eBook

ITIL Report Distribution

(Part 1)

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Introduction

In this whitepaper we shall look at the ITIL Reporting Suite as a whole and what types of reports are needed for each stakeholder level. Getting this right is important for a healthy ITIL infrastructure and overall view on performance.

The purpose of this white paper is to provide a starting point for Project Managers and Business Analysts who want to ensure their ITIL implementation is fully supported.

An important mind set when considering ITIL reporting is not to get too hung up on business intelligence or management information, and consider all the aspects reporting and how it aids the ITIL infrastructure.

Reporting Proportions

No ITIL solution is the same and personal experience has shown it is impossible to predict what aspects of ITIL an organization will decide to adopt. Even things like the Service Catalogue which many (myself included) would consider essential may be absent. With this in mind, this piece focuses more on the overall proportions of reporting areas and broad levels of interest rather than specifics which may not always apply.

A second point worth making before we leap in is that we are really looking at metrics rather than full reports. Reports are nothing more than a way to collate and display metrics, with one metric potentially featuring in a myriad of forms across multiple reports. This makes trying to prescribe actual reports nonsensical. This considered, we will be focusing on metrics and general types of reports that can be used when applicable.

A Balanced Diet for ITIL Reporting

Just like those "portion plates" infographics that illustrate what proportion of food types to eat for a balanced diet, the diagram on the following page shows the spread of metric reporting required for an ITIL system to have enough coverage to stay healthy.

The diagram itself is not just about the proportional volume of metrics and reports, but the order of the levels which is of equal importance and illustrates how the sexy executive dashboards should be the last thing to be implemented, even though the opposite is often true.

Reviewing an existing ITIL System against the different layers in the diagram may flag up gaps in a reporting solution, such as executive level Stakeholders and Sponsors not reading BI/MI reports due to a lack of meaningful dashboards. Which is a rare problem! Or are OLAs overlooked because SLAs are all that matter?

Issues can be more subtle than this with the higher levels being manually collated from lower level reports. This is not just a waste of resources; it also introduces the possibility of human error and often at a high level. Really, this is reporting 101 and the key factor of reporting analysis should always be the capturing of all end requirements.

When done comprehensively, this will remove any need for report manipulation by the end user, i.e. no more cobbling reports together in spreadsheets. Over time, manual intervention may creep in if not closely monitored, but hopefully not for anything as fundamental as executive reporting packs!
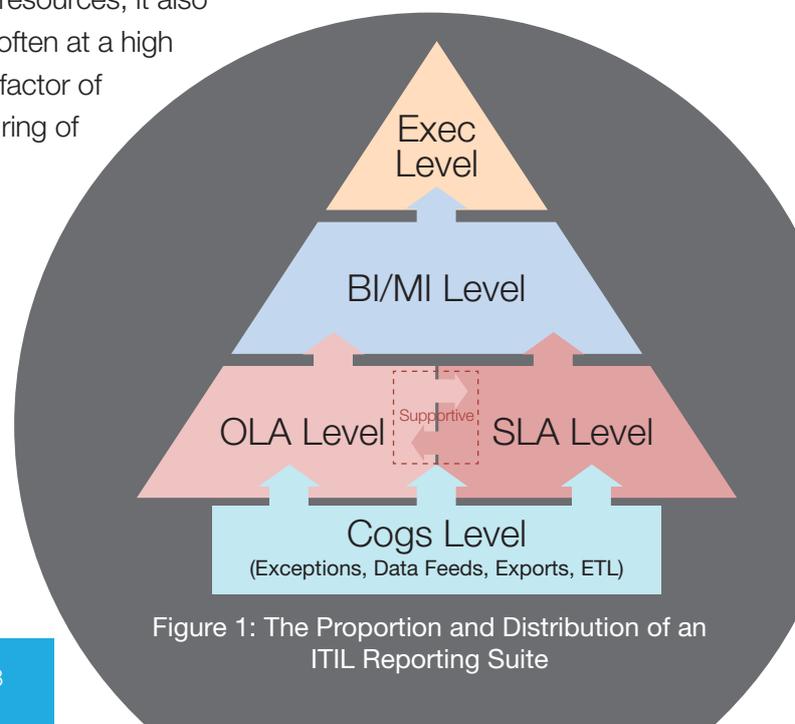

Figure 1: The Proportion and Distribution of an ITIL Reporting Suite

Incident, Change and Problem Management

The proportions of figure 1 can be equally applied to Incident Management as readily as to Change or Problem Management.

The Levels

We are now going to look at each level in summary before delving into the detail and get a feel for how the ITIL reporting suite should hang together.

The Cogs Level

This is the foundation on which the pyramid of reporting is built and where the mechanical aspects of data quality and monitoring reports are implemented.

From partially completed Service Desk Incident records to incorrectly entered dates, these type of data quality issues can make reporting a lot more difficult than it needs to be, with exception logic being built into every report.

Exception Reports, as they are commonly known, can easily catch these problems and aid in improving flawed processes…or the adherence to good processes. Additionally, the Cogs Level should contain monitoring reports that track report access and usage. This is another easy win for continuous improvement as it enables unused reports to be identified and remedial action to be taken as required.

If a Stakeholder is not viewing the metrics and reports being used to track the quality of their Resolver Groups work, there is a high likelihood that there are issues with the reports that need to be investigated.

The OLA Levels

The reports at the OLA Level track the performance of one or more Resolver Groups as they work towards SLAs. They are primarily aimed at the managers of Resolver Groups, although may be of interest at a higher level if consistent issues persist.

The SLA Levels

The reports at this level are arguably the most important, and therefore subjected to the most scrutiny. This level contains the SLA metrics that define whether or not the service being provided to stakeholders is acceptable.

Note: this is also where the UCs (Underpinning Contract) sit. They have not been included in the diagram as they are identical to SLAs in how they are created and distributed, even though the logic may be quite different. Additionally the number of third party vendors can vary greatly (none to all!) from one organization to another which could mess up my proportion based diagram!

(Supportive)

This may be a questionable reporting focus and could arguably be placed in the Cogs Level were it not reliant on the OLA and SLA metrics to be in place before it can be developed.

While SLAs and OLAs should not appear in the same report for Business Intelligence reporting, it is important to have visibility of how the underlying OLAs relate to the SLAs they support.

If a particular SLA is routinely missed, being able to drill down to the underlying OLA metrics and identify any pinch points is essential.

This is an easy and often overlooked method of employing continuous improvement with a minimum of effort.

The Business Intelligence/ Management Information Level

These reports are groupings of SLAs and OLAs from the previous level. What the actual groupings may be is dependent on the audience and their responsibilities.

This is often where the reports based on arbitrary organizational divisions are required. This may take the form of geographical offices, common software support, business function or any other structure that can imposed upon a business with a dedicated owner.

Most businesses have something of this type, it may be called a 'Tower', 'Pillar' or some other nondescript name, and it is not unheard of for several of the above examples to be applied to the same core data. Suitable reports for this level can often be expressed as dashboards for far ranging collections of metrics, but more frequently; they resemble the throughput reports from OLA/SLA Level and usually have the same focus on metrics.

It is important that these different groupings of metrics retain coherence across each group so that any summarized totals agree with each other and provide consistent results. As obvious as that may seem, this is often when variations can sneak in and undermine confidence in the reporting suite.

The Exec Level

This tiny tip of the diagram contains the Executive dashboards and reporting packs that are the shiny jewel in the ITIL reporting crown.

These reports should be, for the most part, a summary of the BI/MI Level reports beneath it. This is the step that tends to be realized through manual effort due to the Exec Level reporting being developed out of order.

With the BI/MI Level in place, the individual metrics and the reports they make up will have been fully tested and trusted. This makes the Exec Level far less labor intensive than when developing from scratch, and can be approached with an air of confidence because of the work that has come before it.

Side Point

Side point: ITIL reporting is often instigated long after the ITIL implementation has gone live and is usually identified as a requirement for the BI/MI dashboard level.

Starting at this point is a mistake for several reasons, but here are "the big three":

- The natural order of the reporting is that each level is fed from the level beneath. By starting at the top, everything must be created specifically, usually in a way that will not transpose to the levels beneath.

- Once implemented, the audience will be able to monitor people who can't monitor themselves due to being lower in the organization. Expecting 'continuous improvement' from someone without the means to know what they have done right or wrong is as pointless as it is unfair.

- When working from the ground up, it is not just the data that accumulates. The analysis and implementation of each level builds a comprehensive knowledge of all the nuances, gotchas and quirks. By the time BI/MI dashboards should be tackled it will be a simple summarizing exercise. However, without that base understanding and interaction with those at the "coal face" the chances of getting it right are minimal. Not only will the Executive Level reports most likely to be wrong and have taken excessive effort, it may be months before lower reporting highlights the errors. At this point the top stakeholders have to be told that they have been given incorrect information for a protracted time and additional money/resources are needed to correct it.

Data Warehouses

Whether metrics are processed and presented via a data warehouse or standalone reports, everything in this white paper is still applicable.

Implementing a data warehouse for ITIL reporting has its own challenges, but it does still lend itself to the pyramid structure being proposed in this white paper. The only Level which is impacted by whether or not a data warehouse is being used is the Cogs Level, which we will look at in depth later on.
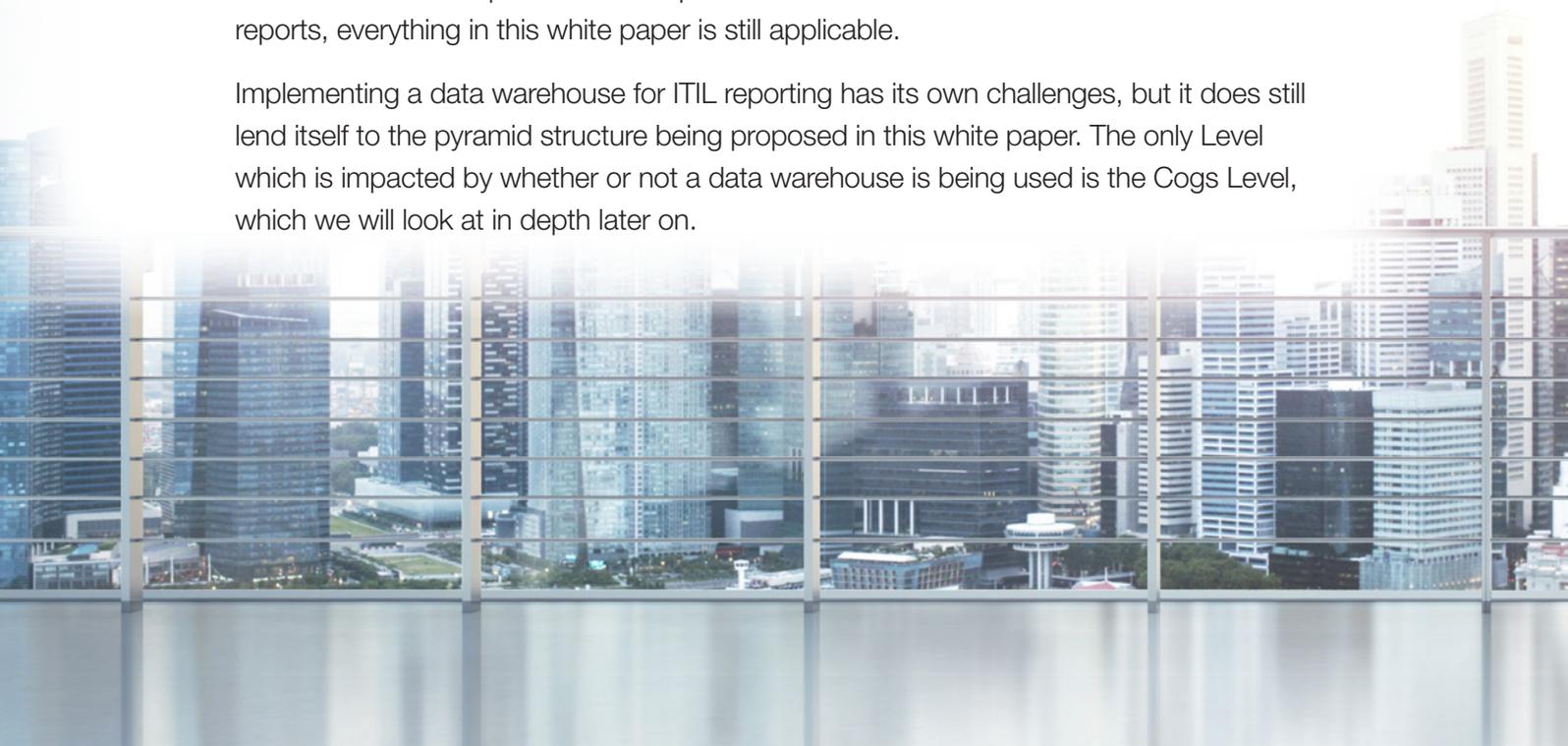
The Levels

We are now going to look at each level in summary before delving into the detail and get a feel for how the ITIL reporting suite should hang together.

The Cogs Level

The Cogs Level is all about functional reporting, monitoring performance and accuracy of incoming data. The whole point of the Cogs Level is ensuring the quality of the data supplied being measured by the metrics in the levels above.

What the Cogs Level should contain varies more from organization to organization than any other level in the pyramid due to varying software and business challenges. A large part of the Cogs Level is about addressing these differences to allow a consistent foundation upon which to build the metrics reporting.

> **Cogs Level**
> (Exceptions, Data Feeds, Exports, ETL)

Data Quality and ITIL Reporting

A series of reports to identify erroneous data should be essential and may not be a large undertaking depending on the quality of data validation in the data sources.

For example, when the service support software performs a check to stop a Resolve Date being before a Start Date, there is nothing to worry about. If it does not, its data requires validation and for any discrepancies to be highlighted and fixed.

Report Types: Data Validation/ Exception Reporting

In the real world trying to pre-empt all (or even most common potential data issues) is a huge undertaking that is unlikely to succeed. With this in mind, I recommend the OLA Level to be developed alongside the Cogs Level so that as OLA testing throws up data errors, they can be caught by expanding Cogs Level reporting.

The nature of Exception Reporting means there are really only two variations of reporting applicable, both of which are based on the data grid of the afflicted record. The variation is in whether or not each report contains one or multiple data errors.

The development effort can become disproportionate when trying to apply multiple instances of complex exception based logic in one report per data source (it is virtually impossible to report on data issues for multiple data sources in one report).

That said, I personally recommend putting it all in one report to make identification and correction of data as easy as possible. The development effort is the one-off, while the report itself will be daily, as should using its contents to update bad source data.

With that in mind, this consolidated view is better than the individual reports, especially when one row of data may contain multiple errors and so appear on numerous Exception Reports unless consolidated.

The Cogs Level Audience

Exception Reporting can have quite a broad audience depending on how an organization handles bad data.

It may be a simple case of an 'Errors List' being sent to the person who input the error for correction as a remedial action. Summarized reports for teams may be of interest to their managers as quality control.

The audience may reach higher in the organization if there is a perceived flow of bad data, but with grassroots reporting in place, the responsible party has the opportunity to address their errors and learn from previous mistakes.

Note: Any report in the style of an 'Errors List' must make it clear to the user what the issue is, why the data has produced error and at least some indictor as how to fix it. Once again, this is a cheap and efficient method of continuous improvement.

The Data Warehouses (again!)

Because the Cogs Level is very practical, it is susceptible to wider considerations, such as the technique or software being used to provision ITIL reporting suite. ITIL only starts to become standardized at the Configuration Item and Process level. What these CIs and Processes sit on can vary from strung together spreadsheets to purpose built software.

Personally, I consider a Data Warehouse not to be an ideal solution for most ITIL reporting. Every requirement is easily achievable through fixed reports, negating the main benefit of self service.

Individual reporting also negates the downsides of data not being dynamic (usually 24 hours out of date is a de facto standard for Data Warehouses) as it can be sourced from the live system, or mirror. This is very useful for Major Incident reporting when stakeholders want up to the minute updates.

The lead times on development for standalone reports are far quicker at producing something tangible, which can be a factor with limited or gated funding. Several standalone reports can be developed and in use, while a Data Warehouse project is still writing transformation code.

Data Warehouses start to show their benefit further down a structured development process that, once reached, allows a myriad of reports to be created quickly, easily and to a predefined and consistent standard, all of which are easily maintained… something individual reporting solutions struggle to achieve.

To align this paper to Data Warehouse approach, the Cogs Level is something that should happen as part of the "T" part of the ETL, namely "Transform".

This is where Extracted (the "E" in ETL) data is manipulated into a report friendly manner, both by restructuring table schemas and amending data as required. So this is where the Exception Handling will take place automatically and where the companion Exception Reporting is produced, often as part of the testing process.

In Part Two: an in depth look at the remaining levels of reporting that make up an ITIL Reporting Suite.

About Jason Dove

Jason Dove is an ISEB accredited Business Analyst, Developer and Professional Writer.

He consults for multiple leading businesses across various industries – from marketing to counter-terrorism.

Jason specialises in Business Intelligence related disciplines, with a strong emphasis on ITIL systems - a commonly overlooked opportunity for organizations to get the most from their IT investment.

With over 15 years of experience in the industry, Jason has leveraged his knowledge into that of author, blogger and is a contributor to print and online publications.