

ISO 20000 certification: what does it mean for you?

This whitepaper discusses what ISO 20000 is and considers arguments for and against certification.

Executive Summary

ISO 20000 is a standard available to IT to support their best practice endeavours. It sets benchmarks to be achieved and works hand-in-hand with a practical methodology, such as the IT Infrastructure Library (ITIL), to achieve excellence in IT Service Management.

An excellent driver and motivator for achieving best practice, ISO 20000 also provides evidence and certainty as to the quality and relevance of services being delivered by IT to the business. It is especially useful for IT organisations providing outsourced IT services where evidence of quality is a major market differentiator. ISO 20000 is, however, not for everyone. The level of rigour in the standard requires the certification of a complete set of process which may not suit all organisations.

This paper examines the arguments for and against certification, keeping in mind the cost/benefit trade off, to assist in your organisation's decision whether or not to pursue ISO 20000.

Contents

| | |
|---|-----------|
| Executive Summary..... | 1 |
| Contents..... | 2 |
| Introduction: Standards vs. Frameworks | 3 |
| The ISO 20000 Standard | 5 |
| ISO 20000 and ITIL..... | 7 |
| Deliberate Alignment..... | 7 |
| ITIL, ISO 20000 and COBIT | 10 |
| Why should we certify? | 11 |
| Reasons to certify..... | 11 |
| Reasons not to certify..... | 14 |
| Questions to consider..... | 15 |
| How to Get Certified..... | 17 |
| Infra and ISO 20000..... | 19 |
| Conclusion | 20 |

Introduction: Standards vs. Frameworks

IT is under pressure to deliver cost-effective services that are relevant to the business. This has led to a rapid growth of interest in IT Service Management (ITSM) principles. Fundamentally, ITSM defines IT infrastructure, processes and activities as services and then seeks to align and prioritize these services against the objectives of the businesses. This results in increased efficiencies through a more effective (business-oriented) allocation of resources and lowered costs.

Six Sigma, ITIL and COBIT are frameworks which support various aspects of the journey to ITSM excellence. ISO 20000 can be an additional element driving ITSM compliance – however, it should be noted that ISO 20000 is a **standard** (not a framework). This distinction between standards and frameworks is an important one when evaluating the importance of ISO 20000 certification:

- Standards provide a measurable set of best practice benchmarks common across organizations and business entities. Compliance to a standard demonstrates that certain minimum benchmarks have been attained and that there is a commitment to ongoing improvement. The quality performance of the compliant product or company can then be anticipated with a level of certainty. A standard is auditable and assessable by independent and authorized auditors.
- Frameworks are not auditable. ITIL, for example, is a well known framework. Compliance is open to interpretation, which can vary widely between organizations, consultants and solution providers. The implementation of a framework can be far more flexible and business-specific than a standard.

The advantages of standards

Standards provide a driver for achieving the following business advantages:

- **Efficiency** - IT is under considerable pressure to improve efficiencies, reduce costs in order to meet ongoing budget reductions or to fund infrastructure development. Focusing and committing to a process improvement strategy drives the identification and redesign of costly processes.
- **Integrity** - Regulatory compliance and major partner reliability require high levels of process control, not to mention the internal need for transparency. A standard offers a benchmark against which these controls can be measured for efficacy.
- **Alignment to business objectives** - the ability of a process to deliver on its objectives is often obscured by the turbulence of IT activity. Standards can ensure that effectiveness is reviewed and measured against business needs, and that efficiency goals have not compromised the objectives of the process.

Best practice:

Both standards and frameworks refer to the term 'best practice'.

Best practice provides a methodology for achieving a goal which has proven to be effective, saving time and avoiding common pitfalls.

- **Agility** - IT is increasingly required to adapt to the dynamic nature of business. Mergers, de-mergers and restructures demand an agile infrastructure and rapid response from IT. Clear processes and process ownership, underpinned by continuous review, increase the capacity for IT to respond to change.

The ISO 20000 Standard

As a management standard, ISO 20000 sets benchmarks and core principles for quality improvement, but is not prescriptive in terms of specific outcomes or activities. Put simply, it provides guidance on **what** should happen, but not on **how** to make it happen. Within this context, the “**what**” is comprised of **process** requirements and **management system** requirements.

Process requirements

ISO 20000 process requirements ensure that procedural and functional areas are addressed. Process requirements include (but are not limited to) areas such as Incident, Problem, and Change Management.

Management System requirements

Management system requirements take a more global focus and aim to ensure that quality is being established and maintained. The elements of the management system are:

- a Quality Management System (QMS)
- a Continuous Service Improvement Program (CSIP)
- the use of a Plan, Do, Check, Act Deming Cycle for continual improvement within both the QMS and CSIP

The **Deming Cycle** is a model of continuous improvement. The cycle moves through the four-process review steps of Plan, Do, Check and Act which then repeat. The goal of the model is the increase process maturity and quality.

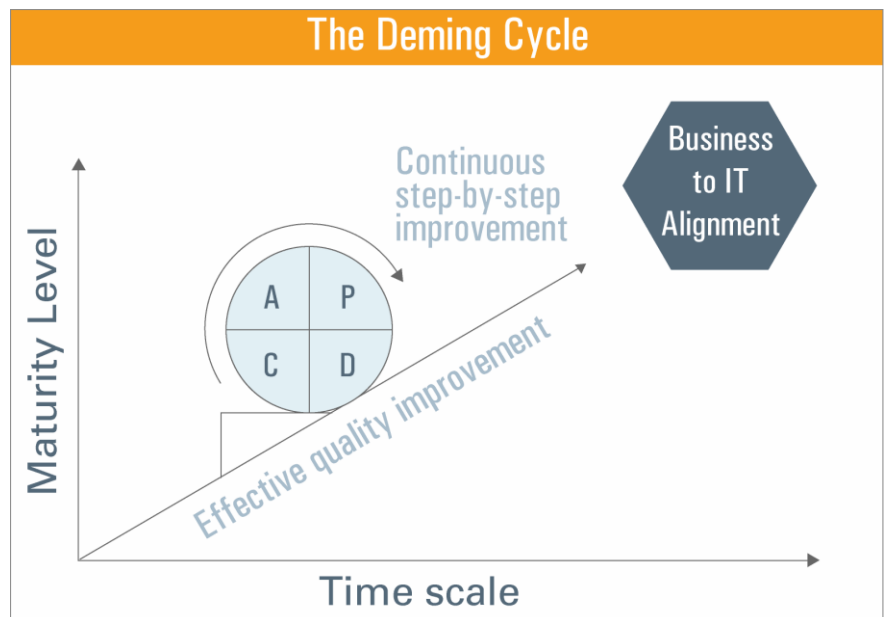


Figure 1. The Deming Cycle

The **Quality Management System (QMS)** details the “**how**” of maintaining and delivering quality. This typically takes the form of high level service management plans, policies and assignment of process ownership. The QMS also addresses staff competencies, awareness and training. It represents the commitment business is making to quality and it is against this plan that an auditor will test for real life evidence of its enactment. The Deming cycle of Plan, Do, Check and Act is enshrined at this level to ensure ongoing improvement.

ISO 20000 and ITIL

To support its benchmarks and core principles, ISO 20000 is dependant on other enabling frameworks (termed 'definitions'). Common frameworks used by business and IT include ITIL, Six Sigma, Microsoft Operations Framework (MOF) and Lean.

ITIL is currently the most commonly used and well known supporting definition

ITIL verified software - such as Infra – provide a basis for an ISO 20000 implementation by supporting the definition component (see Figure 2, below). Infra is a 100% web-based Service Management application, verified as ITIL compatible to Pink Elephant's highest (Service Support Enhanced) level.

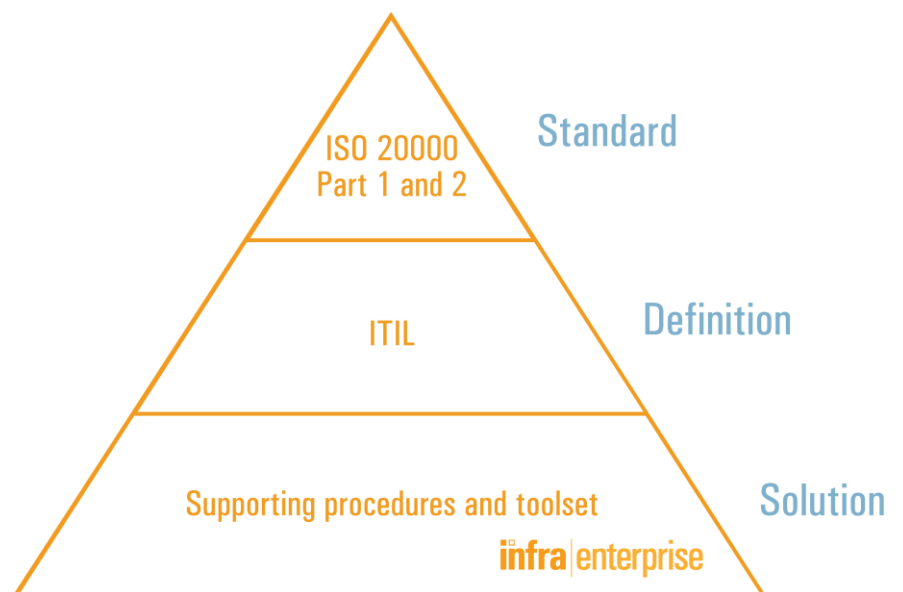


Figure 2: Relationship between ISO 20000, ITIL and Infra

Deliberate Alignment

The apparent alignment between ISO 20000 principles and the ITIL framework is quite deliberate. ISO 20000 makes use of the same processes as ITIL, but groups them in a slightly different way. As can be seen in

Figure 3 (below), the ITIL Service Support processes are grouped under ISO 20000 Control, Release and Resolution Processes. In addition, the ITIL Service Delivery processes are repositioned to also support the Relationship and Service Delivery Processes.

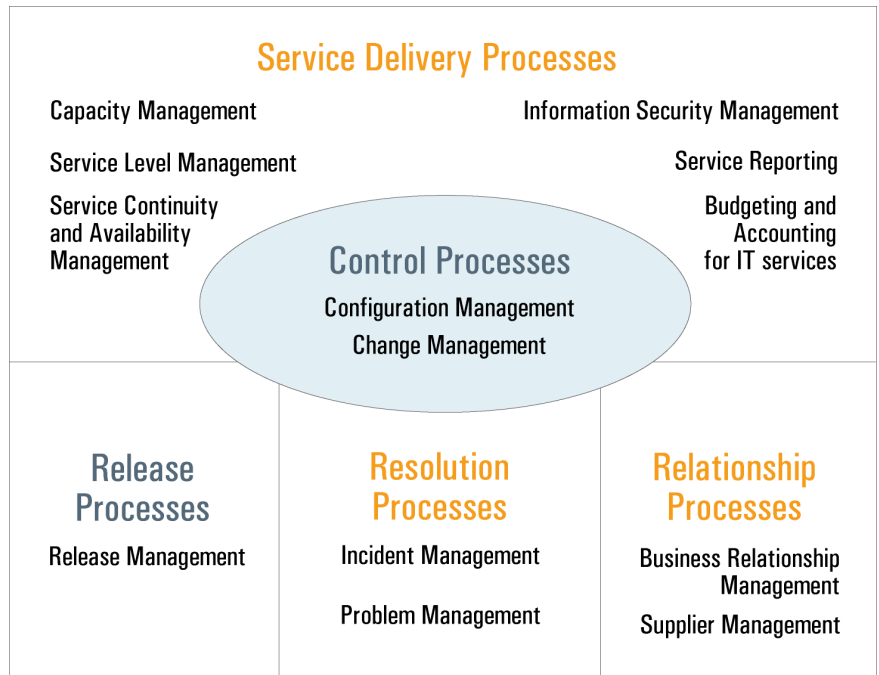


Figure 3: ISO 20000 Process Grouping

As a result of this close alignment, ITIL is a very effective definition to use for certification purposes. In the past, ITIL in isolation was not enough as it lacked the rigorous and clearly defined QMS and CSIP required by ISO 20000¹. The QMS is a mechanism that opens processes to improvement and the wider needs of the business. A fuller representation can be seen in the diagram below.

With the ITIL refresh, an entire book has been dedicated to Continual Service Improvement process. ITIL version 3 may then be more effectively aligned with ISO 20000 than version 2.

¹ ITIL v3 is expected to make these more explicit.

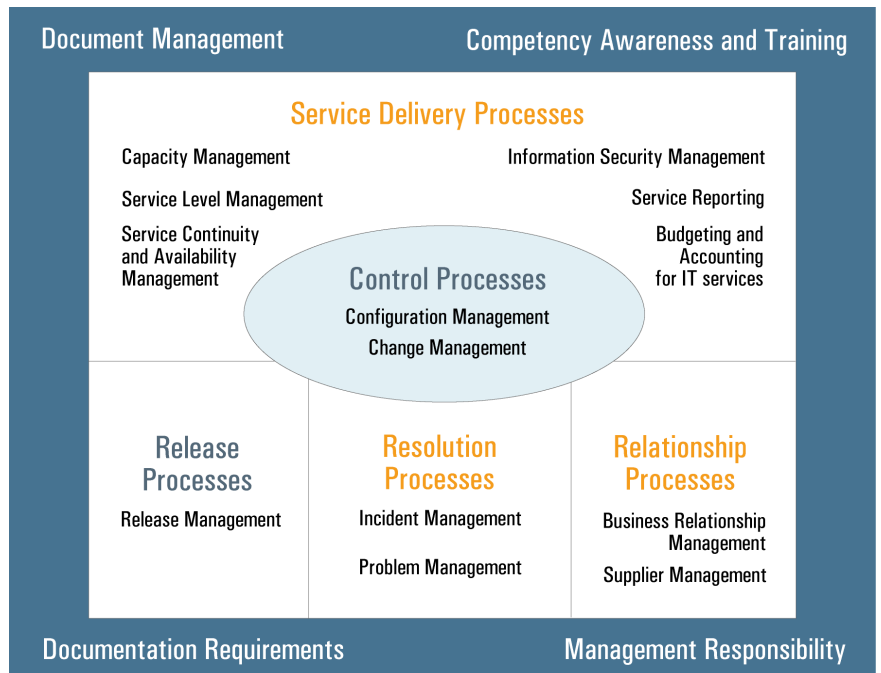


Figure 4: The Quality Management System supporting all the processes.

ITIL, ISO 20000 and COBIT

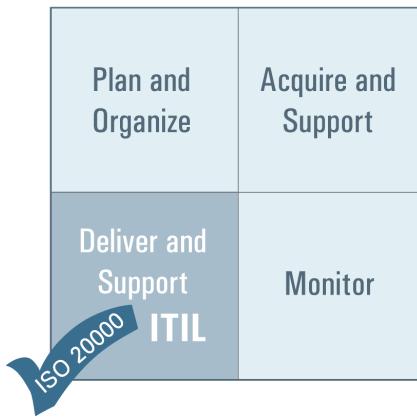


Figure 5: ITIL and ISO 20000 in relation to COBIT

Control Objectives for Information and related Technology (COBIT) is a high-level framework with management and assurance tools for overall IT governance. At its most simplistic, COBIT can be described as a set of benchmarks that is used as an audit tool to ensure governance requirements, such as the Sarbanes Oxley Act, are being met. COBIT is not prescriptive on how to meet these benchmarks.

The COBIT perspective is very much top-down and business oriented and as such can be highly successful in aligning IT to the needs of the business. It approaches the business and IT holistically, and provides a strategic methodology for delivering IT services. Measurements and KPIs are provided and use of the Balanced Scorecard is supported. COBIT has emerged as the auditor's framework of choice when looking to achieve compliance to the Sarbanes Oxley Act (SOX)².

The COBIT checklist is divided into four domains; within each of these domains is a list of processes. Each process then has a list of objectives to be met (318 in total):

- Plan and Organise: covering the use of technology to achieve the company's goals and objectives,
- Acquire and Support: identifying its IT requirements, acquiring the technology, and implementing the technology within the company's current business processes,
- Deliver and Support: defining the support processes for executing and maintaining IT systems,
- Monitor: the strategy to meet regulatory requirements and assess the success of the IT systems in delivery on objectives.

ITIL provides an operational framework for COBIT's Deliver and Support process, and ISO 20000 certification provides the certainty that ITIL has delivered successfully on the Deliver and Support domain of the COBIT framework (see Figure 5).

² 2006, *IT Control Objectives for Sarbanes-Oxley: The Role of IT in the Design and Implementation of Internal Control Over Financial Reporting, 2nd Edition*, IT Governance Institute

Why should we certify?

The literature on ISO 20000 lists considerable potential benefits to be gained from certification. Many of these same benefits can be realised through the adoption of any service improvement framework (such as ITIL) and are not specific to ISO 20000. The certification does; however, provide a level of certainty that the adoption of framework cannot.

ISO 20000 certification requires considerable time and effort to achieve the desired benefits – in this section we will consider the arguments for and against certification.

Reasons to certify

We have identified six primary motivators which drive business to invest in certification:

- reduce exposure to risk from regulatory requirements
- meet client requirements
- encourage ongoing improvement
- motivate and recognise IT
- improve the global consistency of IT
- enhanced business to IT alignment

Reduce exposure to risk from regulatory requirements

There is no doubt that implementing a service improvement program can support regulatory requirements such as SOX; however, for the business to be assured that IT is really delivering to the level required, certification is a good option. Relying on the opinion of IT with regard to its own level of compliance is risky. Even the advice of external consultants is based upon their own unique set of ideas on what constitutes compliance and what does not. Auditors in ISO 20000 use globally consistent and comparable assessment methods.

Client requirements

When an organisation is dependent on an IT vendor to deliver their IT services, ISO 20000 certification of the vendor can be very reassuring. For this reason, contracts increasingly require that compliance to the standard be in place. For example, in the UK all major government contracts now specify certification against ISO/IEC 20000 as a requirement.³ Gartner notes that "... by 2008 75% of relevant IT sourcing decisions will be based around specified ISO/IEC 20000 as a requirement on service providers".⁴ Vendors that fail to provide certainty of the quality of their offering will lose out to competitors who can.

"...by 2008 75% of relevant IT sourcing decisions will be based around specified ISO/IEC 20000 as a requirement on service providers." Gartner

³ David Clifford, 2006, *ISO 20k Explained*, IT Service Success

⁴ S Mingay, N France, 2006, *ISO/IEC 20000 Has an Important Role in Sourcing Management*, Gartner

It seems vendors were initially reluctant to adopt the standard as it was perceived as a threat to the 'lock in' they had on their customers. Broad-scale certification to ISO 20000 would result in a common language and interface into processes, meaning customers could swap vendors more easily. It also meant the re-engineering of internal processes that had previously proved successful and had taken considerable investment and time to implement. Customer demand however, has overcome these obstacles and is increasingly requiring vendors to comply.

Encourage ongoing improvement

Certification is not awarded permanently - organizations must renew their certification annually. Failure to demonstrate compliance results in the certification being either suspended, or revoked. This provides a powerful driver for ensuring continuous improvement.

IT needs to be better motivated, appreciated and recognized

A dispirited and under-appreciated IT department can be difficult to motivate when implementing service improvement. The tangible goal of a certification (which can then be marketed to business to raise the profile of IT) can assist with staff motivation and morale. The standard requires regular reviews of staff competencies and training needs as well as clear definitions of roles and competencies. This attention to staff development has considerable potential to improve morale.

Global consistency of IT

Frameworks provide guidance on process development but they are not auditable. There is no established and universally agreed method for measuring success. The nature of a framework leaves it open to interpretation with the result that different organizations, specialist consultants and industry commentators all follow their own (and sometimes conflicting) approaches. While this allows for a degree of flexibility to the needs of particular businesses, it makes it difficult to ensure consistent standards for global organizations. ISO 20000 can be used strategically as a benchmarking tool to deliver consistent process and levels of maturity across the organisation, regardless of location⁵.

⁵ David Clifford, 2006, *ISO 20k Explained*, IT Service Success

Improve business to IT alignment

ITIL claims to align IT with business needs but often this is not the case - generally ITIL is seen as only being relevant to IT⁶. Strategic, commercial and political matters relevant to the business are not necessarily considered in ITIL implementations⁷.

The limitations of ITIL⁸ in achieving true business alignment are not necessarily an issue, so long as the limitations are understood and other tools are used to fill the gap. ISO 20000 can be used to help address this issue. A requirement of certification is the provision of evidence of the planning and alignment of IT strategies to the goals of the business. This is a powerful mechanism for driving IT to consider the needs of the greater business and to cease operating in virtual isolation.

⁶ Noel Bruton, 2004, *The ITIL Experience*, page 15, Bruton Consultancy, Wales.

⁷ Noel Bruton, 2004, *The ITIL Experience*, page 15, Bruton Consultancy, Wales.

⁸ It is anticipated that ITIL version 3 will enhance business alignment, but it is yet to be seen how this is achieved

Reasons not to certify

Certification comes at a cost, both in monetary and resource terms. For an IT department that is short on budgetary and time resources, certification may be a luxury. The following is a discussion of five situations where certification may not be essential:

- an existing ISO 9001 certification is already in place
- IT is not seen as a critical business function
- performance may be satisfactory already
- a partial ITIL implementation is in place
- costs may be prohibitive

An existing ISO 9001 certification is already in place

ISO 9001 is a well known standard designed to audit the quality of business management across the organisation. If certification against this standard is already in place, and the scope includes the IT division, a Quality Management System should already exist to ensure continuous improvement.

Where IT is not looking to provide specific evidence of its quality system, inclusion in an ISO 9001 certification may be adequate.

IT is not seen as a critical business function

For many organisations, IT is simply one function within the business and is not considered to be business critical. An organisation whose IT dependence is not pronounced may not consider it worthwhile to invest time and resources to certify IT processes alone. Rather, they may prefer a holistic best practice methodology, which looks at all processes across the business i.e. Balanced Scorecards.

Performance is already satisfactory

If there is a service improvement framework in place, and it has delivered on service improvement goals, then ISO 20000 may not be required to drive the implementation further.

Certification requires a degree of maturity across all processes that the business may not need and they may be reluctant to fund if service delivery is considered satisfactory.

A Partial ITIL implementation

Flexibility is a main strength of frameworks such as ITIL. Processes can be implemented as required and adapted to suit the specific needs and points of pain across the business. ISO 20000 is not as flexible - a reasonable level of maturity is required across **all** processes. For organisations that do not have a business driver to implement certain processes (such as Release Management) certification against ISO 20000 cannot be achieved.

Cost

Certification is an additional cost on top of implementing the service improvement program. Large organisations may find this easier to absorb than smaller organisations.

Questions to consider

The first consideration is the **appropriateness of the certification**. The second is the **effort involved**.

Appropriateness

When considering the appropriateness of certification, the following questions should be asked:

- What benefits will be attained through certification?
- Can the benefits be clearly demonstrated?
- Will the benefits outweigh the costs?

None of these questions are unusual when considering new projects. Identifying the business drivers is crucial to justifying ISO 20000 certification.

Delivering certification in an appropriate timeframe can be critical to the success of the project. Certification projects that take longer than 18 months are significantly less likely to succeed. An IT department that is well established in best practice will require less investment to attain the required maturity. A large maturity gap will require additional **resourcing** to close the gap in a workable time frame.

As a rough guide the average maturity required for certification is a level three on the Capability Maturity Model (this model is provided by ITSMF⁹). For processes coming in at 1-1.5 on this scale, it is likely that 18-24 months' worth of work is required. For a maturity of 2-3, then 6-12 months' work is likely to be required.

⁹ For more information visit <http://www.itservicecmm.org>

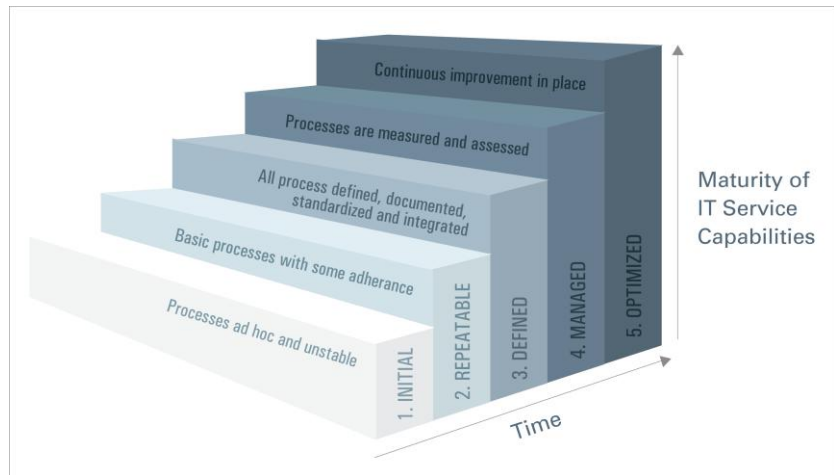


Figure 6. The ITSMF maturity model

A significant **expense** may also be incurred due to the need to fund process design consultants and certification auditors. Staff awareness and internal auditor training must also be budgeted for. It is valuable to invest in an internal marketing program to promote and garner support for the initiative and generate staff buy-in. Finally, certification needs to be renewed - this must be included in budget projections.

Effort involved - reaching the benchmark can be difficult

Reaching the benchmark set by the standard can be difficult. The Capability Maturity Model (CMM) definition of level three is “...the defined level ... aimed at standardisation of services. Organisations at level three employ standard processes to deliver standard services and have implemented organisation-wide processes to train employees and manage resources and problems.”¹⁰

This level of maturity can be difficult to attain across all processes. For example, an organisation may exceed this level for Incident and Problem Management, but may struggle with Service Level Management and Capacity Management. Realistic consideration needs to be given as to whether this level of maturity can be achieved across all processes at a reasonable cost and within a reasonable time frame.

¹⁰ Frank Niessink, 2003, *IT Service CMM White Paper*, Software Engineering Research Centre

How to Get Certified

If you decide that ISO 20000 is the way forward for your organisation, the following steps may be helpful as a guide to achieving certification¹¹.

1. **Make the commitment to Certification.** Clearly identify the benefits driving the desire to certify. This can help both in terms of orienting the project and to identify cost savings or any tangible benefits as they emerge through the project. Develop a clear idea of the objective and of how success will be measured.
2. **Run an awareness program.** Achieving ISO 20000 certification will require significant changes to an organisation and staff buy-in is essential. The benefits of the standard to the individual staff as well as to the organisation should be communicated.
3. **Take an initial benchmark of existing processes.** This provides a point of comparison for the level of maturity and performance that the business has prior to implementation.
4. **Commence rollout** of all processes and the Quality Management System. This includes all documentation, plans, processes and training.
5. **Ongoing gap analyses** should be run as ISO 20000 processes are implemented. These should compare how the business is currently performing against objectives, and develop (then implement) plans to continue the move forward.
6. **Record keeping.** Ensure that measures are in place to enable the organisation to demonstrate at least three months of record keeping and compliance with processes.
7. **Readiness Assessment.** Engage a consultant or Registered Certification Body (RCB)¹² to assess how close to certification IT is, and confirm self assessment findings.
8. **Engage an RCB** to perform the audit.
9. **Achieve certification.** The RCB will issue a certificate of conformance once it is satisfied the IT organisation has met all requirements.
10. **Prepare for reassessments.** Following certification there are periodic reassessments to check ongoing conformance. The first reassessment is after six months and annually thereafter. If a non-conformance is found, a window of three months is provided to apply a corrective action.

¹¹ This list is not exhaustive and is designed to highlight some of the key items that can help ensure a successful certification process.

¹² To find a Registered Certification Body in your country visit www.isoiec20000certification.com

As you move toward certification, keep in mind that the processes and methods must be sustainable in the long term as the certificate must be re-justified through ongoing annual audits.

When embarking upon the certification journey, many organisations choose to employ ISO 20000 consultants to assist with certification, provide a fresh perspective on particular issues, and generally keep the certification process moving in the right direction.

Infra and ISO 20000

As stated previously, ISO 20000 is a *standard* that provides an outline of best practice benchmarking. As such it says nothing about how to implement processes and practices. This is left to the *definition* layer, in which processes and practices are defined and implemented. The most commonly used definition for ISO 20000 in an IT environment is ITIL.

Infra and ITIL

Infra assists businesses wishing to gain ISO 20000 certification by providing a software solution to support ITIL. The product has been verified to Pink Elephant's highest level of ITIL compatibility, *PinkVerify Service Support Enhanced*^{™13}, and provides an effective ITIL implementation solution across all verified processes.

In addition to its extensive coverage of ITIL Infra provides support for more generic ISO 20000 areas, such as process control, document management, and communication.

An emphasis on process control

Beyond its high level of ITIL compatibility, Infra provides additional support for ISO 20000 definitions through its emphasis on process control across areas such as Incident and Problem Management, Change Management, and Knowledge Management. At the core of the application is a workflow development system, which allows processes to be created using a drag and drop graphical user interface, in which tasks and approvals are dragged onto the screen and linked together to create workflows. While this is used widely in IT environments to support Change Management processes, it has applications in any setting which would benefit from wide scale automation of internal processes.

Clearly demonstrable evidence of compliance is rapidly at hand with Infra's highly visible process controls and records, thus ensuring smooth audits.

Document management

Infra supports document management processes through its inbuilt version control system, which provides check in / check out, versioning and commenting on documents. The workflow management system provides the capability to integrate complex document management workflows, and the Infra knowledge bank can index and search on the contents of documents, supporting text, Microsoft Word, HTML, PDF and Open Office (OASIS) formats.

¹³ Pink Elephant is a world leader in IT management best practices. This is the highest level of their PinkVerify[™] certification offering available for toolsets.

Communication

Communication with stakeholders and customers is a crucial part of the Quality Management System inherent in ISO 20000. Infra provides an integrated communication system, in which officers are alerted via email, pager or text message of work that is assigned to them. In addition, customers can be automatically emailed on the status of calls and requests they have logged. To further improve service and customer communication, Infra features customer survey tools, which allow for the automated sending of customer service surveys on call completion.

Conclusion

ISO 20000 has the potential to bring considerable gains in customer service, IT to business alignment, and the consistency of business processes and practices (particularly in global companies). The seemingly ever-increasing pressure of governance can be eased through the confidence that certification brings to at least one aspect of the business. The main consideration is whether sufficient drivers exist for your organisation to pursue certification and its associated investment.

When committing to certification, the adoption of a framework must also be undertaken; ISO 20000 is a standard, not a practice. While it may provide guidance as to quality management and benchmarking, it does not prescribe actual methodologies. For this, particularly around *Delivery and Support*, ITIL provides an excellent fit.

Supporting procedures and toolsets must also be committed to. Selecting Infra, with its integrated ITIL process support, as your ISO 20000 supporting toolset will allow you to focus on process development and rapidly grow maturity. The ability of Infra to deliver a solution rapidly allows your organisation to focus on process development, instead of spending valuable resources attempting to configure and implement an inferior tool. The extensive auditing and reporting capabilities of the Infra solution ensures evidence for your compliance audits is easily accessible.