The Deloitte CIO Survey 2014
CIOs: At the Tech-junction
http://www.deloitte.com/lu/ciosurvey2014
Welcome to the 2014 Deloitte CIO Survey report. In our second year of conducting the survey we have extended our coverage to over 900 CIOs across 49 countries within the Americas, Europe, the Middle East, Africa, Asia and Australia. We are proud to announce that we have again this year about 40 contributions to the survey from our Luxembourg IT leaders. This clearly confirms the importance of IT in our local industries and is a proof of the consistent interest our local IT leaders show in the survey. Last year we explored the effectiveness of CIOs as business partners and the need for them to step up to make a greater impact within the board room. This year, we extend the concept and turn the spotlight on the role of the CIO as a business leader of growth through innovation. In particular we explore the idea of the CIO as a Venture Capitalist, an interesting trend we examined in our Tech Trends 2014 report.

This survey report also explores the world of analytics in our Hot Topics section, discussing current adoption levels and key barriers to more widespread use. This report presents the highlights from the 2014 Deloitte CIO Survey. Within each chapter you’ll find:

• A summary of the key insights across all respondents internationally
• An interactive infographic which allows you to view the findings by major global region and industry sectors
• Commentary, observations and practical tips from Deloitte specialists to help tackle some of the key challenges cited

We hope you find this report a valuable tool to help further develop your role as a trusted IT leader. To the many executives who have provided input into the 2014 Deloitte CIO Survey, thank you for your time and insight. We look forward to continuing the dialogue with you.

Patrick Laurent
Partner - Technology & Enterprise Application, Luxembourg
“Comparisons between CIOs and VCs may seem like a stretch. CIOs can’t shoot from the hip on risky investments. They provide critical services that the business simply can’t do without, where the risk of getting it wrong could be catastrophic. At the same time, there’s a lot to learn from the portfolio mindset that VCs bring to their work: balancing investments in legacy systems, innovation and even bleeding-edge technologies; understanding and communicating – business value; and aligning talent with the business mission. VCs operate in a high-stakes environment where extraordinary value creation and inevitable losses can coexist inside a portfolio of calculated investments. So do CIOs.”

(Tech Trends, Deloitte, 2014)
Summary findings

After a prolonged economic downturn, organisations across the globe are setting their sights on stronger growth, and for many companies, investment in technology is becoming a strategic priority.

Technological innovation is changing the way businesses operate and connect, and firms have the opportunity to recalibrate their operating models to reflect the emerging digital economy. CIOs are associated with maintaining core IT systems for businesses, but a key question in this year’s survey is whether they should also take more responsibility for harnessing technology innovation to drive business growth.

Currently 55 percent of the CIO budget is focused on supporting delivery of core IT services, with 22 percent assigned to business growth. CIOs continue to see delivery of business outcomes through IT services as their primary responsibility. That makes sense given their role in managing core systems, but suggests they could do more in applying technology when driving innovation for business growth.

Most CIOs have limited budgets for innovation-related activities and report that risk aversion among other board members constrains them from making riskier IT investments.

The survey results suggest that more could be done to drive the technology growth agenda in the C-suite and CIOs could make more effort to develop networking groups, alliance partners and supplier relationships. Small and niche relationships may also be rich untapped sources of new ideas.

Taken together, these findings suggest that business leaders do not always believe CIOs are the natural choice to drive technological innovation for growth. However, that perception may be changing, and CIOs are becoming more effective business partners with half of CIOs rating themselves “strong and effective” in that regard, a 10 percent increase on last year. A significant majority of CIOs state that responding to new business needs and driving digital strategy are their top priorities for the next 12 to 18 months.

As new technologies proliferate, the role of CIOs may be set to change as they consider how far to take the innovation and growth agenda. However, the rise in prominence of positions such as chief marketing, digital and data officers provide organisations with alternatives. Now is the time for CIOs to choose whether to remain custodians of core IT systems or become drivers of growth through technological innovation.
Summary findings: infographic

Budget allocation
Business as usual vs. Change & growth

- 55% Business as usual
- 45% Change & growth

IT priorities
Top priorities for the next 12-18 months

- 71% Support new business needs
- 47% Driving digital strategy

CIO relationship
How effective is your IT function in business partnering?

- 10% More CIOs rate themselves as strong and effective compared to last year

CIO portfolio
IT budget ring-fenced for innovation

- Ring-fenced 0-1%: 19%
- Ring-fenced 1-10%: 27%

CIO pulse
What’s stopping you from making risker IT investments?

- #1 Business leaders’ attitudes to risk: 38%
IT budgets & priorities: key findings

Renewed focus on change and growth?
The worst budget cuts are in the past, with only 23 percent of CIOs reporting a decrease in budget in 2014, similar to last year’s survey results. CIOs continue to allocate the lion’s share of budgets to routine IT activities, but there is a 3 percent shift this year towards change and growth activities, perhaps a reflection of the more positive macro-economic environment. In addition, a significant majority of CIOs state that responding to new business needs and driving digital strategy are their top priorities for the next 12 to 18 months. Strengthening risk and security management jump into the top three priorities, perhaps due to high profile security incidents in the last year.

Innovation still lacking funding
Despite an increase in focus on change and growth activities, there is little sign that budgets are ring-fenced for technology innovation. Almost half of CIOs ring-fence 10 percent or less of their budget for that purpose. Of CIOs allocating a larger portion, 60 percent tend to be organisations with less than 2,000 employees, perhaps reflecting the entrepreneurial mindset of smaller businesses.

Continued scepticism towards specialist technologies
More CIOs are piloting, implementing and have adopted emerging technologies such as mobile apps, social media and big data tools, continuing a trend highlighted in last year’s survey.

However, more reported that specialist technologies, such as augmented reality and gamification, are not seen as relevant for their organisations.

Big data and analytics
Almost 50 percent of CIOs are piloting, implementing and have adopted analytics, the survey shows, a change from last year when many respondents said they remained to be convinced of the benefits.

The trend is further evidenced by CIOs selecting analytics as their preferred area of investment if additional budget were available (see focus on analytics in Hot Topics section) showing that CIOs think they aren’t spending enough on big data and that they would like to spend more in this space.
**IT budgets & priorities: infographic**

**IT budgets**
- **Annual shifts**
  - **2013**
    - 78% The same, or up from 2012
    - 22% Down from 2012
  - **2014**
    - 77% The same, or up from 2013
    - 23% Down from 2013

**IT priorities**
- **In next 12-18 months**
  - **2013**
    - Support new business needs
    - Drive digital strategy
    - Reduce IT cost
    - Strengthen risk & security
  - **2014**
    - Support new business needs
    - Drive digital strategy
    - Strengthen risk & security
    - Reduce IT cost

**Levels of technology adoption**
- **2013 vs. 2014 – Piloting, implementing and adopted**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Public cloud</th>
<th>Analytics / Big data</th>
<th>BYOD</th>
<th>Mobile apps</th>
<th>Private cloud</th>
<th>Social media</th>
<th>Augmented reality</th>
<th>Gamification</th>
<th>Digital / multi-channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>34%</td>
<td>43%</td>
<td>48%</td>
<td>41%</td>
<td>47%</td>
<td>63%</td>
<td>69%</td>
<td>55%</td>
<td>65%</td>
</tr>
<tr>
<td>2014</td>
<td>43%</td>
<td>43%</td>
<td>48%</td>
<td>41%</td>
<td>47%</td>
<td>63%</td>
<td>69%</td>
<td>55%</td>
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**The Deloitte CIO Survey 2014**
CIOs: At the Tech-junction
The Deloitte CIO Survey 2014
CIOs: At the Tech-junction

Welcome

Summary findings

IT budgets & priorities

CIO portfolio

CIO relationships

CIO pulse

Hot topic: analytics

Regional variations

About the participants

IT budgets & priorities: infographic

IT budgets
Annual shifts

2013
79%
The same, or up from 2012
21%
Down from 2012

2014
81%
The same, or up from 2013
19%
Down from 2013

IT priorities
In next 12-18 months

2013
Support new business needs
Drive digital strategy
Reduce IT cost
Strengthen risk & security

2014
Support new business needs
Drive digital strategy
Strengthen risk & security
Reduce IT cost

Levels of technology adoption
2013 vs. 2014 – Piloting, implementing and adopted

Public cloud
Analytics / Big data
BYOD
Mobile apps
Private cloud
Social media
Augmented reality
Gamification
Digital / multi-channel

55%
25%
31%
40%
47%
41%
50%
62%
52%
52%
46%
43%
10%
9%
10%
9%
NA
57%
IT budgets & priorities: infographic

IT budgets
Annual shifts

2013
80% The same, or up from 2012
20% Down from 2012

2014
79% The same, or up from 2013
21% Down from 2013

IT priorities
In next 12-18 months

2013
Support new business needs
Drive digital strategy
Reduce IT cost
Strengthen risk & security

2014
Support new business needs
Drive digital strategy
Strengthen risk & security
Reduce IT cost

Levels of technology adoption
2013 vs. 2014 – Piloting, implementing and adopted

Public cloud: 49% (2013) to 50% (2014)
Analytics / Big data: 40% (2013) to 52% (2014)
BYOD: 42% (2013) to 47% (2014)
Mobile apps: 50% (2013) to 71% (2014)
Private cloud: 59% (2013) to 69% (2014)
Social media: 50% (2013) to 55% (2014)
Augmented reality: 16% (2013) to 13% (2014)
Gamification: 7% (2013) to 15% (2014)
Digital / multi-channel: 44% (2014)
IT budgets & priorities: infographic

IT budgets
Annual shifts

2013
- 64% The same, or up from 2012
- 36% Down from 2012

2014
- 65% The same, or up from 2013
- 35% Down from 2013

Levels of technology adoption
2013 vs. 2014 – Piloting, implementing and adopted

<table>
<thead>
<tr>
<th>Technology</th>
<th>2013</th>
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<tbody>
<tr>
<td>Public cloud</td>
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<td>42%</td>
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<tr>
<td>Analytics/Big data</td>
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<td>27%</td>
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<tr>
<td>BYOD</td>
<td>27%</td>
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<tr>
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<td>70%</td>
<td>38%</td>
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<tr>
<td>Augmented reality</td>
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<td>69%</td>
</tr>
<tr>
<td>Gamification</td>
<td>22%</td>
<td>14%</td>
</tr>
<tr>
<td>Digital/multi-channel</td>
<td>NA</td>
<td>12%</td>
</tr>
</tbody>
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IT priorities
In next 12-18 months

2013
- Support new business needs
- Reduce IT cost
- Drive digital strategy
- Strengthen risk & security

2014
- Support new business needs
- Drive digital strategy
- Strengthen risk & security
- Reduce IT cost
CIO portfolio: key findings

CIOs prioritise delivery of IT services over growth
CIOs tend to prioritise the delivery of IT services over profit, innovation and growth, the survey shows. For example, CIOs are twice as likely to prioritise IT delivery over “transforming IT from a cost centre to a profit centre” or “investing in new technologies”. This entrenched perspective may act as a restraint on those CIOs looking to pursue growth agendas through their IT portfolios.

More required on strategic portfolio management
In a positive development more than 60 percent of respondents say they evaluate project portfolios against measures such as risk versus reward. Still, despite nearly nine in 10 having clarity on their long and short term projects, more than a third do not actively evaluate performance of their portfolios against measures of risk versus reward and around a third do not have the ability to speedily switch priorities and be able to shift their focus based on strategic objectives.

Mind the capability gap
Significant capability gaps may prevent innovation-driven CIOs from managing and assessing their portfolios more effectively, with just one in five having the operational capability to invest in emerging technologies or prioritise transforming their organisations from a cost to profit centre. CIOs also identify capability gaps in respect of monetising data with less than four in 10 having a “mature capability” in that respect.
IT portfolio management

Key positives and gaps

Key dimensions of CIO portfolio

Dimension importance

Delivery of business outcomes through IT Services: 55%
Enhancing customer experience through technology: 35%
Building a more agile IT delivery model: 28%
Capitalising on data held within your organisation: 22%
Transforming IT from cost centre to profit centre: 22%
Investing in emerging technologies: 20%
Seamless integration of multiple suppliers: 17%

Dimension maturity

Overall  FSI  Private Sector  Public Sector
Delivery of business outcomes through IT Services: 70%  60%  80%  70%
Enhancing customer experience through technology: 50%  50%  50%  50%
Building a more agile IT delivery model: 41%  41%  41%  41%
Capitalising on data held within your organisation: 37%  37%  37%  37%
Transforming IT from cost centre to profit centre: 21%  21%  21%  21%
Investing in emerging technologies: 20%  20%  20%  20%
Seamless integration of multiple suppliers: 48%  48%  48%  48%

IT portfolio management

Key positives and gaps

Agree

“I actively evaluate the performance of my technology portfolio in terms of value, risk and reward”
63%

Disagree

“I am making investments in emerging technologies or considering partnerships with external entities”
57%

Where you would invest more money if you had it?

Overall  FSI  Private Sector  Public Sector
Analytics / Big data: 30%  30%  30%  30%
Mobile apps: 17%  17%  17%  17%
Private cloud: 15%  15%  15%  15%
Digital / Multi-channel: 11%  11%  11%  11%
Public cloud: 8%  8%  8%  8%
BYOD: 2%  2%  2%  2%
Social media: 2%  2%  2%  2%
Augmented reality: 1%  1%  1%  1%
Gamification: 1%  1%  1%  1%
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CIO portfolio
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Key dimensions of CIO portfolio

IT portfolio management
Key positives and gaps

Delivery of business outcomes through IT Services
Enhancing customer experience through technology
Building a more agile IT delivery model
Capitalising on data held within your organisation
Transforming IT from cost centre to profit centre
Investing in emerging technologies
Seamless integration of multiple suppliers

Dimension importance:
- Delivery of business outcomes: 59%
- Enhancing customer experience: 41%
- Building a more agile IT delivery model: 28%
- Capitalising on data held within your organisation: 21%
- Transforming IT from cost centre to profit centre: 16%
- Investing in emerging technologies: 20%
- Seamless integration of multiple suppliers: 14%

Dimension maturity:
- Delivery of business outcomes: 71%
- Enhancing customer experience: 47%
- Building a more agile IT delivery model: 40%
- Capitalising on data held within your organisation: 35%
- Transforming IT from cost centre to profit centre: 16%
- Investing in emerging technologies: 13%
- Seamless integration of multiple suppliers: 43%

Agree
“I actively evaluate the performance of my technology portfolio in terms of value, risk and reward”

Disagree
“I am making investments in emerging technologies or considering partnerships with external entities”

Where you would invest more money if you had it?
- Analytics / Big data: 27%
- Mobile apps: 17%
- Private cloud: 12%
- Digital / Multi-channel: 25%
- Public cloud: 3%
- BYOD: 3%
- Social media: 1%
- Augmented reality: 0%
- Gamification: 0%
CIO portfolio: infographic

Key dimensions of CIO portfolio

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<td>52%</td>
</tr>
</tbody>
</table>

IT portfolio management

Key positives and gaps

Agree

"I actively evaluate the performance of my technology portfolio in terms of value, risk and reward"

62%

Disagree

"I am making investments in emerging technologies or considering partnerships with external entities"

53%

Where you would invest more money if you had it?

- Analytics / Big data: 29%
- Mobile apps: 18%
- Private cloud: 14%
- Digital / Multi-channel: 9%
- Public cloud: 9%
- BYOD: 2%
- Social media: 2%
- Augmented reality: 2%
- Gamification: 1%
## Key dimensions of CIO portfolio

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## IT portfolio management

**Key positives and gaps**

- **Agree**: I actively evaluate the performance of my technology portfolio in terms of value, risk and reward.  57%
- **Disagree**: I am making investments in emerging technologies or considering partnerships with external entities.  64%

## Where you would invest more money if you had it?

- **Analytics / Big data**: 36%
- **Mobile apps**: 14%
- **Private cloud**: 20%
- **Digital / Multi-channel**: 3%
- **Public cloud**: 10%
- **BYOD**: 2%
- **Social media**: 0%
- **Augmented reality**: 2%
- **Gamification**: 2%
CIOs can begin this gradual process by looking for opportunities to approach tasks—large and small—with a portfolio mindset. This involves getting visibility on the asset pool, understanding asset performance, identifying the assets with the most interesting risk/reward ratio, positioning top talent in those areas, creating people and process ability to rapidly take on change and last but not least learning by experiment (start small, scale fast, fail quickly).

In this way, CIOs can actively shape a technology portfolio and steer investment risk between legacy systems, innovation, and even bleeding-edge technologies. They would be able to manage and communicate the portfolio’s value, position, risk, and exposure in a language the business can grasp. CIOs would change their mindset from risk avoidance to risk intelligence.

Follow a gradual process
The traditional responsibilities of the CIOs have been to focus on meeting business demands for reliable, cost-efficient technologies. Earning the credibility required to become active participants in strategic leadership conversations will likely be a gradual process for many CIOs.

Adopt a venture capitalist mindset
The survey shows that Luxembourg differentiates itself from global findings with a stronger willingness to enhance the customer experience through technological innovation. This is listed as the CIOs’ second priority, after service delivery.

To succeed in providing digital innovation while maintaining service delivery, CIOs can adopt the VC concepts of portfolio and list of assets (hardware/software, projects/programs, staff/contractors, vendor partnerships, 3rd party services).

In this way, CIOs can actively shape a technology portfolio and steer investment risk between legacy systems, innovation, and even bleeding-edge technologies. They would be able to manage and communicate the portfolio’s value, position, risk, and exposure in a language the business can grasp. CIOs would change their mindset from risk avoidance to risk intelligence.

Follow a gradual process
The traditional responsibilities of the CIOs have been to focus on meeting business demands for reliable, cost-efficient technologies. Earning the credibility required to become active participants in strategic leadership conversations will likely be a gradual process for many CIOs.
CIO relationships: key findings

On the right track with some peer level relationships
The survey results suggest that CIOs could do more to enhance their board relationships if they want their IT functions to innovate and support business growth. More positively, slightly more than 40 percent of CIOs report having a very good relationship with CEOs. In a fast-paced business environment, where there is constant pressure to demonstrate and support business growth, there is much to be gained from a strong relationship with the CEO.

Are CIOs making new friends?
Disruptive trends such as analytics and social media have led to a rise in prominence of roles such as chief data, chief digital and chief marketing officers. However, the majority of CIOs do not rate their relationship with those stakeholders as particularly strong and they tend to have much better relationships with CEOs, CFOs and COOs.

Improving as business partners – more to do
Although in a better position than last year, CIOs are striving to become leading business partners within their organisations. Just under half of CIOs rate themselves “strong and effective” strategic business partners. That is a step in the right direction, but more needs to be done, and CIOs perhaps remain inhibited by their established role as guardians of the technological status quo.

Missed opportunities with external stakeholders
CIOs could be doing more to develop networking groups, alliance partners and supplier relationships, with a view to fuelling innovation. CIOs do not currently consider their relationships with alliance partners and technology analysts as very important, and are failing to develop relationships with external customers, where only 16 percent of CIOs report a very good relationship. In addition, just a third claim to have a very good relationship with suppliers and vendors. Taken together these results suggest CIOs are missing opportunities to work with external stakeholders to harness innovation for business growth.
IT strategic business partnering:
How effective is your IT function?

Strong partners to the business

Internal stakeholders
(Perceived importance vs actual strength of the relationship)

<table>
<thead>
<tr>
<th>Role</th>
<th>Very important relationship</th>
<th>Very good relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief data officer</td>
<td>39%</td>
<td>36%</td>
</tr>
<tr>
<td>Chief digital officer</td>
<td>48%</td>
<td>40%</td>
</tr>
<tr>
<td>Chief executive officer</td>
<td>79%</td>
<td>42%</td>
</tr>
<tr>
<td>Chief financial officer</td>
<td>65%</td>
<td>51%</td>
</tr>
<tr>
<td>Chief human resources officer</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Chief information security officer</td>
<td>54%</td>
<td>53%</td>
</tr>
<tr>
<td>Chief marketing officer</td>
<td>29%</td>
<td>31%</td>
</tr>
<tr>
<td>Chief operations officer</td>
<td>62%</td>
<td>47%</td>
</tr>
<tr>
<td>Chief procurement officer</td>
<td>23%</td>
<td>38%</td>
</tr>
<tr>
<td>Head of sales</td>
<td>43%</td>
<td>34%</td>
</tr>
<tr>
<td>MBA director</td>
<td>15%</td>
<td>25%</td>
</tr>
</tbody>
</table>

External stakeholders
(Perceived importance vs actual strength of the relationship)

<table>
<thead>
<tr>
<th>Role</th>
<th>Very important relationship</th>
<th>Very good relationship</th>
</tr>
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<tr>
<td>Alliance partners</td>
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<td>17%</td>
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<tr>
<td>CIO networks</td>
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<td>26%</td>
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<tr>
<td>Customers</td>
<td>55%</td>
<td>16%</td>
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<tr>
<td>Regulators</td>
<td>32%</td>
<td>11%</td>
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<tr>
<td>Shareholders</td>
<td>36%</td>
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<tr>
<td>Suppliers</td>
<td>60%</td>
<td>33%</td>
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<tr>
<td>Technology analysts</td>
<td>45%</td>
<td>11%</td>
</tr>
<tr>
<td>Vendors</td>
<td>43%</td>
<td>30%</td>
</tr>
</tbody>
</table>
CIO relationships: infographic

### IT strategic business partnering:
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#### External stakeholders
(Perceived importance vs actual strength of the relationship)

<table>
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<tr>
<th>Relationship</th>
<th>Very important relationship</th>
<th>Very good relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alliance partners</td>
<td>23%</td>
<td>16%</td>
</tr>
<tr>
<td>CIO networks</td>
<td>55%</td>
<td>55%</td>
</tr>
<tr>
<td>Customers</td>
<td>50%</td>
<td>46%</td>
</tr>
<tr>
<td>Regulators</td>
<td>37%</td>
<td>32%</td>
</tr>
<tr>
<td>Shareholders</td>
<td>59%</td>
<td>59%</td>
</tr>
<tr>
<td>Suppliers</td>
<td>49%</td>
<td>7%</td>
</tr>
<tr>
<td>Technology analysts</td>
<td>49%</td>
<td>7%</td>
</tr>
<tr>
<td>Vendors</td>
<td>49%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Overall | FSI | Private Sector | Public Sector

2013 ....... 45%  2014 ....... 54%
IT strategic business partnering: How effective is your IT function?

Strong partners to the business

Internal stakeholders (Perceived importance vs actual strength of the relationship)

<table>
<thead>
<tr>
<th>Very important relationship</th>
<th>Very good relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief data officer</td>
<td>40%</td>
</tr>
<tr>
<td>Chief digital officer</td>
<td>53%</td>
</tr>
<tr>
<td>Chief executive officer</td>
<td>79%</td>
</tr>
<tr>
<td>Chief financial officer</td>
<td>69%</td>
</tr>
<tr>
<td>Chief human resources officer</td>
<td>30%</td>
</tr>
<tr>
<td>Chief information security officer</td>
<td>50%</td>
</tr>
<tr>
<td>Chief marketing officer</td>
<td>32%</td>
</tr>
<tr>
<td>Chief operations officer</td>
<td>55%</td>
</tr>
<tr>
<td>Chief procurement officer</td>
<td>19%</td>
</tr>
<tr>
<td>Head of sales</td>
<td>44%</td>
</tr>
<tr>
<td>MBA director</td>
<td>16%</td>
</tr>
</tbody>
</table>

External stakeholders (Perceived importance vs actual strength of the relationship)

<table>
<thead>
<tr>
<th>Very important relationship</th>
<th>Very good relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alliance partners</td>
<td>24%</td>
</tr>
<tr>
<td>CIO networks</td>
<td>27%</td>
</tr>
<tr>
<td>Customers</td>
<td>52%</td>
</tr>
<tr>
<td>Regulators</td>
<td>25%</td>
</tr>
<tr>
<td>Shareholders</td>
<td>37%</td>
</tr>
<tr>
<td>Suppliers</td>
<td>61%</td>
</tr>
<tr>
<td>Technology analysts</td>
<td>7%</td>
</tr>
<tr>
<td>Vendors</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>18%</td>
</tr>
</tbody>
</table>

2013: 39%
2014: 50%
IT strategic business partnering:
How effective is your IT function?

Strong partners to the business

<table>
<thead>
<tr>
<th>Internal stakeholders</th>
<th>External stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Perceived importance vs actual strength of the relationship)</td>
<td>(Perceived importance vs actual strength of the relationship)</td>
</tr>
<tr>
<td><strong>Very important relationship</strong></td>
<td><strong>Very good relationship</strong></td>
</tr>
<tr>
<td>CIO data officer</td>
<td>Alliance partners</td>
</tr>
<tr>
<td>CIO digital officer</td>
<td>CIO networks</td>
</tr>
<tr>
<td>CIO executive officer</td>
<td>Customers</td>
</tr>
<tr>
<td>CIO financial officer</td>
<td>Regulators</td>
</tr>
<tr>
<td>CIO human resources officer</td>
<td>Shareholders</td>
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<td>CIO head of sales</td>
<td></td>
</tr>
<tr>
<td>CIO MBA director</td>
<td></td>
</tr>
</tbody>
</table>

2013: 32%
2014: 38%
CIO relationships: insights

CIOs have never been more exposed than today. Days when CIOs had “only” to deliver quality services and cope with the requirements of a limited number of stakeholders are gone. With the advent of more and more new technology trends – mostly disruptive for their companies – CIOs need to liaise with new actors and embrace new business and operating models. They need to manage new relationships internally with new functions such as Chief Digital Officer, or externally with technology advisors or with an increasing number of possible partners supporting the progressive unbundling of the value chain of their industries.

While CIOs were focusing on fine-tuning their relationships with their traditional stakeholders, they will need to position themselves more and more as the linking pin of their companies, integrating all new trends in terms of business, operations and technology innovations. They will need a large capacity to “connect the dots” between all these elements, to interact with an increased number of parties and to articulate a vision which is clear, holistic and sensible. This capacity will be key in their future position. The challenge will prove complex and above all very exciting.
CIO pulse: key findings

Innovation in the IT organisation
For businesses that aspire to grow through technology innovation, there is still work to be done to shift mentalities and embed an innovation culture in the IT organisation. A third of CIOs consider IT innovation as very important to the IT function. More than half of CIOs consider innovation to be important to their organisation, but receive little funding in the IT budget to effectively deliver it. This is an area in which organisations might usefully seek to examine more closely the reasons for lack of investment.

CIO versus business leadership’s attitude to risk taking
The survey results suggest that CIOs are willing to take intelligent risks with IT investments, but this attitude does not appear to match with their current portfolio of projects. Business leadership’s attitude to risk is the biggest constraint in making riskier IT investments for innovation and growth, CIOs say.

Re-invent behaviour and style
Just under 10 percent of CIOs describe themselves as taking charge of situations, a sharp contrast to the perceived abilities of CEOs and COOs. CIOs also tend to be more rational than intuitive, perhaps indicating that they rely on conscious reasoning rather than gut feeling. This is a positive advantage in many situations, but perhaps less so in innovating for business growth.

Increased self-awareness of personal style and attributes in different business situations may provide CIOs with the best chance to adapt behaviour when dealing with other business leaders and making an impact in the C-suite.
Culture of innovation in your IT organisation

52% Innovation is not considered a priority for our IT function

7% Innovation is considered an important priority but receives little funding within our IT function

Describe yourself as a CIO: The ends of the spectrum

Risk averse Intuitive Flexible Verbal Trusting Collaborative Imaginative

Risk tolerant Rational Linear Numerical Sceptical Takes charge Deliberate

Constraining factors: What’s stopping you from making riskier IT investments?

Business leadership’s attitude to risk IT budget constraints

#1 #2

The Deloitte CIO Survey 2014
CIOs: At the Tech-junction

Summary findings
IT budgets & priorities
CIO portfolio
CIO relationships
CIO pulse
Hot topic: analytics
Regional variations
About the participants
Culture of innovation in your IT organisation

53%
Innovation is not considered a priority for our IT function

5%
Innovation is considered an important priority but receives little funding within our IT function

Describe yourself as a CIO: The ends of the spectrum

Risk averse
Intuitive
Flexible
Verbal
Trusting
Collaborative
Imaginative

Constraining factors: What’s stopping you from making riskier IT investments?

#1
Business leadership’s attitude to risk

#2
IT budget constraints
Culture of innovation in your IT organisation

49% Innovation is not considered a priority for our IT function
8% Innovation is considered an important priority but receives little funding within our IT function

Constraining factors: What’s stopping you from making riskier IT investments?

#1 Business leadership’s attitude to risk
#2 IT budget constraints

Describe yourself as a CIO: The ends of the spectrum

- Risk averse
- Intuitive
- Flexible
- Verbal
- Trusting
- Collaborative
- Imaginative

- Risk tolerant
- Rational
- Linear
- Numerical
- Sceptical
- Takes charge
- Deliberate
Culture of innovation in your IT organisation

Innovation is not considered a priority for our IT function

61%

Innovation is considered important priority but receives little funding within our IT function

8%

Describe yourself as a CIO: The ends of the spectrum

Risk averse

Intuitive

Flexible

Verbal

Trusting

Collaborative

Imaginative

Risk tolerant

Rational

Linear

Numerical

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Takes charge

Deliberate

Constraining factors: What’s stopping you from making riskier IT investments?

#1

#2

Business leadership’s attitude to risk

IT budget constraints

CIO pulse: infographic

The Deloitte CIO Survey 2014

CIOs: At the Tech-junction

Overall

FSI

Private Sector

Public Sector

Key findings

Infographic

Insights

Summary findings

IT budgets & priorities

CIO portfolio

CIO relationships

CIO pulse

Hot topic: analytics

Regional variations

About the participants
Innovation, behaviour and IT investments

Almost half of the Luxembourg CIOs (47%) consider innovation to be important for their organisation, but receive little funding to effectively deliver it. This is illustrated by the fact that almost 40% of local CIOs spend less than 10% of their budget on innovation.

In terms of behaviour, the Luxembourg CIOs are generally aware of the importance of engaging as business leaders and strategic partners, and a fourth of them describe themselves as taking charge of situations. The fact that two-thirds tend to be more rational than intuitive probably emphasises the lesser degree of innovation in Luxembourg compared to the overall study results.

The biggest constraint in starting risky IT investments for innovation and growth in Luxembourg seems to be the limited IT budget specific to those areas, and not so much the business leadership’s averse risk attitude as the global survey reveals.
Hot topic – analytics: key findings

Mixed levels of adoption and maturity highlight a need for investment
With businesses using increasing volumes of data for analytics purposes, it is surprising to note that more than 50 percent of CIOs are not piloting, implementing nor adopted analytics in their organisations. The good news is that 74 percent of this group use analytics to support business strategy and almost half see this as giving them a competitive advantage. Still, more than a quarter either don’t use analytics or do so in a way that has no clear alignment to business strategy.

The role of the CIO in analytics
The survey results suggest that the CIO’s role in analytics is focused on delivering technology capabilities rather than insight. In addition, more than a fifth of respondents either have limited responsibility for delivering analytics or say their role in delivering analytics is unclear. There is therefore an opportunity to transition the CIO’s responsibilities, perhaps to a more holistic insight and information-driven role. The rise in the number of chief data/analytics officers may indicate a trend towards specialisation in this area, but CIOs need at least to recognise and understand their impact.

Confusion over executive sponsorship and ownership
More than a third of CIOs either do not know their executive sponsor for analytics, or claim that no single sponsor is defined. In addition, some respondents indicate that CFOs and CEOs are expropriating ownership of analytics from CIOs. The lack of a single clear sponsor appears to be a key hindrance to widespread adoption within some organisations. For others, the well-publicised analytics talent crunch and a lack of centralised approach to capturing and analysing data are key challenges.
Analytics and business strategy: To what extent do your analytics capabilities support your strategy?*

Executive sponsors for analytics

- No single sponsor: 28%
- Chief financial officer: 21%
- Chief executive officer: 16%
- Chief information officer: 12%
- Chief marketing officer: 6%
- Chief analytics officer: 2%
- Chief product officer: 2%
- Chief data officer: 1%
- Chief digital officer: 1%
- Not defined/don't know: 9%

Hindrances: What is holding back the more widespread use of analytics in your organisation?

- #1: We lack the correct talent to use our data (59%)
- #2: There is no centralised approach to capturing and analysing data (20%)

*of respondents who are piloting, implementing or have adopted analytics/big data
Analytics and business strategy: To what extent do your analytics capabilities support your strategy?*  

Executive sponsors for analytics  

Analytics supports our business strategy  

#1  
We lack the correct talent to use our data  

Hindrances: What is holding back the more widespread use of analytics in your organisation?  

#2  
There is no centralised approach to capturing and analysing data
Analytics and business strategy: To what extent do your analytics capabilities support your strategy?*

Executive sponsors for analytics

- No single sponsor: 26%
- Chief financial officer: 24%
- Chief executive officer: 17%
- Chief information officer: 11%
- Chief marketing officer: 7%
- Chief analytics officer: 1%
- Chief product officer: 1%
- Chief data officer: 1%
- Chief digital officer: 1%
- Not defined/don’t know: 9%

Hindrances: What is holding back the more widespread use of analytics in your organisation?

#1: We lack the correct talent to use our data
#2: Budget limitations

CIO’s role in analytics: How is your role in delivering analytics capabilities defined?

- Deliver the technology: 59%
- Develop the insight: 22%
Analytics and business strategy: To what extent do your analytics capabilities support your strategy?*

Executive sponsors for analytics

- No single sponsor: 35%
- Chief financial officer: 13%
- Chief executive officer: 11%
- Chief information officer: 14%
- Chief marketing officer: 5%
- Chief analytics officer: 2%
- Chief product officer: 3%
- Chief data officer: 4%
- Chief digital officer: 0%
- Not defined/don’t know: 14%

Hindrances: What is holding back the more widespread use of analytics in your organisation?

- #1: We lack the correct talent to use our data
- #2: There is no centralised approach to capturing and analysing data
Half of the surveyed CIOs reported low adoption levels of analytics solutions. Nevertheless, a clear majority of the CIOs considered analytics as an added value for their business. The CIOs reported that their role is not clearly defined when it comes to analytics programmes. The combination of an increased amount of available data on one side and the need for critical business decisions on the other, is an opportunity for organisations to adopt analytics and for the CIOs to take the lead of such programmes. Indeed CIOs are in a unique position to set up an adequate analytics strategy for their companies by first finding the right sponsorship at the very heart of the organisation and bringing diverse actors to the best solution. One of the key success factors in the implementation of analytics is the identification of people who have the required business and technological skills to help their organisation in such projects.

On top of this, the Luxembourg government has launched “Digital Lëtzebuerg” as part of its strategy to make the country a leader in Europe in the ICT field. This encompasses measures to attract and ease the installation of ICT companies, including data centers and biotech companies. This initiative goes along with EU’s strategy “Digital Agenda”, which targets to reboot the European economy and enable the European citizens and businesses to get the most out of digital technologies with a strong focus on analytics. Citizen analytics and eGovernment are at the very heart of the Luxembourg strategy for the coming years, namely with the development of programmes such as eHealth, which includes the introduction of an electronic health record.

In Luxembourg, the main concern of the market is not the volume of data, especially in the financial sector where the majority of actors deals with significant but manageable data volumes. The local actors are more focused on getting the right data with the appropriate quality level for analytics purposes. Data confidentiality is a major concern for local actors, as a leak of information could jeopardize their position and the one of the marketplace.
Regional variations

Click on region tabs below to reveal data

Africa  Asia  Canada  Central Europe  Latin America  Middle East  Northern Europe  Oceania  Southern Europe  Western Europe
Regional variations

Africa
More likely to…
• have seen an increase in their IT budget
Least likely to…
• use analytics widely in their organisations
• have embedded innovation in their IT function
• actively evaluate the performance of their technology portfolio in terms of value, risk & reward

Click on region tabs below to reveal data
Regional variations

Click on region tabs below to reveal data

Africa  Asia  Canada  Central Europe  Latin America  Middle East  Northern Europe  Oceania  Southern Europe  Western Europe

Asia
More likely to…
• have formalised approaches for innovation initiatives
Least likely to…
• have adopted analytics, big data and social media in their organisations
Regional variations

Canada
More likely to…
• consider themselves as ‘intuitive’ CIOs
• have a clear line of sight across all the portfolio of IT projects & programmes
• have adopted or are implementing private cloud solutions

Least likely to…
• actively evaluate the performance of their technology portfolio in terms of value, risk & reward

Click on region tabs below to reveal data

Africa Asia Canada Central Europe Latin America Middle East Northern Europe Oceania Southern Europe Western Europe
Regional variations

Central Europe
More likely to...
• consider themselves as ‘riskaverse’ CIOs
• encounter lack of appropriate
  risk models towards growth &
  innovation
Least likely to...
• have adopted analytics

Click on region tabs below to reveal data
Regional variations

Latin America
More likely to...
• have transformed IT from cost centre to profit centre
• believe that, although analytics support their strategy, provide no competitive advantage
• focus on strengthening risk and security management
Least likely to...
• encounter privacy issues hindering the more widespread use of analytics

Click on region tabs below to reveal data

<table>
<thead>
<tr>
<th>Africa</th>
<th>Asia</th>
<th>Canada</th>
<th>Central Europe</th>
<th>Latin America</th>
<th>Middle East</th>
<th>Northern Europe</th>
<th>Oceania</th>
<th>Southern Europe</th>
<th>Western Europe</th>
</tr>
</thead>
</table>
Regional variations

Middle East
More likely to...
• focus on developing IT staff
• have a clear line of sight across all the portfolio of IT projects & programmes
• rate ‘enhancing the customer experience through technology’ as one of the most important dimensions of their work

Least likely to...
• consider themselves as ‘risk tolerant’ CIOs
Regional variations

Northern Europe
More likely to…
• consider themselves as ‘risk tolerant’ CIOs
• have transformed IT from cost centre to profit centre
• have seen an increase in their IT budget

Least likely to…
• lack proper technology and infrastructure to capture the data to deliver analytics

Click on region tabs below to reveal data

<table>
<thead>
<tr>
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<th>Oceania</th>
<th>Southern Europe</th>
<th>Western Europe</th>
</tr>
</thead>
</table>

About the participants
Regional variations

Oceania
More likely to…
• have adopted or implementing mobile apps, private cloud solutions and social media
Least likely to…
• focus on strengthening risk and security management

Click on region tabs below to reveal data

<table>
<thead>
<tr>
<th>Africa</th>
<th>Asia</th>
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<th>Central Europe</th>
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<th>Northern Europe</th>
<th>Oceania</th>
<th>Southern Europe</th>
<th>Western Europe</th>
</tr>
</thead>
</table>

43
Regional variations

Southern Europe
More likely to…
• encounter lack of appropriate risk models towards growth & innovation
• consider transforming IT from a cost centre to a profit centre as one of the most important dimensions of their work

Least likely to…
• believe that analytics and big data provide a competitive advantage
Regional variations

Western Europe
More likely to...
• have adopted, implementing or piloting analytics
• rate ‘enhancing the customer experience through technology’ as an important dimension of their work
• have adopted BYOD
Least likely to...
• consider innovation as a top priority for the IT function

Click on region tabs below to reveal data
About the participants

Job title
- CIO: 50%
- HEAD OF IT/IT DIRECTOR: 28%
- OTHER: 22%

Reporting to
- COO: 35%
- CFO: 22%
- CEO: 11%
- BOARD OF DIRECTORS: 8%
- OTHER: 24%

Regions
- Northern Europe: 17%
- Western Europe: 32%
- Asia: 1%
- Central Europe: 17%
- Canada: 4%
- Africa: 1%
- South America: 13%
- Southern Europe: 15%
- Oceania: 8%
- Middle East: 4%
- Canada: 4%
- Asia: 1%

Company revenue
- <10m: 14%
- 10-100m: 14%
- 1bn-10bn: 18%
- 10bn-100bn: 26%
- >100bn: 13%

Industry
- Private Sector: 65%
- Financial Services: 20%
- Public Sector: 16%

Number of full-time employees (%)
- 1-1,999
- 2,000-3,999
- 4,000-5,999
- 6,000-7,999
- 8,000-9,999
- 10,000-19,999
- 20,000+
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