AGENDA

SURVEY FINDINGS
Jonathan Mitchell, Harvey Nash
Prafull Sharma, KPMG

PANEL
Prodosh Banerjee
Chief Executive Officer, Safe Swiss Cloud

Indradip Paul
Global Head of IT Strategy, LafargeHolcim

Damir Bogdan
Founder of Actvide AG
Former CIO & Head Operations at Raiffeisen

Volker Schmidt
CIO & Operational Excellence
CSS Insurance

Hosted by Albert Ellis, CEO, Harvey Nash
GLOBAL FINDINGS

Jonathan Mitchell
Non-executive chair
Global CIO Practice
Harvey Nash Group plc

Prafull Sharma
Partner
Digital Transformation
Head of CIO Advisory
KPMG Switzerland
LARGEST IT LEADERSHIP STUDY IN THE WORLD

Almost 3,400 respondents

$1/4 Trillion revenue

82 countries
18 years of history

Additional insight
“For me...security is front of mind.”

Katie Docherty, CIO, HSBC Bank Australia Limited, Sydney
Craig Cuyar
Global CIO,
Omnicom,
New York City

“What’s changing most is my business colleagues.”
“Our single biggest priority is to genuinely improve collaboration, efficiently and cost effectively.”

Sean Dewhurst
Change and IT Director
Partner, SSH
Kuwait
“My main focus is to implement the IT service management model.”

Konstantin Makaussov
Head of IT,
Zhol Zhondeushi Company LLP,
Astana, Kazakhstan
THE WORLD IS CHANGING

Fourth industrial revolution & the rise of digital
Economic uncertainty and change
Global political and social instability
IT budgets

IT leaders reporting budget increases in the last 12 months

Source: Harvey Nash / KPMG CIO Survey 2016
## CIO Priorities Are Changing

What are the main issues your board is looking for IT to address?

Source: Harvey Nash / KPMG CIO Survey 2016

<table>
<thead>
<tr>
<th>Priority</th>
<th>2016</th>
<th>2015</th>
<th>2014</th>
<th>2013</th>
<th>Change since 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing operational efficiencies</td>
<td>57%</td>
<td>61%</td>
<td>63%</td>
<td>68%</td>
<td>-16%</td>
</tr>
<tr>
<td>Improving business processes</td>
<td>56%</td>
<td>58%</td>
<td>60%</td>
<td>60%</td>
<td>-7%</td>
</tr>
<tr>
<td>Delivering consistent and stable IT performance to the business</td>
<td>51%</td>
<td>57%</td>
<td>59%</td>
<td>70%</td>
<td>-27%</td>
</tr>
<tr>
<td>Saving costs</td>
<td>50%</td>
<td>54%</td>
<td>57%</td>
<td>71%</td>
<td>-30%</td>
</tr>
<tr>
<td>Delivering business intelligence/analytics</td>
<td>44%</td>
<td>47%</td>
<td>41%</td>
<td>48%</td>
<td>-8%</td>
</tr>
<tr>
<td>Enabling business change</td>
<td>44%</td>
<td>48%</td>
<td>51%</td>
<td>53%</td>
<td>-17%</td>
</tr>
<tr>
<td>Developing innovative new products and services</td>
<td>41%</td>
<td>41%</td>
<td>41%</td>
<td>51%</td>
<td>-20%</td>
</tr>
<tr>
<td>Cyber security</td>
<td>41%</td>
<td></td>
<td></td>
<td></td>
<td>new in 2016</td>
</tr>
<tr>
<td>Driving revenue growth</td>
<td>40%</td>
<td>42%</td>
<td>45%</td>
<td>42%</td>
<td>-5%</td>
</tr>
<tr>
<td>Better engagement with customers/prospects</td>
<td>38%</td>
<td>38%</td>
<td>36%</td>
<td>33%</td>
<td>15%</td>
</tr>
<tr>
<td>Managing operational risk and compliance</td>
<td>36%</td>
<td>39%</td>
<td>40%</td>
<td>41%</td>
<td>-12%</td>
</tr>
<tr>
<td>Improving time to market</td>
<td>26%</td>
<td>30%</td>
<td>29%</td>
<td>21%</td>
<td>-16%</td>
</tr>
<tr>
<td>Improving the success rate of projects</td>
<td>26%</td>
<td>29%</td>
<td>30%</td>
<td>36%</td>
<td>-28%</td>
</tr>
<tr>
<td>Outperforming competitors with new business models</td>
<td>23%</td>
<td>24%</td>
<td>23%</td>
<td>26%</td>
<td>-11%</td>
</tr>
<tr>
<td>Enabling mobile commerce</td>
<td>19%</td>
<td>22%</td>
<td>24%</td>
<td>33%</td>
<td>-42%</td>
</tr>
<tr>
<td>Driving synergies from mergers &amp; acquisitions</td>
<td>12%</td>
<td>15%</td>
<td>17%</td>
<td>17%</td>
<td>-29%</td>
</tr>
<tr>
<td>Investing in social media platforms</td>
<td>7%</td>
<td>9%</td>
<td>10%</td>
<td>N/A</td>
<td>-30%</td>
</tr>
<tr>
<td>Reputation management via social media technology</td>
<td>7%</td>
<td>9%</td>
<td>8%</td>
<td>14%</td>
<td>-50%</td>
</tr>
<tr>
<td>Achieving sustainable/green IT</td>
<td>7%</td>
<td>8%</td>
<td>9%</td>
<td>9%</td>
<td>-22%</td>
</tr>
</tbody>
</table>
REACHING BEYOND TRADITIONAL IT

IMPROVING AGILITY
HUMAN RESOURCES
P&L OWNERSHIP
OPERATIONS
COUNTER-TERRORISM
ARTIFICIAL INTELLIGENCE
DEALING WITH REGULATION
AUTOMATION
ANALYTICS
### How CIOs Spend Their Time

CIOs more likely to be focused on wider range of internal priorities than external

<table>
<thead>
<tr>
<th>% IT leaders</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing the IT organisation and its people</td>
<td>1.9</td>
<td>8.6</td>
<td>15</td>
<td>19.2</td>
<td>18.6</td>
<td>15.3</td>
<td>11.9</td>
<td>6.6</td>
<td>1.7</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Working with non-IT colleagues to address business strategy</td>
<td>0.9</td>
<td>13</td>
<td>30.1</td>
<td>30.8</td>
<td>15</td>
<td>6.8</td>
<td>2.4</td>
<td>1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Meeting with the company’s external customers</td>
<td>11</td>
<td>46</td>
<td>25.9</td>
<td>10.1</td>
<td>3.3</td>
<td>2.1</td>
<td>1</td>
<td>0.7</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Managing areas not traditionally in IT</td>
<td>9.9</td>
<td>45</td>
<td>27.8</td>
<td>11</td>
<td>3.6</td>
<td>1.7</td>
<td>0.6</td>
<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Table 2: Over the last 12 months, estimate the percentage of time you dedicated to the following activities.
HOW CIOS SPEND THEIR TIME

Monday

08:00
Managing IT (45%)

18:00
External customers (15%)

Tuesday

Lunch

Wednesday

Non-IT Colleagues (25%)

Thursday

Friday

Nothing to do with IT (15%)
CIO INFLUENCE REACHES NEW PEAK

34% Report to CEO (Jump of 10% from last year, Highest in survey history)

57% Sit on Exec Board (Highest in survey history)

67% Expect influence to continue to grow
WHAT’S KEEPING CIOS AWAKE AT NIGHT?

#1 CYBER SECURITY
#2 SKILLS SHORTAGE
#3 PROJECT SUCCESS
#4 BEING AGILE, BEING DIGITAL
#1 CYBER ISSUES INTENSIFYING

**Greater threat**
Major cyber attack in last 2 years
- 2016 28%
- 2015 25%
- 2014 22%

**Less prepared**
CIOs feeling ‘very well prepared’
- 2016 22%
- 2015 23%
- 2014 29%
What types of cyber threats give you most cause for concern?

Source: Harvey Nash / KPMG CIO Survey 2016
IT leaders reporting they are suffering from a skills shortage

Source: Harvey Nash / KPMG CIO Survey 2016
GENDER DIVERSITY IMPROVING

Female respondents / in senior roles in IT
Source: Harvey Nash / KPMG CIO Survey 2016
# 3 PROJECT SUCCESS

Success of projects implemented in last 2 years

Source: Harvey Nash / KPMG CIO Survey 2016
PROJECT SUCCESS DECREASING

Overall proportion of projects considered ‘successful’ in last 2 years

Source: Harvey Nash / KPMG CIO Survey 2016
THE CREATIVE CIO

New relationships
New priorities
New profile
#4 BEING AGILE, BEING DIGITAL
THE SWISS PERSPECTIVE

33% vs 45%

Less budgets for Swiss CIO

46% vs 50%

CDO - Equally likely to employ one
Organisations with CDOs

20% vs 19%

Less likely to outsource

21%

Vs

28%

MORE SECURE
Nr. Of major incidents in last two years

Job change - More loyal
CIOs changing jobs in last year
Switzerland 12%
Global 15%

Top five investment priority for more than 30% of CIOs

23% vs 34%

Pay - Less likely to have pay rise

THE SWISS PERSPECTIVE
The Fourth Industrial Revolution
“A fusion of technologies that is blurring the lines between the physical, digital, and biological spheres.”
Klaus Schwab, Founder and Executive Chairman, World Economic Forum (2016)
THE GROWING LANDSCAPE OF DIGITAL

- Business process as a service
- Business Intelligence/analytic tools
- Mobility solutions
- Cloud services
- Social media and collaborative technologies
- Advanced competencies in data science
- Robotic process automation
- Cognitive automation
- Internet of things

Digital Labor
CHANGING THE WAY BUSINESS IS DONE

Knowledge and Data

Complexity and Value

CLASS 1
Basic process automation

CLASS 2
Enhanced process automation

CLASS 3
Cognitive automation

Augment or replace humans

Think like a human

Advancements in Process Automation

Robotic Process Automation

Digital Labor

Human Labor

Cognitive Technologies

Advancements in Machine Intelligence
As the technology leader for the organization, CIOs are uniquely positioned to drive the digital labor agenda.

As with the SaaS revolution, technology vendors are targeting “the business,” resulting in fragmented digital labor initiatives.

Build on their past automation and technology integration track record, but recognize that digital labor will be different.

CIOs must move quickly to evaluate the broader enterprise architecture and integration implications before fragmentation proliferates.

The data required to drive long term digital labor success resides in the systems that CIOs manage today.

Digital labor considerations
THE DUAL ROLE FOR THE CIO

1. Enable Business Transformation
   - Back Office
     - Human Resources
     - Legal/Compliance
     - Finance & Accounting
     - Supply Chain
     - Industry Specific Functions
   - Customer-Facing
     - Marketing
     - Sales
     - Customer Support

   Digital Labor CoE
   - Opportunity Assessment
   - Technology Evaluation
   - Architecture and Integration
   - Stand Up and Training
   - Digital Labor Operations
   - Security and Governance

   As a Business Enabler
   - CIO

   As an IT Functional Leader

2. Automate IT Delivery
   - Customer Management
   - Strategy and Architecture
   - Solution Development/Delivery
   - Operations
   - IT Management

   CIO Organisation
GETTING TO GRIPS WITH DIGITAL

Org’s with CDOs
- 2014: 7%
- 2015: 17%
- 2016: 19%

Enterprise-wide digital strategies
- 2015: 27%
- 2016: 35%

Ownership of digital strategy
- C Suite: 37%
- IT: 16%
- Marketing: 9%
- IT/Marketing: 14%
- Other: 24%

Comparison of Org’s with CDOs: 2014: 7%, 2015: 17%, 2016: 19%
Comparison of Enterprise-wide digital strategies: 2015: 27%, 2016: 35%
JOURNEY TO THE CLOUD

Reasons to invest in cloud

- Improve availability and resiliency: 40%
- Improve agility and responsiveness: 40%
- Accelerate product innovation: 34%
- Save money: 33%
- Best solution available: 27%
- Simplified management: 21%
- Shift CapEx to OpEx: 21%
- Data centre modernisation: 19%
- Better enable the mobile workforce: 19%
- Support global shared services: 13%
- Improve alignment with customers: 11%
- Attract talent: 1%

Org’s significantly investing in cloud

<table>
<thead>
<tr>
<th>Type</th>
<th>Now</th>
<th>1-3 yrs time</th>
</tr>
</thead>
<tbody>
<tr>
<td>SaaS</td>
<td>31%</td>
<td>49%</td>
</tr>
<tr>
<td>PaaS</td>
<td>20%</td>
<td>37%</td>
</tr>
<tr>
<td>IaaS</td>
<td>25%</td>
<td>39%</td>
</tr>
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Source: Harvey Nash / KPMG CIO Survey 2016
PANEL

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Former CIO & Head Operations at Raiffeisen

Volker Schmidt  
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CSS Insurance

Hosted by Albert Ellis, CEO, Harvey Nash