ITIL Foundation

ITIL 4 Edition

5 ITIL management practices

Key message
In ITIL a management practice is a set of organizational resources designed for performing work or accomplishing an objective. The origins of the practices are as follows:

- General management practices have been adopted for service management from general business management domains.
- Service management practices have been developed in service management and ITSM industries.
- Technical management practices have been adapted from technology management domains for service management purposes by expanding or shifting their focus from technology solutions to IT services.

General management practices	Service management practices	Technical management practices
Architecture management	Availability management	Deployment management
Continual improvement	Business analysis	Infrastructure and platform management
Information security management	Capacity and performance management	Software development and management
Knowledge management	Change control	
Measurement and reporting	Incident management	
Organizational change management	IT asset management	
Portfolio management	Monitoring and event management	
Project management	Problem management	
Relationship management	Release management	
Risk management	Service catalogue management	
Service financial management	Service configuration management	
Strategy management	Service continuity management	
Supplier management	Service design	
Workforce and talent management	Service desk	
	Service level management	
	Service request management	
	Service validation and testing	

ITSM in the modern world: high-velocity service delivery

High velocity service delivery paradigm includes:

- Focus on fast delivery of new and changes IT services for users
- Continual analysis for feedback provided for IT services at every stage of there lifecycle
- Agility in processing the feedback, giving rise to continual and fast improvement of its services
- An end-to-end approach to the service lifecycle, from ideation, though creation and delivery, to consumption of services
- Integration of product and service management practices
- Digitalization of IT infrastructure and adoption of cloud computing
- Extensive automation of the service delivery chain

ITSM in the modern world: high-velocity service delivery

An organization aiming to deliver and improve its services faster than others needs to consider:

- Agile project management
- Agile financial management
- Product based organizational structure
- Adaptive risk management, and audit and compliance management
- Flexible architecture management
- Specific architecture technology solutions such as microservices
- Complex partner and supplier environments
- Continual monitoring of technology innovations and experimenting
- Human centered design
- Infrastructure management focused on cloud computing

5.1 General Management Practices

5.1.1 Architecture management

Key message
The purpose of the architecture management practice is to provide an understanding of all the different elements that make up an organization and how those elements interrelate, enabling the organization to effectively achieve its current and future objectives. It provides the principles, standards, and tools that enable an organization to manage complex change in a structured and Agile way.

- Business Architecture
- Service architecture
- Information systems architecture, including data and application architecture
- Technology architecture
- Environmental architecture

Business architecture

The business architecture allows the organization to look at its capabilities in terms of how they align with all the detailed activities required to create value for the organization and its customers. These are then compared with the organizations strategy and a gap analyses of the target state against current capabilities performed. Identified gaps between the baseline and target state are prioritized and these capability gaps are addressed incrementally. A “roadmap” describes the transformation from current to future state to achieve the organizations strategy.

Service architecture

Gives the organization a view of all the services it provides, including iterations between the services and service models that describe the structure (how the service components fit together) and the dynamics (activities, flow of resources, and interactions) of each service. A service model can be used as a template or blueprint for multiple services.

Information systems architecture, including data and application architecture

The information architecture describes the logical and physical data assets of the organization and the data management resources. It shows how the information resources are managed and shared for the benefit of the organization.
Information is a valuable asses for the organization, with actual and measurable value. Information is the basis for decision-making, so it must always be complete, accurate and accessible to those who are authorized to access it. Information systems must therefore be designed and managed with these concepts in mind.

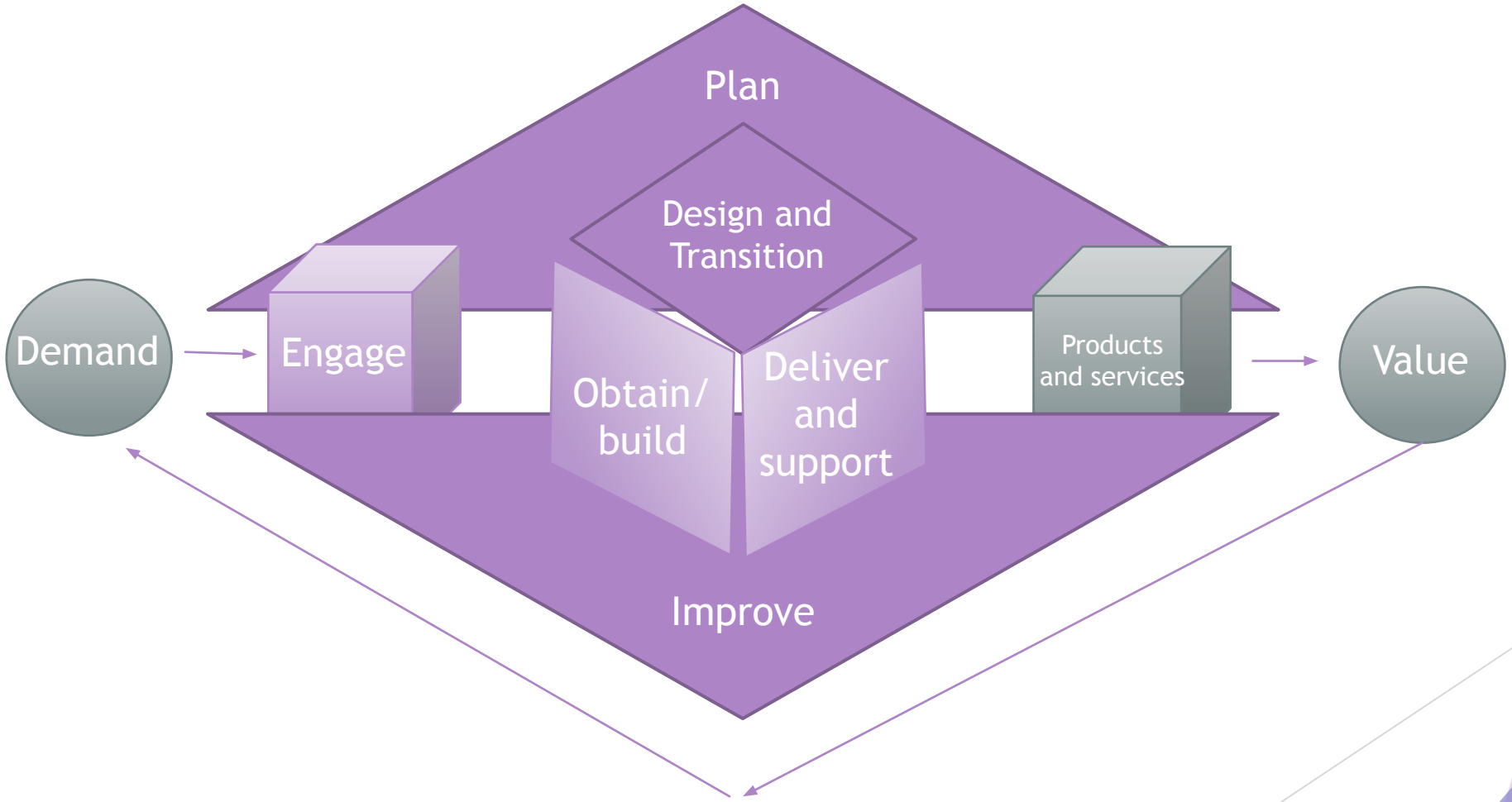
Technology architecture

The technology architecture defines the software and hardware infrastructure needed to support the portfolio of products and services.

Environmental architecture

The environmental architecture describes the external factors impacting the organization and the drivers for change, as well as all aspects, types, and levels of environmental control and their management. The environment includes development, technological, business, operational, organizational, political, economic, legal, regulatory, ecological, and social influence.

Heat map of the contribution of architecture management



Architecture management practice value chain activities

- Plan – the architecture management practice is responsible for developing and maintaining a reference architecture that describes the current and target architecture for the business, information, data, application, technology, and environment perspectives. This is used as a basis for all the plan value chain activity.
- Improve – many opportunities for improvement are identified thorough review of the business, service, information, technical, and environment architecture.
- Engage – the architecture management practice facilitates the ability to understand the organizations readiness to address new or under-served markets and a wider variety of products and services, and more quickly respond to changing circumstances. The architecture management practice is responsible for assessing the organizations capabilities in terms of how they align with all the detailed activities required to co-create value for the organization and its customers.
- Design and transition – once a new or changed product or service is approved to be developed, the architecture, design, and build teams will continually evaluate whether the products/service meets the investment objectives. The architecture management practice is responsible for the service architecture, which describes the structure (how the service components fit together) and the dynamics (activities, flow of resources, and interactions) of the service. A service model can be used as a template or blueprint for multiple services and is essential to the design and transition activity.
- Obtain/build - the reference architecture (business, service, information, technical, and environmental) facilitate identification of what products, services, or service components need to be obtained or built.
- Deliver and support – the reference architectures are used continually as part of the operation, restorations, and maintenance of products and services.

5.1.2 Continual improvement

Key message
The purpose of the continual improvement practice is to align the organizations practices and services with changing business needs through the ongoing improvement of products, services, and practices, or any element involved in the management of products and services.

Continual improvement - Key activities

Key activities that are part of continual improvement practice include:

- Encouraging continual improvement across the organization
- Securing time and budget for continual improvement
- Identifying and logging improvement opportunities
- Assessing and prioritizing improvement opportunities
- Making business cases for improvement action
- Planning and implementing improvement
- Measuring and evaluating improvement results
- Coordinating improvement activities across the organization

Continual improvement

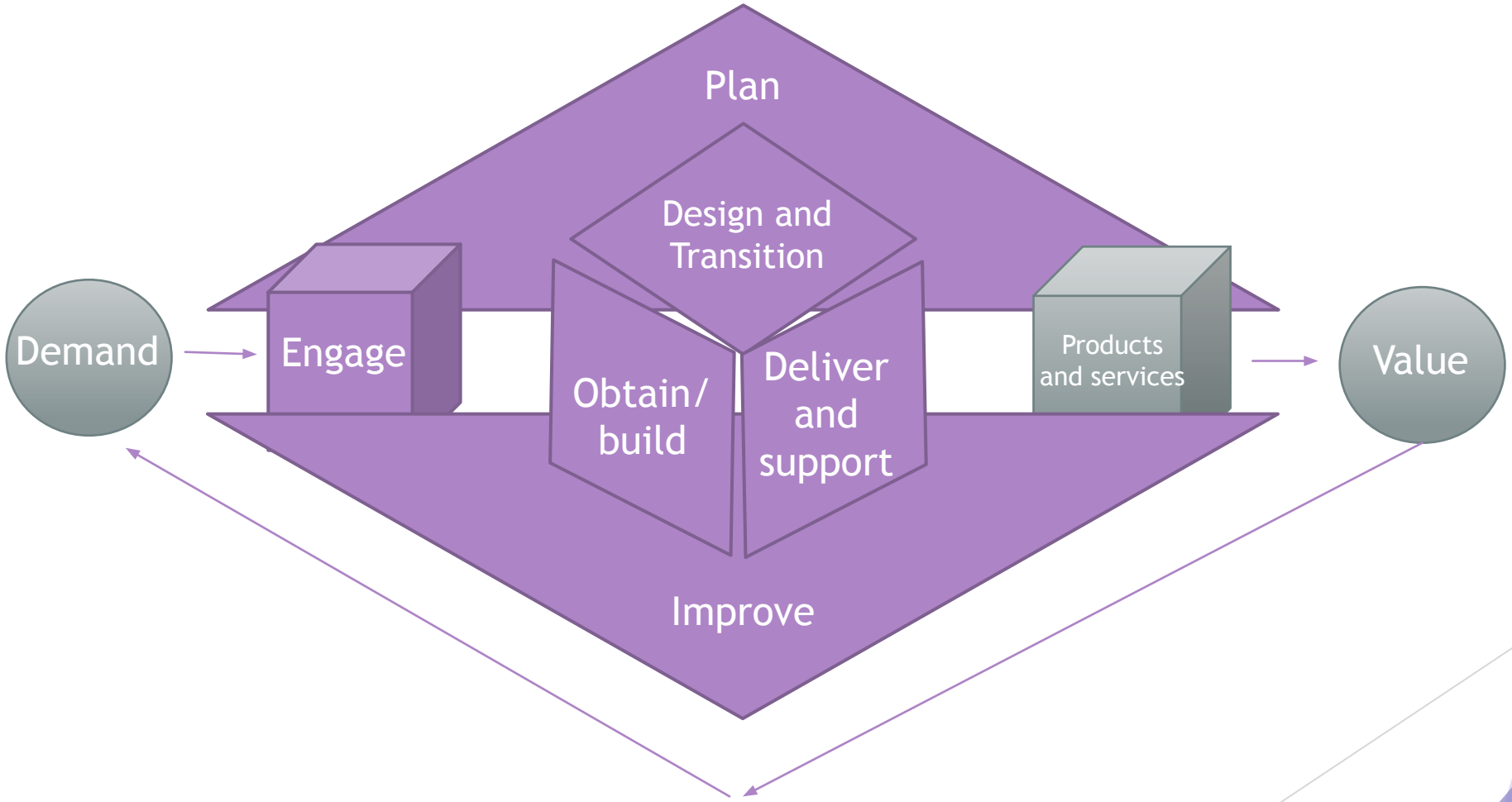
When assessing the current state, there are many techniques that can be employed, such as a **strength, weakness, opportunities, and threat (SWOT)** analysis, a balanced scorecard review, internal and external assessments and audits, or perhaps even a combination of several techniques.

There should at leas be a small team dedicated full time to leading continual efforts and advocating the practice across the organization.

To track and manage improvement ideas from identification though final action, organizations use a database or structured document called a continual improvement register (CIR).

Organizations problem management practice can uncover issues that will be managed though continual improvement.

Heat map of the contribution of continual improvement



Continual improvement practice value chain activities:

- Plan – the continual improvement practice is applied to planning activities, methods, and techniques to make sure they are relevant to the organizations current objectives and context
- Improve – the continual improvement practice is key to this value chain activity, it structures resources and activities, enabling improvement at all levels of the organization and the SVS
- Engage, design and transition, obtain/build, deliver and support – each of these value chain activities is subject to continual improvement, and the continual improvement practices is applied to all of them.

5.1.3 Information security management

Key message
The purpose of the information security management practice is to protect the information needed by the organization to conduct its business. This includes understanding and managing risks to the **confidentiality**, integrity, and availability of information, as well as other aspects of information security such as authentication (ensuring someone is who they claim to be) and non-reputation (ensuring that someone cant deny that they took an action)

The required security is established by means of policies, processes, behaviors, risk management, and controls, which must maintain a balance between:

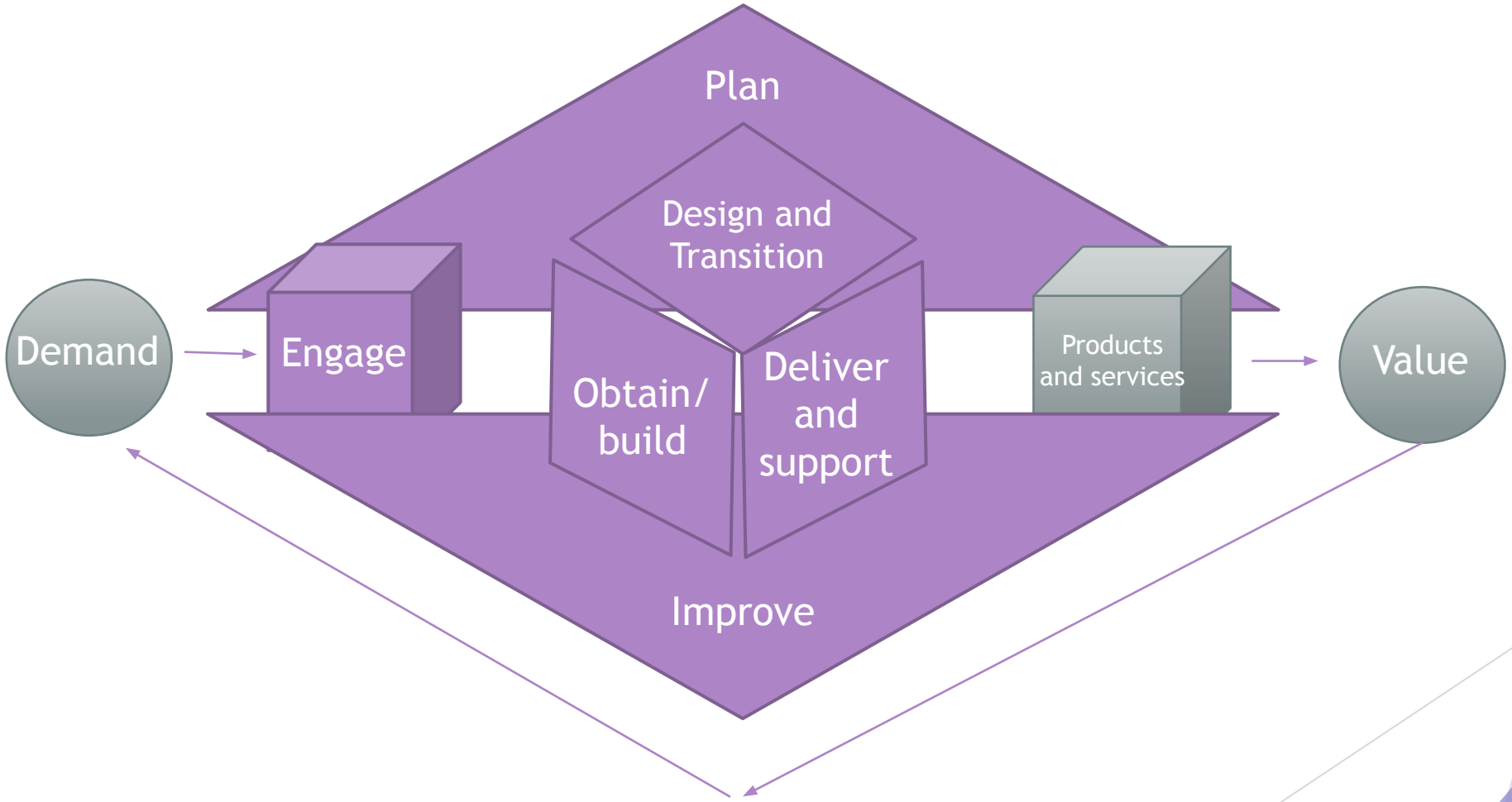
- Prevention – ensuring that security incidents don't occur
- Detection – rapidly and reliably detecting incidents that cant be prevented
- Correction – recovering from incidents after they are detected

5.1.3 Information security management

Many processes and procedures are required to support information security management. these include:

- An information security incident management process
- A risk management process
- A control review and audit process
- An identity and access management process
- Event management process
- Procedures for penetration testing vulnerability scanning
- Procedures for managing information security relating changes

Heat map of the contribution of continual improvement



Information security management practice value chain activities

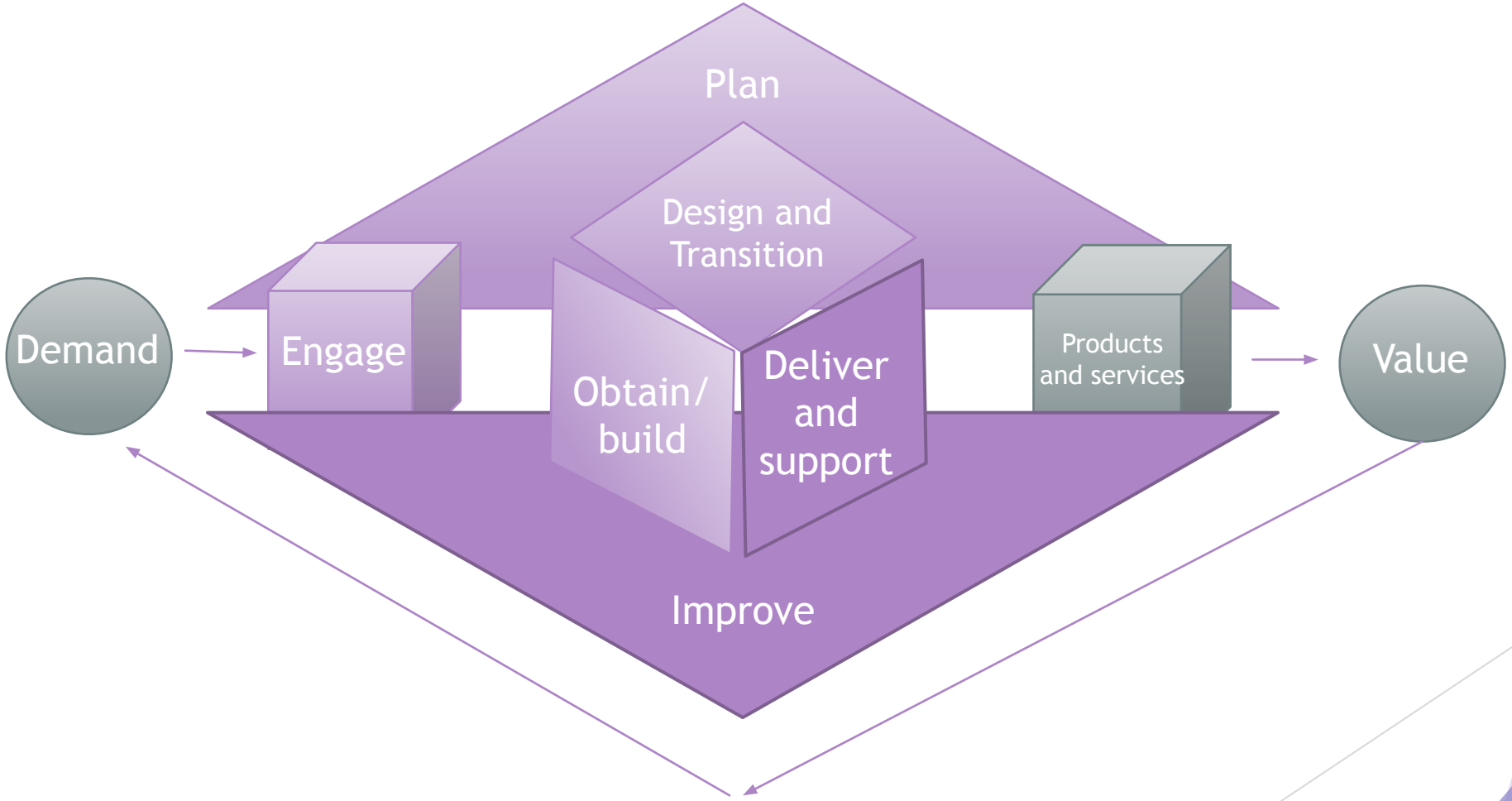
- Plan –information security must be considered in all planning activity and must be built into every practice and service
- Improve – information security must be considered in all improvement value chain activity to ensure that vulnerabilities are not introduced when making improvements
- Engage – information security requirements for new and changed services must be understood and captured. All levels of engagement, from operational to strategic, must support information security and encourage the behaviors needed. All stakeholders must contribute to information security, including customers, users, suppliers.

- Design and transition – information security must be considered throughout this value chain activity, with effective controls being designed and transitioned into operation. The design and transition of all services must consider information security aspects as well as all other utility and warranty requirements
- Obtain/build – information security must be built into all components, based on the risk analysis, policies, procedures, and controls defined by information security management. This applies whether the components are built internally or procured from suppliers.
- Deliver and support – detection and correction of information security incidents must be an integral part of this value chain activity.

5.1.4 Knowledge management

Key message
The purpose of the knowledge management practice is to maintain and improve the effective, efficient, and convenient use of information and knowledge across the organization.

Heat map of the contribution of knowledge management



Knowledge management practice value chain activities

- Plan – knowledge management helps the organization to make sound portfolio decisions and to define its strategy and other plans, and supports financial management
- Improve – this value chain activity is based on an understanding of the current situation and trends, supported by historical information. Knowledge management provides context for the assessment of achievements and improvement planning.
- Engage – relationships at all levels, from strategic to operational, are based on an understanding of the context and **history of those relationships**. Knowledge management helps to better understand stakeholders.
- Design and transition – the efficiency of this value chain activity can be significantly improve with sufficient knowledge of the solutions and technologies available, and though the re-use of information.
- Obtain/build – the efficiency of this value chain activity can be significantly improved with sufficient knowledge of the solutions and technologies available, and though re-use of information.
- Deliver and support – **ongoing value chain activity, in this area benefits from knowledge management through re-use of solutions in standard situations and a better understanding of the context of non-standard situations that require analysis.**

5.1.5 Measurement and reporting

Key message
The purpose of the measurement and reporting practice is to support good decision-making and continual improvement by decreasing the levels of uncertainty. This is achieved through the collection of relevant data on various managed objects and the valid assessment of this data in an appropriate context. Managed objects include, but are not limited to, products and services, practices and value chain activities, teams and individuals, suppliers and partners, and the organization as a whole.

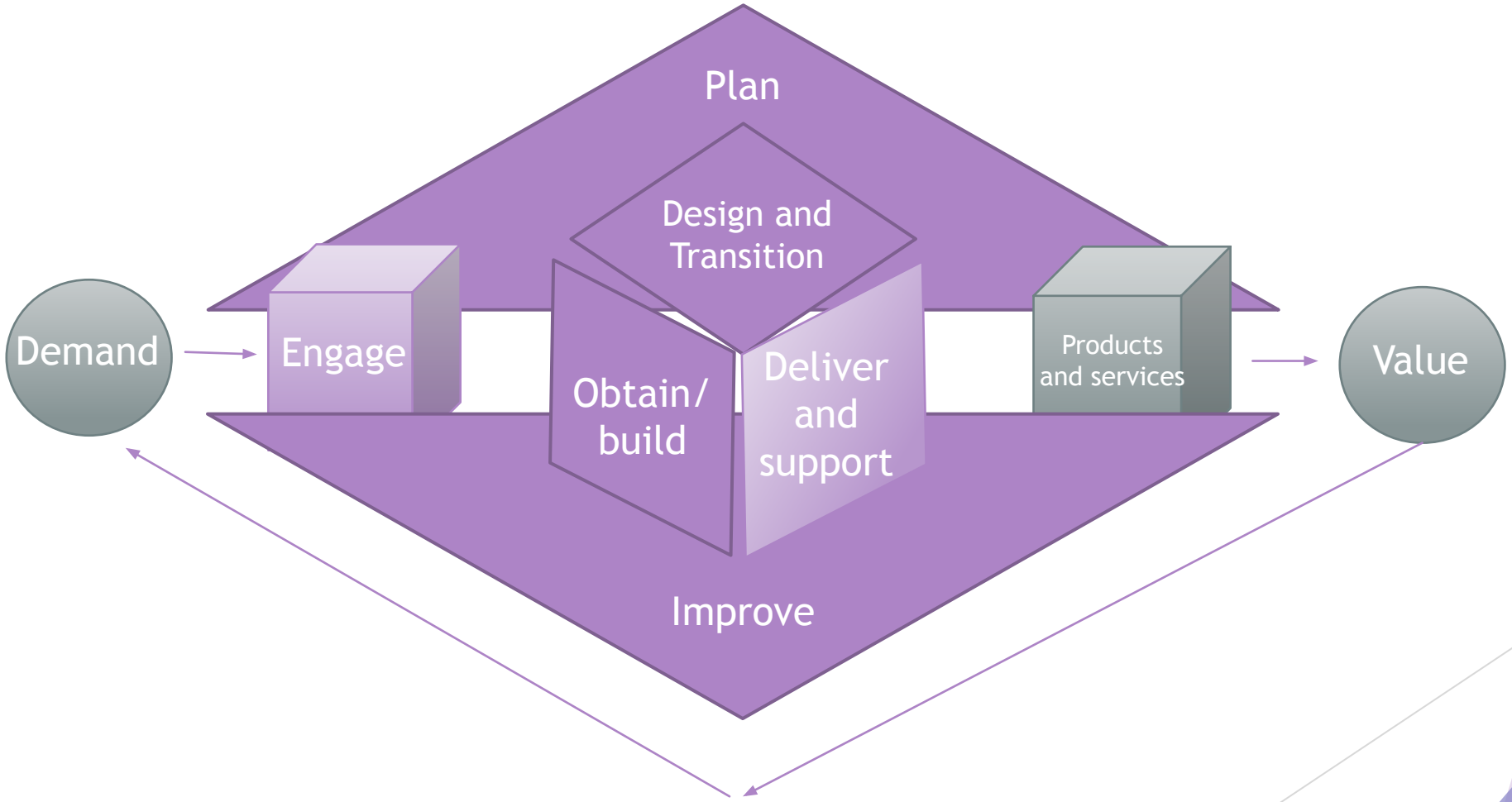
Definition:

- Critical success factor (CSF) – A necessary precondition for the achievement of intended results.
- Key performance indicators (KPI) – an important metric used to evaluate the success in meeting an objective.

5.1.5.1 KPIs and Behavior & Reporting

- Operational KPI should ideally be set for teams rather focusing too closely to individuals.
- Data collected as metrics is usually presented in the form of reports or dashboards. A good report should answer two main questions:
  - How far are we from our targets?
  - What bottlenecks prevent us from achieving better results?

Heat map of the contribution of measurement and reporting



measurement and reporting practice value chain activities

- Plan – measurement and reporting enables strategy and service portfolio decisions by providing details on current performance of products and services.
- Improve – performance is constantly monitored and evaluated to support continual improvement, alignment, and value creation.
- Engage – engagement with stakeholders is based on correct, up-to-date, and sufficient information provided in the form of dashboards and reports
- Design and transition – measurement and reporting provides information for management decisions at every stage before going live
- Obtain/build – the practice ensures transparency of all development and procurement activities, enabling effective management and integrations with all other value chain activities
- Deliver and support - ongoing management of products and services is based on correct, up-to-date, and sufficient performance information.