An exploratory survey on Challenges Adopting LibreOffice in Taiwanese Local Government

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1. Research Motivation, and Research Questions.
2. Brief Literature Review and Questionnaire Structure
3. Statistical Results and Interpretations
4. Interesting Discoveries
5. May Franklin’s conducts to mitigate gap works?
6. Conclusions and Suggestions
7. Acknowledgment
Research Background

- Few empirical studies about this issue is conducted in Taiwan, and knowledge of this issue is fragmented.
- Knowing end-users’ subjective feeling about the software is important step promoting LibreOffice and ODF policy.
Main Research Questions

- How was the adoption progress in Taiwan government.
- How and would civil-servants’ feeling or behavior vary in different attributions, such as age, IT experience, etc?
- How to improve our promotion of LibreOffice effectively in Taiwanese context?
Ajzen’s (1991:182) Theory of Planned Behavior
The main concept and components of the questionnaire are referenced to these articles: Brooke (1996); Chin, Diehl, & Norman (1988); Ko (2005); Nielsen (1995); Nielsen (2012); Raza et al. (2012); Sutor (2008); Taylor & Todd (1995).
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Responds based on the time-lapse

![Bar chart showing the number of responses from 2018-05-23 to 2018-06-07. The highest response was on 2018-05-29 with 19 responses, followed by 12 responses on 2018-05-30. There were 6 responses on 2018-05-31, 8 responses on 2018-06-01, 5 responses on 2018-06-04, 10 responses on 2018-06-05, and 3 responses on 2018-06-06 and 2018-06-07.]
1. Most are street-level servants in a local government.

2. Most people are aged in 30-50 yrs old.

3. Medium-highly dependence on computer. (6-9 hours)
Main results

- Respondents show mostly neutral but tend to negative attitude.
Q22-1 I found there are too many difference in the way using LibreOffice and Microsoft Office.
Q22-2 It takes me a lot of time getting familiar with LibreOffice.
Q22-3 If I save and share files as ODF, It is hard to cooperate with my colleague.
Q22-5 In general, LibreOffice could fit my work need.
Q22-6 In general, my experience working with LibreOffice is pleasant.
Q22-7 I think LibreOffice is very hard to use.
Q22-8 I would like to spend more time working with LibreOffice
Q22-9 I would like to recommend other people working with LibreOffice.
Frequency of responds of Q23

- Much more less than Microsoft: 32
- Little less than Microsoft Office: 8
- Mainly equal: 2
- Little more than Microsoft Office: 4
- Much more than Microsoft Office: 3
Q22-4 My affiliation could help me if I have trouble using LibreOffice.
Read the !@#$ manual?

<table>
<thead>
<tr>
<th>Choice</th>
<th>Rank 1</th>
<th>Rank 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asking my colleagues and IT supervisors.</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Reading the (online) manual of this software.</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Search for similar cases on the Internet.</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Asking questions on the online communities.</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Watching tutorial videos on the Internet, such as YouTube.</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>
Is the stereotype of age diff. is true?

22-2 It takes me a lot of time getting familiar with LibreOffice.

\[ f(x) = -0.02x + 4.25 \]

\[ R^2 = 0.03 \]
22-7 I found LibreOffice is hard to use.**

\[ f(x) = -0.04x + 4.91 \]
\[ R^2 = 0.1 \]

*p<0.1, **p<0.05, ***p<0.01
22-8 I would like to spend more time working with LibreOffice.

\[ f(x) = 0.03x + 1.65 \]
\[ R^2 = 0.07 \]

\[ *p<0.1, **p<0.05, ***p<0.01 \]
23 Compared to Microsoft Office, how much time you work with LibreOffice in general?

\[ f(x) = -0.19x + 1.91 \]

\[ R^2 = 0 \]
• Even though in statistical perspective, age is not absolutely influential factor (due to low R square), it is interesting findings in measuring bureaucrats’ feeling or behavior in quantitative method.

• However more further research should be conducted, reliability and validity should be concerned also.
May Franklin’s conduct of helping migration works in Taiwanese Context?

I compared several groupings in different occasions with simple statistical methods in the following slides.
<table>
<thead>
<tr>
<th>Know the policy?</th>
<th>Samples</th>
<th>Mean</th>
<th>Difference</th>
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</thead>
<tbody>
<tr>
<td>22-6 In general, my experience working with LibreOffice is pleasant.</td>
<td>no</td>
<td>9</td>
<td>2.22</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>46</td>
<td>2.78</td>
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<tr>
<td>22-9 I would like to recommend other people working with LibreOffice.</td>
<td>no</td>
<td>9</td>
<td>2.33</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>46</td>
<td>2.85</td>
</tr>
<tr>
<td>23 Compared to Microsoft Office, how much time you work with LibreOffice in general?</td>
<td>no</td>
<td>7</td>
<td>1.86</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>42</td>
<td>1.71</td>
</tr>
<tr>
<td>Question</td>
<td>Attended the orientation?</td>
<td>Sample Size</td>
<td>Mean</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>22-6 In general, my experience working with LibreOffice is pleasant.</td>
<td>no</td>
<td>18</td>
<td>2.83</td>
</tr>
<tr>
<td></td>
<td>yes</td>
<td>28</td>
<td>2.75</td>
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<tr>
<td>22-8 I would like to spend more time working with LibreOffice.</td>
<td>no</td>
<td>18</td>
<td>2.89</td>
</tr>
<tr>
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<td>yes</td>
<td>28</td>
<td>2.93</td>
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<tr>
<td>22-9 I would like to recommend other people working with LibreOffice.</td>
<td>no</td>
<td>18</td>
<td>2.56</td>
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<tr>
<td>Compared to Microsoft Office, how much time you work with LibreOffice</td>
<td>yes</td>
<td>28</td>
<td>3.04</td>
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<tr>
<td>in general?</td>
<td></td>
<td></td>
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<td>24</td>
<td>1.75</td>
</tr>
<tr>
<td>Question</td>
<td>Taken the training course?</td>
<td>N</td>
<td>mean</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>-----</td>
<td>--------</td>
</tr>
<tr>
<td>22-2 It takes me a lot of time getting familiar with LibreOffice.</td>
<td>No</td>
<td>23</td>
<td>3.91</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>32</td>
<td>3.22</td>
</tr>
<tr>
<td>22-6 In general, my experience working with LibreOffice is pleasant.</td>
<td>No</td>
<td>23</td>
<td>2.43</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>32</td>
<td>2.88</td>
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<tr>
<td>22-7 I think LibreOffice is very hard to use.</td>
<td>No</td>
<td>23</td>
<td>3.87</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>32</td>
<td>3.00</td>
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<td>Yes</td>
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<td>1.86</td>
</tr>
</tbody>
</table>
Conclusions and Suggestions

- Well training system and documentation is crucial, improving user-experience and user-interface should be in priority.
- Usability test on Windows may be more deployed.
- Mitigating the UX gap between proprietary software and LibreOffice should be another concern.
Acknowledgment

• Dr. Dong and Dr. Hsiao, faculty in my academic dept for professional conduction.

• Franklin Weng for helping me deliver questionnaire and sharing us his exp.

• Overall, I take the full responsibility for the wording and content of this article, and (potential) mistakes in this presentation.
Appendix: References


