

A Study on Public Library Roles: From the Perspective of Big Data

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Research Background

Potentials for Data Explosion Big Data various aspects, e.g. KM To be managed BD in public libraries To manage One sub-project of a two-year government funded project: Big Cities Meet Big Data

http://blogs2.abo.fi/bcbd/



Research Question

What is the role of the Public Library in managing Big Data and bringing citizens to Big Data?







Empirical Work

Literature review

Online Survey

Interview





Roles attained from previous studies

- 1. From the perspective of enlarging the audience of Big Data:
 educator and marketer
- 2. From the perspective of sustainable development: data organiser and data container
- 3. From the perspective of user conduction: advocator and adviser
- 4. From the perspective of service improvement: developer and organization server





Online survey

Target Group: Finnish librarians in public libraries

Motivation: to verify the roles

Method: web-based survey

Number of respondents: 48 out of more than 500!!!





Online Survey

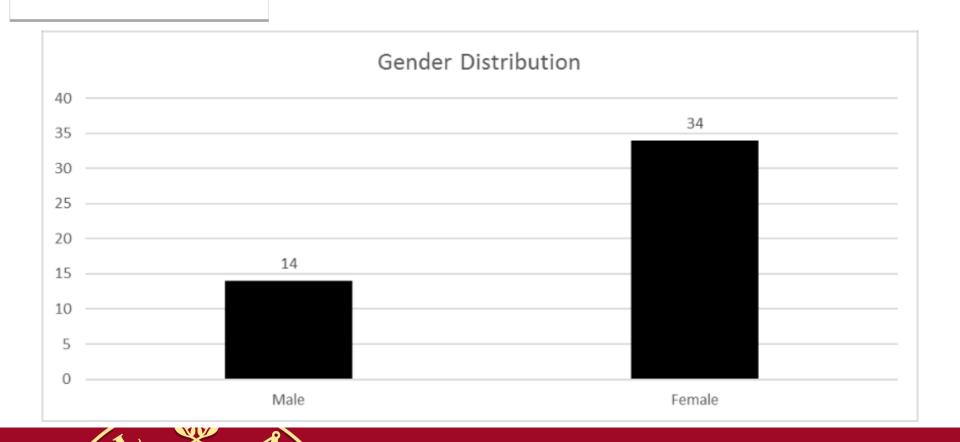
Demographic information

Perception of Big Data

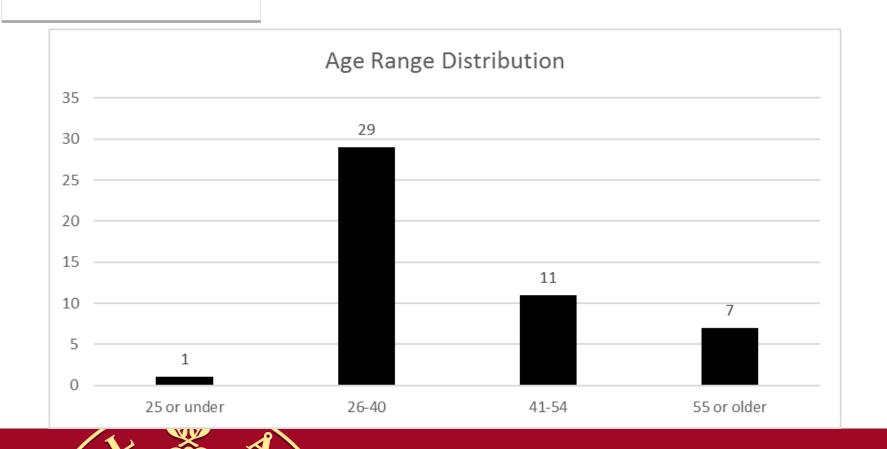
Opinions towards different roles



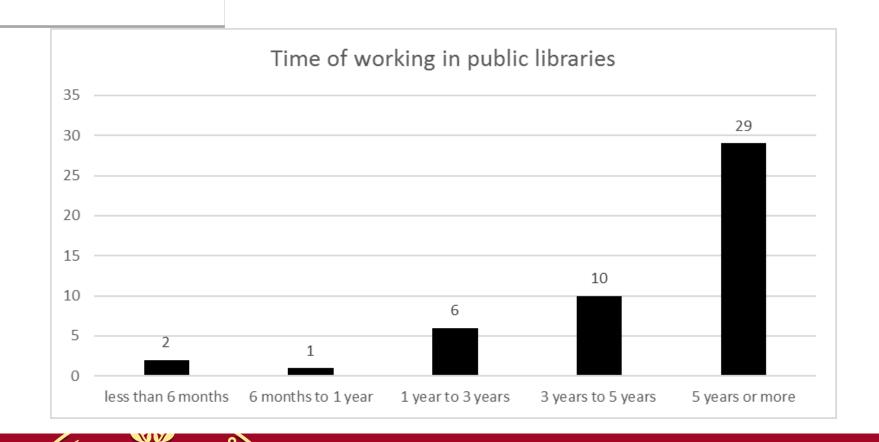




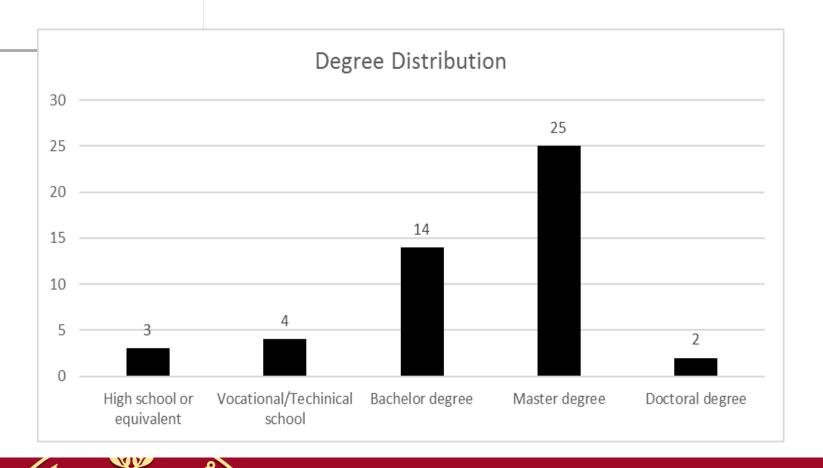






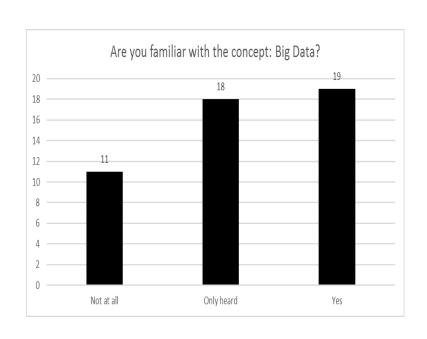


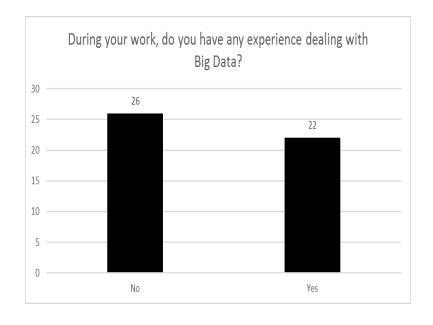






The analysis of librarians' perception of Big Data









The analysis of librarians' perception of Big Data

| Item | Mean value |
|---|------------|
| I8: You need to conduct large volume of data in your work (Volume) | 1.98 |
| I9: You need to deal with various kinds of data in your work (Variety) | 4.44 |
| I10: You need to deal with data increasing very fast (Velocity) | 2.10 |
| I11: You can find out useful information during the data processing operation (Value) | 2.85 |
| The mean value of four items | 2.84 |

Likert scale 7. 1 means never, 7 means everyday





Opinions on library roles

| Roles | Item | Mean value | Overall mean value |
|---------------------|------|------------|--------------------|
| Marketer | l12 | 5.27 | 5.06 |
| | I13 | 4.85 | |
| Educator | l14 | 4.83 | 5.22 |
| | l15 | 5.60 | |
| Data Organizor | I16 | 4.54 | 4.62 |
| | I18 | 4.69 | |
| Data Container | I16 | 4.54 | |
| | l17 | 3.81 | 4.64 |
| | I19 | 5.58 | |
| Advocator | 120 | 5.79 | 5.33 |
| | I21 | 4.86 | |
| Advisor | 122 | 5.38 | 4.06 |
| | 123 | 4.54 | 4.96 |
| Developer | 124 | 5.00 | 4.86 |
| | 125 | 4.71 | |
| Organization server | 126 | 4.10 | 4.10 |
| | 127 | 4.10 | 4.10 |

Likert scale 7. 1 means totally disagree, 7 means totally agree





Exploring the potential influential factors of respondents' opinions

| Independent Variables | Sig |
|---|-------|
| ABDP | 0,034 |
| Degree | 0,284 |
| Time working in library | 0,239 |
| Library infrastructure maintenance | 0,514 |
| General library management | 0,544 |
| Cataloging/Classification/ Technical services | 0,516 |
| Electronic information service | 0,880 |
| Enquiry work/ Reader service | 0,880 |
| Library loans/ Document delievry | 0,289 |
| Other | 0,747 |



Conclusions from the survey

- 1. There is a natural match between public libraries and Big Data
- 2. The understanding of Big Data is not clear for librarians, which might make difference.
- 3. Respondents tend to agree with user-oriented roles (educator, marketer, advocator, advisor and developer)
- Therefore: user-oriented roles should be mainly developed and undertaken
- The outcome of this subproject is presented as a paper, which is now under revision according to the opinion from The Electronic Library, in-depth interviews are under conduction with library directors.



Thank you





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