AVM SBU - Induction Manual

KEEP CHALLENGING™

Revision History

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Preface

Providing assimilation mechanisms for new employees positively reflects on their productivity, excellence and increases the level of job satisfaction. As a matter of fact, the Induction program and Induction manual for new employees is deemed to be important since it constitutes the starting point for an ideal work relationship between the employee and their employer, and it provides positive work environment for creative delivery.

About this Manual

This manual is designed to support the new employees so that they adapt and get involved quickly in the workplace by understanding their responsibilities, which helps to boost their passion for work and loyalty to the institution. The manual serves as a reference document for induction program for the new associated at AVM and documents all important information related to induction program.

This manual is developed based on several experiences and best practices, shared by the different Leads and other members of AVM.

Abbreviations

ACV	Annual Contract Value
AVM	Application Value Management
AD	Application Development
ADAPT	Application Analysis, Due Diligence, Acclimatization, Process and Infrastructure Convergence, Transition
AM	Account Manager
ASL	Application Services Library
ASP	Advance Solutions Practice
BAFO	Best and Final Offer
BU	Business Unit
BFS	Banking and Financial Services
CBC	Cognizant Business Consulting
CCA	Cognizant Career Architecture
CMDB	Configuration Management Database
CM	Change Management
CoE	Center of Excellence
CP	Client Partner
CTB	Change The Business
DevOps	Development Operations
DM	Delivery Manager
DD	Delivery Director
EAS	Enterprise Application Services
EIM	Enterprise Information Management
EOI	Expression of Interest
FTE	Full Time Employee
HC	Health Care
HybrAID	Hybrid Apps Infra Delivery
INS	Insurance
IP	Intervention Plan
ISmO	Integrated Smart Operations
ITIL	Information Technology Infrastructure Library
ITIS	IT Infrastructure Services
KPI	Key Performance Indicator
KT	Knowledge Transfer/Transition
LS	Life Sciences
MLEU	Manufacturing, Logistics, Energy and Utilities
OLA	Operational Level Agreement
POC	Point of Contact
Proj	Project
PM	Project Manager
RCA	Release Control Acceptance
RCG	Retail and Consumer Goods

RFP	Request For Proposal
RFI	Request For Information
RFQ	Request For Quote
RM	Release Management
RTB	Run the Business
SBU	Strategic Business Unit
SDLC	Software Development Life Cycle
SMO	Service Management Office
SPOC	Single Point of Contact
SLA	Service Level Agreement
TCV	Total Contract Value
TEMS	Test Environment Management
T&H	Travel and Hospitality
TM	Transition Manager
TO	Transformation Office
UAT	User Acceptance Training
XBS	Xerox Business Services

1. AVM Essentials

Application Management Services is referred to as **AVM** and **Center of Excellence** is referred to as **CoE.** We differentiate ourselves from the traditional Application Management by addressing the dual focus on Transformation and Service Management thereby adding value to the clients and hence we call it as **Application Value Management (AVM) Services**. AVM CoE team in Cognizant provides leadership, evangelization, best practices, research, support and training for Application Value Management Services.

AVM is headed by **Arun Baid** and his counterparts at Onsite are **Ilanko Kumaresan** and **Udayasuryan Gummidipoondy**. AVM in Cognizant operates in a Hub and Spokes Model where the Hub is the AVM CoE and the Spokes are the AVM SBU's from different verticals.

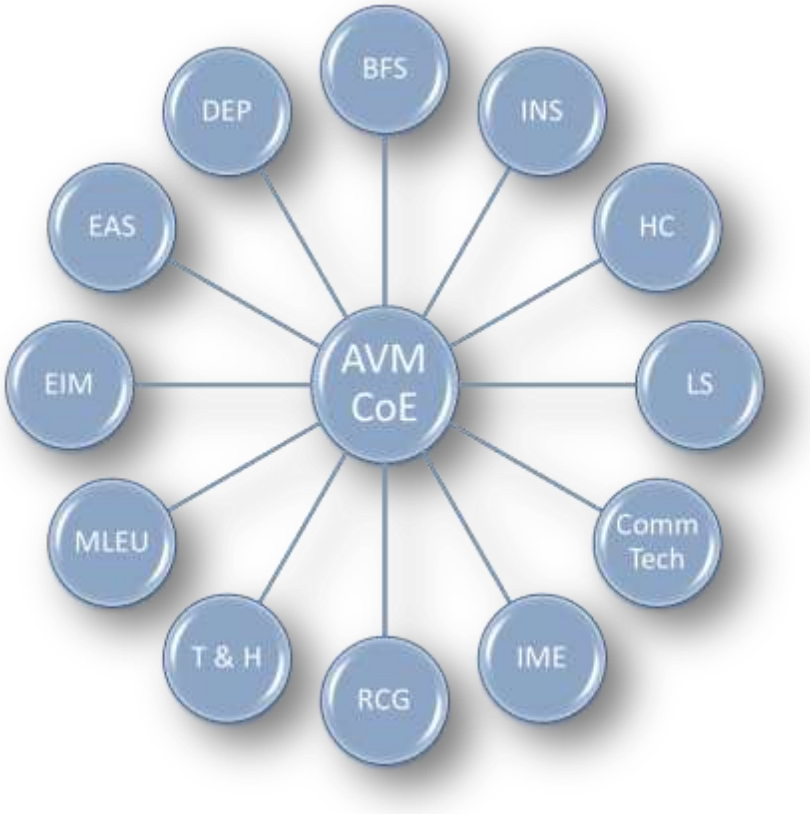


Fig 1: Hub and Spokes Model

Here, the AVM CoE is the Engineering Arm and the AVM SBU is the Execution Arm. The aim of this model is to industrialize all the findings, constructs, best practices etc. evolved from AVM CoE into the delivery of AVM engagements across Cognizant through different AVM SBUs. This is spearheaded by **Srinivasan Thiagarajan** who is responsible for the Engineering arm (**AVM CoE)** and **Selvakumaran Mannappan** who is responsible for the implementation arm (**AVM SBU)**.

1.1 Organization Structure of AVM

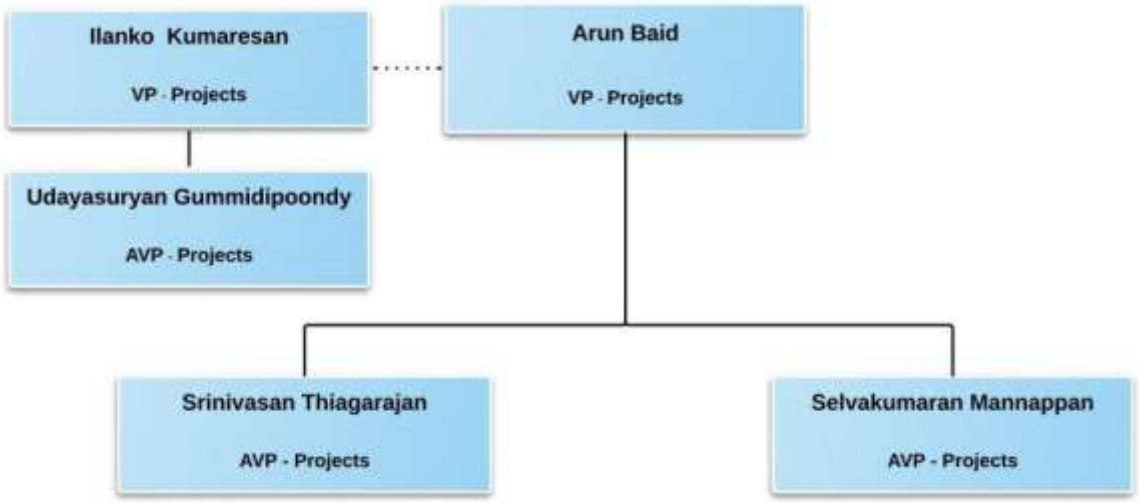


Fig 2: Organization Chart of AVM

1.2 AVM SBU Objectives

- Industrialization leading to reduced Cost of Delivery + enabling faster Transformation
  - Create / enhance the required Frameworks, Process artifacts, Tools
  - On board AVM engagements on to the AVM platform
  - One Managed Production Services model including ISmO
  - Centralized Transition Services for the Application tower
- Help increase 'Win-Ratio' of AVM deals
- Thought leadership and Mindshare gain with Analysts and Intermediaries
  - Specialized Business Development support leveraging App-Infra synergies
    - ISmO, DevOps, TEMS, Business SLAs
  - Launching new consulting service offerings under the AVM-CBC umbrella

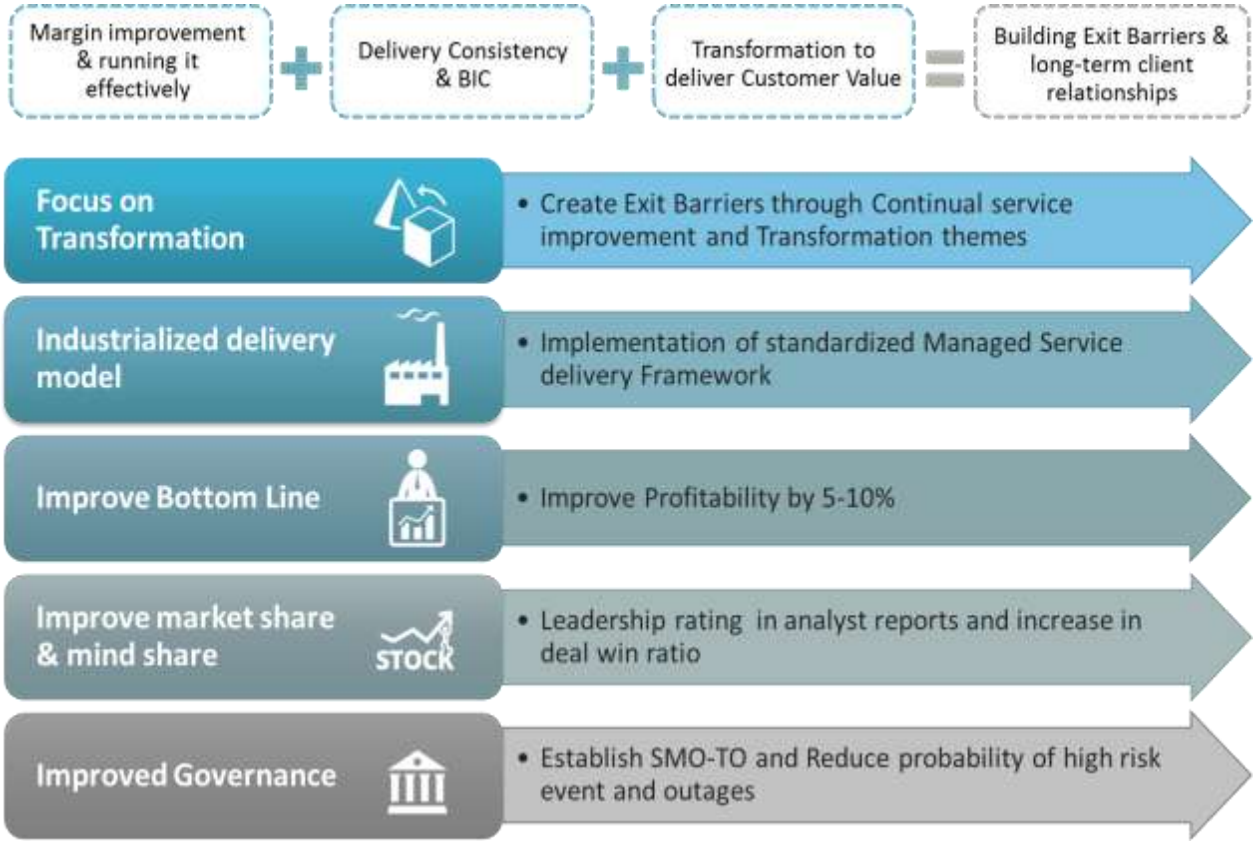


Fig 3: Goals and Objectives of AVM SBU

1.2.1 AVM SBU Operating Model (Before/After)

A BU in Cognizant typically comprises of AD and AVM projects. The AVM projects in a business unit is identified and reorganized under AVM SBU. The AVM SBU Heads report to the corresponding BU Heads, but the AVM SBU has its own governance in place. Projects activities for L1 support level are assessed by the ITIS team for scoping to the ITIS practice. This is to bring synergies between the App & Infra L1 Support layers, resulting into better end user experience and cost efficiencies.

The representation below identifies the organization chart for AVM SBU, the key groups and responsibilities.

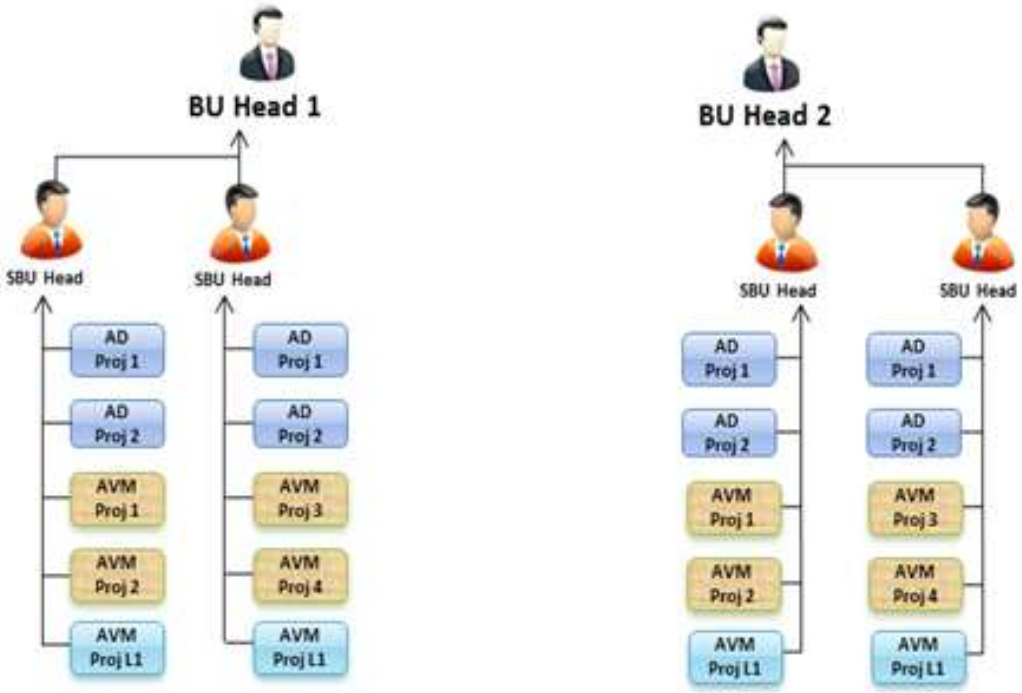


Fig 4: Operating Model: Before the Introduction of AVM SBU

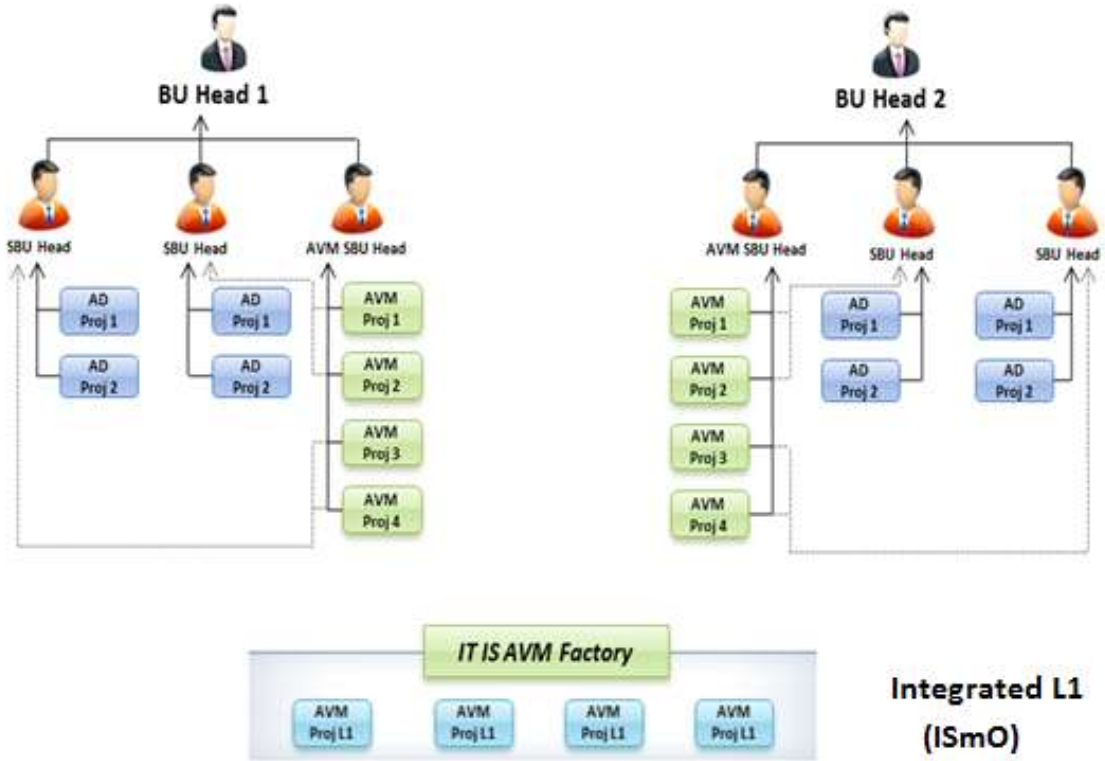


Fig 5: Operating Model: After the Introduction of AVM SBU

2. Different Tracks in AVM SBU

2.1 Tools Development Track

The primary activity of this track is to develop in-house tools depending on the requirements needed across all tracks in the AVM Space. They also provide on-boarding support for these tools.

The following are the most commonly used tools and platforms in AVM Landscape developed by the Tools track:

	Demo Link
AVM DART – A standalone Data Analytics and Reporting Tool aligned to ITIL based Services. Ticket Analysis Support for On-going/ESA and RFP/RFI projects. Integrated with workflow based Effort Tracking framework.	AVM DART – Overview
	AVM DART – Dashboard and Service Operational Metrics
	AVM DART - Effort Tracking
	AVM DART – Portfolio
	AVM DART – Ticket Analyzer
	AVM DART – Self Start & Configuration
	AVM DART
Eaglei – It is a web based SLA Monitoring tool to define and track Acknowledgement, Response and Resolution SLAs. It has a near Real time dashboard with a ticker that flashes impending SLA breaches for all the applications under a production support program. It also provides Key Metrics such as SLA, Influx\backlog and critical tickets. This is mainly applicable for Production support projects with stringent SLA or heavy influx of tickets with 100+ in a day.	Eagle I – Demo
	Eagle I – Overview
Knowledge Transition Portal – This portal is a unique tool-based model for Knowledge Transition which includes a scientific approach to identify the complexity of applications for effective planning and drive end-to-end transition execution.	Knowledge Transition Portal
Estimation Portal – This Portal is used to estimate the FTE's required for different services in AVM Service	Estimation Portal

line.	
SoW Portal – This portal is used to generate standard SoW/Contract template for AVM Service line projects.	SOW Portal
Shift Roster – Shift Roster is a proactive web based planning tool for creating and managing shifts which helps in better, faster and easier planning of staffing for shift based projects. It automates the Shift Roster generation process using pre-defined shift pattern.	Shift Roster Introduction Shift Roster Demo
CSI and Transformation – This portal helps the BU to track the progress of CSI and Transformation initiatives. It helps the CSI team or project team with creation/Tracking of CSI plans and the benefits of these initiatives.	CSI & Transformation Portal – New user onboarding Creating CSI Plan Approving CSI Plan Tracking CSI Plan Validating CSI Plan Completing CSI Plan
AVM Genie Lamp – A home grown, wizard based data analysis tool which is completely driven by user needs to generate the required charts based on their wish for any kind of column based data effectively and efficiently. This can be used for application diagnostic assessments, RFP analysis or for any general data analysis process with least constraints.	

2.2 Analytics Track

With the current explosion of data (2.5 quintillion bytes of data created everyday) the need for Analytics to make real time decisions is on high demand. This track focuses on applying science based techniques to extract meaningful insights which add business value for service lines across AVM.

The key activities of the track involves

- Converting raw data into knowledge “to support decision making” using statistical tool like “R”, Minitab etc.

- Identify “insights” that are both “Hindsight” and “Foresight” in nature. Where “Hindsight” intelligence are extract via “Descriptive Analytics” & “Diagnostics Analytics” and “Foresight” intelligence are extracted via “Predictive Analytics” and “Prescriptive Analytics”.

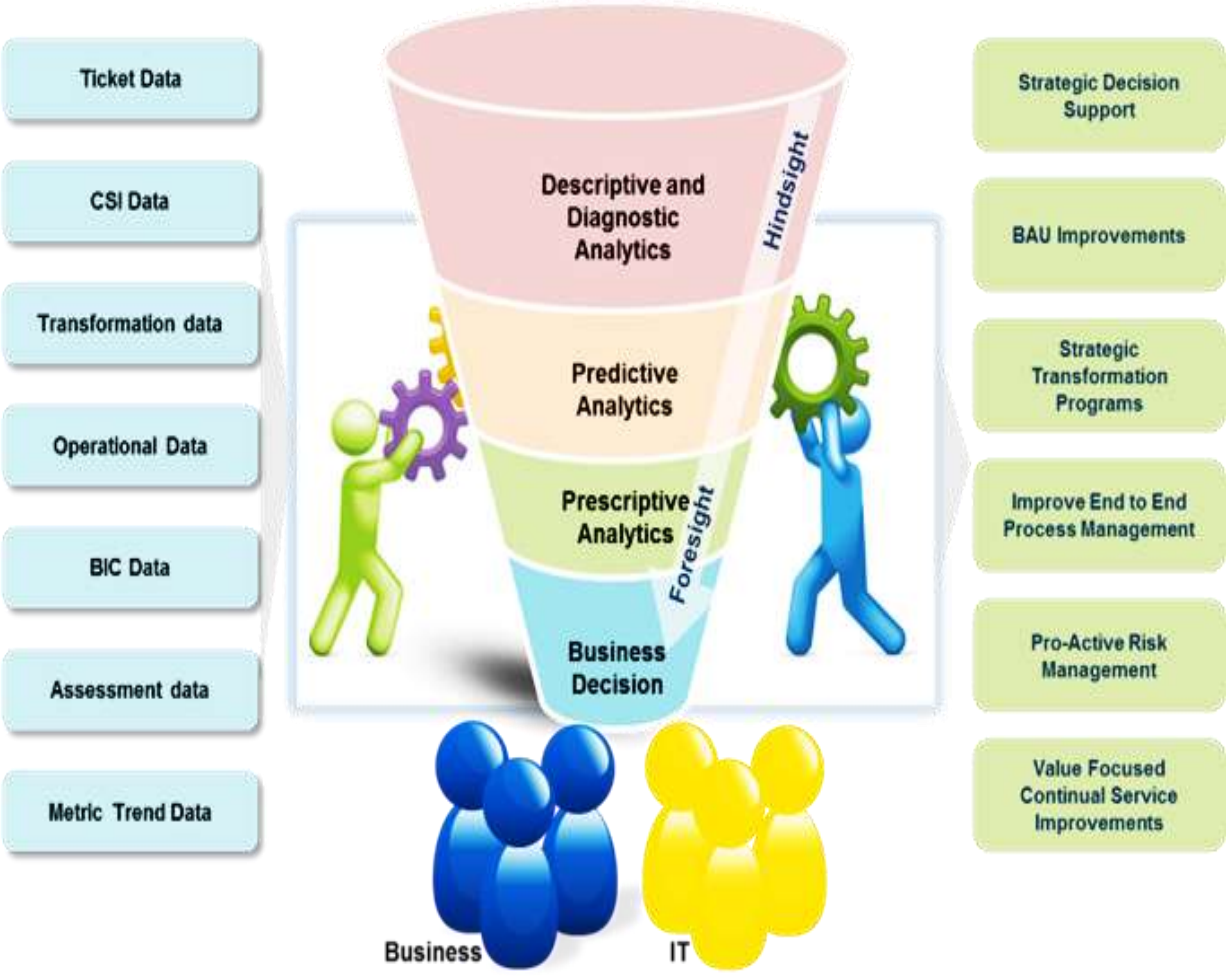


Fig 6: Analytics in AVM

The track has also came up with Cognizant’s proprietary algorithms in the following areas

- Automation potential identification.
- Influx reduction opportunity.
- Cross skilling opportunity.

2.3 Operations Track

The operations track involves in tracking & monitoring existing AVM SBU projects; On-boarding new AVM SBU Projects; track the associates and tag them to projects; analyzing their effectiveness; creating strategies to improve productivity and efficiency; managing the CSI & Transformation programs; Analyze the Win-Loss and send Scorecard reports to the management.

The following are the other key activities of this track.

2.3.1 Associate Movement

AVM SBU people track provides exciting AVM roles and career options for the associates. The PM along with DD and TM would do a mapping exercise for each associate as per the role they play in the AVM project. These roles are Core Service delivery, Service Management (SMO/TO), SME and Transition roles

2.3.2 Evangelize and Training

All associates have to undergo trainings and Knowledge assessments (SA- population) on AVM SBU constructs during the on boarding process. This helps them understand AVM Constructs in detail.

2.3.3 Project ESA Tagging

This covers Project tagging and mapping of Service level (L1, L2, L3, and L4) in ESA. It also helps to know the no. of project & FTE who have on-boarded on this initiative and also the support level offered as part of an engagement.

2.3.4 Moving into Service based delivery

Discover & identify the services offered and configure the MS process package in C2.0 by selecting appropriate metrics and base lining the same with the help of ticket dump.

2.3.5 Baseline and Goal Setting

Operational & Financial parameters will be base lined and target will be set with the help of PM/DM of the project, to precisely track the bottom line improvement. Also the parameters are monitored on a monthly basis until the set target is reached

2.3.6 As-is Assessment

Service & Maturity assessment is performed to create Intervention Plan (IP) document.

IP gets created to identify the gaps in the process/service offered and also continuous service improvement (CSI) & transformation themes are created from this.

2.3.7 CSI/Transformation Kick-Off

CSI – Helps to improve the day to day service delivery operations. Here the focus is on improving the service effectiveness, efficiency and optimizing cost.

Transformation is a process of thoughtful and radical change that orients an organization in a new direction and takes it to an entirely different level of effectiveness (non-linear changes).

Whereas CSI is incremental improvement to business processes, transformations are of larger magnitude. Transformations are carried out in a planned manner after getting buy in from relevant stakeholders. Typically CSI and Transformations focus on Automation at work, Outcome based service layers, Vendor agnostic service improvements, Self-optimizing process models and Portfolio improvements.

2.3.8 Customer Messaging

It includes Value proposition articulation to Customer, as appropriate and demonstration of our delivery model & value adds/cost benefit to the engagements.

The Overall On-Boarding Plan is depicted in the following diagram:

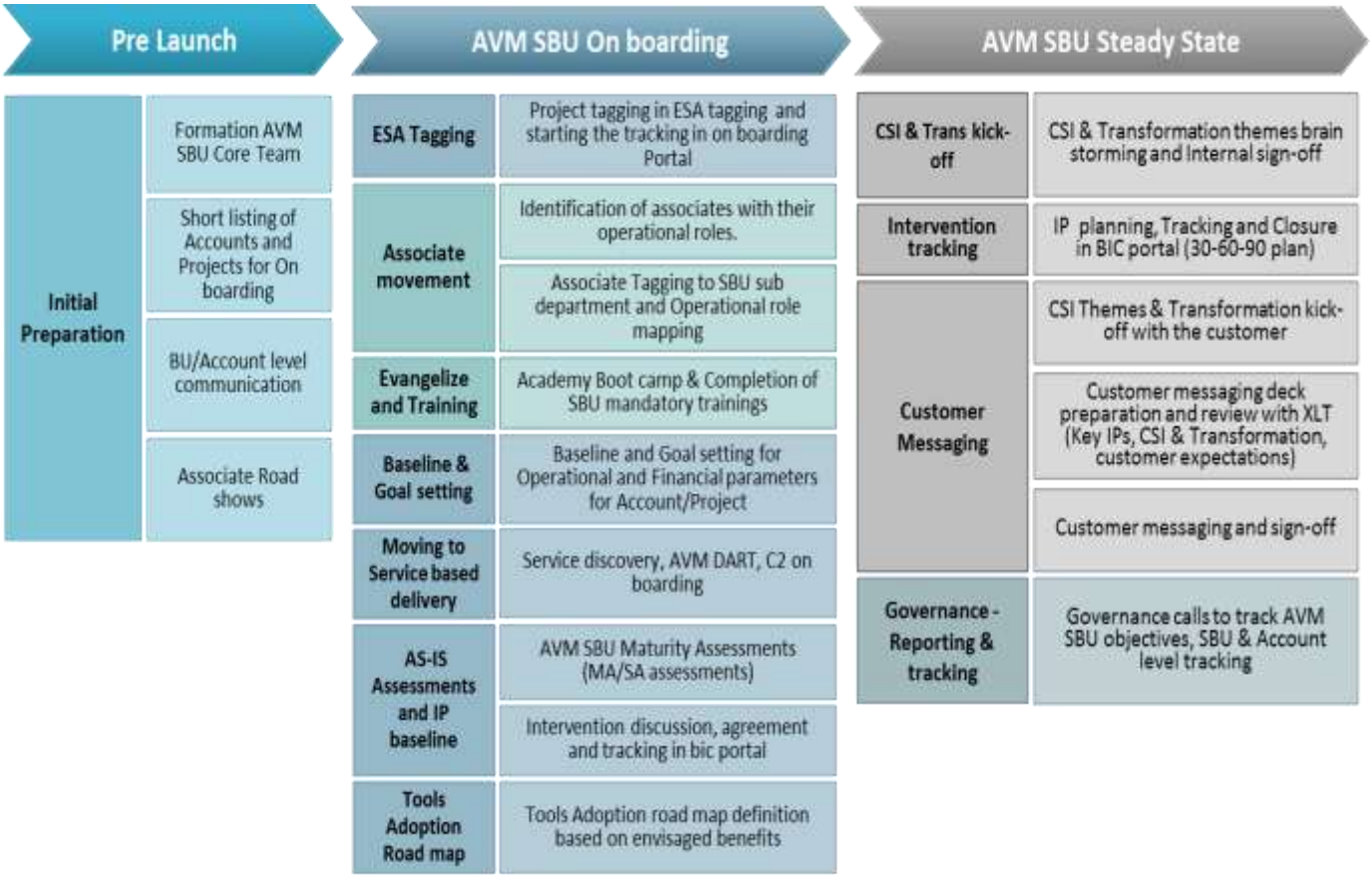


Fig 7: Overall AVM SBU On-Boarding Plan

2.4 AVM SBU Implementation Track

The main aim of AVM SBU Implementation track is to "Put in Action" all the findings, constructs, best practices etc. evolved from AVM CoE into the delivery. It Comprises of AVM **SBU Heads** and **AVM SBU Champions.**

The **AVM SBU Heads** act as a single point of contact for Account Managers, Sales Team, Client Partners and Delivery Managers. The **AVM SBU Champions** act as a single point of contact for AVM SBU Heads who will channelize requests to respective tracks within AVM CoE.

The primary focus of the **AVM SBU Champions** is to drive AVM Deals across the verticals as Solution Architects. Typically, they work with the Vertical BD teams, and are responsible for translating the requirements created by functional analysts into the architecture for AVM solutions and describing it through the set of architecture and design artifacts. They are also responsible for SBU enablement on the dimensions of On-boarding, Industrialization of AVM through OneMPS and OneMAS constructs, Increase the Market share of AVM etc.

3. Our focus areas in Application Management Services

Our Application Value Management services are designed to provide day-to-day operations, support, and maintenance of enterprise applications. Application Management Services include but are not limited to end-user support, monitoring, proactive problem avoidance, issue resolution, service restoration, and root cause analysis. Patching, application enhancements, and operational responsibility for application performance and uptime are often core services.

The two major focus areas in AVM are

- **M**anaged **P**roduction **S**ervices **(MPS)** which consists of L1, L2 and most of L3 activities
- **M**anaged **A**pplication **S**ervices **(MAS)** which consists of L4 and some part of L3 activities

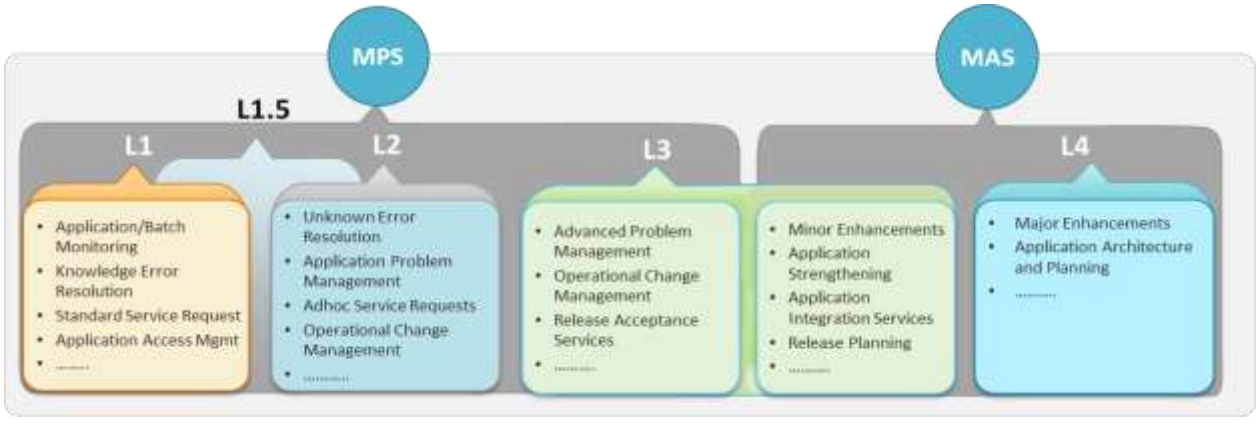


Fig 8: Two major focus areas in AVM

- **Managed Production Services** → They are categorized into Operational (L1 support) services and Specialist Services (L2 and L3 support). These services are designed to provide support and maintenance to applications for the day-to-day operations. Some of the services here include

i) Application Monitoring
ii) Batch Monitoring
iii) Batch Scheduling / Execution
iv) Mailbox & Ticketing Tool Monitoring
v) End Of Term Services
vi) Application Continuity & Resiliency Support

- **Managed Application Services** → It covers the core application/technology related services comprising of enhancement services (minor & medium), assessment services and transformation services. All of these services are L3, L4 support or transformational in nature. Some of the services here include

i) Functional Enhancements
ii) Application Integration Services
iii) Regulatory & Compliance Services
iv) Application Strengthening
v) Application Tuning and Optimization
vi) Application Consolidation
vii) Application Decommission
viii) Application Reengineering and Modernization

Apart from MPS and MAS services, we also have the following services offered in the AVM Space.

- **Governance Services** → It focuses on service governance aspects. Some of the services here include

i) Service Level Management
ii) Service Management Integration
iii) Change Advisory Board Governance
iv) Release Control Board Governance
v) Demand Management

- **Security Services** → These services focus on reactive and proactive security management. Some of the services here include

i) Application Access Management
ii) Application Security Assessment
iii) Application Security Hardening

- **Professional Services** → Some of the services here include

i) Project Management
ii) Program Management
iii) Project Support
iv) Training Services

- **Product Value Management (PVM)** → The service here covers the entire product lifecycle (from maintaining a product, its upgrades, integration, migration, testing and consultation).

4. AVM Industrialization

Our vision is to industrialize AVM Services across Cognizant. Our Principle of **Industrialization** is **"Componentize + Standardize".**

This involves segregating different groups in a particular Layer and bringing in standardization in each of these components.

The current industrialization of MPS and MAS is done by the adoption of One MPS and One MAS models. The figure below shows the comparison between the traditional model and our Current Industrialized model (Factory model).

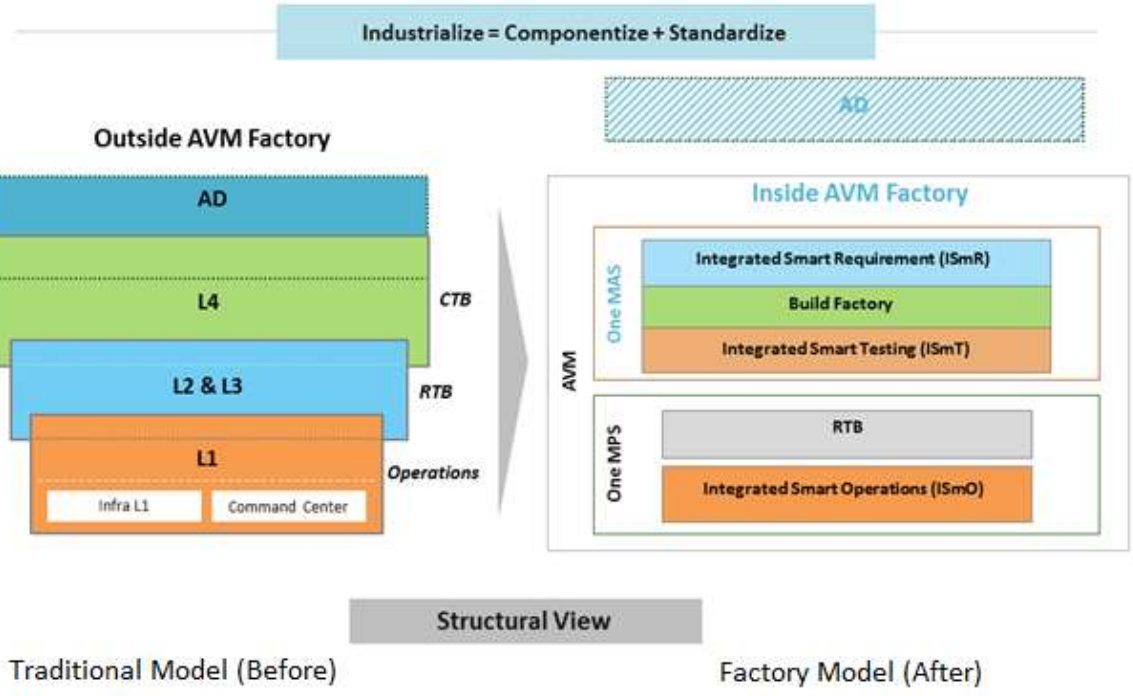


Fig 9: AVM Industrialization (Before and After)

One MPS

One MPS brings about industrialization of Managed Production Services by means of Componentizing MPS into **ISmO and RTB** and standardizing the services delivered.

ISmO (Integrated Smart Operations) / L1 Utility is an Integrated Service Desk and Operations center for applications and infrastructure. This team will be responsible for providing an integrated view of infrastructure and application mapping which in turn helps in avoiding longer outages. The unified Application and Infrastructure Service Desk function will serve as

- "Single" user interface to handle both application and infrastructure issues
- Single point of ownership for all incidents and requests irrespective of the service chain it flows through
- The focus will be to ensure systems and applications are monitored for availability and performance through a common set of processes based on ITIL framework
- Provide reactive and proactive services (e.g. Incident and Event management) by establishing an integrated collaborative platform for the Level 1 layer

In summary, some of the benefits of setting up an Integrated L1 Utility Layer on account of deriving Application and infrastructure synergies are as follows:

- Demand Reduction and Improved Responsiveness
- Faster Issue identification and resolution of system related issues
- **Proactive Prioritization of support responses, RCA and remediation activities**

Fig 10: Industrialization of MPS (One MPS)

The ISmO will be delivered by the CIS team and the rest of the services in MPS which falls under RTB will be delivered by AVM SBU.

One MAS

One MAS brings about industrialization of Managed Application Services by means of Componentization and Standardization of Application Enhancement process through demarcation of Requirements Elucidation, Build and Testing. This is achieved by means of three pillars namely **Integrated Smart Requirements, Build factory and Integrated Smart Testing** that constitute 'Change the business' (CTB).

- **Integrated Smart Requirement or ISmR Team** will focus on requirement elicitation and will act as a bridge between Customer and the Application Enhancement team. ISmR team specializes in functional aspects of the delivery organization with focus on Delivery Excellence, Solution Development and Knowledge Asset Management.
- **Build factory** will take input from ISmR with the intent to bring domain focus required for enhancements and at the same time operate efficiently through needed technology specific specialization
- **Integrated Smart Testing or ISmT** will bring a 'Test factory' approach through the involvement of expert QA testers to ensure that required changes are verified and validated, before they are pushed into production. The testing will be performed by the QE & A team.

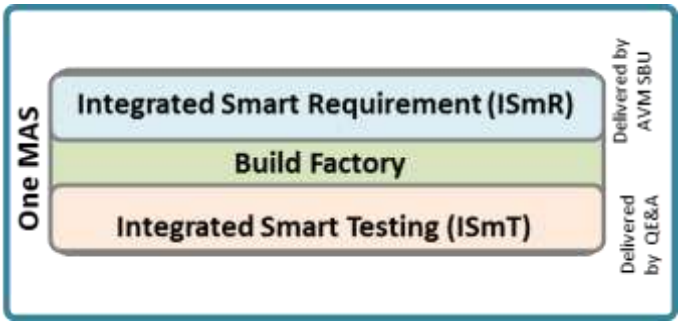


Fig 11: Industrialization of MAS (One MAS)

5. Levels of Engagement

The Cognizant Engagement Maturity model helps to baseline existing and newer engagements of Cognizant into 4 levels of maturity. Cognizant has home grown capabilities to evaluate the levels of maturity of an engagement and enables them to progress from one level of maturity to another.

The Cognizant Engagement Maturity model is the primary basis for all of our frameworks, and the frameworks in turn help in accelerating this journey to higher maturity levels.

Business Models	Rate Card	Service Levels		Strategic
	Task Based	Service Based	Managed Services	Business Outcomes

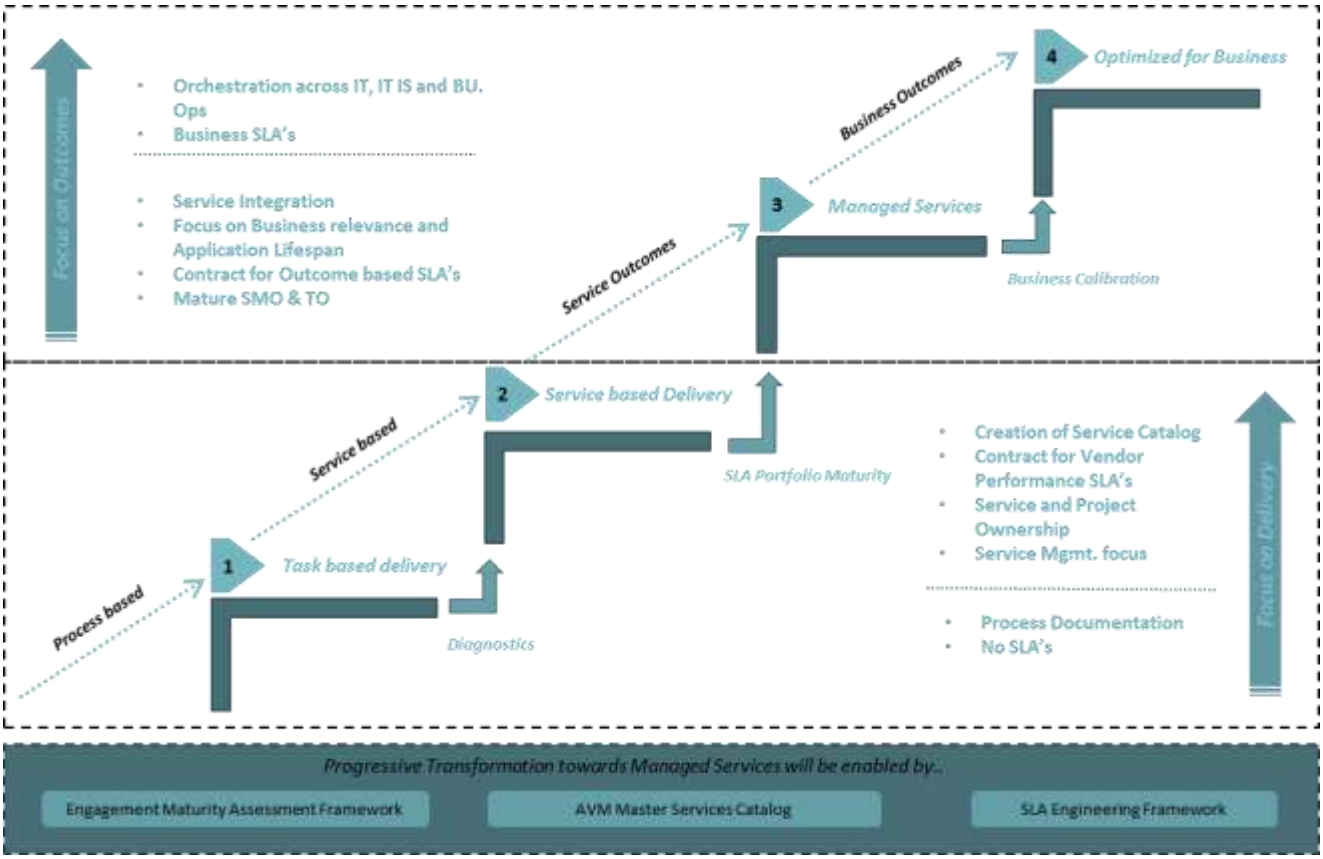


Fig 12: Levels of Engagement

Task based delivery model (also called staff augmentation model) → In this type of engagement, there are no SLAs or process documentation involved. At this maturity level, MSP's generally provides resources, who carry out day-today activities defined by the customer.

Service based delivery model → In this type of engagement, set of activities are identified and bundled as services, with SLAs in place that focuses primarily on vendor performance. The ownership on service delivery is also introduced to a certain extent, with primary ITIL processes in place along with a good level of project ownership (eg. resource revenue reporting).

Managed Services model → This is one of the most commonly used term in the industry with without any clear definition. Within Cognizant, we have clear demarcation and protocols on what defines this particular level.

"Managed Services is defining a set of cataloged services and managing them with clearly stated outcomes"

The Key tenets of Managed Services are shown in the following diagram.

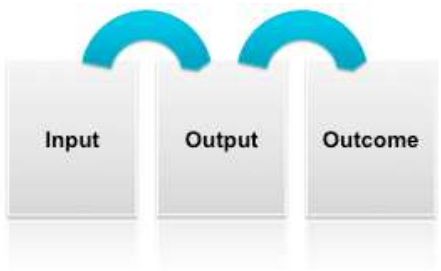
Fig 13: Key Tenets of Managed Services

In this type of engagement, the focus is on Service Tiers (L1/L2/L3/L4) or Service Horizontals. Here the roles and responsibilities are clearly defined and the service provider is responsible for delivering the IT Output based on SLA's. The key aspect of this level focuses helps to integrate seamlessly with multiple service lines and other suppliers/vendors.

The characteristics of measurement system at this level transcend from Vendor performance based metrics to Service and IT Outcome based metrics. The governance functions in the form of SMO and TO will be established to ensure Service Excellence and Continual Transformation within Service Delivery.

Business Outcome based delivery model → The most important goal of any organization is to ensure that it delivers outcomes that matter to business. In this type of engagement, IT Outcomes to Business Benefits and Business Outcomes are orchestrated. The Operating model of this engagement is given below:

Input: They refer to the effort / resources put in to give the desired Outputs.
Output: They refer to the work undertaken to realize the desired Outcomes.
Outcomes: They refer to the Business outcomes as a result of Output.



6. Different Levels of Support (L1/L2/L3/L4) in Application Management

Support Level	Description	Detailed Information
L1	• Forms the initial support level responsible for basic customer issues. • Will consist of Application & Infrastructure Service Desk along with the Monitoring function. • L1 group typically handles straightforward and simple issues possibly using a knowledge management tool.	• Detect, Record, Monitor, Escalate ticket and /or alerts to L2 and L3 Levels • Provide voice call support • Monitor mailboxes and / or ticketing tool, create tickets as necessary and assign them to relevant support groups, categorize and prioritize tickets as per the defined process guidelines • Provide scripted solutions (solutions that are available in knowledge management data base) • Monitor batch execution and report status periodically; create tickets when there are exceptions • Handle routine documented health checks on applications • Handle end client communication • Trigger problem management through periodic trend analysis
L2	• L2 is a more in-depth technical support level than L1 and more experienced and knowledgeable on a particular product or service. • L2 are responsible for assisting L1 personnel in solving basic technical problems and for investigating elevated issues by confirming the validity of the problem and seeking for known solutions related to these more complex issues.	• Troubleshoot tickets that have been escalated from level 1 team • Perform ticket related diagnostics and restore services through fixes that do not involve code change i.e., provide workarounds. If code change is required in exceptional condition, level 2 must act as level 3. • Escalate to Level 3 team for complex requests and incidents • Escalate to Level 3 team for incidents requiring a code change • Trigger problem management through periodic trend analysis and for incidents where there is no workaround possible • Perform Root Cause Analysis for simple problems • Enrich KEDB / KB to enable “Shift Left” • Handling adhoc or non-standard service requests • Support during change impact analysis • Schedule and manage manual/ad-hoc batch jobs

L3	• Highest level of support in a three-tiered technical support model responsible for handling the most difficult or advanced problems. • Possess specialist technical skills to support the application environment, and are responsible for not only assisting both L1 and L2 personnel, but with the research and development of solutions to new or unknown issues.	• Resolve incidents and requests that have been escalated from Level 2 • Handle complex queries / incidents • Provide solutions to incidents involving code change cycle / complex configuration changes • Handle business change request capped to certain number of hours • Scripting batch jobs and handling unknown exceptions on batch jobs • Provide UAT support for incidents fixed at Level 3 and business change implemented • Handle standard testing requests • Perform RCA and provide permanent solutions for problems • Enrich KEDB / KB to enable “Shift Left"
L4	• L4 support is more often referred as application development which follows any of the standard SDLC models	• Handle small development, enhancement projects in line with SDLC process defined • Management of quarterly or yearly release cycles • Provide UAT Support for development and enhancement projects • Provide warranty support • Provide knowledge transition to L1/L2/L3 teams • Provide remediation support for adaptive maintenance

7. ITIL Demystified

ITIL stands for the Information Technology Infrastructure Library. ITIL is a framework of best practices to manage IT operations and services defined in the mid-1980s by the Government of Commerce, UK. ITIL’s main objective is to align business and Information Technology, allowing organizations to implement what is relevant to their business. ITIL is just a documented common sense from years of learning from people around the world.

The set of topics and concepts, which are best practice for ITSM, are condensed into 5 books

1. **Service Strategy –** It focuses on understanding customer needs, directions, requirements, helping improve IT over time
2. **Service Design –** It focuses on turning strategies for services into a detailed Service description, not just the technology.
3. **Service Transition –** It focuses on building, validating, and delivering new and changed services to customers

4. **Service Operations –** It focuses on the day-to-day care and feeding of services
5. **Continual Service Improvement –** It focuses on identifying and managing incremental improvements to services

We are sometimes confused by the use of ITIL and IT Service Management (ITSM) interchangeably. ITSM is a generic phrase describing the field of Service Management as applied to providing IT Services. ITIL, on the other hand, is a specific framework of guidance that is owned and managed by Axelos.

ITSM can be implemented in many ways, including the adoption of ITIL. Many organizations adopt ITIL in addition to other complimentary frameworks like COBIT, USMBOK, Lean/Six Sigma, LeanIT, DevOps and PRINCE2.

Here is what you really need to know

Quick Facts	
ITIL is not a standard	Consider it a good advice from IT Managers who have been there. It is up to you to take it or leave it. You can follow ITIL the way it works best for you.
ITIL is for small, medium and large companies	It's true! Anyone can implement ITIL. However, it makes sense when the size of your helpdesk team is more than 5.
ITIL is not from a single company or a person	ITIL is not backed by a single company or a person. There is no profit motive or personal promotion.

Service and Service Management:

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.

Services consist of the 4 **P**'s: **P**eople, **P**rocess, **P**roduct (Technology), and **P**artners (Vendors).

Service Management is a set of specialized organizational capabilities for providing value to customers in the form of Services. Organizations must consider both their Resources and Capabilities when managing their Services.

Resources are the things an organization has, such as money, infrastructure, people, information

and applications.

Capabilities are the things an organization can do, such as management, organization, process, knowledge and people (people have certain capabilities).

Resources and Capabilities come together to create value for the customer, but only when balanced in the right proportions.

For instance, if you are staffing a Service Desk, the determination can be made that 10 Service Desk agents is an adequate number of resources based on the number of customers being supported. However, if only 3 of the 10 agents have the capability to handle an Incident from initiation through to closure, then we do not have enough capability as an organization. Therefore the organization is not providing value to the customer. An ineffective and inefficient Service Desk will lead to unsatisfied customers, and the organization will suffer because it will not win repeat business.

Quite often, an organization will take an overly reactive approach to remedy this situation. This can lead to the mistake of "throwing more resources" at the problem. In our example, this would be the hiring of 10 more Service Desk agents. This will not resolve the problem, and actually has the effect of making things worse. The organization goes from 7 incapable Service Desk agents, to 17 incapable Service Desk agents and we still only have 3 capable agents.

Events and Incidents:

ITIL defines an Event as any detectable or discernible occurrence that has significance for the management of the IT infrastructure or the delivery of IT service. There are 3 types of Events:

- Events that signify Normal Operation (Informational)
- Events that signify Unusual Operation (Warnings)
- Events that signify Exceptional Operations (Incidents)

An Incident is any event that causes (or may cause) a disruption to, or degradation of a service.

The common confusion is the belief that every Event is an Incident. Most Events are not Incidents, they are informational. However, all Incidents are Events, but these Events actually disrupt service.

Incident Management:

The goal of Incident Management is to restore IT services to the normal state as soon as possible with workarounds or solutions to make sure that it does not affect business.

An incident is an event that is not part of the standard operation; it is an event that you don't want to happen, however it eventually happens. In simple words, Incident Management is a process to manage disruptions in critical IT services and restore them ASAP.

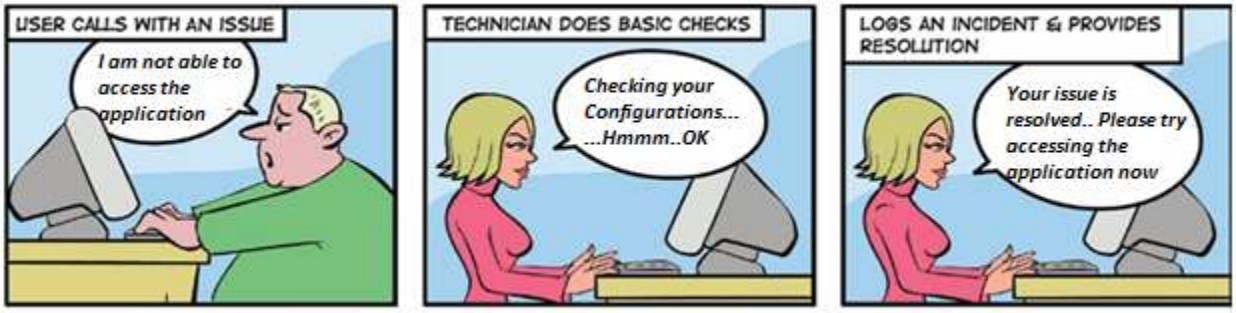


Fig 14: Incident Management

Problem Management:

ITIL defines a Problem as the unknown, underlying root cause of one or more Incidents. The goal of Problem Management is to find the root cause of incidents and reduce the impact on business. Problem Management is a proactive approach that prevents recurrence of incidents.

Problem management brings strategy to your helpdesk; it helps you move from your firefighting mode to a proactive mode. In simple words, the disruptions faced by users are mostly different instances of a problem. When you find and eliminate the root cause of all the Incidents, you also prevent future incidents.

Fig 15: Problem Management

Service Request and Change Management:

ITIL defines a Service Request as a request for a change to be made to a service that is usually well understood, common, has standard procedures, pre-approved, and low risk. A Standard Change is also defined as a request for a change to be made to a service that is usually well understood, common, has standard procedures, pre-approved, and low risk.

Fig 16: Service Request

The common confusion is in understanding the difference between a Service Request and a Standard Change and which processes we use to manage them.

Fig 17: Change Management

Service Requests are usually initiated by the user and handled through the Request Fulfillment Process. Standard Changes are usually operational in nature, and are managed through the Change Management Process.

The change management process helps you co-ordinate changes with minimal disruptions and accepted risk.

Configuration Item (CI) and Configuration Management Database (CMDB):

ITIL defines a Configuration Item (CI) as any component that needs to be managed in order to deliver an IT Service.

The Configuration Management Database (CMDB) holds records for CI's that are important to the business and impacts a business service. The remaining items should be managed in the Asset Inventory.

The ones that are covered are the basics and a very high level view of some of the processes in ITIL. To get a solid understanding of all the processes, ITIL Training and Certification is recommended.

How to get certified in ITIL?

If you're interested in pursuing the ITIL certification, there are a few things you should know.

The Basics →ITIL v3 has five different certification levels:

- ITIL Foundation
- ITIL Intermediate Level
- ITIL Managing Across the Lifecycle
- ITIL Expert Level
- ITIL Master Qualification

The most popular of these is the ITIL Foundation certification, which is the first step to all further ITIL certifications. While a foundation-level certification is usually enough, those who are looking for higher and managerial positions would do well to get both an intermediate-level and expert-level certification.

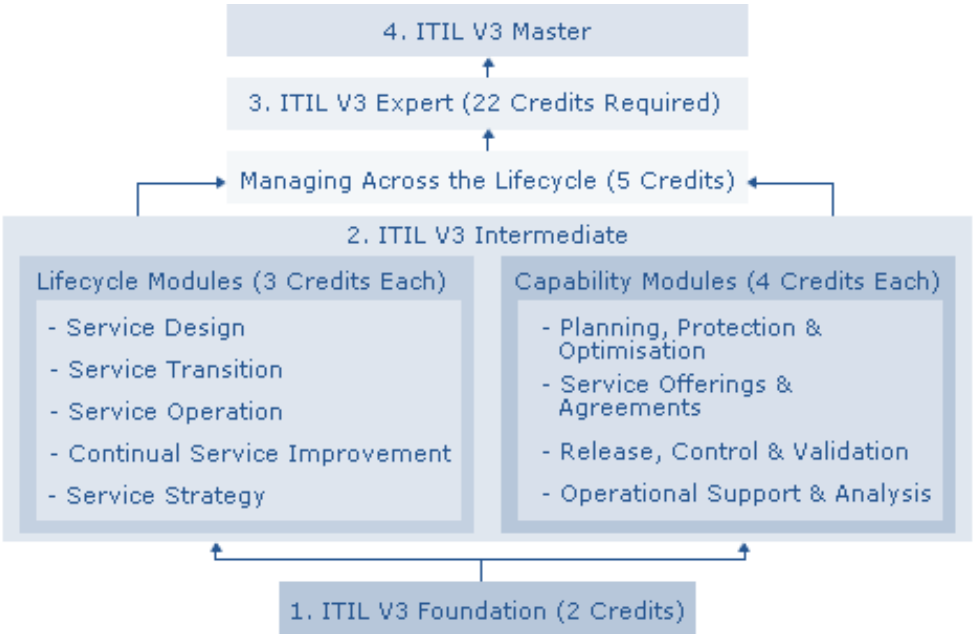


Fig 18: Levels of Certification in ITIL

The ITIL Expert in IT Service Management certification is finally obtained by accumulating credits via the earlier levels. The Master level may be achieved through five years of on-the-job experience in leadership, managerial or higher management roles.

Clearly, studying for all levels at once is impossible. Keep it simple by preparing yourself for the examination that you are taking. ITIL generally involves intensive study and tough exams as well as work experience, so if you're looking to take the higher levels of ITIL, it's best to approach them one by one.

8. Mandatory Boot Camp and Trainings

As a part of the AVM SBU Enablement initiative, all associates have to undergo trainings and Knowledge assessments on AVM SBU constructs during the on boarding process. The Academy team will conduct boot camp for Associates and the same will be communicated through the Learning Calendar. The Calendar would include an eLearning Course on the Foundations of ITIL, Orientation to Managed Services, C2.0, Service Management, CSI and AVM Tools.

The course completion status report will also be published on a weekly basis. Please reach-out to AVMAcademy@Cognizant.com for any questions/clarifications.

9. Key Portals in AVM and Referral

9.1 Key Portals in AVM

Portal Name	Links
OneAVM	https://oneavm.cognizant.com
Estimation Portal	https://avmestimation.cognizant.com
AVM DART	https://avmdart.cognizant.com
KT Portal	https://knowledgetransition.cognizant.com
CSI Portal	https://avmcsitransformation.cognizant.com
On Boarding Portal	https://avmsbuonboarding.cognizant.com/
AVM SBU Dashboard	https://avmsbuonboarding.cognizant.com/
SoW Portal	https://managedservicesow.cognizant.com
BIC Portal	https://bic.cognizant.com/

9.2 Referral

Cognizant a great place to work! We welcome the referral of your friends and ex-colleagues to our team and the best part of which is “it pays you to have them referred.”

For more details on referral schemes, visit

https://onecognizant.cognizant.com > Global Referral

Appendix

ITIL Glossary – Commonly used terms

Terms	Short Description
Acceptance	Formal agreement that an IT service, process, plan or other deliverable is complete, accurate, reliable and meets its specified requirements. Acceptance is usually preceded by change evaluation or testing and is often required before proceeding to the next stage of a project or process.
Access Management	The process responsible for allowing users to make use of IT services, data or other assets. Access management helps to protect the confidentiality, integrity and availability of assets by ensuring that only authorized users are able to access or modify them. Access management implements the policies of information security management and is sometimes referred to as rights management or identity management.
AM **(A**ccount **M**anager**)**	A role that is very similar to that of the business relationship manager, but includes more commercial aspects.
Accounting	The process responsible for identifying the actual costs of delivering IT services, comparing these with budgeted costs, and managing variance from the budget.
Accredited	Officially authorized to carry out a role. For example, an accredited body may be authorized to provide training or to conduct audits.
AST **(A**greed **S**ervice **T**ime**)**	A synonym for service hours, commonly used in formal calculations of availability.
ASP **(A**pplication **S**ervice **P**rovider**)**	An external service provider that provides IT services using applications running at the service provider's premises.
Application Sizing	The activity responsible for understanding the resource requirements needed to support a new application, or a major change to an existing application. Application sizing helps to ensure that the IT service can meet its agreed service level targets for capacity and performance.
Asset Management	A generic activity or process responsible for tracking and reporting the value and ownership of assets throughout their lifecycle.

Terms	Short Description
Balanced Scorecard	A management tool developed by Robert Kaplan (Harvard Business School) and David Norton. A balanced scorecard enables a strategy to be broken down into key performance indicators. Performance against the KPIs is used to demonstrate how well the strategy is being achieved.
BCM **(B**usiness **C**ontinuity **M**anagement**)**	The business process responsible for managing risks that could seriously affect the business. Business continuity management safeguards the interests of key stakeholders, reputation, brand and value-creating activities. The process involves reducing risks to an acceptable level and planning for the recovery of business processes should a disruption to the business occur. Business continuity management sets the objectives, scope and requirements for IT service continuity management.
BCP **(B**usiness **C**ontinuity **P**lan**)**	A plan defining the steps required to restore business processes following a disruption. The plan also identifies the triggers for invocation, people to be involved, communications etc. IT service continuity plans form a significant part of business continuity plans.
Benchmark	The recorded state of something at a specific point in time. A benchmark can be created for a configuration, a Process or any other set of data. E.g. Can be used in Continual Service Improvement to establish the current state for managing improvements.
BU **(B**usiness **U**nit**)**	A segment of the business that has its own plans, metrics, income and costs. Each business unit owns assets and uses these to create value for customers in the form of goods and services.
Business Objective	The objective of a Business Process, or of the Business as a whole. Business Objectives support the Business Vision, provide guidance for the IT Strategy and are often supported by IT services.
Capacity Management	The process responsible for ensuring that the capacity of IT services and the IT infrastructure is able to meet agreed capacity- and performance-related requirements in a cost-effective and timely manner. Capacity management considers all resources required to deliver an IT service, and is concerned with meeting both the current and future capacity and performance needs of the business.
CAB **(C**hange **A**dvisory **B**oard**)**	A group of people that support the assessment, prioritization, authorization and scheduling of changes. A change advisory board is usually made up of representatives from: all areas within the IT service

Terms	Short Description
	provider; the business; and third parties such as suppliers.
Change Management	The process responsible for controlling the lifecycle of all changes, enabling beneficial changes to be made with minimum disruption to IT services.
COTS **(C**ommercial **O**ff **T**he **S**helf**)**	Pre-existing application software or middleware that can be purchased from a third party.
CI **(C**onfiguration **I**tem**)**	Any component or other service asset that needs to be managed in order to deliver an IT service. Information about each configuration item is recorded in a configuration record within the configuration management system and is maintained throughout its lifecycle by service asset and configuration management.
CSF **(C**ritical **S**uccess **F**actor**)**	Something that must happen if an IT service, process, plan, project or other activity is to succeed. Key performance indicators are used to measure the achievement of each critical success factor. For example, a critical success factor of 'protect IT services when making changes' could be measured by key performance indicators such as 'percentage reduction of unsuccessful changes', 'percentage reduction in changes causing incidents' etc.
Demand Management	The process responsible for understanding, anticipating and influencing customer demand for services.
Deming Cycle	Plan-Do-Check-Act.
Downtime	The time when an IT service or other configuration item is not available during its agreed service time. The availability of an IT service is often calculated from agreed service time and downtime.
Economies of Scale	The reduction in average cost that is possible from increasing the usage of an IT service or asset.
Efficiency	A measure of whether the right amount of resource has been used to deliver a process, service or activity.
ECAB **(E**mergency **C**hange **A**dvisory **B**oard**)**	A subgroup of the change advisory board that makes decisions about emergency changes. Membership may be decided at the time a meeting is called, and depends on the nature of the emergency change.

Terms	Short Description
Estimation	The use of experience to provide an approximate value for a metric or cost. Estimation is also used in capacity and availability management as the cheapest and least accurate modelling method.
Event	A change of state that has significance for the management of an IT service or other configuration item.
Follow the sun	A methodology for using service desks and support groups around the world to provide seamless 24/7 service.
Gap analysis	An activity that compares two sets of data and identifies the differences. Gap analysis is commonly used to compare a set of requirements with actual delivery.
Incident	An unplanned interruption to an IT service or reduction in the quality of an IT service. Failure of a configuration item that has not yet affected service is also an incident.
Incident Management	The process responsible for managing the lifecycle of all incidents. Incident management ensures that normal service operation is restored as quickly as possible and the business impact is minimized.
ISM **(I**nformation **S**ecurity **M**anagement**)**	The process responsible for ensuring that the confidentiality, integrity and availability of an organization's assets, information, data and IT services match the agreed needs of the business.
ISMS **(I**nformation **S**ecurity **M**anagement **S**ystem**)**	The framework of policy, processes, functions, standards, guidelines and tools that ensures an organization can achieve its information security management objectives.
Internal Customer	A customer who works for the same business as the IT service provider.
ISP **(I**nternet **S**ervice **P**rovider**)**	An external service provider that provides access to the internet. Most ISPs also provide other IT services such as web hosting.
ITSCM **(IT S**ervice **C**ontinuity **M**anagement**)**	The process responsible for managing risks that could seriously affect IT services. IT service continuity management ensures that the IT service provider can always provide minimum agreed service levels, by reducing the risk to an acceptable level and planning for the recovery of IT services. IT service continuity management supports business continuity management.

Terms	Short Description
ITSM **(IT S**ervice **M**anagement**)**	The implementation and management of quality IT services that meet the needs of the business.
ITIL	A set of best-practice publications for IT service management. Owned by the Cabinet Office (part of HM Government), ITIL gives guidance on the provision of quality IT services and the processes, functions and other capabilities needed to support them. The ITIL framework is based on a service lifecycle and consists of five lifecycle stages (service strategy, service design, service transition, service operation and continual service improvement).
Job scheduling	Planning and managing the execution of software tasks that are required as part of an IT service.
KPI **(K**ey **P**erformance **I**ndicator**)**	A metric that is used to help manage an IT service, process, plan, project or other activity. Key performance indicators are used to measure the achievement of critical success factors.
Known Error	A problem that has a documented root cause and a workaround.
KEDB **(K**nown **E**rror **D**ata**B**ase**)**	A database containing all known error records. This database is created by problem management and used by incident and problem management.
LOS **(L**ine **O**f **S**ervice**)**	A core service or service package that has multiple service options.
Major Incident	The highest category of impact for an incident. A major incident results in significant disruption to the business.
MIS **(**Management Information System**)**	A set of tools, data and information that is used to support a process or function. Examples include the availability management information system and the supplier and contract management information system.
Maturity	A measure of the reliability, efficiency and effectiveness of a process, function, organization etc. The most mature processes and functions are formally aligned to business objectives and strategy, and are supported by a framework for continual improvement.
MTBF **(M**ean **T**ime **B**etween **F**ailures**)**	A metric for measuring and reporting reliability. MTBF is the average time that an IT service or other configuration item can perform its agreed function without interruption.

Terms	Short Description
MTTR **(M**ean **T**ime **T**o **R**epair**)**	The average time taken to repair an IT service or other configuration item after a failure. MTTR is measured from when the configuration item fails until it is repaired.
MTRS **(M**ean **T**ime to **R**estore **S**ervice**)**	The average time taken to restore an IT service or other configuration item after a failure. MTRS is measured from when the configuration item fails until it is fully restored and delivering its normal functionality.
Offshore	Provision of services from a location outside the country where the customer is based, often in a different continent. This can be the provision of an IT service, or of supporting functions such as a service desk.
Onshore	Provision of services from a location within the country where the customer is based.
Operational cost	The cost resulting from running the IT services, which often involves repeating payments – for example, staff costs, hardware maintenance and electricity (also known as current expenditure or revenue expenditure).
OLA **(O**perational **L**evel **A**greement**)**	An agreement between an IT service provider and another part of the same organization. It supports the IT service provider's delivery of IT services to customers and defines the goods or services to be provided and the responsibilities of both parties.
Opportunity Cost	A cost that is used in deciding between investment choices. Opportunity cost represents the revenue that would have been generated by using the resources in a different way. For example, the opportunity cost of purchasing a new server may include not carrying out a service improvement activity that the money could have been spent on.
Optimize	Review, plan and request changes, in order to obtain the maximum efficiency and effectiveness from a process, configuration item, application etc.
Outcome	The result of carrying out an activity, following a process, or delivering an IT service etc.
Outsourcing	Using an external service provider to manage IT services.

Terms	Short Description
Pareto principle	A technique used to prioritize activities. The Pareto principle says that 80% of the value of any activity is created with 20% of the effort. Pareto analysis is also used in problem management to prioritize possible problem causes for investigation.
Performance	A measure of what is achieved or delivered by a system, person, team, process or IT service.
PDCA **(P**lan-**D**o-**C**heck-**A**ct**)**	A four- stage cycle for process management, attributed to Edward Deming. Plan-Do- Check-Act is also called the Deming Cycle. **Plan** – design or revise processes that support the IT services; **Do** – implement the plan and manage the processes; **Check** – measure the processes and IT services, compare with objectives and produce reports; **Act** – plan and implement changes to improve the processes.
Planned downtime	Agreed time when an IT service will not be available. Planned downtime is often used for maintenance, upgrades and testing.
Policy	Formally documented management expectations and intentions. Policies are used to direct decisions, and to ensure consistent and appropriate development and implementation of processes, standards, roles, activities, IT infrastructure etc.
Priority	A category used to identify the relative importance of an incident, problem or change. Priority is based on impact and urgency, and is used to identify required times for actions to be taken.
Proactive monitoring	Monitoring that looks for patterns of events to predict possible future failures.
Proactive problem management	Part of the problem management process. The objective of proactive problem management is to identify problems that might otherwise be missed. Proactive problem management analyses incident records, and uses data collected by other IT service management processes to identify trends or significant problems.
Problem management	The process responsible for managing the lifecycle of all problems. Problem management proactively prevents incidents from happening and minimizes the impact of incidents that cannot be prevented.
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.

Terms	Short Description
Project	A temporary organization, with people and other assets, that is required to achieve an objective or other outcome. Each project has a lifecycle that typically includes initiation, planning, execution, and closure. Projects are usually managed using a formal methodology such as PRojects IN Controlled Environments (PRINCE2) or the Project Management Body of Knowledge (PMBOK).
PMBOK **(P**roject **M**anagement **B**ody **O**f **K**nowledge**)**	A project management standard maintained and published by the Project Management Institute.
PMO **(P**roject **M**anagement **O**ffice**)**	A function or group responsible for managing the lifecycle of projects.
PRINCE2 **(PR**ojects **IN C**ontrolled **E**nvironments**)**	The standard UK government methodology for project management.
QA **(Q**uality **A**ssurance**)**	The process responsible for ensuring that the quality of a service, process or other service asset will provide its intended value.
RACI	A model used to help define roles and responsibilities. RACI stands for **R**esponsible, **A**ccountable, **C**onsulted and **I**nformed.
RPO **(R**ecovery **P**oint **O**bjective**)**	The maximum amount of data that may be lost when service is restored after an interruption.
RTO **(R**ecovery **T**ime **O**bjective**)**	The maximum time allowed for the recovery of an IT service following an interruption.
Redundancy	Use of one or more additional configuration items to provide fault tolerance.
Release	One or more changes to an IT service that are built, tested and deployed together. A single release may include changes to hardware, software, documentation, processes and other components.
Release and Deployment management	The process responsible for planning, scheduling and controlling the build, test and deployment of releases, and for delivering new functionality required by the business while protecting the integrity of existing services.

Terms	Short Description
Reliability	A measure of how long an IT service or other configuration item can perform its agreed function without interruption.
RFC **(R**equest **F**or **C**hange**)**	A formal proposal for a change to be made. It includes details of the proposed change, and may be recorded on paper or electronically. The term is often misused to mean a change record, or the change itself.
Request fulfilment	The process responsible for managing the lifecycle of all service requests.
Resolution	Action taken to repair the root cause of an incident or problem, or to implement a workaround.
Response time	A measure of the time taken to complete an operation or transaction. Used in capacity management as a measure of IT infrastructure performance, and in incident management as a measure of the time taken to answer the phone, or to start diagnosis.
Restore	Taking action to return an IT service to the users after repair and recovery from an incident. This is the primary objective of incident management.
Retire	Permanent removal of an IT service, or other configuration item, from the live environment.
ROI **(R**eturn **O**n **I**nvestment**)**	A measurement of the expected benefit of an investment. In the simplest sense, it is the net profit of an investment divided by the net worth of the assets invested.
Rights	Entitlements, or permissions, granted to a user or role.
Risk	A possible event that could cause harm or loss, or affect the ability to achieve objectives. A risk is measured by the probability of a threat, the vulnerability of the asset to that threat, and the impact it would have if it occurred.
Risk assessment	The initial steps of risk management: Analyzing the value of assets to the business, Identifying threats to those assets, and Evaluating how vulnerable each asset is to those threats.

Terms	Short Description
	Risk assessment can be quantitative (based on numerical data) or qualitative.
Role	A set of responsibilities, activities and authorities assigned to a person or team. A role is defined in a process or function.
Root cause	The underlying or original cause of an incident or problem.
RCA **(R**oot **C**ause **A**nalysis**)**	An activity that identifies the root cause of an incident or problem. Root cause analysis typically concentrates on IT infrastructure failures.
Scope	The boundary or extent to which a process, procedure, certification, contract etc. applies.
Second-line support	The second level in a hierarchy of support groups involved in the resolution of incidents and investigation of problems. Each level contains more specialist skills, or has more time or other resources.
Service	A means of delivering value to customers by facilitating outcomes customers want to achieve without the ownership of specific costs and risks.
Service asset	Any resource or capability of a service provider.
SACM **(S**ervice **A**sset and **C**onfiguration **M**anagement**)**	The process responsible for ensuring that the assets required to deliver services are properly controlled, and that accurate and reliable information about those assets is available when and where it is needed.
Service catalogue	A database or structured document with information about all live IT services, including those available for deployment.
Service contract	A contract to deliver one or more IT services. The term is also used to mean any agreement to deliver IT services, whether this is a legal contract or a service level agreement.
SDP **(S**ervice **D**esign **P**ackage**)**	Document(s) defining all aspects of an IT service and its requirements through each stage of its lifecycle. A service design package is produced for each new IT service, major change or IT service retirement.

Terms	Short Description
Service desk	The single point of contact between the service provider and the users. A typical service desk manages incidents and service requests, and also handles communication with the users.
SIP **(S**ervice **I**mprovement **P**lan**)**	A formal plan to implement improvements to a process or IT service.
SKMS **(S**ervice **K**nowledge **M**anagement **S**ystem**)**	A set of tools and databases that is used to manage knowledge, information and data. The service knowledge management system includes the configuration management system, as well as other databases and information systems. The service knowledge management system includes tools for collecting, storing, managing, updating, analysing and presenting all the knowledge, information and data that an IT service provider will need to manage the full lifecycle of IT services.
Service level	Measured and reported achievement against one or more service level targets.
SLA **(S**ervice **L**evel **A**greement**)**	An agreement between an IT service provider and a customer. A service level agreement describes the IT service, documents service level targets, and specifies the responsibilities of the IT service provider and the customer.
Service Management	A set of specialized organizational capabilities for providing value to customers in the form of services.
Service reporting	Activities that produce and deliver reports of achievement and trends against service levels. The format, content and frequency of reports should be agreed with customers.
Service request	A formal request from a user for something to be provided – for example, a request for information or advice; to reset a password; or to install a workstation for a new user.
Service validation and testing	The process responsible for validation and testing of a new or changed IT service. Service validation and testing ensures that the IT service matches its design specification and will meet the needs of the business.
SPOF **(S**ingle **P**oint **O**f **F**ailure**)**	Any configuration item that can cause an incident when it fails, and for which a countermeasure has not been implemented. A single point of failure may be a person or a step in a process or activity, as well as a component of the IT infrastructure.

Terms	Short Description
SMART	An acronym for helping to remember that targets in service level agreements and project plans should be **S**pecific, **M**easurable, **A**chievable, **R**elevant and **T**ime-bound.
Stakeholder	A person who has an interest in an organization, project, IT service etc. Stakeholders may be interested in the activities, targets, resources or deliverables.
Super user	A user who helps other users, and assists in communication with the service desk or other parts of the IT service provider. Super users are often experts in the business processes supported by an IT service and will provide support for minor incidents and training.
SWOT analysis **(S**trengths, **W**eaknesses, **O**pportunities and **T**hreats.**)**	A technique that reviews and analyses the internal strengths and weaknesses of an organization and the external opportunities and threats that it faces.
Third party	A person, organization or other entity that is not part of the service provider's own organization and is not a customer.
Threshold	The value of a metric that should cause an alert to be generated or management action to be taken.
Throughput	A measure of the number of transactions or other operations performed in a fixed time – for example, 5,000 e-mails sent per hour, or 200 disk I/Os per second.
TCO **(T**otal **C**ost of **O**wnership**)**	A methodology used to help make investment decisions. It assesses the full lifecycle cost of owning a configuration item, not just the initial cost or purchase price.
TQM **(T**otal **Q**uality **M**anagement**)**	A methodology for managing continual improvement by using a quality management system. Total quality management establishes a culture involving all people in the organization in a process of continual monitoring and improvement.
Transition	A change in state, corresponding to a movement of an IT service or other configuration item from one lifecycle status to the next.

Terms	Short Description
Trend analysis	Analysis of data to identify time-related patterns. Trend analysis is used in problem management to identify common failures or fragile configuration items, and in capacity management as a modelling tool to predict future behavior. It is also used as a management tool for identifying deficiencies in IT service management processes.
Vulnerability	A weakness that could be exploited by a threat – for example, an open firewall port, a password that is never changed, or a flammable carpet. A missing control is also considered to be vulnerability.
WIP **(W**ork **I**n **P**rogress**)**	A status that means activities have started but are not yet complete. It is commonly used as a status for incidents, problems, changes etc.

Thank You