How COBIT® 5 & BiSL® Address Governance and Management of Information

This paper summarizes the content of the APMG International webinar 'How COBIT® 5 & BiSL® address Governance and Management of Information' on 16 December 2014.

Professor Steven de Haes (Professor at the Antwerp Management School in Belgium) and Mark Smalley (The IT Paradigmologist from the ASL BiSL Foundation) explained how COBIT 5 and BiSL combine to address governance and management of information, which has become a major and complex business issue over recent years.

Introduction

The objectives of the session are to raise more awareness of the importance of good governance and management of information, as well as the benefits that COBIT and BiSL guidance can offer in this area.

It is targeted at Practitioners in the areas of Information Management or IT Management in general, Business Analysts, Enterprise Architects and Information Managers. Trainers and consultants who serve customers in user organizations and IT department will also benefit.

The session – and this summary – comprises three 3 parts:

Part 1 – Enterprise governance of information and related technology
Steven de Haes starts by covering general governance statements and introducing the COBIT Enabling Information publication, showcasing the highlights. This section concludes with the bridge to Demand and Use.

Part 2 – Demand and use of information and related technology
Mark Smalley then explores the Demand and Use concept in further details, followed by an introduction to BiSL and its highlights.

Part 3 Questions and answers
A recording of the webinar and the accompanying slides are available at www.apmg-international.com/webinars (16 December 2014).

'COBIT 5 provides a comprehensive framework that assists enterprises to achieve their objectives for the governance and management of enterprise IT.'

Part 1 – Enterprise governance of information and related technology (Steven de Haes)

1. The 'knowing' is high

Topics such as IT governance and business/IT alignment have been on the top-priority list of organizations the past decade according to research by SIM-CIOnet and "Firms with superior IT governance have at least 20% higher profits ... than firms with poor governance given the same strategic objectives" (Weill and Ross, 2004).

2. Yet the 'doing' is low

Business managers are often still frustrated about the promised value creation through IT not getting achieved. In his Masters program at the Antwerp Management School, De Haes witnesses frequent 'IT bashing', and confronts the participants with the statement "You get the IT that you deserve". IT entails end-to-end responsibility yet business managers often abdicate their duties.

3. Too much IT

Due to the focus on IT in the naming of the concept of 'governance of IT', the discussion is mainly a discussion within the IT function. De Haes calls this ''The Paradoxical Role of IT in Leading IT Governance'.

4. A shift towards Enterprise Governance of IT

De Haes and his colleague Professor Van Grembergen propose using the term 'Enterprise governance of IT', defined as "an integral part of corporate governance exercised by the Board overseeing the definition and implementation of processes, structures and relational mechanism in the organisation that enable both business and IT people to execute their responsibilities in support of business/IT alignment and the creation of business value from IT-enabled business investments".

5. ISO 38500

The international standard for Corporate governance of information, ISO/IEC 38500:2008, takes a similar perspective, proposing six guiding principles for responsibility, strategy, acquisition, performance, conformance, and human behaviour.

6. COBIT® 5

ISACA's COBIT 5 "provides a comprehensive framework that assists enterprises to achieve their objectives for the governance and management of enterprise IT. COBIT 5 enables IT to be governed and managed in a holistic manner for the whole enterprise, taking in the full end-to-end business and IT functional areas of responsibility, considering the IT-related interests of internal and external stakeholders".

7. COBIT 5 principles
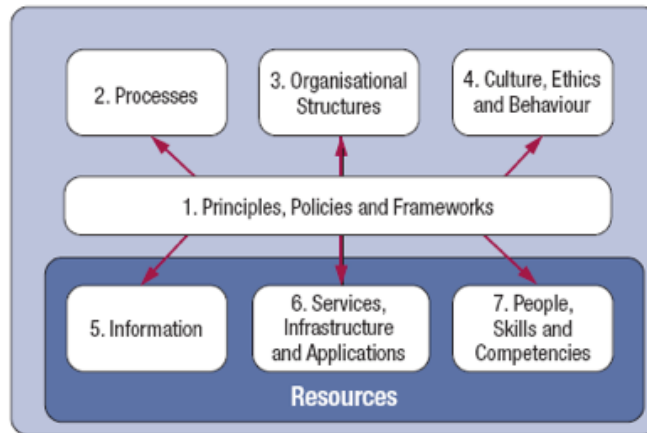
COBIT 5 is based on 5 principles.
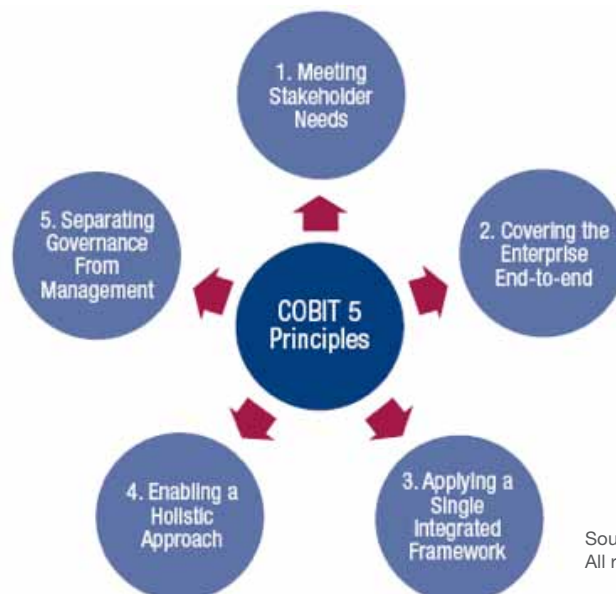
'COBIT 5 offers guidance by helping to identify relevant stakeholders, define appropriate goals, take a life cycle perspective, and adopt and adapt good industry practices.'

8. Goals cascade

Principles 1 and 4, Meeting stakeholder needs and Enabling a holistic approach, are particularly relevant in translating the enterprises goals into IT-related goals that are realized by the seven enablers that COBIT 5 has defined.

9. Enabling processes

COBIT defines 37 processes that enable governance and management of information and related technology. 5 processes define the board's governance role in terms of evaluating, directing and monitoring the organization, and 32 processes define how management fulfils the governance directives while:

- Aligning, planning and organizing

- Building, acquiring and implementing

- Delivering, servicing and supporting

- Monitoring, evaluating and assessing

10. Enabling information

The COBIT 5 publication Enabling Information offers guidance on both the management of the 'information enabler', and common information governance & information management issues.

An international survey amongst more than 900 business and IT managers worldwide has determined that information is the most important enabler, yet the most difficult to implement and manage. This seems to justify the need for guidance in this domain.

11. Guidance for the 'Information Enabler'

As depicted in the illustration below, COBIT 5 offers guidance by helping to identify relevant stakeholders, define appropriate goals, take a life cycle perspective, and adopt and adapt good industry practices.

'Value is only realized when the users use the information systems and apply the information to achieve business benefits.'

## 12. Important Governance/Management Issues

Finally, COBIT 5 elaborates on 7 current issues with respect to governance and management of information:

■ Demand side/use of information

■ Big data, covering three areas:
  - Marketing situational awareness (variety of
  - information)
  - Fraud detection (volume of information)
  - IT Predictive analytics (velocity of information)

■ Master and reference data management

■ End-user computing

■ Disintermediation

■ Regulatory compliance

■ Data privacy

Part 2 – Demand and use of information and related technology (Mark Smalley)

13. Demand and use in perspective

Smalley uses his Demand/Supply – Provide/Consume paradigm to position demand and use in a cycle of activities that – when executed well – create value from investments in information and technology (I&T).
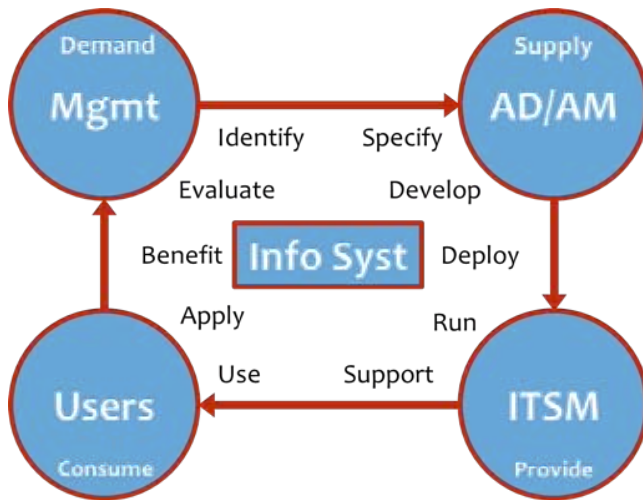
The business is depicted on the left hand side, with the decision makers top left and business operations – where value from products and services are created – bottom left. On the left hand side we have the IT function, comprising intern departments and external providers. This is simplistically split into apps and ops, application development and management (AD/AM), and IT service management (ITSM). And the information systems in the middle, comprising hardware, software and data. Starting top right, decision makers evaluate how I&T are contributing to the organization and identify new ways of getting value from investments in IT. After which they specify and collaborate with IT to create appropriate solutions that are deployed into production where they are kept operational and supported when needed. Up until now, no value has been created. Value is only realized when the users use the information systems and apply the information to achieve business benefits.

‘Information is often misinterpreted, leading to poor business decisions.’

14. Audience poll

"How well do your users use their information systems, apply the information and achieve business benefits?"

15% Don't know

15% Worse than average

70% About average

0%   Better than average

15. ‘Average’ is ‘poor’

The University of Twente in the Netherlands conducted research into use of information systems and reported that between 6% and 10% productivity is lost due IT issues. Slightly more than half of this is related to the systems themselves, while the rest is due to poor use. Surprisingly, managers aren't aware of the productivity loss or don't seem to care. Users don't know where to get help and learn more from co-workers than the service desk.

Sources:

- Ctrl Alt Delete: Lost productivity due to IT problems and inadequate computer skills in the workplace, Van Deursen, A.J.A.M. & Van Dijk, J.A.G.M. (2012)
- Insight into IT skills (Dutch), Van Deursen, A.J.A.M. & Van Dijk, J.A.G.M. (2013)

16. Demand, supply and use of information

Using the illustration below, Smalley dived into what users actually do with information, what is needed to provide it, and the role of IT. Blue depicts business dominance, green information, and yellow IT.
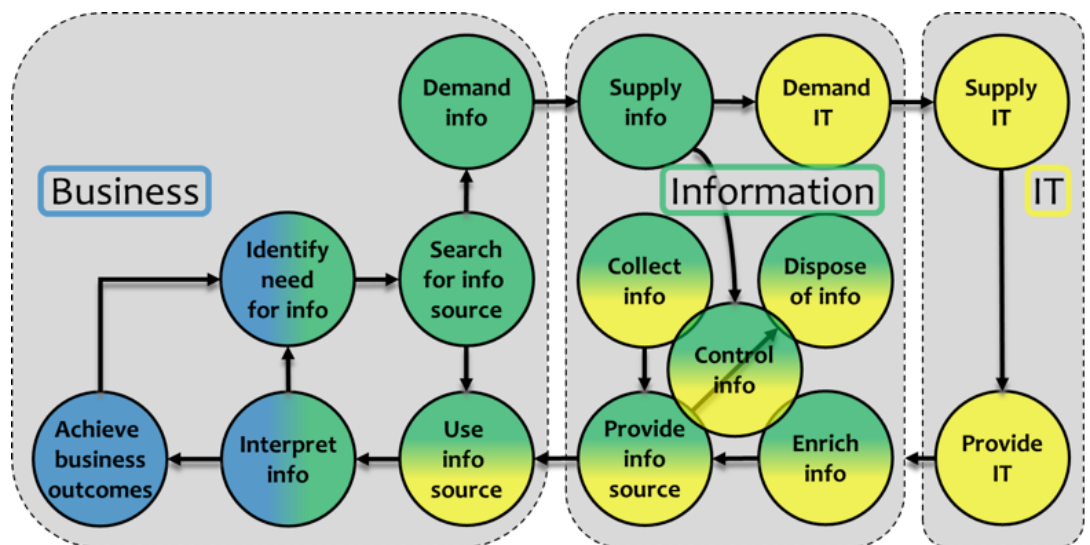
Business

Here you can imagine somebody at work and running into the operational need for information, for instance to serve a customer. They look for a source, use the source and interpret the information so that they can achieve their business goals, for instance serving a customer. It's worth considering how often information is misinterpreted, leading to poor decisions.
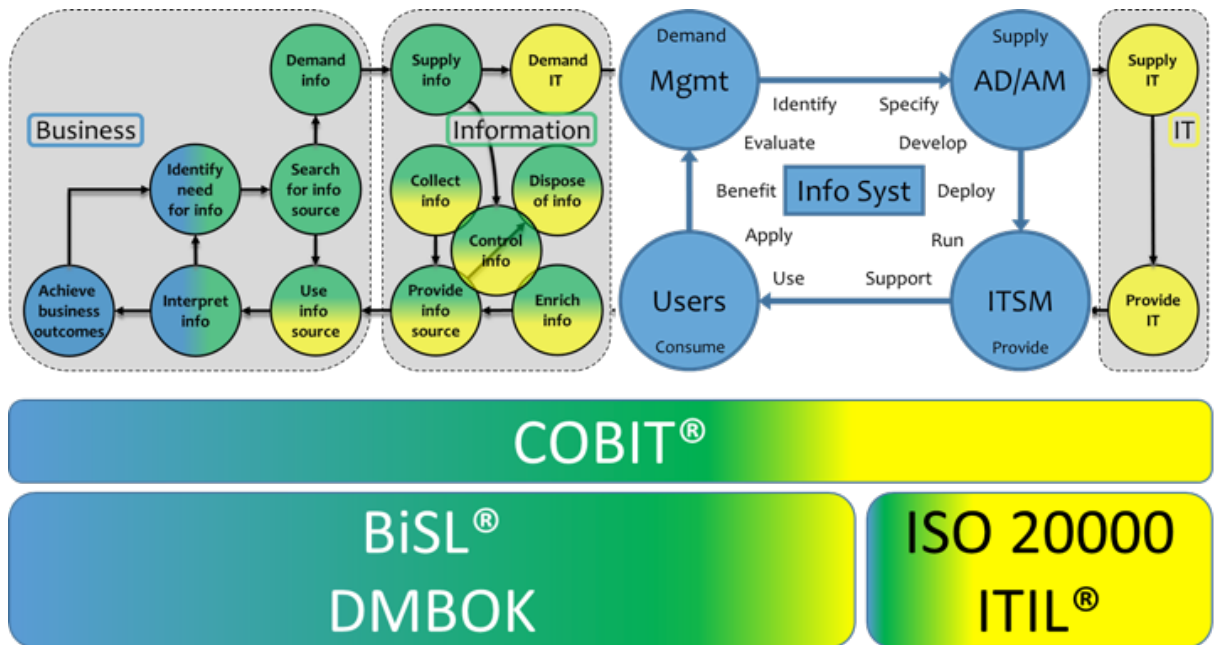
Information

Of course this information has to be made available, and what is needed in order to do that? Information needed to be collected, enriched (e.g. big data and data analytics), controlled in the sense of protecting it and ensuring the quality, and finally, disposed of when it is no longer useful, or even harmful.

IT

And – almost as an afterthought – IT is engaged to provide the automated part. Of course there's a whole world of IT behind the IT column but this presentation focuses on information, not IT.

17. Guidance for demand and use

Combining his two models, Smalley positions COBIT across the enterprise, addressing the business, information and IT. There are many frameworks and standards for IT supply, such as ITIL® and ISO/IEC 20000, but fewer for demand and use. COBIT refers to DAMA's DMBOK and BiSL. DMBOK focuses of the quality of data, while BiSL addresses information management from a process-based perspective.

18. BiSL

The Business Information Services Library not only comprises a process model but also many best practices how the process model has been applied in practice. There is guidance on how to adopt and adapt the framework, and it's supported by a training and certification scheme (APMG International). The not-for-profit ASL BiSL Foundation has a community of users who are keen to share their knowledge, and they have ambassadors who offer local support in 10 countries. BiSL has been around for a while and in the home market in the Netherlands, it's been widely adopted by both public and private organizations. It's also used outside the Netherlands, with one of the more recent adoptions being by IBM in Japan who used BiSL in a consultancy engagement for NTT Data.

19. Benefits

What kind of benefits can you expect when you use BiSL to improve information management? Winners of the annual ASL BiSL Foundation award were interviewed and reported benefits in the business itself (such as the Dutch Police Force reducing criminality by sharing information more effectively); benefits in how the business interacts with I&T (for instance improved business satisfaction with IT at a university due to better involvement and influence), and pure I&T related benefits, such as an insurance company that lowered costs and risks related to I&T.

Business benefits
- Fewer disruptions of service delivery to customers
- Improved business productivity
- Easier integration with another company during merger

Business-I&T benefits
- Better governance and (financial) management of I&T
- Improved business satisfaction with I&T
- Better alignment of I&T with business needs
- Better response to users' problems and requests
- More improvement proposals from users

I&T benefits
- Fewer surprises in project planning
- Projects more often on time and within budget
- Lower I&T costs and risks
- Fewer escalations

20. The BiSL framework

The framework addresses operational, managing and strategic activities related to information management.

Bottom left there are processes that support the day-to-day activities such as ensuring that users use the IS effectively and efficiently. The processes bottom right ensure that new or changed functionality is created. In the middle, resources and quality are kept under control. The processes top right take a longer term perspective and consider information in terms of lifecycles and portfolios. And finally top left, all of the above has to be organized.

23 processes describe the activities that are needed to manage information. Take for example the process Contract management in middle right. Who manages the contract or SLA with the IT department? And how well do they do it? Or another example bottom left, End user support. When users have queries about how to use the information systems in a business context, for instance "on which day of the month do I have to submit my timesheet?", do you have somebody like a super user who is tasked with these questions? And finally, bottom right, Design non-automated IS, who designs the manual procedures and so on that guide and support the use of the IS?
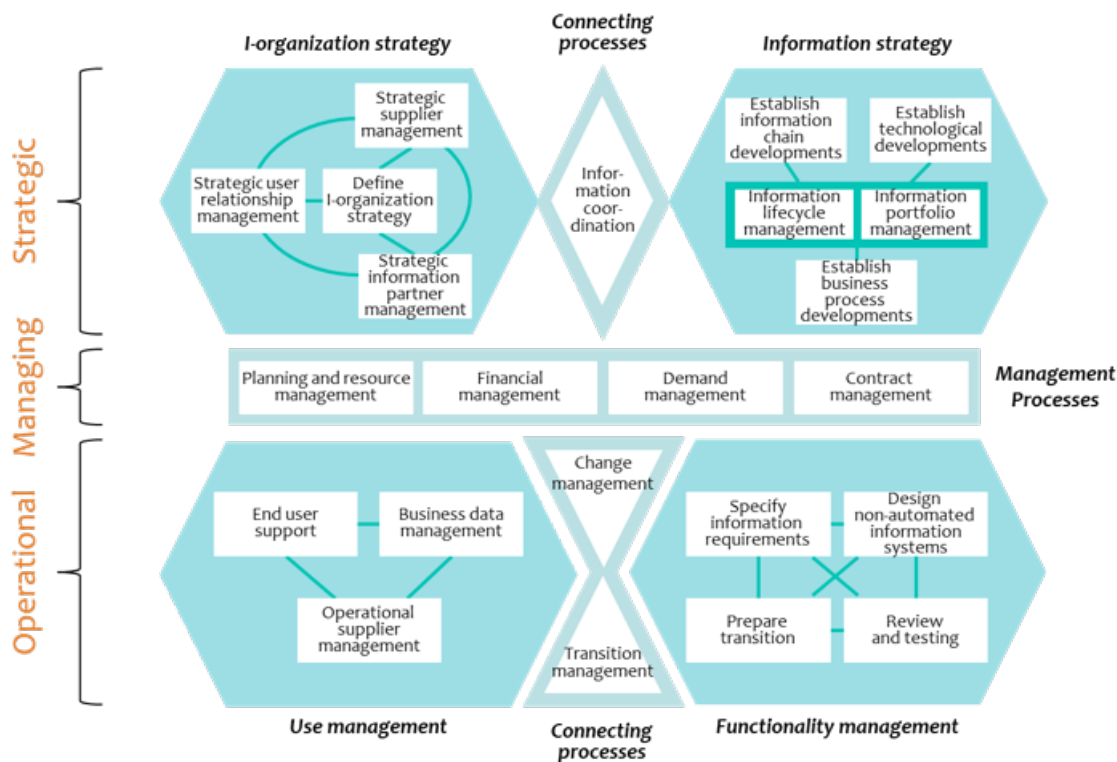
More information is available on the ASL BiSL Foundation website www.aslbislfoundation.org.

21. BiSL and other frameworks

BiSL enhances COBIT by providing detailed guidance in the specific area of information management. Particularly processes. A detailed comparison paper will be published in 2015. BiSL also interfaces neatly with other frameworks. For instance, there's an AXELOS white paper that compares ITIL and BiSL, in which ITIL Chief Examiner Sharon Taylor endorses BiSL as a complementary framework.

22. Risks associated with poor demand and use

As detailed in COBIT Enabling Information, there are considerable risks associated with poor demand and use:

- Badly informed business decisions are hazardous and affect competitive advantage
- Misuse of systems or information undermines the analysis of costs and benefits in the business case
- When information or IT is handled badly, disclosure of sensitive information may accidentally occur
- Poor user training leads to substantial business productivity loss
- Business users abandon poor solutions, causing frustration with IT, unnecessary costs and other risks

'Poor user training leads to substantial business productivity loss.'

Part 3 – Q&A

Q: What is the (global) adoption of COBIT?

A: [De Haes] COBIT's owner, ISACA, has about 100.000 members worldwide and COBIT has a broad international acceptance as the de facto umbrella framework for governance and management of IT.

Q: How to get boards more engaged in treating IT seriously?

A: [De Haes] Board maturity is often not that high, as has been confirmed by research such as 'Boards of Directors and Technology Governance: The Surprising State of the Practice' by Stephen J. Andriole. Boards are often not aware that they should be asking questions about the potential risks but also opportunities related to use of IT in organizations. This is surprising because almost all sectors have become digitized and therefore dependent on technology. As far as how to achieve more board engagement, it is higher in countries that enforce regulations about controlling the IT asset in organizations. In other countries, it helps when there is a burning platform such as a capital-intensive IT transformation programme. I believe that we should invest in educating board members and proactively engage them in discussions.

Q: What's the best way to start to use BiSL?

A: [Smalley] An evaluation of the organization's demand and use capabilities is a good place to start. A detailed BiSL Self-assessment is available (ISBN 9789087537395 and eBook ISBN 9789087537661) as well as a quick scan (Quick scan business information management capabilities, Mark Smalley, www.aslbislfoundation.org)

Q: What about the necessity and opportunity to teach COBIT 5 and Enterprise Governance of IT?

A: [De Haes] Be careful how you frame this topic. At the Antwerp School of Management and University of Antwerp we don't teach COBIT, we have programmes on business and IT strategy aimed to improve the alignment, governance and management of IT. But we acknowledge that COBIT has a very nice library of examples of best practices that organization can consider when doing hands-on implementation of IT governance and management approaches. I'm always a bit hesitant about calling it a COBIT course; it's about improving your governance and management procedures around technology. The same is true when using COBIT with organizations. I would never use the word COBIT but explain that we are improving the value creation from technology and that we are basing this on an internationally accepted framework. So yes, there are many opportunities and necessities to teach around this, but I would never frame it around COBIT but refer to value creation from technology etc.

A: [Smalley] The same applies to BiSL. It's about improving management of information, and by the way, we have BiSL best practices that we use as the 'tools of our trade'. But don't talk to the business about BiSL – talk to them about benefits, costs and risks in their world.

A: [De Haes] In Antwerp we have a Masters programme where we talk for two years about what's inside COBIT, which demonstrates that the richness of the content – and the same applies to BiSL – is very high.

Q: How do you convince an organization to invest in BiSL if they have already invested heavily in ITIL with little to no results?

A: [Smalley] It can only be justified in terms of the business value that the investment generates. What is the problem and is it being caused by something on the IT supply side, or on the demand and use side? If the former is the case, then improving information management (using BiSL) is probably not the answer. If however, a problem is caused by something related to demand (for instance not identifying and specifying the right investments in I&T) or use (such as users taking wrong decisions because they are misinterpreting the information), then there is a potential case for investing in improving information management (using BiSL).

'The BiSL framework addresses operational, managing and strategic activities related to information management.'

Further information

COBIT 5 Enabling Information, ISACA: www.isaca.org/cobit

COBIT 5 qualification scheme: www.APMG-International.com/COBIT5

BiSL, A Framework for Business Information Management, 2nd edition, Van Haren Publishing: http://www.aslbislfoundation.org/en/bisl

BiSL qualification scheme: www.APMG-International.com/BISL

Presenters

Prof Dr Steven de Haes

Associate Professor in Information Technology Governance, Alignment and Value
University of Antwerp - Antwerp Management School
Chairman COBIT 5 IRM Task Force
Academic Director Executive Master of

- IT Governance & Assurance
- Enterprise IT Architecture
- Information Technology Management

steven.dehaes@uantwerpen.be & @stevendehaes
www.antwerpmanagementschool.be

Mark Smalley

The IT Paradigmologist, Smalley.IT
Ambassador-at-large, ASL BiSL Foundation
ASL BiSL Product Champion, APMG-International
BookStore Delivery Partner & Trainer, GamingWorks
Inaugural member, Taking Service Forward
Reviewer, COBIT 5 Enabling Information publication

mark.smalley@aslbislfoundation.org & @marksmalley
www.aslbislfoundation.org

APMG International Regional Offices

GLOBAL HEADQUARTERS UNITED KINGDOM

Tel: +44 (0)1494 452450
Email: servicedesk@apmg-international.com
Web: www.apmg-international.com

EMEA

BENELUX OFFICE
Tel: +31 (0)35 52 31 845
Email: admin@apmg-benelux.com

GERMANY OFFICE
Tel: +49 (0)2133 53 1667
Email: admin@apmg-deutschland.com

ITALY OFFICE
Tel: +39 (0)333 326 6294
Email: info@apmg-italia.com

POLAND OFFICE
Tel: +48 797 705 065
Email: info@apmg-poland   .com

SOUTH AFRICA OFFICE
Tel: +27 (0)21 0033623
Email: nigel.mercer@apmg-international.com

SPAIN OFFICE
Tel: +34 (0)911 829933
Email: info@apmg-espania.com

UK OFFICE
Tel: +44 (0)1494 452450
Email: servicedesk@apmg-uk.com

THE AMERICAS

US OFFICE
Tel: +1 (0)781 275 8604
Email: info-us@apmg-us.com

CANADA OFFICE
Tel: +1 647 980 5234
Email: info-Canada@apmg-international.com

BRAZIL OFFICE
Tel: +55 (11) 3042 4939
Email: Info-brasil@apmg-international.com

CENTRAL ASIA

INDIA OFFICE
Tel: +91 (0)80 6583 6280
Email: info@apmg-india.com

SOUTH-EAST ASIA

MALAYSIA OFFICE
Tel: +6.03.6211 0281
Email: exams@apmg-malaysia.com

CHINA & HONG KONG

CHINA OFFICE
Tel: +86 (0)532 85 78 95 91
Email: admin@apmg-china.com

AUSTRALASIA

AUSTRALIA OFFICE
Tel: +61 (0)2 6249 6008
Email: admin@apmg-australasia.com

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