THE EVOLUTION OF PROJECT AUDITING

2015 Global Benchmark Study Results

Sam C.J. Huibers, MSc EMIA RO CRMA - Study lead and first author

Brett Nan Tie, BEng MBA, Jeroen Bolluijt, MSc CISA CISSP, Nic Coleman, BA BCom - Co-authors

MANAGEMENT INNOVATION CENTRE

Practical Solutions for Complex Management Problems

Supported by

IIA Netherlands

The Project Auditing Global Benchmark Study

The Project Auditing Global Benchmark Study is an initiative of the Management Innovation Centre in co-operation with the Institute of Internal Auditors in the Netherlands and is led by Sam Huibers.

The main objective of the Global Benchmark Study is to understand the importance of project auditing, with a view to obtaining an accurate picture of the current challenges, risks and emerging solutions facing and affecting the profession.

© S.C.J. Huibers, MSc EMIA RO CRMA and Management Innovation Centre
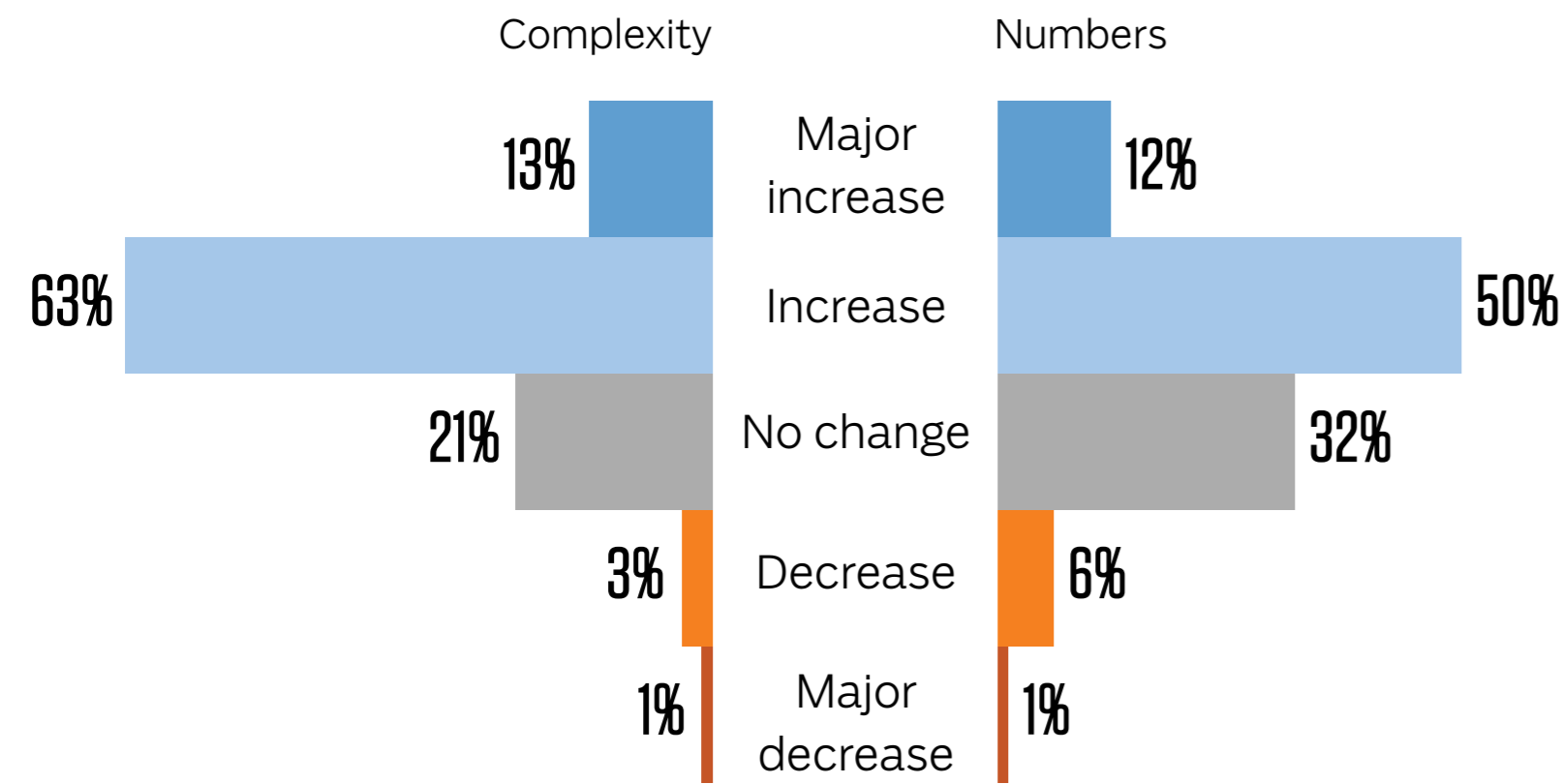
Supported by

MANAGEMENT INNOVATION CENTRE

IIA Netherlands

"I suppose it is tempting, if the only tool you have is a hammer, to treat everything as if it were a nail."

Abraham Maslow,
The Psychology of Science, 1966

Contents

Figure 1: The expected trend in complexity and the total number of projects
Q: What is the expected trend in the total number of projects for your organization over the next 1-2 years? What is the expected trend in the complexity of these projects?

Complexity | Numbers

- 13% Major increase 12%
- 63% Increase 50%
- 21% No change 32%
- 3% Decrease 6%
- 1% Major decrease 1%

Figure 2: The involvement of internal audit in projects
Q: Does your internal audit function audit, advise on or participate in projects?

Yes **90%**
Don't Know **1%** No **9%**

With the vast majority of the internal audit function already involved in auditing projects, it is clear that internal auditors will have a growing role to play in successful project delivery.

1. Executive Summary

In today's fast-changing world, organizations must adapt in order to survive and thrive. Organizational improvement is primarily achieved through projects, which now account for a significant and growing element of economic activity.

Projects enable businesses to respond to increasingly changeable environments, as well as realize their strategic objectives. Failure to manage project delivery risks effectively can have far reaching consequences for organizations, individuals and communities. Therefore, insightful project management is not only about preventing failure and managing the downside, but also about improving economic returns and other benefits. For all these reasons, project audits have an increasingly prominent role to play in the internal audit profession.
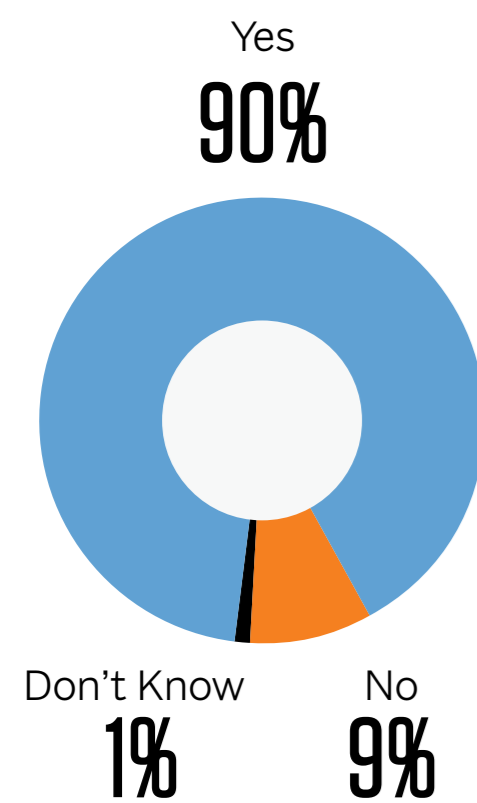
Main findings

With the complexity and volume of projects being audited expected to grow, internal audit functions have responded to the challenge, largely by becoming increasingly involved in project auditing and by doing so in a more pro-active way.

The involvement of internal audit in projects

Observations and the main findings from the Study are presented theme by theme:

- **Theme 1 | Audit Universe:** the project audit landscape is becoming more demanding - projects are increasing in number and becoming more complex at the same time *(Figure 1)*.

- **Theme 2 | Planning:** selection of projects for audit is often done on an ad hoc basis in response to management requests rather than through risk-based planning *(Figure 3)*.

- **Theme 3 | Role of the Auditor:** the role of the auditor is becoming more proactive;
  - Roles are expanding beyond assurance to encompass advisory and participative roles *(Figure 4)*.
  - The auditor is getting involved earlier and throughout the different phases of the project lifecycle *(Figures 2 & 5)*.

- **Theme 4 | Capabilities and Methods:** the need for sufficiently experienced staff and appropriate toolsets is creating a significant challenge;
  - The skills and experience of individuals are key contributors to the effectiveness of the audit.
  - The project auditing frameworks used don't cover all critical risks and controls.

4

Figure 3: Selection of projects for audit
Q: How are projects selected for audits?

47% Risk based annual plan

30% Ad hoc by (senior) management

19% Ad hoc by governing body

4% Ad hoc by regulator

1% Other selected method
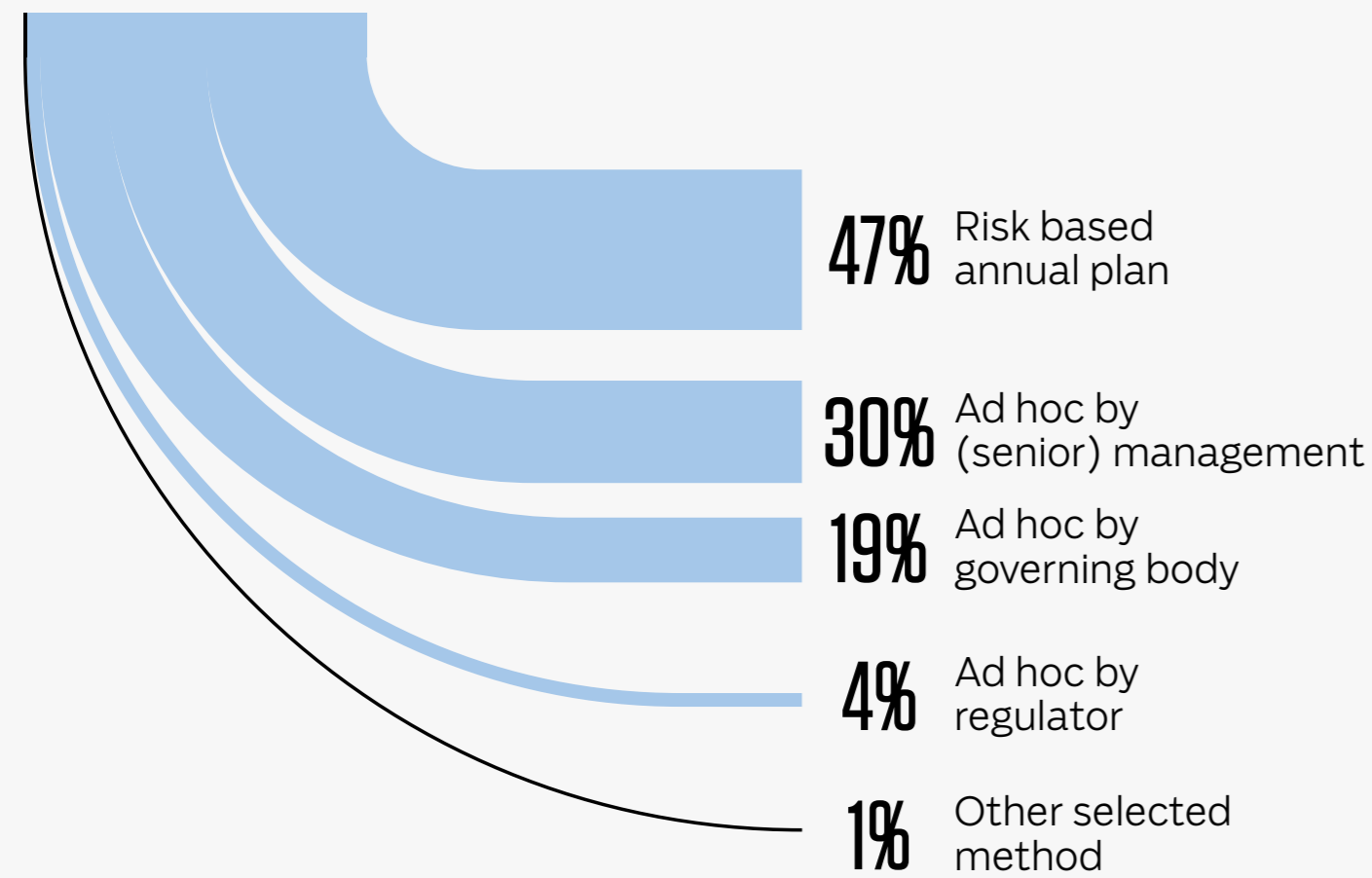
Figure 4: Roles of the auditor
Q: Which of the following roles does your audit function perform in projects?

Assurance roles **100%**
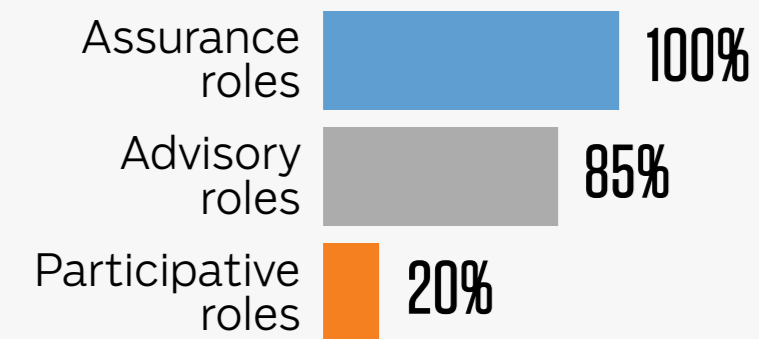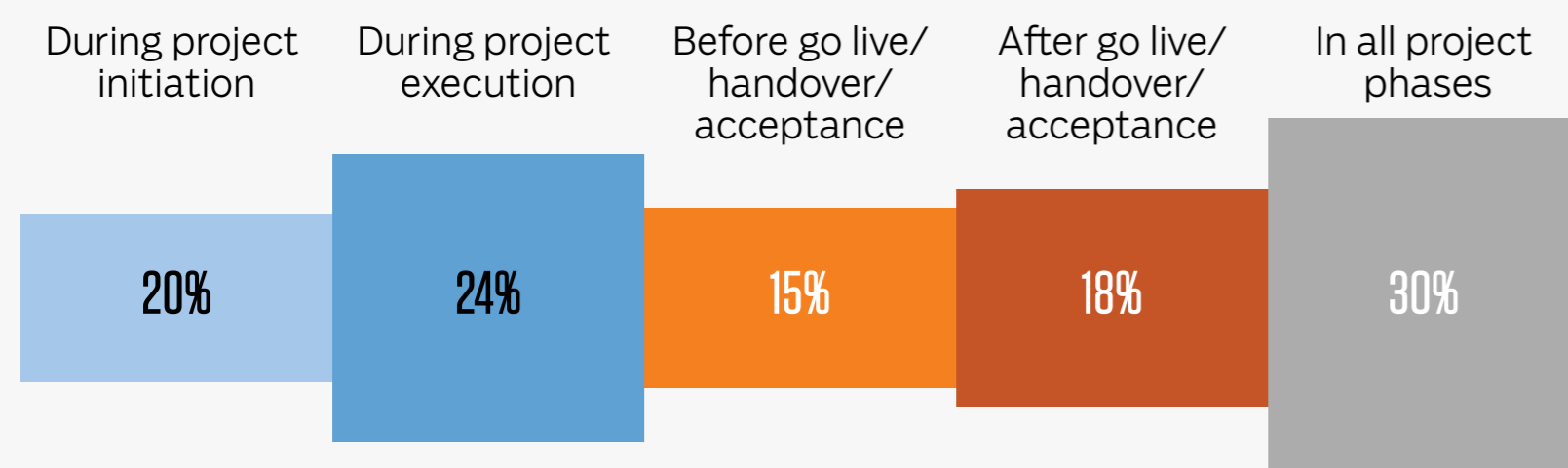Advisory roles **85%**
Participative roles **20%**

Figure 5: When projects are audited
Q: In which phase of the project are project audits usually conducted?

During project initiation	During project execution	Before go live/ handover/ acceptance	After go live/ handover/ acceptance	In all project phases
20%	24%	15%	18%	30%

Rapidly changing and complex environments require not just adaptive processes and adequate tools and techniques, but also a continuous dialogue with senior management.

Project audit blind spots

Internal audit functions believe their project auditing performance and capability is good – which raises the question: *'is good, good enough?'* Project success rates remain low according to research by the Management Innovation Centre. Other research [PwC, 2013] indicates that executives are dissatisfied with the performance of the audit department in project auditing. Good is therefore most definitely not good enough.

The authors believe that the project audit profession needs to address three potential blind spots:

• **Blind spot 1:** the majority of project audits are based on ad hoc management requests rather than systematic identification as part of the risk based audit planning cycle.

• **Blind spot 2:** audit departments place too much reliance on the skills and experience of individuals, with the project auditing frameworks used not covering all critical risks and controls. For example, most auditing frameworks do not include factors that are key to success in the vast majority of projects, such as 'tone at the top' and commitment to change.

• **Blind spot 3:** there seems to be a disconnection between having a successful audit and a successful project. Do project auditors tend to focus too much on proper execution of the audit program rather than project success?

An over arching reflection is that a rapidly changing and complex environment requires not just adaptive processes and adequate tools and techniques, but also a continuous dialogue with senior management.

This Study provides insight into the state of project auditing and the increasing demands being generated by a highly dynamic organizational landscape. For the potential blind spots identified we consider how audit functions can overcome the challenges to maximize their value to the organization.

Based on the outcome of this Study and with the cooperation of the audit profession, the Management Innovation Centre is developing industry-wide project auditing standards.

Figure 6: Capital project and Infrastructure spending: outlook to 2025
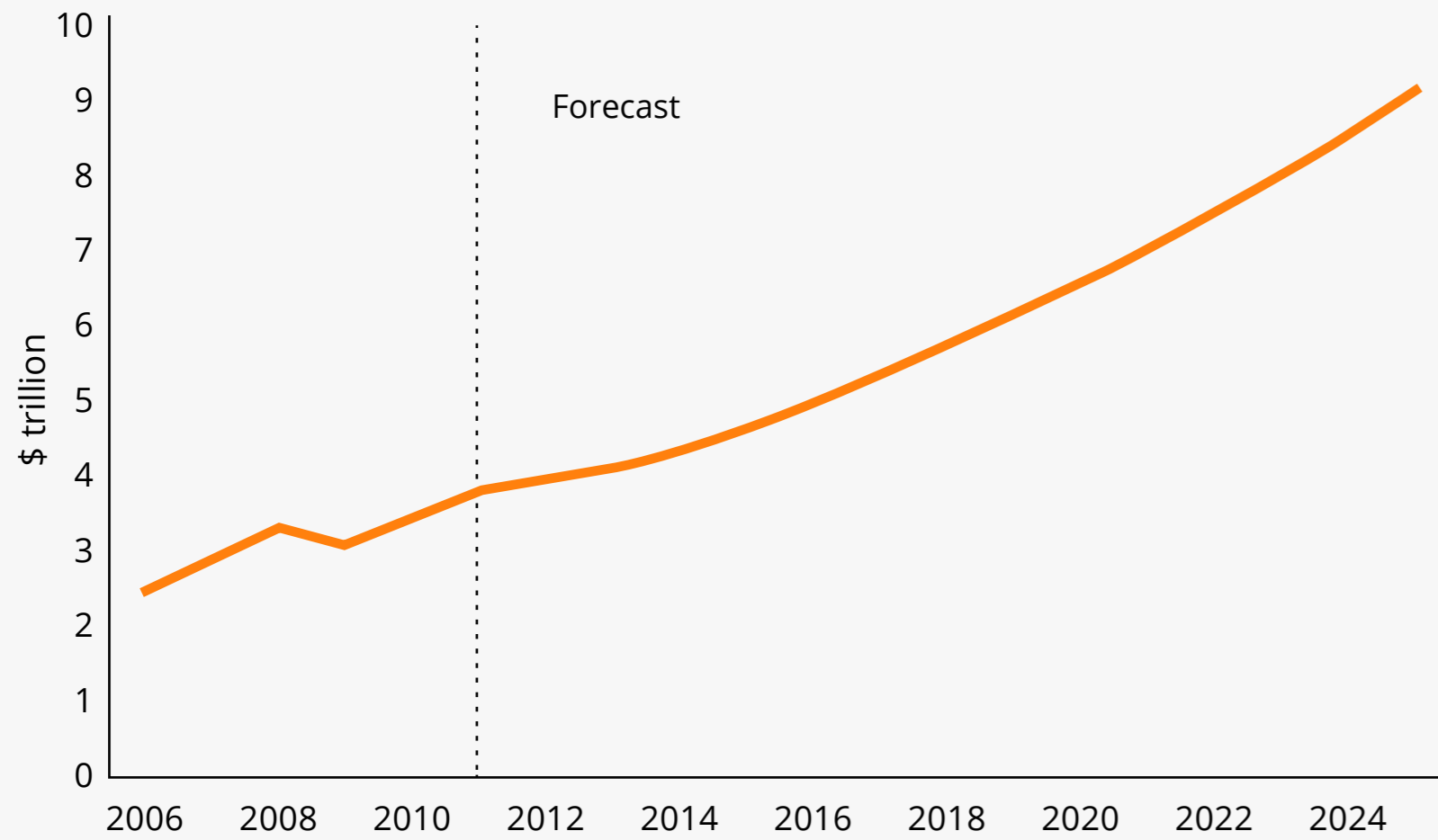
Source: capital Project and Infrastructure Spending: Outlook to 2025 PWC
http://www.pwc.com/gx/en/capital-projects-infrastructure/publications/cpi-outlook/key-findings.jhtml

Figure 7: Project success rates (2002-2014)
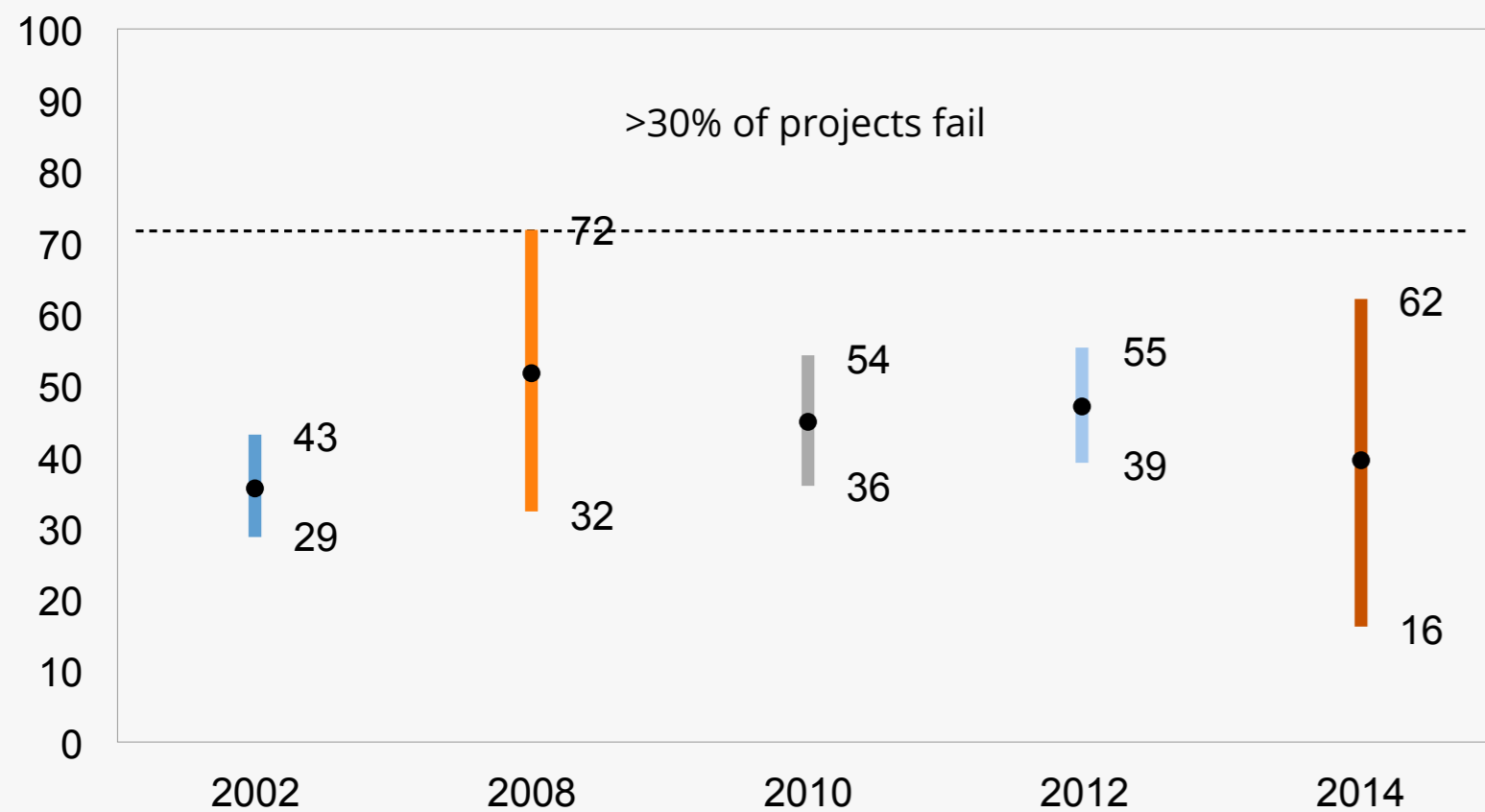
Note that the majority of projects were categorised as IT and business change initiatives. The success scores represent averages across the survey samples.
Source: analysis Project Success Management Innovation Centre (see references).

2. Introduction

With spending on global capital projects and infrastructure expected to more than double to $9 trillion by 2025 *(Figure 6)*, it seems obvious that effective project delivery is critical for any organization wanting to survive, let alone thrive.

But while the project management profession has become highly proficient in managing the intricacies of projects, spawning a plethora of standards, methodologies, software, and training and certification bodies in the process, project success rates remain stubbornly low.

Project Auditing Global Benchmark Study

More than 30% of projects fail to complete on time and to budget, and to meet their original goals *(Figure 7)*.

How project auditors can prevent this from happening while also contributing to project success is a question that is increasingly being asked.

Against a backdrop of a widening interest in project auditing, the IIA Netherlands (IIA NL) joined forces with the Management Innovation Centre (MIC) to develop the 2015 Project Auditing Global Benchmark Study. Led by Sam Huibers, this followed on from the 2013 survey into project auditing trends in the

Netherlands [Huibers and Walrave, 2013], as well as using MIC's own insights and experience in this area.

In 2010, the response to an IIA Netherlands paper offering practical guidance on project auditing revealed the widespread interest of audit professionals in this growing area of internal audit.

The key objectives of the Global Benchmark Study were to understand the importance of project auditing and obtain an accurate snapshot, not just of the profession's current state, but also emerging solutions to the risks and challenges it faces.

In March 2015, our Global Benchmark Study analyzed 453 responses from audit professionals across 22 industries and 43 countries involving more than 2000 audited projects. Follow up focus group discussions were also held, as well as a round table session with various practitioners and experts, to help interpret the Study findings and gain further insights.

Figure 8: The expected trend in the total number of projects over the next 1-2 years
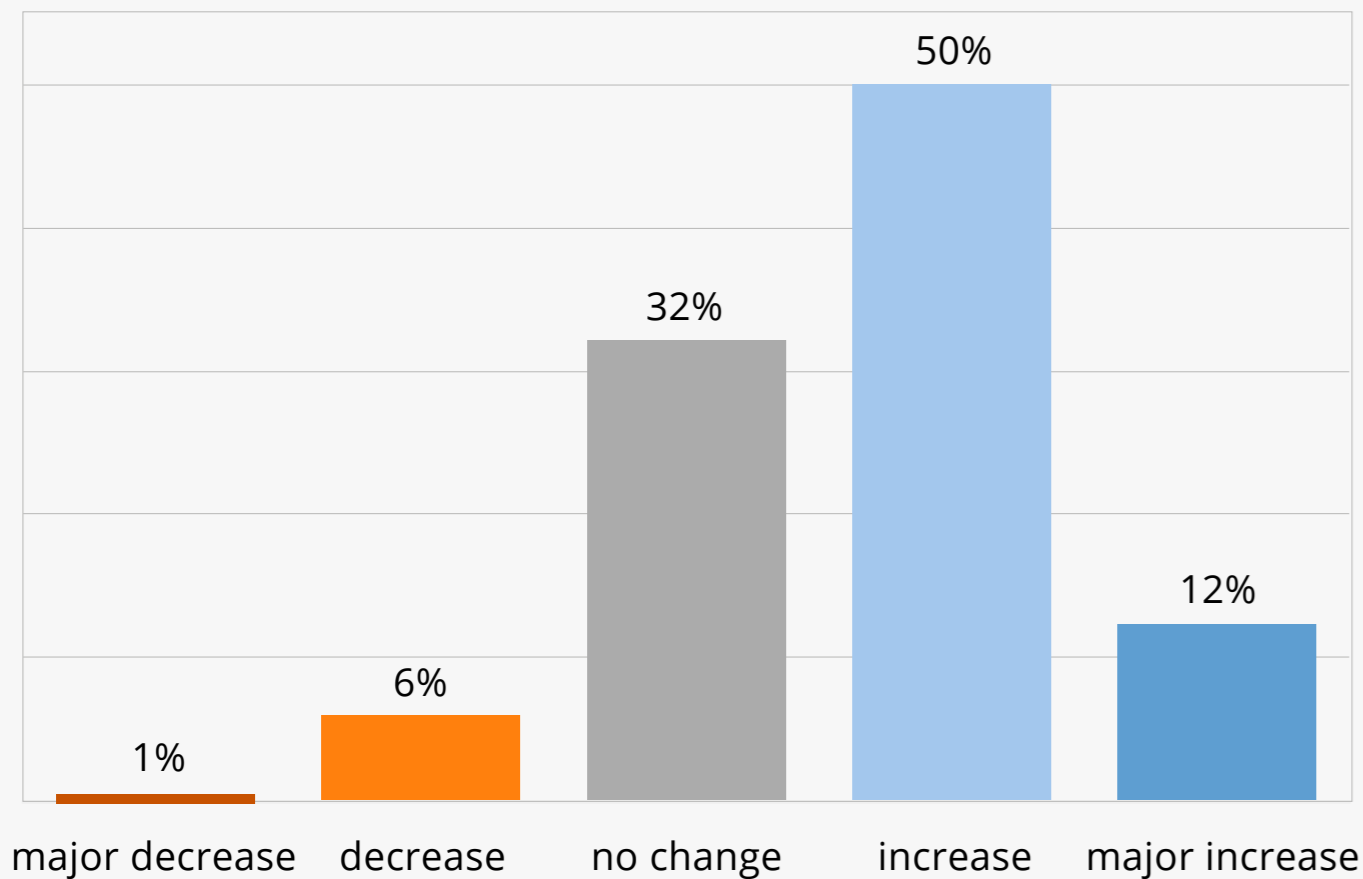*Q: What is the expected trend in the total number of projects for your organization over the next 1-2 years?*

Figure 9: The expected trend in the complexity of projects
Q: What is the expected trend in the complexity of these projects (see Figure 8)

3. Key Findings

Four main areas were covered by the Study, with findings divided into four different themes:

• **Theme 1 | Audit Universe**

• **Theme 2 | Planning**

• **Theme 3 | Role of the Auditor**

• **Theme 4 | Capabilities and Methods**

3.1. Theme 1 | Audit Universe

The project audit landscape is becoming more demanding

We live in an increasingly complex, interdependent and rapidly changing world that constantly generates new and unexpected challenges.

Since projects enable adaptation to this turbulent environment and the realization of strategic objectives, it is imperative that organizations form a strategic view of their major project delivery risks by mapping the changing risk landscape, anticipating challenges and systematically building delivery capability. Failure to effectively manage project delivery risks can have far reaching consequences for organizations, individuals and communities.

Since insightful project management prevents failures and helps manage downsides, as well as generating economic returns – just as good quality management and project assurance can – project audits are playing an increasingly prominent role in the internal audit profession.

There is clearly a need to improve project delivery performance, with over 30% of all projects still failing by not meeting deadlines, exceeding budgets or not delivering to their original goals.

From our findings, it was evident that among respondents there was a strong sense that projects would not only become more numerous (62% expected project numbers to rise) but also more complicated (76% predicted an increase in project complexity) - a consequence it seems of the increasing pace of change and the interconnectedness of organizations *(Figures 8 & 9)*.

Project complexity is defined as the difficulty of delivering a specific project in a particular organization from the perspective of the project manager.

90% of respondents indicated that they already audit, advise or actively participate in projects as part of their audit activities *(Figure 10)*.
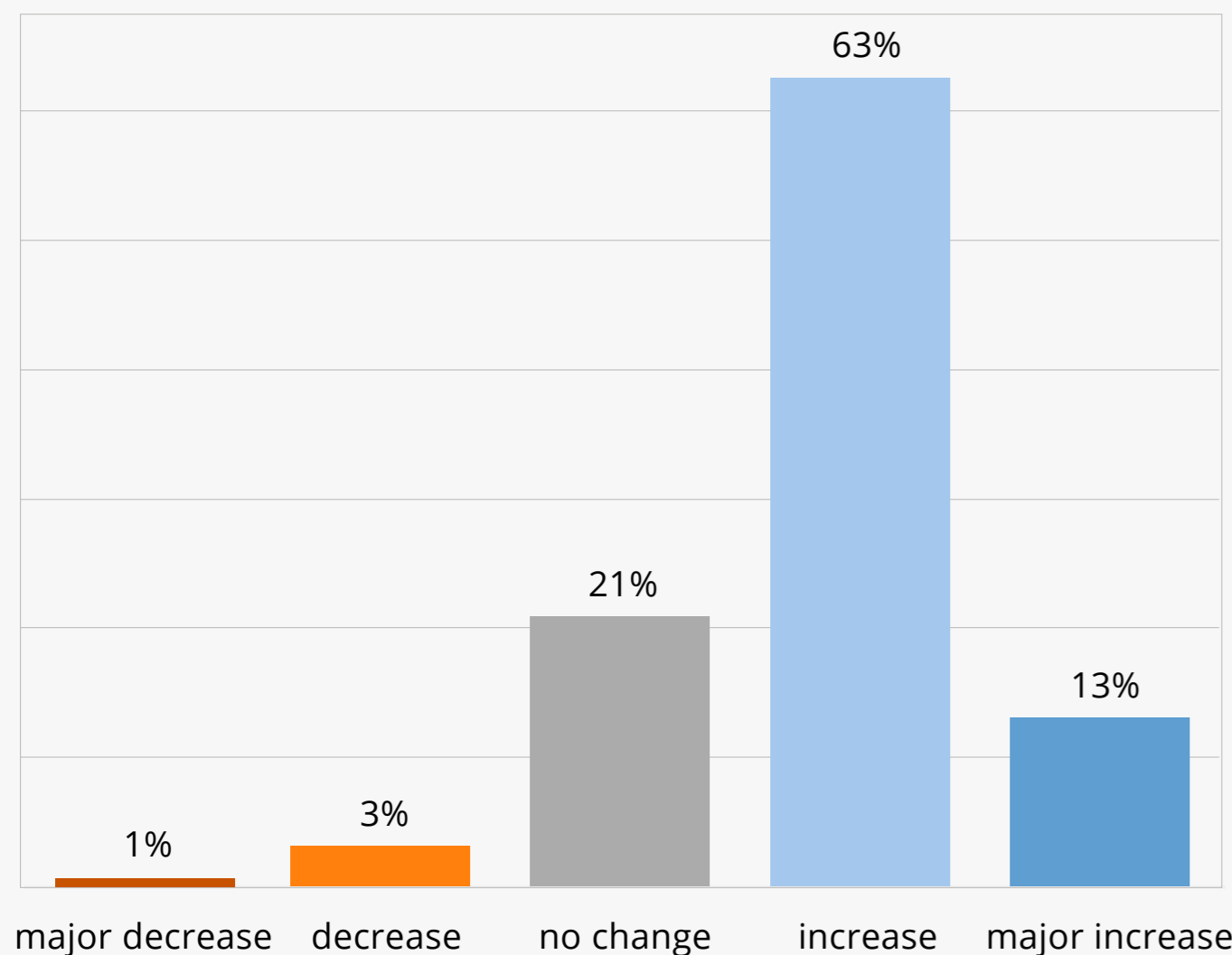
7

Figure 10: The involvement of internal audit in projects
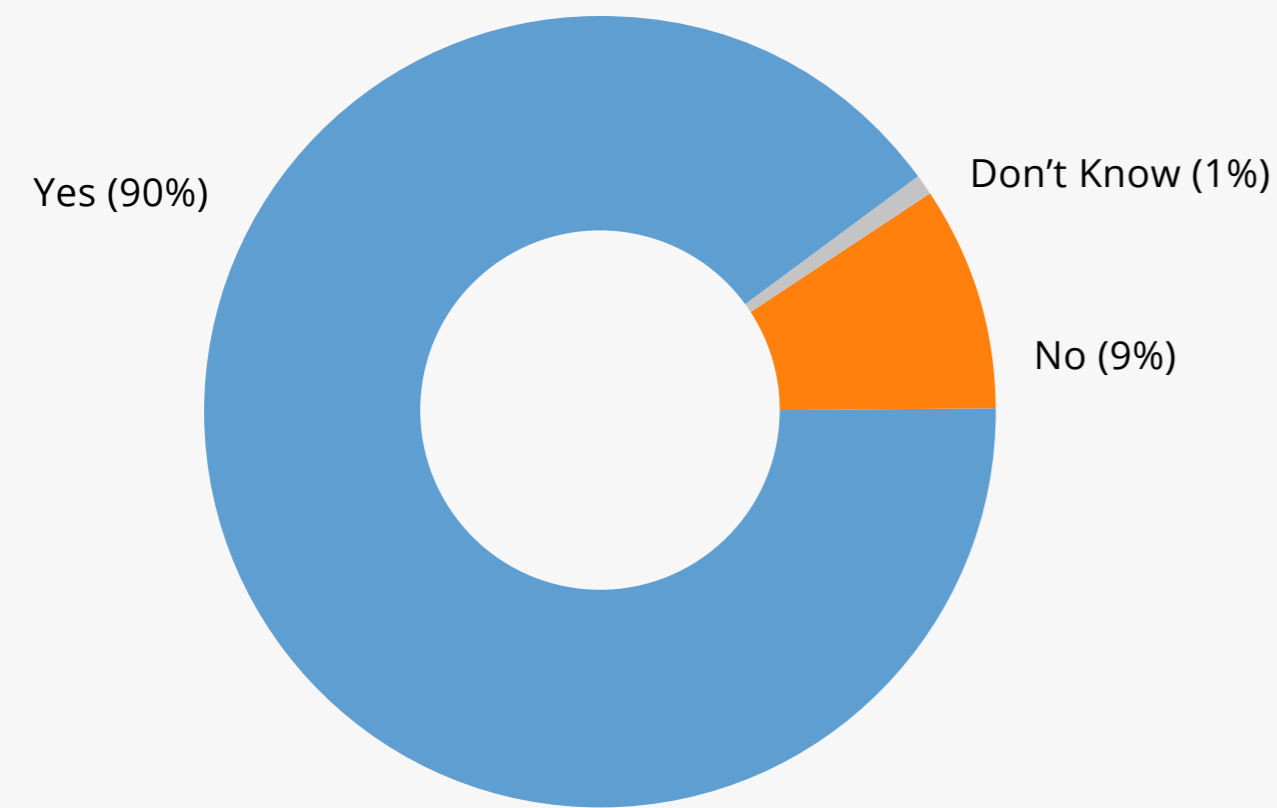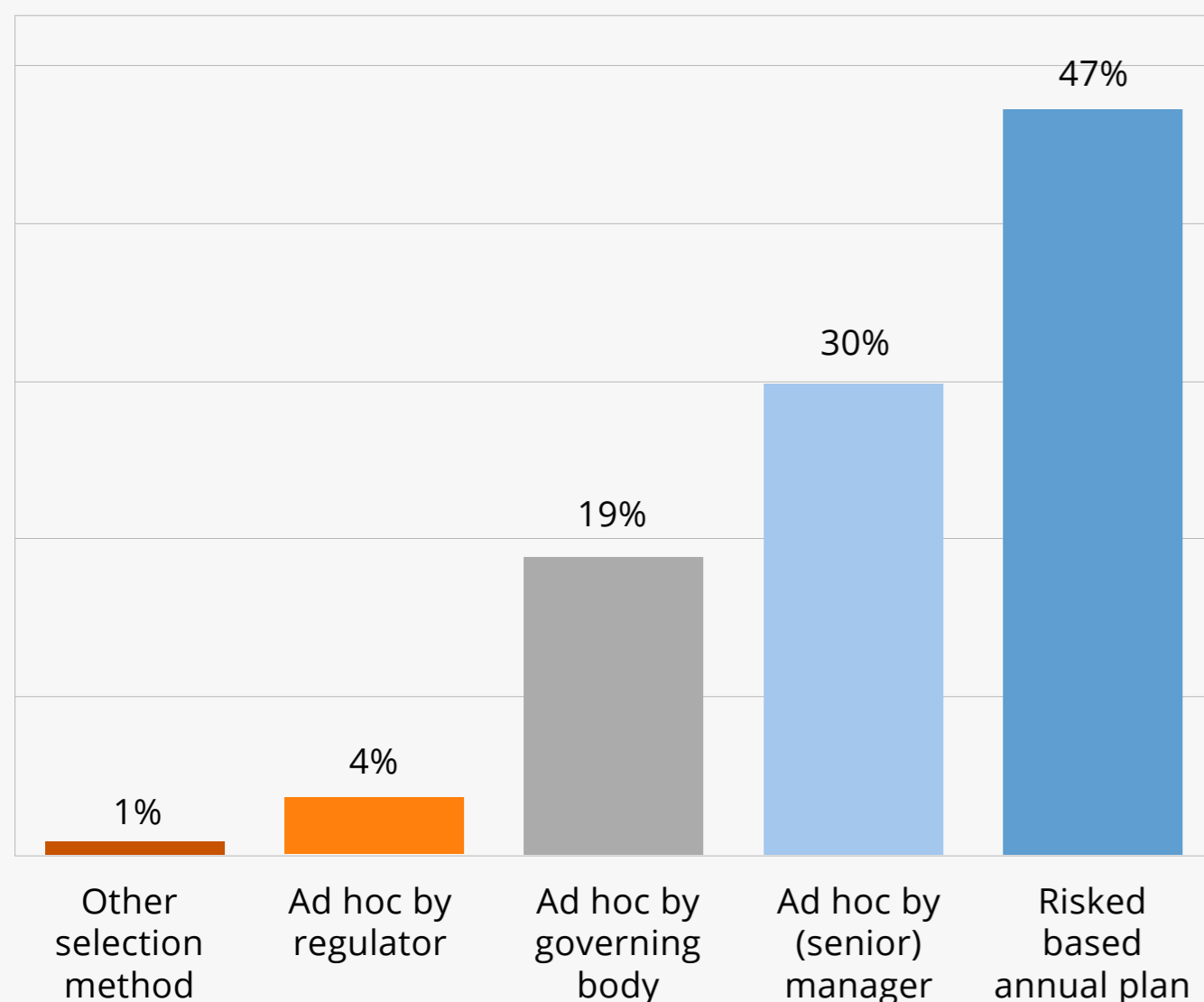*Q: Does your internal audit function audit, advise on or participate in projects?*

Yes (90%)
Don't Know (1%)
No (9%)

Figure 11: Selecting projects for audit
Q: How are projects selected for audit?

Other selection method	Ad hoc by regulator	Ad hoc by governing body	Ad hoc by (senior) manager	Risked based annual plan
1%	4%	19%	30%	47%

Internal audit functions will have an ever more important part to play in successful project delivery.

With the vast majority of the internal audit functions surveyed already involved in auditing projects, it is clear that internal auditors have a growing role to play in successful project delivery.

3.2. Theme 2 | Planning

Risk-based planning is not applied in many instances

With more projects than there is capacity to audit them, the number of projects that can actually be audited is to a large extent restricted. So using the right criteria to select the right audits is key to adding the most assurance and value to the organization.

However, there seems to be a lack of structure in the way projects are chosen for audit, often seemingly based as much on ad hoc requests from senior management (30%) or a governing body (20%), rather than any deliberate risk-based selection process *(Figure 11)*.

A thought

One potential blind spot revealed by the Study is that the majority of project audits are based on ad hoc requests rather than being systematically identified by the audit department.

However, the authors believe that if projects were made an explicit part of the audit universe and project audits embedded into the risk-based planning cycle of the internal audit function, a portfolio-based technique that includes both value (contribution to objectives) and risk components could be used for selection.

As priorities in a dynamic and complex organizational context may well change over time, this will require a continuous dialogue with senior management, as well as the flexibility to adapt the audit plan throughout the year.

In a rapidly changing environment there is ever more need for an adaptive planning process. New projects may be initiated or timelines of existing projects may be different from those anticipated at the start of the year.

8

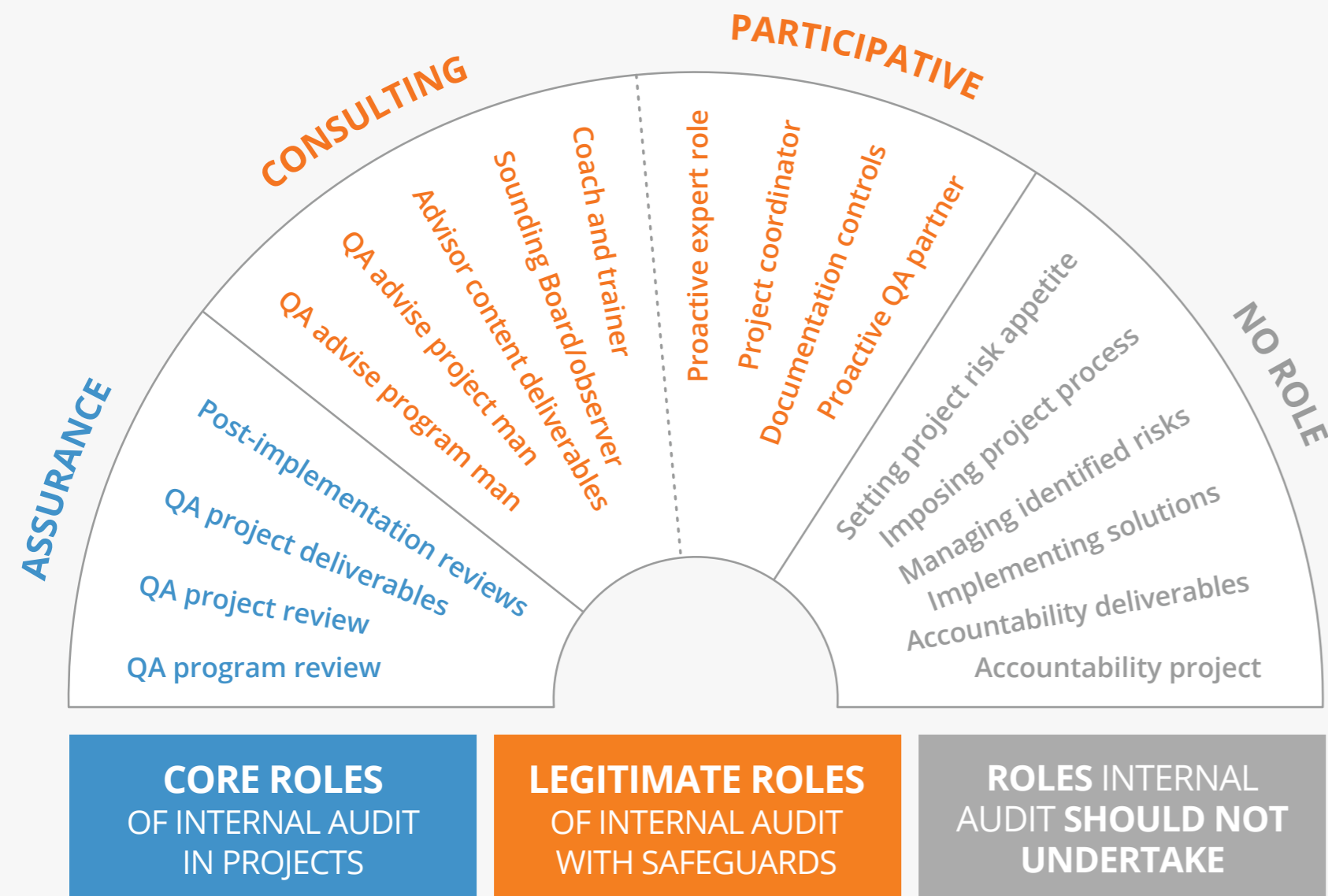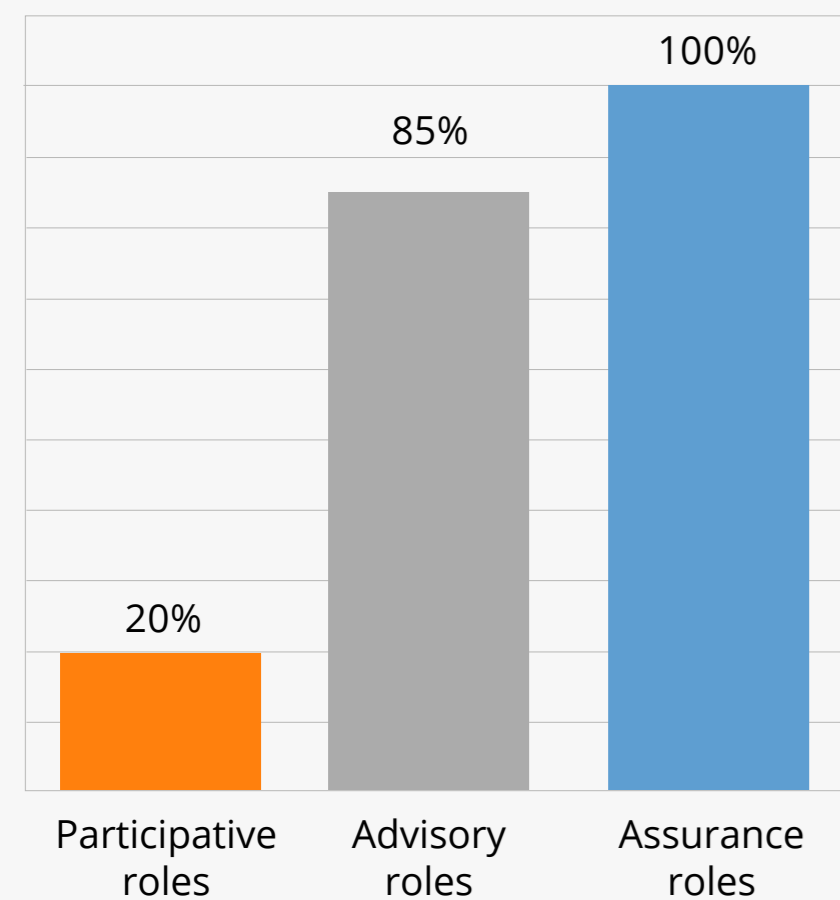Figure 12: The roles of the auditor in projects [Huibers / IIA NL, 2010, 2013]

CORE ROLES OF INTERNAL AUDIT IN PROJECTS	LEGITIMATE ROLES OF INTERNAL AUDIT WITH SAFEGUARDS	ROLES INTERNAL AUDIT SHOULD NOT UNDERTAKE

Figure 13: Roles of the auditor in projects
Q: Which of the following roles does your audit function perform in projects?

The auditor's role is being redefined, as it shifts from one of traditional assurance to becoming more involved as a proactive partner in projects.

3.3. Theme 3 | Role of the Auditor

The role of the auditor is becoming more proactive

Role of the auditor

We researched three role types that internal auditors can legitimately play in respect of projects [Huibers / IIA NL, 2010 and 2013] *(Figure 12)*:

- **Assurance roles:** the traditional role of providing assurance through project reviews and audits, with the auditor conducting independent reviews of the governance and controls of the project (e.g. they ensure audit compliance against project methodology and review the design and effectiveness of project deliverables).

- **Advisory roles:** the auditor uses their professional knowledge to provide advice to the project, but they are not directly involved in the execution of it (e.g. they advise on project setup, and act as subject matter expert, sounding board or coach).

- **Participative roles:** the auditor takes an active role in the execution of the project (e.g. they document controls or conduct risk assessments).

Advisory (consulting) and participative project roles are both legitimate and can be performed by the

internal auditor, with safeguards in place and if certain preconditions are met. The most important of these is that the auditor should not have managerial accountability in any area of the project, from setting the project risk appetite initially through to the final embedding of deliverables in the organization.

The Study revealed that in most cases internal audit functions have expanded beyond the traditional assurance role.

So, though providing assurance through project reviews and assessment remains the core role of internal auditors, our study found many (85%) who were also acting in advisory roles and, to a lesser extent, actually participating in project delivery (20%) *(Figure 13)*.

Phases of the project

The auditor becomes involved earlier in the project

Independent of the project methodology used, projects are typically distinguished by the following phases – initiation, execution, prior to go-live, post implementation – though the names may differ.

The Study also found that audits are being conducted across the project lifecycle, not just at the end, with 30% of respondents indicating they perform project audits during all phases of the project *(Figure 14)*.

Figure 14: Phases of the project in which project audits are conducted
Q: In which phase of the project are project audits usually conducted?

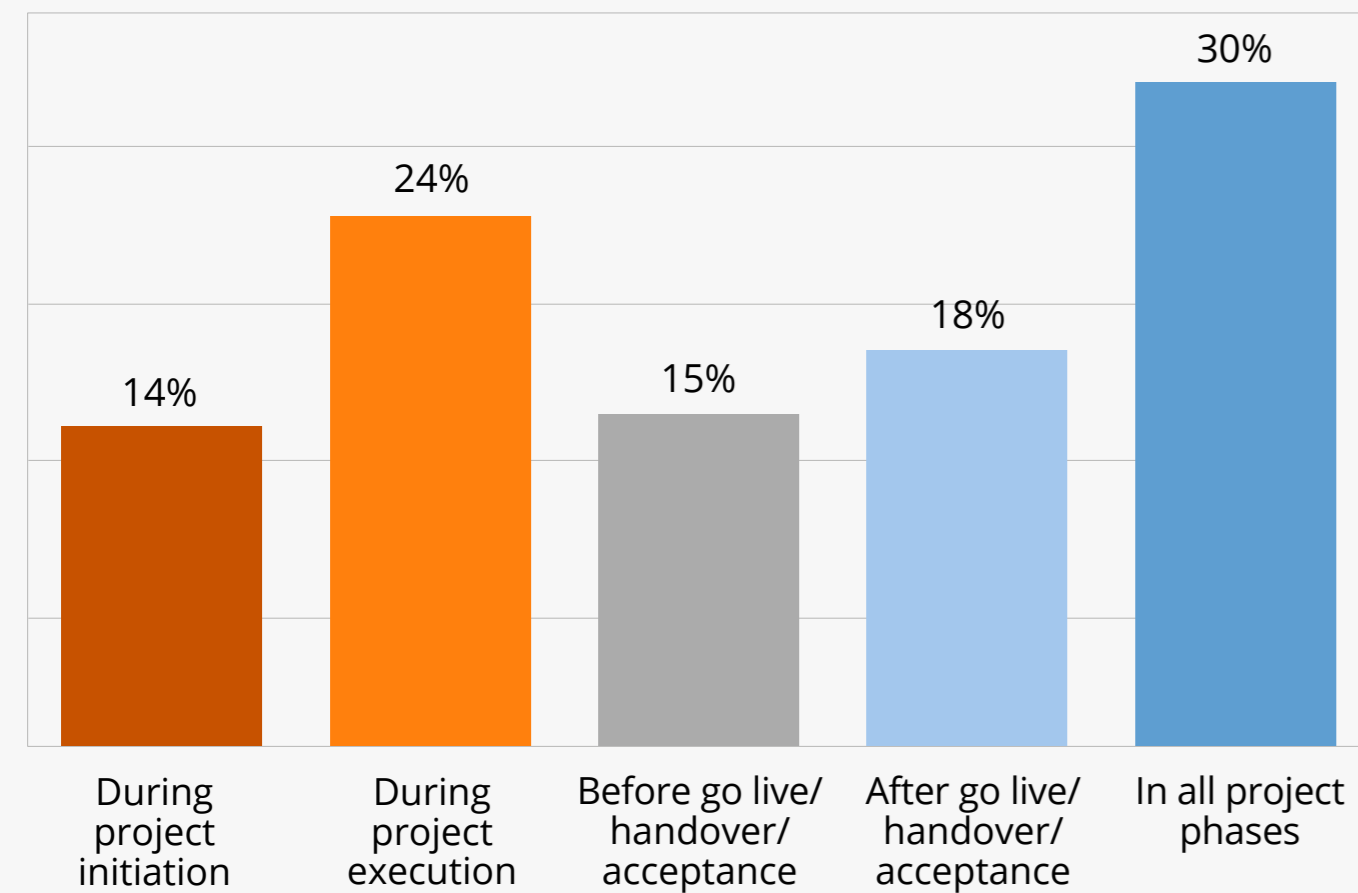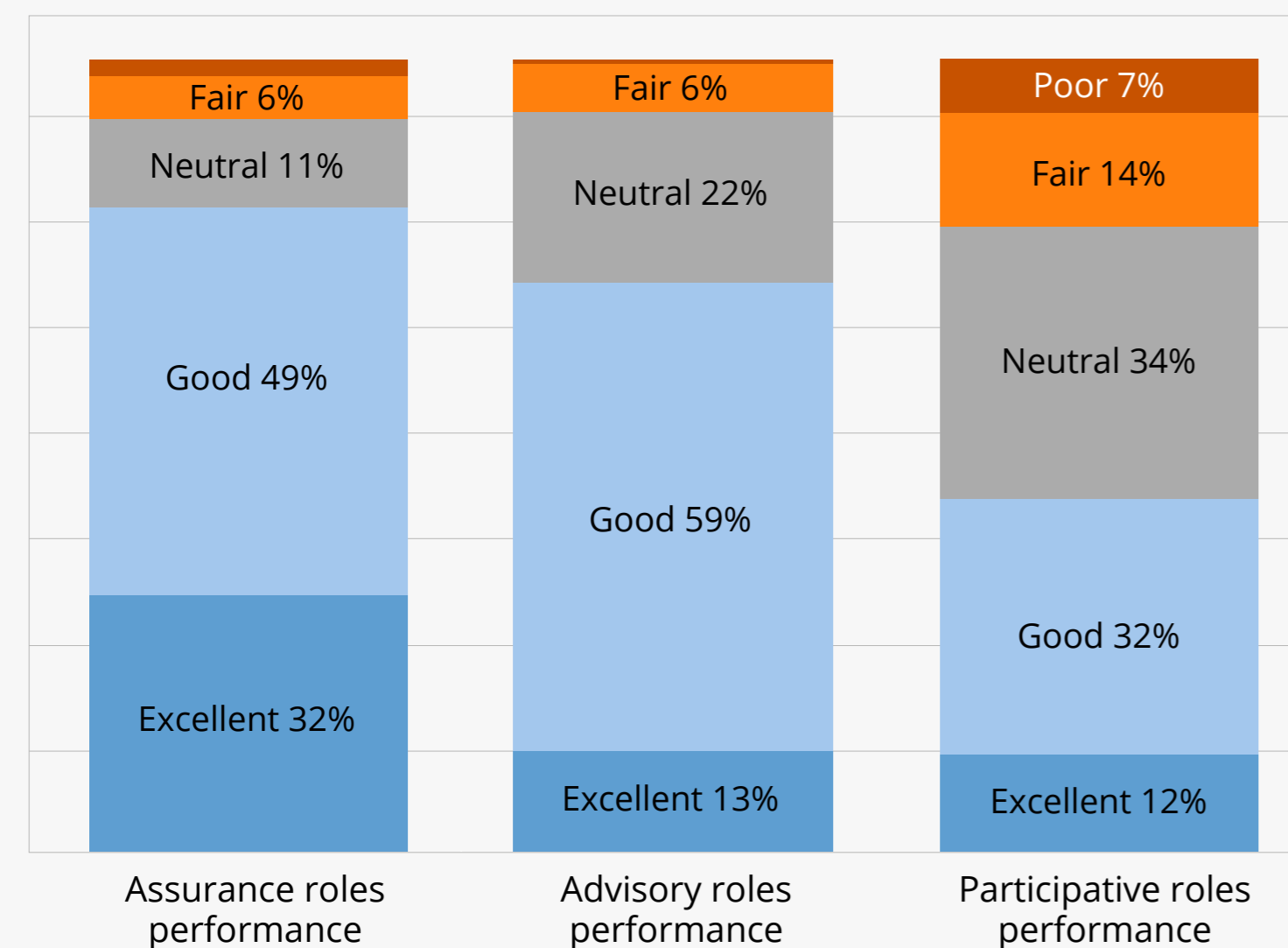| During project initiation | During project execution | Before go live/handover/acceptance | After go live/handover/acceptance | In all project phases |
| 14% | 24% | 15% | 18% | 30% |

Figure 15: Current performance of the audit function
Q: Please rate the current performance of your audit function in each of these project audit roles

Assurance roles performance: Fair 6%, Neutral 11%, Good 49%, Excellent 32%

Advisory roles performance: Fair 6%, Neutral 22%, Good 59%, Excellent 13%

Participative roles performance: Poor 7%, Fair 14%, Neutral 34%, Good 32%, Excellent 12%

Auditors may have greater impact on a project through their earlier involvement, rather than leaving it until later when lessons learned can only contribute to future projects.

At the round table during which the results were discussed, participants confirmed that their earlier involvement in project and greater diversity in their roles is being driven by internal auditors themselves and the management of their organizations, who want internal audit to contribute more proactively to project success.

Satisfaction

Generally, there appears to be broad-based satisfaction with project auditing performance. Overall, 81% of respondents rated their accomplishments as either 'good' or even 'excellent' for 'assurance' and 72% for 'advisory' roles, although that figure fell to 44% for their 'participative' efforts *(Figure 15)*.

However, such self-congratulation doesn't quite square with the low success rates among major projects.

Also, a survey by PwC showed that the top four areas of highest relevance and least satisfaction for executives are all related to the project audit discipline. "Internal audit continues to struggle to maximize its impact, particularly in areas outside of the function's traditional focus." [PwC, 2013].

The question this raises for project auditors is therefore; *'Is good, good enough?'*

A thought

To maximize value to a business, the auditor could take on new advisory and participative responsibilities, which would redefine their role from just providing traditional assurance to one of becoming a much more proactive partner in projects.

The involvement of different supportive departments such as Risk Management, Compliance and Internal Control, in the monitoring of the governance of the organization, as well as the maturity of their activities, can play an important part when assigning different roles across the so-called 'lines of defense' [The IIA, 2013]. The first step in effective cooperation is to define and agree with the executive management roles and responsibilities in the organizational governance structure. Then, at a program/project level, roles can be assigned to individuals from different departments who are tasked with monitoring, including internal audit.

Often, auditors are also becoming more involved with projects earlier and at different phases throughout the project lifecycle. In line with the round table feedback, the authors contend that auditors have a greater impact on project success through their earlier involvement, rather than leaving it until later when lessons learned can only contribute to future projects.

10

Figure 16: Main types of projects
Q: How important is it to include the following elements in the project audit framework (by type of project audited)?

Average Ranking (lower score is more important)

- 🟦 Project methodology (e.g. Prince 2)
- 🟧 Competencies/skills
- 🟦 Change management
- ⬜ IT framework (e.g. Cobit)
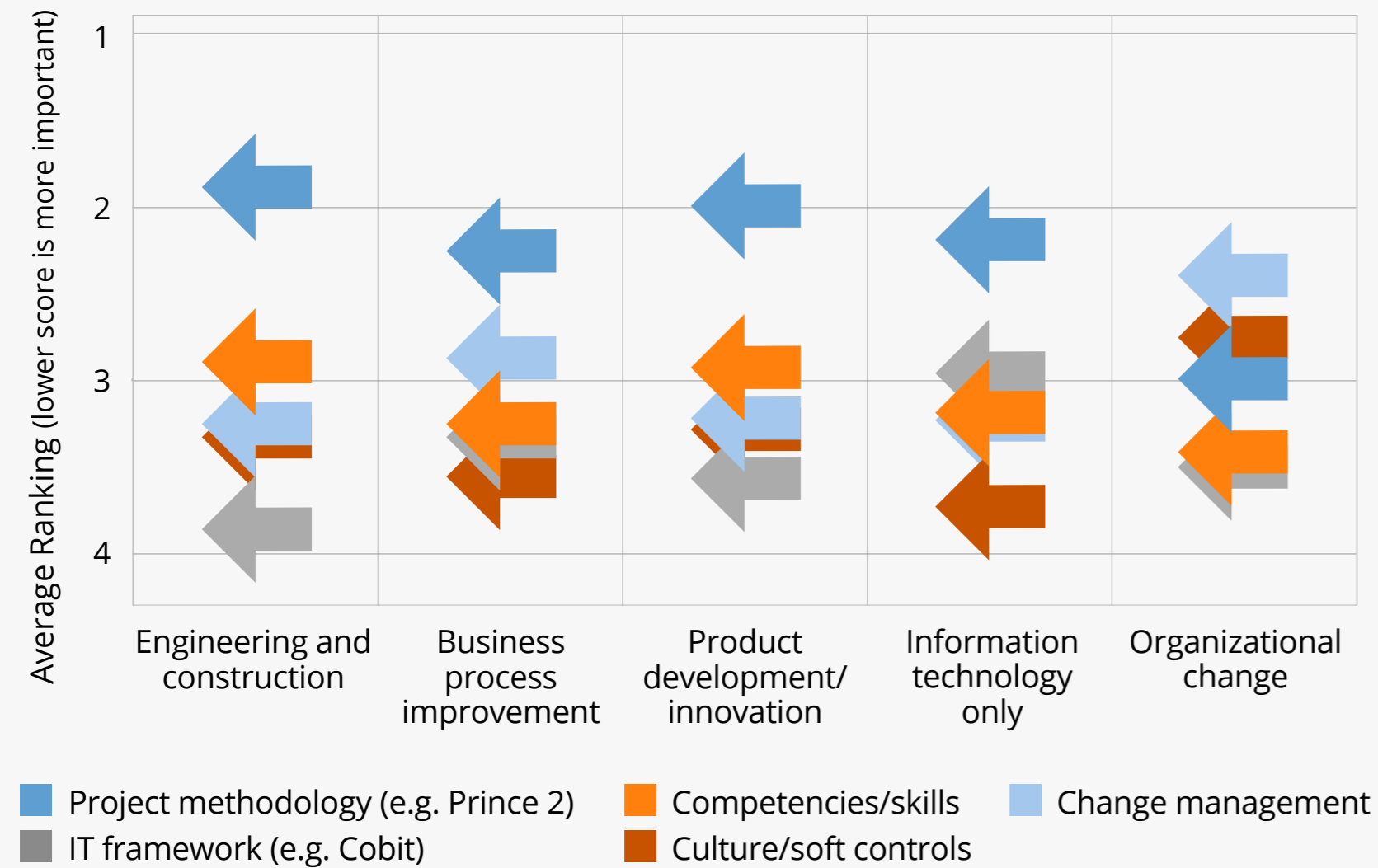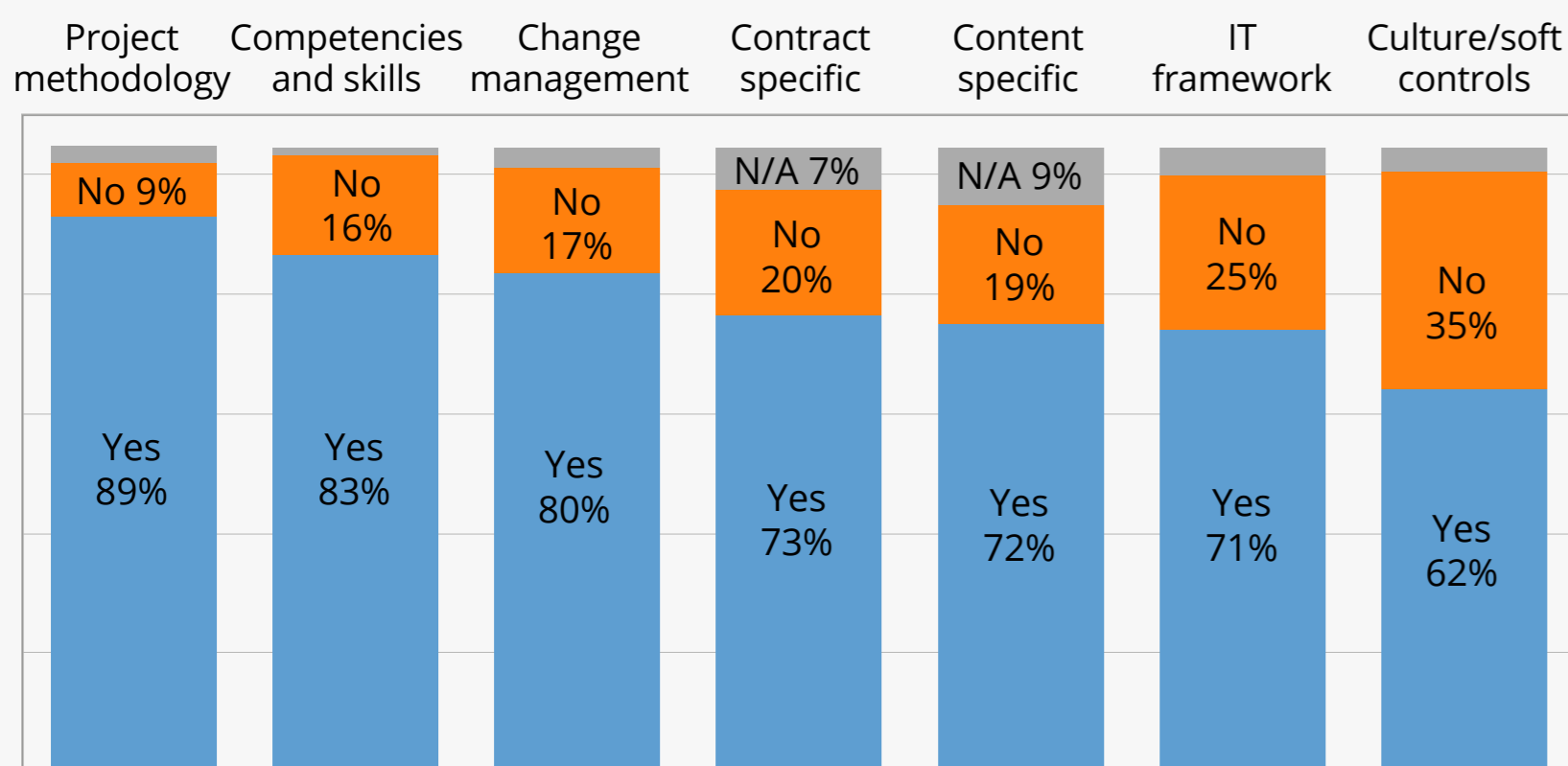- 🟫 Culture/soft controls

Figure 17: Project auditing frameworks rely heavily on project methodologies
Q: Are the following elements included in your project audit framework?

Project methodology	Competencies and skills	Change management	Contract specific	Content specific	IT framework	Culture/soft controls
No 9%	No 16%	No 17%	N/A 7%	N/A 9%	No 25%	No 35%
			No 20%	No 19%		
Yes 89%	Yes 83%	Yes 80%	Yes 73%	Yes 72%	Yes 71%	Yes 62%

Audit approaches that focus solely on project methodologies may actually increase project risk by over emphasizing compliance, rather than what is needed for project success.

3.4. Theme 4 | Capabilities & Methods

Appropriate staffing and available toolsets are a significant challenge

There seems to be an inherent inability in standard auditing frameworks to effectively deal with the transient nature of major projects and their propensity for significant change throughout their lifecycle.

The Study found that current audit frameworks are not well suited to complex projects as they rely too heavily on checking compliance against a project methodology (e.g. Prince 2). Consequently, most standard project methodologies and in-house methodologies tend to offer only a 'one-size-fits-all' approach.

Less experienced auditors, in particular, may place too much importance on achieving compliance against a particular project methodology, whether that's created in-house, or is a proprietary product, again like Prince 2.

Over reliance on these 'usual suspects' however, can foster a spurious sense of control as uncertainties are often 'assumed away' in order to apply the methodology. So audit approaches that focus solely on project methodologies may actually increase project risk by over emphasizing compliance, rather than what is needed for project success.

While project auditors do have a range of components in their auditing frameworks, follow up discussions with focus groups indicate that these are weak when it comes to non-technical or "soft" factors. This is a crucial finding, as key risks and root causes of project failure are frequently related to soft aspects, such as senior management commitment and willingness to change, rather than hard factors, like having tangible project controls in place (e.g. project plan, progress reports). Remarkably, the Study also showed that change management and soft controls are the least used elements of the audit framework *(Figure 17)*.

Projects that vary greatly in both inherent and contextual complexity are difficult to audit successfully, as an approach that deals effectively with complexity in one context may fail completely in another. This suggests a strong need to employ a wide range of different project management methodologies. However, to date, innovation in project delivery has focused largely on intricacy – managing the 'moving parts' of a project – rather than the uncertainty attached to it.

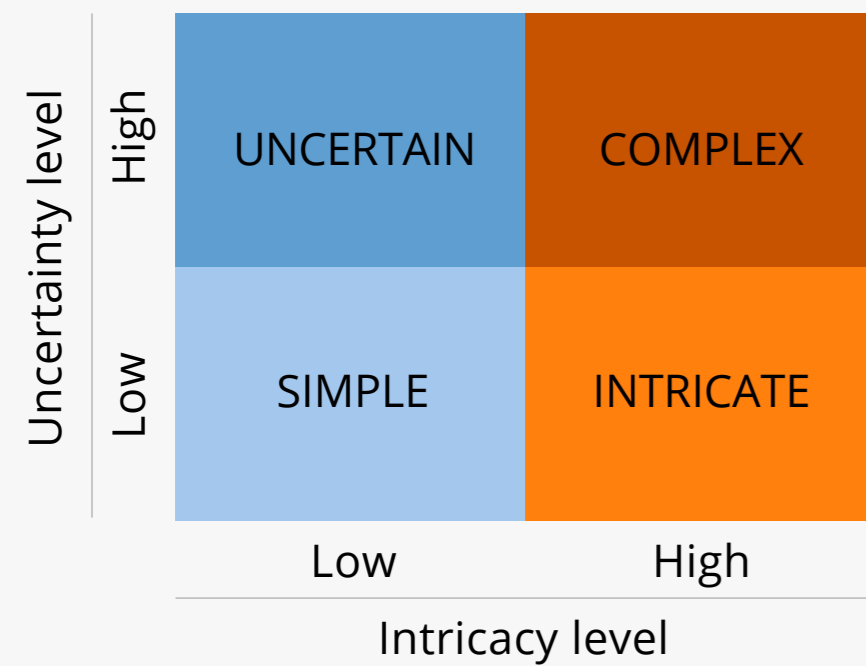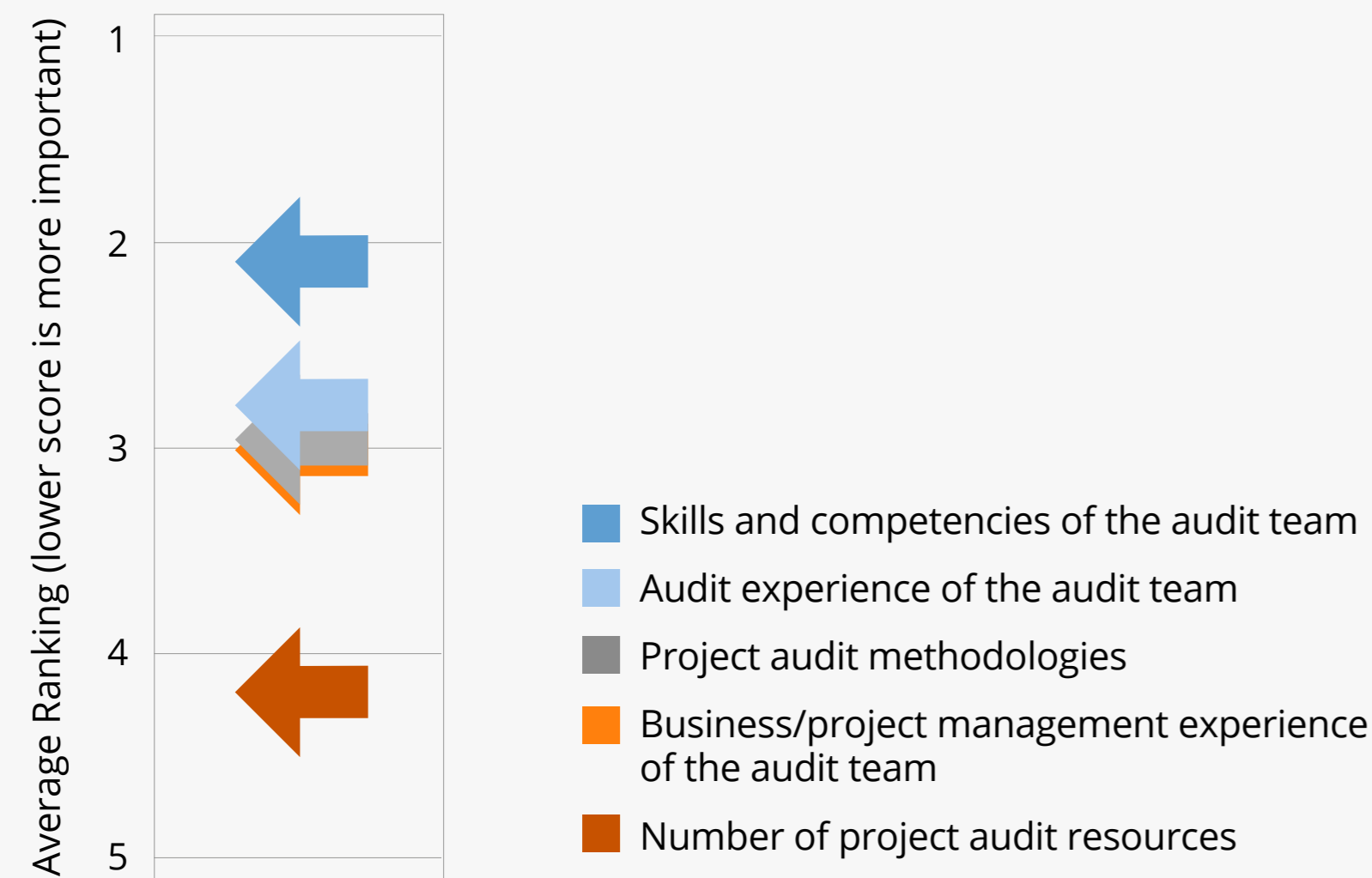**Figure 18: Management Innovation Centre (MIC) Project Complexity Framework**

Figure 19: Factors having the biggest impact on project audits

Q: Which factors have the biggest impact on your project auditing effectiveness? (Rank 1 has greatest importance)

- Skills and competencies of the audit team
- Audit experience of the audit team
- Project audit methodologies
- Business/project management experience of the audit team
- Number of project audit resources

There needs to be a greater understanding of the social dynamics and individual behaviours of complex projects.

This is something the authors believe must change. We see the better management of behavioral uncertainty in particular as providing the greatest opportunities when it comes to achieving improvements in project delivery. In other words, there needs to be a greater understanding of the social dynamics and individual behaviors within complex projects. However, from our focus group discussions it seems that many professionals in the sector feel they lack the tools to review non-technical 'soft' factors such as commitment.

Project auditors appear to be aware of the shortcomings in the frameworks that they use, as they rate the skills and experience of the audit team as having the biggest impact on project audit effectiveness *(Figure 19)*.

A thought

We have identified a number of potential blind spots in the project auditing area, including what may be an over reliance by audit departments on the skills and experience of individuals.

Also, the project auditing frameworks being used don't cover all critical risks and controls. For example, many do not include factors that in many of projects may be the key to success, such as 'tone at the top' and commitment to change.

Another blind spot is the disconnection between what constitutes a successful audit and a successful project. Do project auditors tend to focus too much on proper execution of the audit program rather than project success?

Consequently, project auditors may frequently have to compensate for the shortcomings in the frameworks they use by relying on their own professional judgment. However, without appropriate methodologies in place, this dependence on the previous experience of individuals creates risks, and limits the flexibility and capacity of audit functions.

To address this, effective audit frameworks would have to not only take 'hard' project controls into account, but also 'soft controls', when assessing cultural aspects and the impact of change management.

Finally, to keep pace with the increasing number of projects and their growing importance in the realization of companies' objectives, the authors believe that internal audit functions need to more proactively develop and / or recruit auditors with project auditing experience (and preferably business and project management experience), as well as devoting greater effort to developing project audit competencies within the audit team.

12

"At the Frontier"

AN ORGANISATIONAL ANALOGY

In 1845 Sir John Franklin set out to discover the fabled Northwest Passage, a sea route that was said to connect the Atlantic and the Pacific by passing through the Arctic Ocean. This was a vitally important expedition because the Northwest Passage, if it existed, would provide a vital link between Britain and her far-flung empire.

Sailing with 138 officers, Sir John and his men set out in two three-masted barques expecting the voyage to last two to three years.

Each ship was designed to be a replica of a Royal Navy officers' club, with a 1200 volume library, innumerable sets of china, and cut glass wine goblets. The sterling silver cutlery was engraved with each officer's initials and family crest. So much space did all these items take up, that room could be found for only twelve days' supply of coal for the ships' auxiliary steam engines.
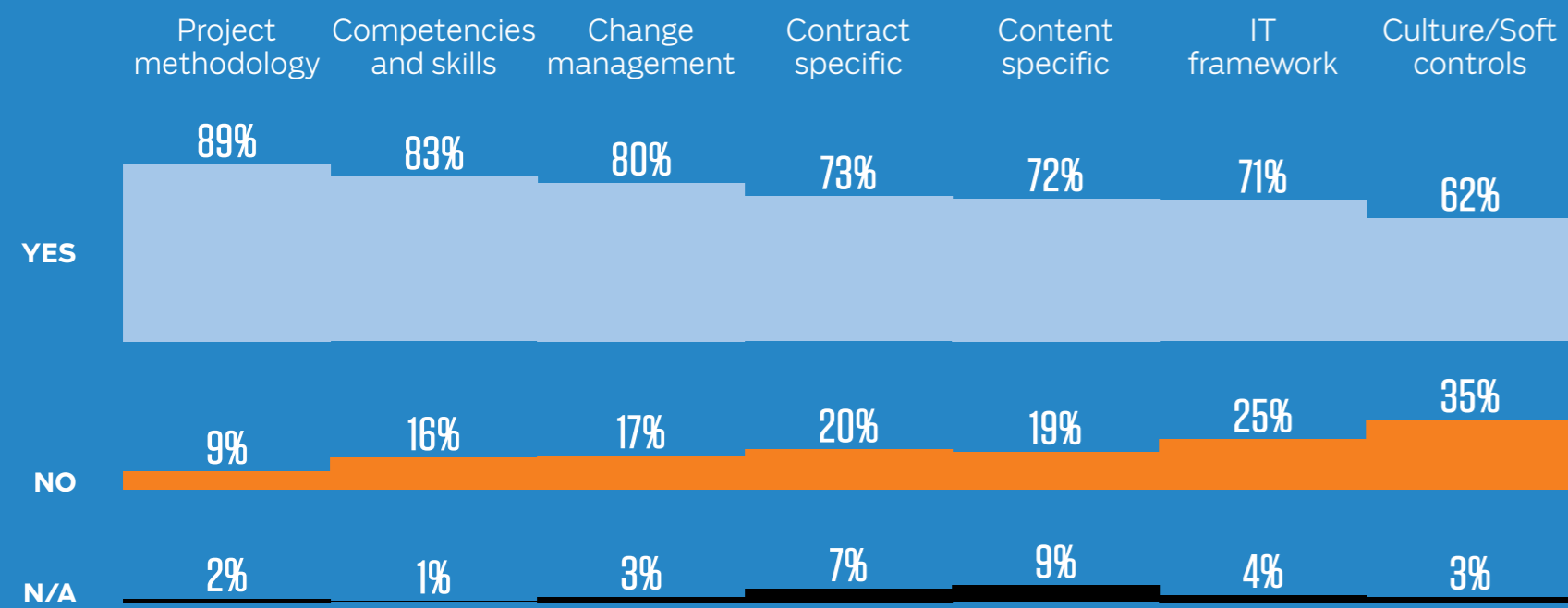
And though Arctic conditions would, of course, be dramatically different from those of England, rather than take special clothing, Franklin and his crew relied upon their rather splendid naval uniforms and standard issue equipment. There were no sleds for instance, to see them through.

It took twenty years to find the remnants of the expedition: the ships had been destroyed by the pack ice, but frozen bodies were found in groups, many kilometres from where their ships disappeared. These were remnants of the scattered parties that had desperately sought survival in the alien land. Some members of these parties were still dressed in their fine blue uniforms, edged with silk braid and gold buttons. Surprisingly, in the improvised sleds and the ship's boats they had dragged for tortuous kilometres were large quantities of ornate table silver.

A metaphor for our times? Many, perhaps most, of our organizations face an economic and social environment that is as alien as the icy Arctic wastes are to England's green and pleasant land. Most are ill equipped for the new environment, and some are persisting in doggedly dragging with them the cultural baggage of the past, despite all the evidence that it is a useless or dangerous encumbrance.

Source: Adapted from *Under New Management* [Dunphy, D and Stace, D., 1990]

Figure 20: Elements included in the project framework
Q: Are the following elements included in your project audit framework?

	Project methodology	Competencies and skills	Change management	Contract specific	Content specific	IT framework	Culture/Soft controls
YES	89%	83%	80%	73%	72%	71%	62%
NO	9%	16%	17%	20%	19%	25%	35%
N/A	2%	1%	3%	7%	9%	4%	3%

Project auditing frameworks used often do not cover all critical risks and controls (...) such as 'tone at the top' and commitment to change.

4. Conclusion

With the complexity and volume of projects being audited expected to grow, internal audit functions have responded to the challenge, largely by:

• Incorporating project audits into their audit plan.

• Reacting to an increasing number of management requests.

• Expanding their roles beyond assurance to encompass advisory and participative responsibilities.

• Becoming involved earlier and throughout the different phases of the project.

Those responsible for internal audit functions believe their project auditing performance and capability is good. At the same time, project success rates remain low. Other research [PwC, 2013] indicates that executives are dissatisfied with the performance of the audit department in project auditing. The top four concerns all relate to projects and programs. Good is therefore most definitely not good enough.

The project audit profession needs to address three particular potential blind spots:

• **Blind spot 1:** the majority of project audits are based on ad hoc requests rather than being systematically identified by the audit department.

• **Blind spot 2:** audit departments may place too much reliance on the skills and experience of individuals, and project auditing frameworks used often do not cover all critical risks and controls. For example, most auditing frameworks do not include 'soft' factors that are key to success in the vast majority of projects, such as 'tone at the top' and commitment to change.

• **Blind spot 3:** there seems to be a disconnection between having a successful audit and a successful project. Do project auditors tend to focus too much on proper execution of the audit program rather than project success?

A final consideration is that a rapidly changing and complex environment requires not just adaptive processes and adequate tools and techniques, but also a continuous dialogue with senior management.

5. References

- The Institute of Internal Auditors (UK & Ireland), Position Paper *The Role of Internal Auditing in Enterprise-wide Risk Management*, (2004) and edition 2009.

- The Institute of Internal Auditors, The Professional Practices Framework, The IIA Research Foundation, 2013.

- The Institute of Internal Auditors, Huibers S.C.J., Webbers, D.D.J, Michel, P.B.N. et al., Project Auditing, Handvatten voor de internal auditor, Institute for Internal Auditors in the Nederlands, Naarden, 2010. Can be downloaded from the site of the IIA Netherlands.

- The Institute of Internal Auditors, Position Paper *The Three Lines of Defense in Effective Risk Management and Control*, 2013.

- The Institute of Internal Auditors, Huibers, S.C.J., *Combining Internal Audit and Second Line of Defense Functions*, White Paper, 2014. Can be downloaded from the site of the IIA Netherlands.

- Huibers, S.C.J., American journal EDPACS, *The Role(s) of the Auditor in Projects: Proactive Project Auditing*, Taylor and Francis, 2013. Can be downloaded from the Knowledgeleader® database of Protiviti and the website of Taylor and Francis in the United States.

- Huibers, S.C.J. and Walrave, B., *Trends in Project Auditing*, Audit Magazine 1, IIA NL, 2014.

- PwC, *State of the Internal Audit Profession*, 2013.

Analysis Project Failure MIC (Figure 1)

Sources: analysis Management Innovation Centre, survey results from:
- PMI Pulse of the profession (2014, 2013, 2012, 2011, 2010, 2008)
- Standish Group Report Chaos (2014, 2012, 2010, 2008, 2004)
- KPMG IT project management survey (2002, 2010, 2012)
- McKinsey-Oxford Study (2012)
- IBM, making change work (2008).

Quotations and analogy

- Maslow, A.H., *The Psychology of Science: A Reconnaissance*, Maurice Bassett Publishing, 1966.

- Dexter, D., Stace,D., *Under New Management*, 1990.

About

The Management Innovation Centre is a private company with offices in the Netherlands and Australia. Its mission is to develop practical solutions for complex management problems.

Based on the outcomes of the Study, one of its aims is to develop specific project auditing standards in cooperation with the audit profession. These standards will be modular, so that applicable modules can be selected based on the complexity of the project. The modules will cover all technical and non-technical aspects, required to deliver projects successfully and manage organizational risk. MIC's complexity assessment framework and the module selection methodology will be part of the standard.

The Management Innovation Centre works in partnership with leading academic institutions, companies and public sector organizations.

Please visit **www.managementinnovationcentre.com** to learn more.

The Institute of Internal Auditors in the Netherlands is affiliated with The Institute of Internal Auditors (IIA), an international professional association with global headquarters in the USA. The IIA is the internal audit profession's global voice, a recognized authority, acknowledged leader, chief advocate, and principal educator. Members work in internal auditing, risk management, governance, internal control, information technology audit, education, and security.

Please visit **www.iia.nl** and **www.theiia.org** to learn more.

Sam Huibers – Study Lead

Sam C.J. Huibers, MSc EMIA RO, CRMA, has extensive experience in a range of international managerial business, audit and advisory functions. He has led large international projects in the areas of finance, governance, internal control and audit.

He is currently employed in a managerial role in the Global Audit Function at Heineken International, for whom he designed and deployed its audit methodology and system globally. As a member of the Dutch IIA Professional Practices Committee, Sam leads the Project Auditing advocacy initiative. He is also the coordinator and lecturer of Internal Audit Excellence of the Executive Master of Internal Auditing Programme at the Amsterdam Business School of the University of Amsterdam.

in More information about Sam Huibers on LinkedIn

The Project Auditing Benchmark Study

The Project Auditing Global Benchmark Study is part of ongoing research on project auditing by Sam Huibers that originates from his initial research project at the Executive Master of Internal Auditing Programme of the University of Amsterdam.

Various articles are published by the IIA Netherlands and the professional bodies for registered IT auditors and chartered accountants in the Netherlands. His international publications on the role of the auditor are available at the Knowledgeleader® database of Protiviti and the website of Taylor and Francis in the United States.

in Join our Project Auditing LinkedIn group

For more information on the Project Auditing Global Benchmark Study contact:

✉ projectauditing@managementinnovationcentre.com