Vliv současných IT trendů na budoucnost šedé literatury
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Impact of Current Information Technology Trends on the Future of Grey Literature

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Presentation at a glance

- IT progress
- Present state of information management
- Grey literature today
- Grey literature challenges
- Current information technology trends
- Information management relevant trends
- Impact on grey literature
- Conclusions
IT progress

- Tremendous development
- Boundary-pushing innovations
- Constant change
- Fast pace

Examples

- "Moore's law" the number of transistors in a dense integrated circuit has doubled approximately every 18 m.
- The processing power of computers from 1956 to 2015 increased 1 trillion-fold
- 1994 first mobile phone to feature software applications (IBM Simon); 2007 iPhone (first commercial smartphone to use finger input); 2010 the Samsung Galaxy S
- 1975-2008 one billion PCs sold; in 2013 alone 1 billion cell phones sold
- 89% of China’s 668 million Internet users access the web from their mobile devices. Similar with other developing nations
- In January 2014, mobile phone Internet usage overtook PC Internet usage
- In January 2016, Google’s AlphaGo crossed a major artificial intelligence threshold by besting human grandmaster Lee Sedol at the famously complex game of Go
Present state of information management

- Libraries and information centers disappearing
- Staff count and professional work decreasing; Evident skill gaps
- Budgets for library and information centers dropping
- External content price increasing, access to it more difficult
- High cost of new systems and applications
- Intellectual property management challenges
- External competition (e.g. Amazon, Google)
- Increased user demands (e.g. delivery speed, format, added value)
- Notion that everything is already on the web
Grey literature today

Grey literature stands for manifold document types produced on all levels of government, academics, business and industry in print and electronic formats that are protected by intellectual property rights, of sufficient quality to be collected and preserved by library holdings or institutional repositories, but not controlled by commercial publishers i.e., where publishing is not the primary activity of the producing body. ("Prague Definition" 2010)

The diverse and heterogeneous body of material that is made public outside, and not subject to, traditional academic peer-review processes (Adams at al. 2016)

Multiple shades of grey

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<th>Bibliographies</th>
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Grey literature challenges

Concept
• Distinction from other forms; Diverse types of GL
• New electronic forms (e.g. blogs, Tweets or Facebook postings, webinars)

Processing
• Reliability; Missing key metadata elements
• Lack of bibliographic control and systematic collection

Sustainability
• Long-term preservation; No permanent location identifiers
• Financial sustainability

Usability
• Intellectual property issues
• Open access
What are the current IT trends?

What do IT and other trends tell us about tomorrow?

What is the impact of current trends on the future of GL?
# Current information technology trends – 2016

<table>
<thead>
<tr>
<th>Gartner</th>
<th>Forbes</th>
<th>Forrester</th>
<th>Deloitte</th>
<th>Accenture</th>
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</thead>
<tbody>
<tr>
<td>1. The device mesh</td>
<td>1. Connecting customers</td>
<td>1. Smart connected world</td>
<td>1. Right-speed IT</td>
<td>1. Intelligent automation</td>
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<td>3. 3D printing materials</td>
<td>3. Remote employee development and training</td>
<td>3. APIs as strategy</td>
<td>3. Internet of Things: From sensing to doing</td>
<td>3. Platform economy</td>
</tr>
<tr>
<td>10. Internet of things architecture and platforms</td>
<td>9. Integrate impartial content to support customer decisions</td>
<td>10. Workforce technology</td>
<td>Technology Vision 2016 - People First: The primacy of people in a digital age</td>
<td></td>
</tr>
</tbody>
</table>

*Gartner’s top 10 strategic technology trends for 2016*

*Top 10 Business Trends That Will Drive Success in 2016*

*The Operating Model For Customer Obsession*

*Global Human Capital Trends 2016*
Information management related trends

Technology
- Secure architecture
- Autonomous agents
- Machine learning (algorithms)
- Internet of things (from sensing to doing)
- Application Program Interface (API)
- 3D printing

Customers
- Customer culture
- Connected world
- User experience
- Engage customers
- From data-rich to insight-driven

Products/services
- Added value
- Deliver results, not just solutions
- Social impact
- Predictable disruption
- Digital trust
- Analytics

Employees
- New generation
- Liquid workforce
- Remote work
- Learning & training
- New skills (leadership, sales)
- From silos to connected
Impact on grey literature - Technology

Technology

- Secure architecture
- Autonomous agents
- Machine learning (algorithms)
- Internet of things (from sensing to doing)
- Application Program Interface (API)
- 3D printing

- More difficult access to GL
- Higher level of IT expertise required to access and process GL
- More dynamic docs – less GL
- New tech-driven forms
- Increased amount of big data
Impact on grey literature – Products/services

Products/services

- Added value
- Deliver results, not just solutions
- Social impact
- Predictable disruption
- Digital trust
- Analytics

- Available resources
- Competition with ‘big players’
- Lack of interest to make GL available
- Going beyond local repositories
- Intellectual property protection
- Disappearing e-archives, older materials
Impact on grey literature – Customers

Customers

- Customer culture
- Connected world
- User experience
- Engage customers
- From data-rich to insight-driven

- High expectations (comprehensiveness, relevance, aggregation, added value)
- Interconnectivity
- Top of the line finding tools
- Web 2.0 features (social networking, collaboration, user generated content)
- Tools to exploit big data
- Mobile addiction of the new generation
- Lack of training and understanding of GL
Impact on grey literature – Employees

Employees

- New generation
- Liquid workforce
- Remote work
- Learning & training
- New skills (leadership, sales)
- From silos to connected

- Lack of proper education
- Career development
- Frequent change of jobs and interests (lack of continuity and long-term planning)
- Changing technical requirements
- Business focus
- Culture of preservation missing
- Multitasking and rapid delivery
Conclusions

To increase use of GL
- Make the repositories open and freely accessible to the public
- Get a top performance technical solution (DB, search engine, tools)
- Provide full-text of documents and different record formats

To increase accessibility to GL and meet user needs
- Simplify the basic search interface and improve the advanced search
- Incorporate rich features but make them as discrete as possible
- Offer big data analysis tools

To increase GL visibility
- Incorporate GL with Google.com, Google Scholar and other search engines
- Invest in promotion
- Training, training, training...
I never think of the future - it comes soon enough!

Albert Einstein

Thank you!