<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description of what is in the SDP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Build policy, plans and requirements, including service and component build plans, specifications, control and environments, technology, tools, processes, methods and mechanisms, including all platforms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Testing policy, plans and requirements, including test environments, technology, tools, processes, methods and mechanisms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Testing must include:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Functional testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Component testing, including all suppliers, contracts and externally provided supporting products and services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o User acceptance and usability testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o System compatibility and integration testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Service and component performance and capacity testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Resilience and continuity testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Failure, alarm and event categorization, processing and testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Service and component, security and integrity testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Logistics, release and distribution testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Management testing, including control, monitoring, measuring and reporting, together with backup, recovery and all batch scheduling and processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Deployment policy, release policy, plans and requirements, including logistics, deployment, staging, deployment environments, cultural change, organizational change, technology, tools, processes, approach, methods and mechanisms, including all platforms, knowledge, skill and competence transfer and development, supplier and contract transition, data migration and conversion</td>
</tr>
<tr>
<td><strong>Category</strong></td>
<td><strong>Sub-category</strong></td>
<td><strong>Description of what is in the SDP</strong></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Service operational acceptance plan</td>
<td></td>
<td>Overall operational strategy, objectives, policy, risk assessment and plans including: Interface and dependency management and planning Events, reports, service issues, including all changes, releases, resolved incidents, problems and known errors, included within the service and any errors, issues or non-conformances within the new service Final service acceptance</td>
</tr>
<tr>
<td>Service acceptance criteria</td>
<td></td>
<td>Development and use of service acceptance criteria for progression through each stage of the service lifecycle, including: All environments Guarantee and pilot criteria and periods</td>
</tr>
</tbody>
</table>

Service Design Table A.1 Contents of the service design package

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**The Five Aspects of Service Design**

Service Design is not just about the services themselves, it is also about how those services are managed. The Service Design book describes five aspects of service design:

1. **Service solutions**

2. **Management information systems and tools which support Service Management processes.** The Service Portfolio is a particularly important management information system

3. **Technology and management architectures which provide blueprints for the design of new services and for Service Management capabilities**

4. **Processes**

5. **Measurement methods and metrics – the Continual Service Improvement book contains advice on what metrics are needed, Service Design must ensure that services, processes and technology will provide those measurements**

These five aspects are not independent of one another. When making changes in any aspect the possible implications for other aspects must be considered.
Service Design and Business Change

It’s important to keep in mind that IT is the servant of the business; that Service Design exists to enable the business to adapt to changing circumstances. For example, the changing demands of its customers, increased competitive pressure, new regulatory requirements, and challenging economic circumstances.

Usually, the demand for a new service is triggered by some change within the business, so Service Design should be seen as a part of a wider business change process as illustrated in the diagram above.

The Business Value of Service Design

Service Design is an essential part of Service Management that allows a Service Provider to serve the wider organization by:

- Aligning IT service provision with business goals – business goals and priorities can change quite quickly so the business needs its IT Service Provider to be able to deliver change quickly – Service Design capability is a key enabler
- Prioritizing IT activities in line with business need – in many organizations there will be several new or changed services in design at the same time and using the same set of shared resources; Service Design must be able to prioritize design activity in line with business need
Increasing business productivity and profitability through efficient IT processes – the design of processes falls within the scope of Service Design

Supporting corporate governance and regulatory compliance through appropriate IT controls – Service Design takes a holistic view of service requirements

Using IT technology to gain competitive advantage

Improving service quality and customer satisfaction

Maintaining security of assets and information

Keeping IT services aligned with business need over time

**Demonstrating Value**

It is essential that the Service Provider is able to demonstrate its value to the business by linking its activities and the IT assets to business outcomes. It can do this by:

- Negotiating Service Level Agreements that document agreed targets for all services
- Measuring and reporting service quality in terms that are meaningful to the business. For example, using units of lost production rather than minutes lost to measure availability
- Linking services and components to business activity to reduce disruption to business activity caused by lack of understanding of the importance of components
- Linking service metrics to business metrics to ensure focus on business priorities
- Regular reporting of end-to-end service performance
What the Business Wants from IT Services

The business doesn’t just want services that provide utility. It also wants services that:

- Are cost-effective – the value it gets from the services must justify the cost of delivering them
- Provide the appropriate level of security
- Are able to respond and adapt to changing business requirements. Most organizations depend on their IT services and all organizations need to adapt to a changing world. No organization wants to be held back by inflexible IT services.
- Are able to handle increasing workloads without suffering loss of performance. Sometimes services have in-built limitations caused by poor design decisions
- Are able to support the need for round-the-clock operation that is increasingly needed in the global economy
- Delivered at a level of risk that is appropriate to the business
- Are able to deliver the performance and availability needed by the business

Service Design is the Foundation of Success

The success of an operational service rests on the foundations laid in Service Design. A poorly-designed service may never deliver all of the requirements we have just discussed. Acceptable service quality may only come from strenuous efforts of operations staff, efforts that will have a cost.

Unfortunately there is often a temptation to cut corners at the design stage in order to fit defined timescales. This usually causes problems down the line in transition and operation, often in the form of service disruption and increased costs.

The answer is to develop effective and efficient design processes that enable quality designs to be produced in spite of challenging timescales.
Exercise – Poor Service Design

This Lesson included an Exercise to look at the consequences of poor design. If you didn’t have time to complete the exercise during the Lesson, why not attempt it now?

Exercise

The web sales team have demanded a replacement for Holwebsales. They want to release this as quickly as possible as the current system is failing. Design staff are being pressured to just get on with it.

- What will the impact of poor design be?
- How will it affect the transition and operation of the service?
- What consequences might the website users see?
<table>
<thead>
<tr>
<th>Exercise solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The impact of poor design could include:</td>
</tr>
<tr>
<td>- Not all the user requirements being met</td>
</tr>
<tr>
<td>- A service that performs poorly</td>
</tr>
<tr>
<td>- Lack of integration with other systems</td>
</tr>
<tr>
<td>- Customer dissatisfaction due to downtime</td>
</tr>
<tr>
<td>- The service cannot be changed or improved easily</td>
</tr>
</tbody>
</table>

| The transition and operation of the service could be affected in a number of ways: |
| - More errors during transition – the service doesn’t work immediately |
| - More staff required during transition |
| - Transition is poorly planned and clashes with other changes |
| - Operational staff unable to manage the service on a day to day basis |
| - Operational staff unable to support the service and resolve incidents and problems |
| - No documentation handed over to operational staff |

| The website users could well see: |
| - Downtime |
| - Degraded performance |
| - Missing or incomplete functionality |
| - Lots of changes to make improvements leading to a poor reputation for the service |
Initial Design Activities

The Service Design book recommends that the following list of actions that should be carried out at the start of the design which will help to ensure that the solution satisfies customer requirements:

- “The new service solution should be added to the overall service portfolio from the concept phase, and the service portfolio should be updated to reflect the current status through any incremental or iterative development. This will be beneficial not only from the financial perspective, but also from all other areas during design.
- As part of the initial service/system analysis, there will be a need to understand the service level requirements (SLRs) for the service when it goes live.
- From the SLRs, the various processes and functions must ascertain if customer’s requirements can be met with current resources and capabilities. For example, the capacity management team can model this within the current infrastructure to ascertain if it will be able to support the new service. If organizational policies require it, the results from the modelling activities can be built into the capacity plan.
- If new infrastructure is required for the new service, or extended support, financial management for IT services will need to be involved to set the budget.
- An initial business impact analysis and risk assessment should be conducted on services well before implementation as invaluable input into IT service continuity strategy, availability design, security design and capacity planning.
- The service desk will need to be made aware of new services well in advance of live operation to prepare and train service desk staff and potentially IT customer staff.
- The technical management, application management and IT operations management functions (see ITIL Service Operation) also need to be made aware of new services to allow them to plan for effective operational support of the services.
- Service transition can start planning the implementation and build into the change schedule.
- Supplier management will need to be involved if procurement is required for the new service.”
Components of a Service

The diagram above shows the components of a service that the design must address.

First the designers must understand the business processes that the service will support. From this they will identify and agree the functional requirements of the service.

The designers do not have complete freedom of action when designing a new service. There are many constraints including those arising from the need to meet the organization’s overall policies and strategies, and governance and compliance requirements.

The designers of a new service must identify the warranty requirements of the new service and document these in the form of Service Level Requirements. The service must be designed to deliver these requirements.

The infrastructure requirements of the service must be considered. The starting point will be to ask if the current infrastructure will support the new service. A Service Provider will usually want to make the best use of what it already has rather than buying more.
Environmental requirements include such things as electrical power, air conditioning, physical space in data centers and server rooms. In some locations electrical power is a real issue — companies are moving their servers out of some cities because of supply limitations.

Designers must determine what data the service will require, where that data will come from, how to ensure its accuracy, and its security needs. Data is seen as an asset in its own right and should be managed as such.

IT services are supported by one or more applications which deliver the functionality needed by the business. Designers will investigate the possibility of re-using existing applications to deliver the service rather than developing new ones.

The infrastructure, environment, data and applications are often known as technology domains.

Many services depend on other services, known as supporting services. Designers must identify what these dependencies are and whether the supporting service will be capable of meeting the requirements of the new service.

The level of support provided by in-house and external staff must be evaluated by reviewing the existing OLAs and contracts.

The capabilities of the support teams must be reviewed. Do we have sufficient numbers of staff to meet the needs of the new service? Do our staff have the skills needed to design, transition, support and operate the underpinning technology? If not, then what should be done? Similar questions must be asked of our suppliers.

Finally the Service Management processes themselves must be reviewed to ensure that they are capable of handling the requirements of the new service. For example, a new service may involve issuing handheld devices to mobile staff but our incident management process might be designed to provide hardware support only on company premises.

These components are interdependent and so cannot be considered in isolation. Also, many of them are shared by existing services; the impact of the new service on those services must be considered.
Managing IT

Most organizations have a committee made up of senior managers from the business and IT. Common names for this committee include the IT Steering Group or the IT Strategy Group (ISG).

The purpose of the ISG is to oversee IT. It ensures that IT remains aligned to the business but at the same time ensures that the business does not make unrealistic demands of IT.

“Subjects for the ISG to discuss may include:

- Reviewing business and IT plans To identify any changes in either area that would trigger the need to create, enhance or improve services
- Demand planning To identify any changes in demand for both short- and long-term planning horizons; such changes may be increases or decreases in demand, and concern both business-as-usual and projects
- Project authorization and prioritization To ensure that projects are authorized and prioritized to the mutual satisfaction of both the business and IT
- Review of projects To ensure that the expected business benefits are being realized in accordance with project business cases, and to identify whether the projects are on schedule
- Potential outsourcing To identify the need and content of sourcing strategies for the IT service provision
- Business/IT strategy review To discuss major changes to business strategy and major proposed changes to IT strategy and technology, to ensure continued alignment
- Business continuity and IT service continuity The group, or a working party from the group, is responsible for aligning business continuity and IT service continuity strategies
- Policies and standards The ISG is responsible for ensuring that IT policies and standards, particularly in relation to financial strategy and performance management, are in place and aligned with the overall corporate vision and objectives”
The diagram above illustrates the role of the ISG in keeping the IT organization aligned with the business at the strategic, tactical and operational levels. The Service Portfolio is a key source of information supporting the decision-making of the ISG in relation to the choice and prioritization of services and projects.

To be successful at Service Design an organization must employ systematic ways of working that are provided by formal, documented processes. It must manage the performance of those processes by measuring their effectiveness and efficiency. It must monitor and measure the consequences of poor design through the lifecycle. For example, service disruption caused by inadequate designs or the cost of re-work required to resolve design failings.
Design Coordination

The syllabus for this course does not require us to look at this process in detail, only its interfaces with other processes.

Modern IT services are often very complex. They involve many different technologies; use networks stretching across the globe; are provisioned by large quantities of resources – hundreds, thousands or sometimes even larger numbers of servers; are supported by many groups both inside and outside of the organization.

The design of a service is correspondingly complex. In many organizations a number of different design projects will be running concurrently, each one drawing on a common set of shared design resources – this adds a further layer of complexity.

Design Coordination exists to manage this complexity by providing control and co-ordination across all projects, groups, activities and processes.
Exercise – The interfaces of Design Coordination

This Lesson included an Exercise to look at the interfaces of Design Coordination. If you didn’t have time to complete the exercise during the Lesson, why not attempt it now?

Exercise

What interfaces does Design Coordination have with the Service Management processes listed below?

- Service Portfolio Management
- Financial Management
- Transition Planning and Support
- Release and Deployment Management
- Change Evaluation
- The PPO processes

Change Management
- Business Relationship Management
- Strategy Management for IT Services
- Service Validation and Testing
- Service Level Management
- Supplier Management

In each case describe what the interface is.

Exercise Solution

“The principal interfaces to the adjacent stages of the lifecycle are:

- **Service strategy**: using information contained within the IT strategy and service portfolio
- **Service transition**: with the handover of the design of service solutions within the SDP.

The design coordination process also interfaces with all the processes that include service design activity, especially the processes described in this publication. Key process interfaces include:

**Service portfolio management** This process provides design coordination with the service charter and all associated documentation such as business requirements, requirements for service utility and warranty (including service options), risks and priorities.

**Change management** This process produces change requests (formal communications requesting the addition, modification or removal of something
in our live environment that we have chosen to control with change management). Design coordination and change management should have collaboratively defined policies and consistent practices for the design work associated with changes. Some changes will be of a scope that they will go through the service strategy stage and service portfolio management process, while others may come to design coordination directly from change management. Design coordination provides status information on design milestones that relate to changes. Change management provides details of authorized changes from which detailed service design activity can proceed. Change management also provides authorization at defined points in the service lifecycle, to ensure that required actions have taken place and that quality criteria have been met. Finally, the post-implementation reviews (PIRs) from change management can provide valuable feedback on areas for improvement for design coordination.

**Financial management for IT services**  This process provides details of the value proposition for the new or changed service as well as budgets available.

**Business relationship management**  This process provides design coordination with intelligence and information regarding the business’s required outcomes, customer needs and priorities and serves as the interface with the customer at a strategic level.

**Transition planning and support**  Design coordination provides the SDP to the service transition stage via this process. Transition planning and support carries out the overall planning and coordination for the service transition stage of the service lifecycle, in the same way that design coordination does for the service design stage. These two processes need to be carefully interfaced to ensure consistent overall plans and resource schedules for current and future projects and changes.

**Strategy management for IT services**  This process provides information about the current and evolving service strategy to enable design coordination to ensure that design guidelines and documentation remain aligned with the strategy over time.

**Release and deployment management**  This process manages the planning and execution of individual authorized changes, releases and deployments. Planning and design for release and deployment is carried out during the service design stage of the service lifecycle. Design coordination should ensure that this is integrated with other service design activities and forms part of the overall SDP.

**Service validation and testing**  This process plans and executes tests to ensure that the service matches its design specification and will meet the needs of the business. Planning and designing tests is carried out during the service design
stage of the service lifecycle and design coordination should ensure that this is integrated with other service design activities and forms part of the overall SDP.

**Change evaluation**  This process determines the performance of a service change. This includes evaluation of the service design to ensure it is able to meet the intended requirements. Design coordination should be properly interfaced with change evaluation to ensure that the required resources are available to assist in evaluation of changes.

**Service level management**  Adherence to the standards and practices developed by design coordination for successful service design is critical for this process. Service level management is responsible for defining and agreeing the service level requirements for new or changed services, which must be done in a consistent manner according to practices developed cooperatively with design coordination. Activities of these two processes should be carefully integrated with service level management activity, focusing primarily on the warranty levels that are required in the solution design and design coordination activity. This should ensure that all parts of the service solution design and SDP are appropriately addressed.

**Availability, capacity, IT service continuity and information security management processes**  Each of these processes is actively involved in service design and must perform these design activities consistently, according to practices developed cooperatively with design coordination.

**Supplier management**  In order to ensure that the contributions of suppliers to design activities are properly managed, this process must collaborate with design coordination to develop consistent and reliable practices in this area. Supplier management will then take the lead in building these practices into supplier contracts and agreements as appropriate and then managing the suppliers and their performance during service design, with the assistance of design coordination.”