Technology Adoption Survey Findings

Ms Aurelia Leopold
Director, Finance and Banking, Taylor Nelson Singapore

Ms Ruchika Talwar
Senior Manager, Qualitative Research, Taylor Nelson Singapore
Changing gears to meet the future

Measuring Technology Adoption in the Accountancy Profession
Measuring and understanding the technology adoption rate of accounting and finance functions across organizations

As the finance job function grows to be more complex, there is a need to shift towards higher-value, analytical activities and spend less time on transactional matters.

Hence, it becomes crucial for organizations to adopt integrated software/solutions to streamline their processes in order to improve their productivity, stay competitive and most importantly, GROW.

ISCA wanted to establish the strategic roadmap to get to the right level of technology adoption amongst Public Accounting firms and Accounting & Finance function of companies, and to help them reach the next level.
With this in mind, we designed a Technology adoption study speaking to the following people:

- The specifications of the study is broken down into two phases:

**Phase 1: Quantitative**

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Online survey via Email invite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
<td>N=130 completed interviews, out of a total of over 1,600 members</td>
</tr>
<tr>
<td>Sample source</td>
<td>ISCA, on the assumption all members will have given consent to receive surveys, as required by the Singapore Personal Data Protection Act</td>
</tr>
<tr>
<td>Sample profile</td>
<td>Existing members of ISCA who works with PA firms or on A&amp;F Function</td>
</tr>
</tbody>
</table>
| Sample quota            | N=60 PA Firms  
                          N=70 A&F function |
| Interview length        | 15 mins |
| Interview language      | English |

**Phase 2: Qualitative**

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Focus group discussions (FGDS),</th>
</tr>
</thead>
</table>
| Sample size             | N=4  
                          - PA firms : 2 FGDs  
                          - A& F : 2 FGDs |
| Sample source           | Recruitments facilitated by ISCA |
| Sample profile          | Existing members of ISCA who works with PA firms or on A&F Function |
| Interview length        | 90-120 minutes |
| Moderation              | All groups moderated by experienced TNS qualitative researchers |
4 out of 5 use technology within A&F departments, while in PA firms there is still a majority who don’t have a practice management system, and less than half use technology for their key services.

**Accounting & Finance Departments**

**Usage of technology/software in Accounting and Finance department**
Base: Amongst those who work in Accounting and Finance department (n=70)

- 81% Yes
- 19% No

**Deep dive into company size**

**Amongst those who use technology/software in A&F department**
- SME (≤ 200) 54%
- Large companies (>200 employees) 46%

**Top 3 services & use of technology**
- Statutory audit: 52% use technology
- Compilation: 28% use technology
- Taxation: 24% use technology

**Public Accounting firms**

**Usage of practice management system firm-wide**
Base: Amongst those who work in Public Accounting firm (n=60)

- 67% Yes
- 33% No

**Usage of software**
Base: Amongst those who work in Public Accounting firm (n=60)

- 55% Yes
- 45% No

Note that charts will not add up to 100% as this is a multiple answer question.
State of technology adoption (PAF): 18% are using Audit software

Usage of Technology/Software in Public Accounting Firms

Approximately 18% of accounting firms are using Audit Software.

Results from Isca’s audit manual survey: Approximately 15% are using audit software.
Only 2/3 of A&F departments use technology for compliance or planning. The adoption is higher for transactional operations. Similarly in PA firms, wide usage for Billing & Timesheets but low for management reporting or CRM.

**Accounting & Finance Departments**

^Usage of technology/software across the different areas of the Accounting and Finance department

<table>
<thead>
<tr>
<th>Total</th>
<th>Transaction Processing</th>
<th>Compliance and Control</th>
<th>Planning and Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>84%</td>
<td>67%</td>
<td>67%</td>
</tr>
</tbody>
</table>

**Public Accounting firms**

^Usage of technology by Firm’s operational functions

Base: Amongst those who are using technology (n=41)

<table>
<thead>
<tr>
<th>Operational Function</th>
<th>Technology Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billing</td>
<td>76%</td>
</tr>
<tr>
<td>Customer Relationship Management (CRM)</td>
<td>15%</td>
</tr>
<tr>
<td>Document Management</td>
<td>22%</td>
</tr>
<tr>
<td>Job Scheduling</td>
<td>39%</td>
</tr>
<tr>
<td>Management Reporting</td>
<td>27%</td>
</tr>
<tr>
<td>Technical Library</td>
<td>17%</td>
</tr>
<tr>
<td>Timesheet</td>
<td>66%</td>
</tr>
</tbody>
</table>

*Others include: Peoplesoft, Axiom, Bios, Infor ERP, Qlikview, Infomaster, Hyperion, Axapta, Prophix, etc
^ Note that the charts will not add up to 100% as this is a multiple answer question.

Base: Amongst those who work in Accounting and Finance department (n=70)
Base: Amongst those responsible for transaction processing (n=56) | Amongst those responsible for Compliance and control (n=54) | Amongst those responsible for Planning and Analysis (n=55)
B4. Other than Microsoft Excel, what software/ system does your department currently use? (MA)
In A&F departments, software are mostly custom built, unlike for PA where they are most of the time off the shelf. Cloud is still an opportunity with 2/3 of solutions currently on premise.

### Accounting & Finance Departments

<table>
<thead>
<tr>
<th>Base</th>
<th>Off the shelf</th>
<th>Custom-developed</th>
<th>Cloud-based</th>
<th>On-premise</th>
<th>Average Length of usage (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>85</td>
<td>31%</td>
<td>69%</td>
<td>33%</td>
<td>67%</td>
</tr>
</tbody>
</table>

SAP is the most frequently encountered system

### Public Accounting firms

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</thead>
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<tr>
<td>Total</td>
<td>75</td>
<td>77%</td>
<td>23%</td>
<td>36%</td>
<td>64%</td>
</tr>
</tbody>
</table>

Very fragmented, no prevalent system

Few mentions of concerns around confidentiality and security of data shared
The main reason for choosing a particular software is fit for purpose – however levels of satisfaction could be better.

### Accounting & Finance Departments

<table>
<thead>
<tr>
<th>Base</th>
<th>^Key reason for purchase of product</th>
<th>Performance of current software (Very Good/Excellent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Fit for purpose</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>Ease of use</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td>Required by head office</td>
<td></td>
</tr>
</tbody>
</table>

SAP, Oracle more often required by HQ – which leads to lower satisfaction.

### Public Accounting firms

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<tr>
<td>Total</td>
<td>Fit for purpose</td>
<td>80%</td>
</tr>
</tbody>
</table>

^Note that key reasons for purchase will not add up to 100% as this is a multiple answer question.

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Base: Amongst those who work in Accounting and Finance department (n=70)
Base: Amongst those responsible for transaction processing (n=56) | Amongst those responsible for Compliance and control (n=54) | Amongst those responsible for Planning and Analysis (n=55)
86. Why did your department choose to buy <INSERT PRODUCT FROM B4>? (MA)
T1. All things considered, how would you rate the performance of the current software/ system(s) in your department in helping you to improve your productivity, e.g. time savings and cost savings? (SA)
*Low base
Generating time saving is most important to both A&F departments & PA firms – with significant improvement observed. Improving control & generating cost savings are also critical, however a key difference between A&F & PA is that A&F departments don’t expect to see a direct link with revenue.

**Accounting & Finance Departments**

Base: Amongst those who work in Accounting and Finance department who uses software (n=57)

^Important benefits when using a software/system

<table>
<thead>
<tr>
<th>Important benefits</th>
<th>Average Improvement</th>
</tr>
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<tbody>
<tr>
<td>Generate time saving</td>
<td>17.9%</td>
</tr>
<tr>
<td>Improve control, risk management and governance</td>
<td>N/A</td>
</tr>
<tr>
<td>Generate cost saving</td>
<td>12.2%</td>
</tr>
<tr>
<td>Increase in revenue</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

Most gains observed for Transactional activities

Base: Amongst those who work in Accounting and Finance department who uses software (n=57)

^Note that charts will not add up to 100% as this is a multiple answer question.

**Public Accounting firms**

Base: Amongst those who are using technology (n=41)

<table>
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<th>Important benefits when using a software/system</th>
<th>Average Improvement</th>
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<td>Generate time saving</td>
<td>22%</td>
</tr>
<tr>
<td>Improve control, risk management and governance</td>
<td>N/A</td>
</tr>
<tr>
<td>Generate cost saving</td>
<td>18%</td>
</tr>
<tr>
<td>Increase in revenue</td>
<td>12%</td>
</tr>
</tbody>
</table>

Base: Amongst those who work in Accounting and Finance department who uses software (n=57)
Base: Amongst those responsible for transaction processing (n=47) | Amongst those responsible for Compliance and control (n=44) | Amongst those responsible for Planning and Analysis (n=47)
D1. How important are the following benefits to you when using a software/ system?
D2. What was the annual percentage improvement achieved for each of the following areas relative to previous year?
The process of software adoption is perceived to be time and cost intensive → leaner business find it harder to justify

- Installation & onboarding
- Manual data key in – ongoing process
- Churn triggered training/onboarding
- Generating output, analysis and monitoring
- Software upgrading, data transfer
- Money investment
- Time cost
Therefore smaller PA firms likely to use for basic enablement functions vis-à-vis relatively larger A& F functions.
Training is the key action taken by companies to educate members and nurture competency in using the software/system in the company, it is also the most effective action.

**Actions taken to ensure user competency of software/system**

*Base: Amongst those who work in Accounting and Finance department who uses software (n=57)*

- **Training**: 96%
- **Contactable Helpdesk And Technical Support**: 82%
- **Online Self-help Guide**: 39%

56% of respondents ranked training as the **MOST** effective action in ensuring that users are competent in using the software/system

**Base: Amongst those who are using technology (n=41)**

- **Training**: 90%
- **Contactable Helpdesk And Technical Support**: 68%
- **Online Self-help Guide**: 54%

65% of respondents ranked training as the **MOST** effective action in ensuring that users are competent in using the software/system

^Note that charts will not add up to 100% as this is a multiple answer question.

TNS
A key challenge that both A&F / PA firms face when using the software/system is that they are unaware of the full features of the software – hence they are not able to fully utilize its benefits in improving efficiency and the lack of understanding of the features could possibly lead to them not being able to navigate it seamlessly.

^Challenges faced using the software/system
Base: Amongst those who work in Accounting and Finance department who uses software (n=57)

- Unaware of the full features: 77%
- Difficult to navigate and not intuitive: 53%
- Lack of proper training: 46%
- Presence of bugs/glitches in the software/system: 37%
- Longer time to do daily tasks: 28%
- Poor customer support/helpline: 19%
- Difficult to install: 18%
- Others: 11%

^Note that charts will not add up to 100% as this is a multiple answer question.

"Training is important, how well they get people on boarding sessions and all that. My company does a lot of road show, they will have a lot of on boarding sessions, just for the Singapore office they will organize three to four sessions, so there is no excuse for you. But it’s not easy to get everybody to go, but if you don’t go you really don’t know how to use it”

^Challenges faced using the software/system
Base: Amongst those who are using technology (n=41)

- Unaware of the full features: 66%
- Difficult to navigate and not intuitive: 49%
- Longer time to do daily tasks: 41%
- Lack of proper training: 29%
- Presence of bugs/glitches in the software/system: 27%
- Poor customer support/helpline: 22%
- Others: 12%
- No challenges: 5%
- Difficult to install: 2%
Majority of members (86%) are aware of the government schemes provided to encourage technology adoption in companies, mainly IRAS PIC. 67% of those who are aware, uses the IRAS PIC scheme, while 30% of the members do not use any schemes. Members felt that funding quantum is the key area that can be improved on.

Awareness of government schemes for technology adoption

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Awareness (%)</th>
<th>Use (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRAS Productivity and Innovation Credit (PIC)</td>
<td>84%</td>
<td>67%</td>
</tr>
<tr>
<td>SPRING Innovation and Capability Voucher (ICV)</td>
<td>30%</td>
<td>58%</td>
</tr>
<tr>
<td>SPRING Capability Development Grant (CDG)</td>
<td>29%</td>
<td>50%</td>
</tr>
<tr>
<td>IDA iSPRING</td>
<td>17%</td>
<td>28%</td>
</tr>
<tr>
<td>IDA Enhanced iSPRING</td>
<td>9%</td>
<td>42%</td>
</tr>
<tr>
<td>None</td>
<td>14%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Government schemes used currently

- IRAS PIC: 67% of those aware
- IDA iSPRING: 85% of those aware

49% of respondents ranked Funding Quantum as the KEY area that government schemes can improve on.

48% of respondents ranked Funding Quantum as the KEY area that government schemes can improve on.

"Of course we SMEs welcome grants and subsidies to buy software. SPRING is available if you implement certain new initiatives, anything which improves productivity, including accounting, processes (is available)."

^ Note that charts will not add up to 100% as this is a multiple answer question.
The key motivation for adopting technology is fit for purpose – while Costs are the main barrier.

**Accounting & Finance Departments**

**Key reasons for NOT using a software:**
1) Costs
2) Lack of Management support & commitment

**Base:** Amongst those who work in Accounting and Finance department and are NOT using any software for each of the areas (n=26)

**Motivation to adopt software in the next 12 months**
- Ease of use: 73%
- Price: 85%
- Fit for purpose: 85%
- Others: 12%

**Public Accounting firms**

**Key reasons for NOT using a software:**
1) Costs
2) No suitable software (Liquidation, receivership management, valuation & forensic)

**Base:** Amongst those who work in PA Firms and are NOT using any software for each of the areas (n=50)

**Motivation to adopt software in the next 12 months**
- Ease of use: 74%
- Price: 72%
- Fit for purpose: 92%
- Others: 6%

*Note that charts will not add up to 100% as this is a multiple answer question.*

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TNS

H1. Why is your department not using any software/ system for the following functions? (MA)
H2. What will motivate you to adopt technology in the next 12 months?
Key Opportunities

- **Opportunity for wider adoption in compliance & control, and planning & analysis**

- **Smaller companies** struggle with costs and support /knowledge: opportunity for an active role to guide them

- **Training** on most often used software can also help as they are usually not taking advantage of all features

- Besides, currently while the awareness of **government schemes** is high, there is still a gap in terms of usage because of funding quantum, eligibility criteria & ease of claiming process – this might be driven purely by perception.

- **Opportunity for wider adoption among small firms not using firm wide practice management** – usually firms with their IT outsourced.

- **Opportunity to drive awareness of the benefits of technology** as a need for adoption is not always obvious (process perceived as working fine, with too much time, training & costs to invest for a change): educating them about long term benefits and guiding them through finding the right technology within their limited budget. They also have the same challenges & suggestions as SMEs with regards to Government schemes.

- Further **training** on existing software (sometimes perceived as more time consuming than manual tasks) would also be helpful.
Thank You
Sharing from Workforce Singapore

Mr Melvin Yang
Manager, Creative and Professional Services Division,
Workforce Singapore
From 1 Jul 2016, WorkPro has been enhanced to encourage employers to implement age-friendly workplaces through job redesign and age management practices for older workers.

Objectives
Support the employment and employability of older workers aged 50 and above

Develop a strong Singaporean core by encouraging sustainable flexible work arrangements for all workers.
**WorkPro Grant Components**

**Age Management Grant**
- Up to $20,000
- Adopt progressive age management practices

**Job Redesign Grant**
- Up to $300,000
- Positive impact on older workers by providing easier, safer and smarter jobs

**Work-Life Grant**
- Up to $160,000
- Implement and sustain Flexible Work Arrangements

*Note: The grant components and amounts are illustrative and subject to change.*
Funding Considerations

1. Productivity Project *with elements of Easier, Smarter, Safer for Ageing Population*
2. Total Project Investment Cost
3. Manpower Structure

**Example Manpower Structure:**

<table>
<thead>
<tr>
<th>No. of Employees</th>
<th>1. Above 60 yrs old</th>
<th>2. 50 – 59 yrs old</th>
<th>3. 40 – 49 yrs old</th>
<th>4. &lt; 40 yrs old</th>
</tr>
</thead>
</table>

**Funding Mechanism**

**JR Qualifying Project Cost:** $500,000  
**Workers to Benefit:** 10 older workers aged 50 – 59 years  
8 older workers aged above 60 years

---

**Grant Computation**

**JR Grant**

$260,000 (52%)

80% x $500K = $400K  
(capped at $300K – Funding Limit)  
Or  
($10K x 10) + ($20K x 8) = $260K

whichever is lower

**JR (Rider) Grant**

(Took up other schemes such as IGP or CDG)

$400,000 (80%)

CDG: 70% x $500K = $350K

JR (Rider): 10% x $500K = $50K  
Or  
($10K x 10) + ($20K x 8) = $260K

whichever is lower
Funding Mechanism

Project Cost

Maximum funding 80% of Project Cost

Funded by other agency?

Yes

Funding Nett other Govt Grants

No

2\textsuperscript{nd} Funding Calculation based on no. of older workers,
* Tiered quantum for older workers:
• $10,000 per older worker aged 50 to 59 years old
• $20,000 per older worker aged 60 and above

Whichever lower

JR Grant

Whichever lower

JR Rider Grant
1. **Productivity Project with elements of Easier, Smarter, Safer for Ageing Population**
2. **Total Project Investment Cost**
3. **Manpower Structure**

### Example Manpower Structure:

| No. of Employees | 1. Above 60 yrs old  
2. 50 – 59 yrs old  
3. 40 – 49 yrs old  
4. < 40 yrs old |
|------------------|------------------------------------------------|

**Funding Considerations**
Thank you.

For more details:

Melvin Yang,  Melvin_YANG@wsg.gov.sg
Rain Lim,    Rain_LIM@wsg.gov.sg
Merry Christmas & Happy New Year!

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