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# ITIL® Maturity Model

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# 1 ITIL processes and functions

The ITIL service lifecycle is documented in five core publications (Cabinet Office, 2011), each one covering a stage of the lifecycle:

- *ITIL Service Strategy*
- *ITIL Service Design*
- *ITIL Service Transition*

- *ITIL Service Operation*
- *ITIL Continual Service Improvement*.

There are 26 processes and four functions described within the ITIL core guidance. Processes and functions operate across the entire service lifecycle but belong predominantly to one lifecycle stage (see Table 1).

**Table 1 Processes and functions across the ITIL service lifecycle**

<b>Service strategy</b>	Strategy management for IT services
	Service portfolio management
	Financial management for IT services
	Demand management
	Business relationship management
<b>Service design</b>	Design coordination
	Service catalogue management
	Service level management
	Availability management
	Capacity management
	IT service continuity management
	Information security management
	Supplier management
<b>Service transition</b>	Transition planning and support
	Change management
	Service asset and configuration management
	Release and deployment management
	Service validation and testing
	Change evaluation
	Knowledge management
<b>Service operation</b>	Event management
	Incident management
	Request fulfilment
	Problem management
	Access management
	Service desk function
	Technical management function
	IT operations management function
	Application management function
<b>Continual service improvement</b>	Seven-step improvement process

**Definition: process**

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

**Definition: function**

A team or group of people and the tools or other resources they use to carry out one or more processes or activities – for example, the service desk.

## 2 Availability

The ITIL Maturity Model and Self-assessment Service is available in two ways:

- As a high-level self-assessment. This is a free service.
- As a full self-assessment. This is a paid-for service.

The service consists of a set of assessments (in the form of questionnaires) for each process and function across the ITIL service lifecycle. Each questionnaire comprises:

- Process/function demographic questions
- Process/function-generic attributes
- Process/function-specific attributes
- Process/function outcomes and outputs
- Interfaces and inputs.

### The high-level self-assessment

The high-level self-assessment of the maturity model offers a reduced set of questions for each process and function. In total, each assessment consists of about 50 questions and is designed to provide an indicative maturity score to 0.5 of a decimal place.

### The full self-assessment

The full self-assessment provides access to the full set of questions for each process and function. It contains more than 2,600 additional questions (compared to the high-level self-assessment) and is designed to give you a precise maturity score to one even decimal place.

As well as giving access to additional questions, the full self-assessment also provides:

- A detailed breakdown of what your maturity score means, including a description of your maturity level, the characteristics of that maturity level, and how to improve your score
- The ability to save your results and track your improvement
- A benchmarking facility so that you can compare your score against other organizations. (This functionality will become available once we have gathered enough data – we estimate this will take between three and six months after launch.)

## 3 Maturity levels

The ITIL Maturity Model and Self-assessment Service is based on five levels of maturity:

- Initial
- Repeatable
- Defined
- Managed
- Optimized

The five maturity levels are defined below, followed by the characteristics of each maturity level. These maturity level definitions are aligned with COBIT® and CMMI® definitions.

### Maturity level definitions

#### Level 1

Processes or functions are ad hoc, disorganized or chaotic. There is evidence that the organization has recognized that the issues exist and need to be addressed. There are, however, no standardized procedures or process/function management activity, and the process/function is regarded as of minor importance, with few resources allocated to it within the organization. There are instead ad hoc approaches that tend to be applied on an individual or case-by-case basis. The overall approach to management is disorganized.

#### Level 2

Processes or functions follow a regular pattern. They have developed to the stage where similar procedures are followed by different people undertaking the same task. Training is informal, there is no communication of standard procedures, and responsibility is left to the individual. There is a high degree of reliance on the knowledge of individuals and therefore errors are likely. In general, activities related to the process or function are uncoordinated, irregular and directed towards process or function efficiency.

#### Level 3

The process or function has been recognized and procedures have been standardized, documented and communicated through training. The procedures themselves are not sophisticated but are the formalization of existing practices. It is, however, left to the individual to follow these procedures and deviations may occur. The process has a process owner, formal objectives and targets with allocated resources, and is focused on both efficiency and effectiveness. Activities are becoming more proactive and less reactive.

#### Level 4

The process or function has now been fully recognized and accepted throughout IT. It is service-focused and has objectives and targets that are aligned with business objectives and goals. It is fully defined, managed and is becoming pre-emptive, with documented and established interfaces and dependencies with

other IT processes. Processes and functions are monitored and measured. Procedures are monitored and measured for compliance and action taken where processes or functions appear not to be working effectively. Processes or functions are under constant improvement and demonstrate good practice. Automation and tools are increasingly used to deliver efficient operations.

### Level 5

Leading practices are followed and automated. A self-contained continuous process of improvement is established, which has now resulted in a pre-emptive approach. IT is used in an integrated way to automate the workflow, providing tools to improve quality and effectiveness, making the organization quick to adapt. The process or function has strategic objectives and goals aligned with overall strategic business and IT goals. These have now become 'institutionalized' as part of the everyday activity for everyone involved with the process or function.

## Maturity level characteristics

Below is a list of the generic characteristics of each maturity level. These characteristics are derived from a variety of sources, including the generic attributes of the ITIL Maturity Model and Self-assessment Service.

### Level 0: absence (chaos)

- The process or function is either completely absent or only partially present.
- If the process or function is partially present, there is no structure around it, no defined responsibilities and no consistency in its operation.

### Level 1: initial (reactive)

- There is little management commitment.
- No process or function governance exists.
- There is no defined vision.
- Activities respond only reactively to appropriate triggers; there is no pro-activity.
- There is no strategic direction; activities are uncoordinated with little or no consistency.
- There are few, if any, documented procedures.
- There is no definition of process or functional roles.
- Performance of the activities varies according to who undertakes them.
- There is little, or no, automation of any activities.
- Few, if any, records are kept of performance.
- There is no formal procedure for making improvements.
- People performing the role receive little training beyond 'on-the-job' learning.
- Performance of the activities is subject to no, or only basic, measures such as volume and failure rate.
- Activities have a technical rather than customer or service focus.
- No stakeholder feedback is gathered or sought.

### Level 2: repeatable (active)

- Some management commitment exists.
- The activities are formally resourced.
- Goals and objectives are defined.
- The scope of the process or function and its interfaces with other dependent processes or functions are defined and agreed.
- Procedures exist but may not be fully documented.
- Procedures are usually followed but vary from person to person and team to team.
- People carrying out the activities have the skills, experience, competence and knowledge to perform their role.
- Roles are recognized, even if they are not formally defined.
- Performance is measured and reported to at least internal stakeholders.
- Performance is becoming more consistent but is still variable.
- Some automation is starting to be used to improve efficiency.
- Significant failings are recognized and remedial action taken, although in a somewhat ad hoc way.
- People performing the role receive basic, job-related training when they join, but little, if any, thereafter.
- Some stakeholder feedback is provided and major issues are responded to on an ad hoc basis.
- Improvements are focused on the activities rather than the stakeholder outcomes.

### Level 3: defined (proactive)

- Management commitment is visible and evident.
- The activities are appropriately resourced, although occasionally, and in unusual circumstances, may be inadequate.
- There is starting to be a focus on operating proactively, although the majority of work is still reactive.
- Important documents are version-numbered and subject to change control.
- The scope of the process or function and its interfaces with other dependent processes or functions are documented.
- Procedures and work instructions are documented and kept up to date.
- Activities are carried out with a reasonable degree of consistency.
- Outcomes are increasingly predictable and usually meet stakeholder needs.
- Variations between people and teams performing the activities are minimal.
- Roles are formally recognized, defined and assigned.
- Performance is measured using a range of metrics.
- Performance is reported to both internal and external stakeholders.
- At least some of the activities are automated.
- Mistakes and failures to follow procedure are the exception.



- When errors are made, these are often recognized and are starting to be investigated to improve performance and reduce subsequent errors.
- People performing the role receive both initial and some ongoing training.
- Feedback from stakeholders is actively sought and acted on.
- Inter-process relationships and dependencies are recognized.
- Activities are subject to planning and rarely taken on an ad hoc or unplanned basis.
- The process or function is consistently employed throughout the organization.
- People skills are assessed and validated against changing requirements.
- There is a formal method for managing changes to the process or function.
- Routine activities are automated.
- Procedures and activities are tested for compliance, and clear exceptions logged and used as the basis for improvement.
- The internal (technical) and external (customer) focus is balanced.

#### **Level 4: managed (pre-emptive)**

- The process or function and the associated activities are robust and rarely fail to perform as planned.
- The organization has considered what might disrupt services and put in place measures to eliminate these or reduce their impact.
- There is a single process owner responsible for all sites within the organization.
- There is funding to invest and resources available to prevent failures or reduced performance.
- Process documentation is consistent (based on a standard process template) and includes the policy, purpose, objectives, procedures, roles and metrics.
- Documentation is protected from unauthorized change, centrally stored and backed up.
- Activities are performed in a highly consistent way with only rare exceptions.
- Most activities that can be automated are automated.
- Refresher training and updates are given in advance of a procedure or activity changing.
- Inter-process relationships and dependencies are fully recognized and actively embedded.
- There is a clear and documented definition of authority levels for each role.
- Skills matrices or their equivalent are used to validate people's capabilities.
- Changes to procedures rarely fail or have unexpected consequences.
- The focus is more on customer and service outcomes than technical considerations.

- Funds and resources are planned and allocated in plenty of time.
- Performance and activity are continuously measured and monitored.
- Activities are subject to a defined strategy and direction with clear objectives.
- Processes are integrated.
- Toolsets are integrated.
- There is regular measurement and review of process and function effectiveness from the customer perspective.
- Metrics and measurements are used to assess process performance against agreed process targets and objectives.
- Thresholds are established that generate warning alerts if a threshold is reached so that action can be taken before services are affected.
- Process and procedural interfaces and dependencies are recognized, documented and tested for compliance.
- Process activities and responsibilities that span more than one team are subject to operational level agreements.
- Activities are performed seamlessly across functional interfaces both internally and externally.
- Regular process reviews are completed by the process owner and reviewed with stakeholders to validate continued effectiveness.
- Compliance to the process and procedures is regularly checked against documented procedures by independent assessment or audit.
- Warnings, non-compliances and variations are actively used as a source of continual service improvement (CSI).
- Activities are highly consistent and generate predictable outcomes, regardless of who performs them.
- Improvements are identified based on audits and reviews of the process and are recorded in a CSI register.

#### **Level 5: optimized**

- All activities are subject to management control, governance and leadership.
- Activities are performed consistently and reliably across all areas of the organization in which they are used.
- Process improvements are actively sought, registered, prioritized and implemented, based on the business value and a business case.
- Plans are based, wherever appropriate, on business and service considerations.
- Metrics and measurements are used to assess the effectiveness and quality of the process outcomes and stakeholders' requirements and expectations.
- Measures, monitoring, reviews, alerts and reporting are part of a coordinated commitment to continual improvement.
- IT planning and activities are integrated with business plans and activities.



- Processes, procedures and functions are regularly audited for efficiency and effectiveness.
- Service governance including measures, roles and procedures span the entire supply chain to include inter-related and inter-dependent internal and third-party relationships.
- Redundant or sub-optimized procedures are identified and removed.
- Improvements are introduced across the entire organization to maintain operational consistency.
- Performance data and stakeholder feedback are retained and analysed for trends and improvement potential.
- There is regular communication between the service provider and its stakeholders to ensure that services and activities remain relevant and effective.

## References

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## Acknowledgements

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