

White Paper

The COBIT Evolution

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Over his career he has managed a vast number of Telecoms, IT, Business and Consulting projects and programmes, and the associated global cross functional teams, with a strong track record of results. Mike is a specialist in many aspects of information technology, including infrastructure, architecture, systems development, business processes, service management, policies and standards, leadership, governance and management.

To say that COBIT has transformed itself in the last two decades would be an understatement. Today, when we talk about corporate governance, and the governance and management of Enterprise IT, it is as if these terms and practices have been around since the very concept of an organization began. This is not the case.

In fact it was only in the 1990s that we first saw an emergence of what can best be described as a series of internal control frameworks, intended primarily for use in the practice of internal auditing. Whilst corporate governance as a concept was tabled in the 1970s, it was also the 90's which saw the start of its entrenchment and institutionalization from academic, organizational and regulatory perspectives. One may well argue that it was the release of these internal control frameworks which catapulted corporate governance into the mainstream, and really set the wheels in motion.

The early part of that decade saw the introduction of The Committee of Sponsor-ing Organizations of the Treadway Commission's (COSO's) Internal Control-Integrated Framework, the Canadian Institute of Char-tered Accountants' (CICA's) Criteria of Control Frame-work (CoCo) and the issue of Standards for Internal Control by the U.S. Federal Government - all in 1992. Toward the end of the decade we saw the introduction of The Basel Committee on Banking Supervision's Framework for Internal Control Systems - in 1998.

In between, however, was the first release of the Control Objectives for Information and Related Technologies (COBIT), by what was then to become the Information Systems Audit and Control Association (ISACA),

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today known only as COBIT and ISACA respectively. This was the start of a long journey for COBIT, which when examined provides valuable insight into how and why its latest release, COBIT 5, it has become arguably the most generally accepted and in use business framework for the Governance and Management of Enterprise IT, the globe over.

Continuous (Re) Evolution

It was the need for a centralized source of information and guidance on the auditing of controls in computer systems, which can be traced as the beginnings of ISACA back in 1967 – nearly half a century ago. Back then IT auditing was known as Electronic Data Process (EDP) Auditing, which came about due to the need for IT controls in technology based financial systems. Financial systems transitioned from manual, paper-based systems to technology driven ones, and with that the need for the control of information technology increased, and therefore so did IT auditing.

Technology changed the very concept of data to one of information, information required by the business to function and deliver its products or services. Information moved from being primarily used in financial systems for accounting and reporting purposes to fast becoming critical to the wider operations of Enterprises. Computers, and their adoption, increased by order of magnitude and the image of a few accountants, auditors and internal IT staff huddled around a few computers changed dramatically as departments across the Enterprise began to use computers and the information they provided to do their 'business'. It was no surprise then that the need for experts in the field of EDP, and essentially EDP Auditing, grew in parallel with this uptake of information technology by the Enterprise.

The official Electronic Data Processing Auditors Association (EDPAA) was incorporated in 1969, and became the first body primarily focused on the subject of EDP Auditing. Their primary goal was to define guidelines, procedures and standards for EDP audits and in fact they published what was arguably the start of COBIT as we know it today, a publication on Control Objectives.

It was eventually, only in 1994, that the EDPAA changed its name to the Information Systems Audit and Control Association which more recently simply became known by its acronym only – ISACA. Over the last twenty years, from 1994 to 2014, ISACA's membership has grown to a constituency in excess of 110,000 people in 180 countries around the globe with a sphere of influence extending far further.

Today, in collaboration with the affiliated IT Governance Institute (ITGI), ISACA has established itself as a true leader in the field of information technology controls, management and governance, and continues to strengthen and grow in our ever changing, dynamic world of technology and the exponential demands on it.

COBIT history

COBIT has become synonymous with ISACA, and as Corporate Governance has become a hot topic over the last decade, so too has COBIT become more and more of a buzz word in passages and boardrooms of Enterprises globally. However, there are still many out there who don't realize that COBIT has been in existence independently for nearly a couple of decades, and that its move to Governance at the same time as Enterprises moved to institutionalize Corporate Governance, is no coincidence.

The shift of COBIT from Audit to Governance (and Management) of Enterprise IT has spanned 16 years, from its first incarnation in 1996 to its most recent in 2012. Over this period, COBIT has gone through five major releases (namely COBIT 1, 2, 3, 4.0, 5) and one 'dot' release (namely COBIT 4.1). This evolution in the Scope of COBIT over time can be best presented in Figure 1 below.

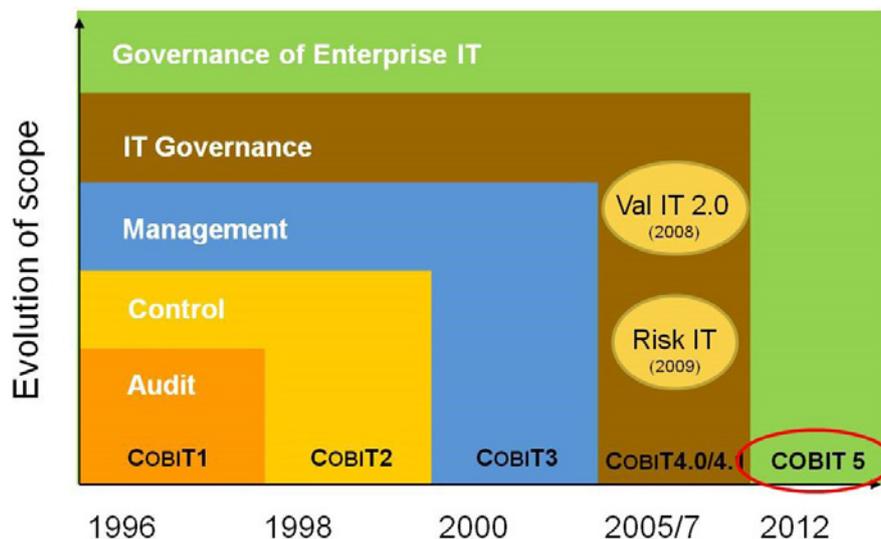


Figure 1 (COBIT © 2012 ISACA® All rights reserved)

- The COBIT 'Audit edition' - In 1996, the first edition of COBIT was released, known as COBIT 1. The focus in this first iteration was squarely on the Auditing of Information Technology, with limited business application, and stakeholders made up primarily of IT Auditors. In essence it was an IT auditing framework, arguably developed by Auditors for Auditors, however was proved to be a very strong foundation for the future. Auditing was the key theme in COBIT 1.
- The COBIT 'Control edition' - In 1998, the second edition of COBIT was released, known as COBIT 2. The focus in the second iteration moved to Information Technology controls, with control practices and activities, as well as an implementation 'tool-set'. However the authorship and audience, although expanded, was still very much the IT Auditing fraternity. Control was the key theme in COBIT 2.

- The COBIT 'Management edition' – In 2000, the third edition of COBIT was released, known as COBIT 3. It was at this time that the ITGI (IT Governance Institute) became the prime publisher of the COBIT framework. The focus in this third edition changed materially, from Audit and Control, to a more business orientation and on the Management of Information Technology in the Enterprise. A set of comprehensive Management Guidelines was included as part of the release. Later, in 2003, COBIT was made available online, which became commonly known as 'COBIT Online'. IT Management was the key theme in COBIT 4.
- The COBIT 'IT Governance editions' –
 - o In 2005, the fourth edition of COBIT was released, known as COBIT 4.0. Precipitating this release were a number of business catastrophes and the bursting of the Information Technology bubble across the globe. The collapse of a number of leading organizations and household names had a significant bearing on the business world, and the regulatory environment in which they operated. Most notable was the release of Sarbanes Oxley, better known as SOX, in 2002 which brought an enshrined focus on corporate governance, and incorporated Auditor Independence and Corporate Responsibility into its compliance requirements. IT Governance was the key theme in COBIT 4.1
 - o In 2007, a revision to the fourth edition was released as a dot release. It was to be known as COBIT 4.1. There were no fundamental changes from COBIT 4.0 to 4.1, but rather minor enhancements, updates and explanations.
 - COBIT 4.1 was a single publication and the framework comprised of the following core content:
 - Framework Processes
 - Control Objectives
 - Management Guidelines
 - Maturity Model
- The COBIT 'Governance (and Management) of Enterprise IT edition' -
 - o In 2012, the fifth and latest edition of COBIT was released, known as COBIT 5. This ground-breaking release consolidated and integrated the COBIT 4.1, Val IT 2.0 and Risk IT frameworks into a single, cohesive framework for the Governance and Management of Enterprise IT. COBIT 5 also drew inputs from the Business Model for Information Security (BMIS) and the Information Technology Assurance Framework (ITAF). Governance and compliance

processes were an essential ingredient added. Governance of Enterprise IT was the key theme in COBIT 5, along with the Management thereof.

- December 2012 saw the release of the supplementary document - COBIT 5 for Information Security.
- June 2013 saw the release of the supplementary document - COBIT 5 for Assurance.

Moving from COBIT 4.1 to COBIT 5

“The most significant change to CobiT® is the reorganization of the framework from being an IT process model into an IT governance framework with a set of governance practices for IT, a management system for the continuous improvement of IT activities and a process model with baseline practices.”

(IT Governance Network)

Some of the major changes in the content of COBIT for release 5 included:

1. The delivery of a single framework, consolidating COBIT 4.1, Val IT and Risk IT and integrating these into one process reference model
2. The introduction of five new Governance of Enterprise IT (GEIT) principles to create a principles based framework, bringing it in to line with Val IT, Risk IT and IOC/IEC 38500 which all use principles in their frameworks and standard respectively.

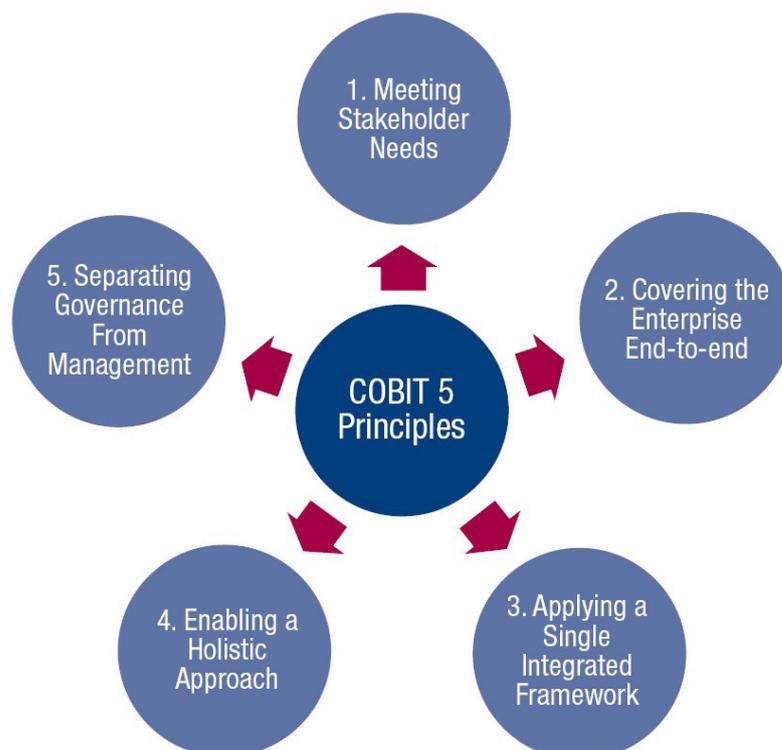


Figure 2 (COBIT® 5, © 2012 ISACA® All rights reserved)

3. A new classification, Enablers, and a stronger orientation and focus on these seven Enablers as core to COBIT 5

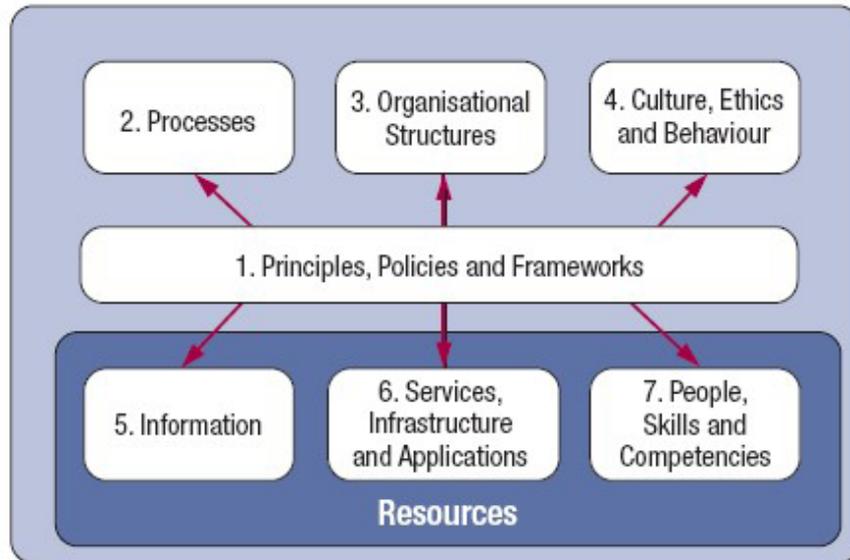


Figure 3 (COBIT® 5, © 2012 ISACA® All rights reserved)

4. Revised Process Reference Model characterized by a whole new domain specifically for Governance
5. New and Modified Processes now covering enterprise activities end-to-end, business and IT, and the definition of five new Governance processes

COBIT 5

With COBIT 5 also came the giant leap, from essentially an individual product, to a comprehensive and growing product family. This COBIT 5 family contains the COBIT 5 business framework itself, along with a series of Enabler and Professional guides. There is also a new, expanded and improved online experience with COBIT 5 online which will unfold through to completion over 2014. And there are more publications in the pipeline too.

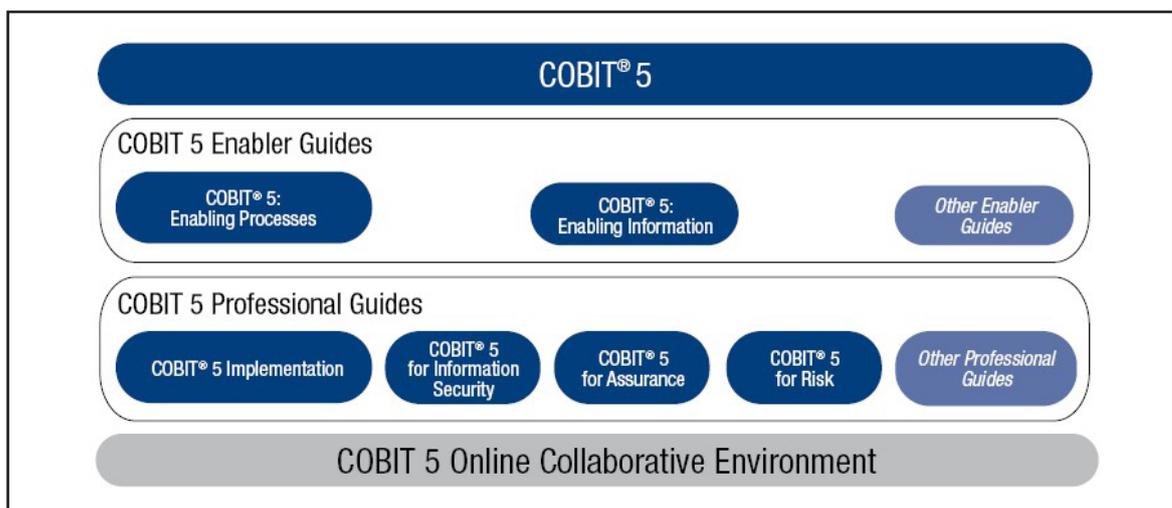


Figure 4 (COBIT® 5, © 2012 ISACA® All rights reserved)

COBIT 6

Let's recap on the historical COBIT Mission –

“To research, develop, publicise and promote an authoritative, up-to-date, internationally accepted IT governance control framework for adoption by enterprises and day-to-day use by business managers, IT professionals and assurance professionals.”

(ISACA)

So where to next for COBIT and what will COBIT 6 look like? There are many who believe that the post millennium thrust of Cloud Computing and the dawn of the concept of all Information Technology being available as Services, will be key drivers in the next iteration of COBIT. Perhaps the forthcoming ISACA publication - Controls and Assurance in the Cloud: Using COBIT 5 - bears testament to this. After all the need for Governance and Management of Enterprise IT , and the complexity thereof, will surely increase as we see Enterprise IT evolving into a diverse portfolio of demand based services provisioned and provided by predominantly external suppliers.

Where alignment to business was a common historical objective of Enterprise IT, and one often heard the term ‘IT as an enabler’ – the future is much more than that. IT is rightfully at the core of the new-age Enterprise, and as such an essential part of the organization’s setting and execution of strategies to achieve long term goals. And arguably the most important long term goal for the Enterprise is value creation. It would therefore be with merit that one may expect that value may emerge as a key theme and objective and become more prevalent in the COBIT releases of the future. Governing and Managing Enterprise IT is effectively becoming Governance and Management of the Enterprise... or at the very least an increasingly integrated component of it.

Conclusions

The journey of COBIT is a story of continuous evolution, transforming from having an audience of predominantly Auditors, Finance and internal IT department staff, to having a voice at Executive and Board meetings around the globe. Its sphere of influence today includes strategy and the strategic direction of Enterprises, a far cry from the audit controls in financial systems of organizations, in its earliest days.



Revolution - *“A dramatic and wide-reaching change in conditions, attitudes, or operation”*

Evolution – *“The gradual development of something”*

(<http://www.oxforddictionaries.com>)

Looking at the definitions above, some would say it's more apt to describe this transformation as a Revolution rather than an Evolution. More important than any descriptor though, is the testament that COBIT has become an essential, critical part of the contemporary organization, where Enterprise governance, and the governance and management of Enterprise IT combine in synergy to assure value creation for the years to come.

Naturally, when one has explored the history of the COBIT business framework, one starts to imagine what the future has in store. We have seen over the last decade, COBIT adapt and align to the foci of value, risk, cost and corporate governance in the business world. Perhaps in releases to come we can expect COBIT to become a leader and catalyst in its own right as information technology continues to morph in to this role for Enterprises today.

Whilst it is difficult to predict how the exponential advances in technology will pervade the Enterprise world, what we do know is that there will be no slow-down in the depth and breadth of this penetration. Similarly, we can be assured of advancements in corporate governance, and other macro factors around the globe, which will shape modern day Enterprises and play a significant role in how they organize and operate. For COBIT to sustain and increase its own value to organizations of the future, whether there is a big shift to Enterprise IT in the Cloud or an emergent set of new regulatory compliance requirements, one thing is clear – it needs to continue to expand its collaborative research and development efforts, and thought leadership, that has served it so well to date. In so doing, we can confidently expect this trend of evolution of the COBIT framework to provide us with releases over the decades to come, which will be relevant, timely, necessary and most importantly, of value to organizations the world over. And if so called, this is one Revolution it is worth being a part of.

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