

IT vs. Librarians

By

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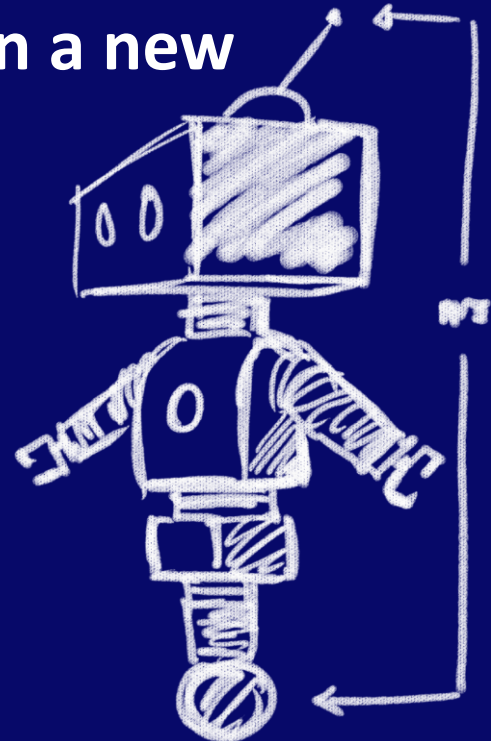
“The spread of computers and the Internet will put jobs in two categories, people who tell computers what to do, and people who are told by computers what to do.”

-Marc Andreessen

co-author of the Netscape browser.

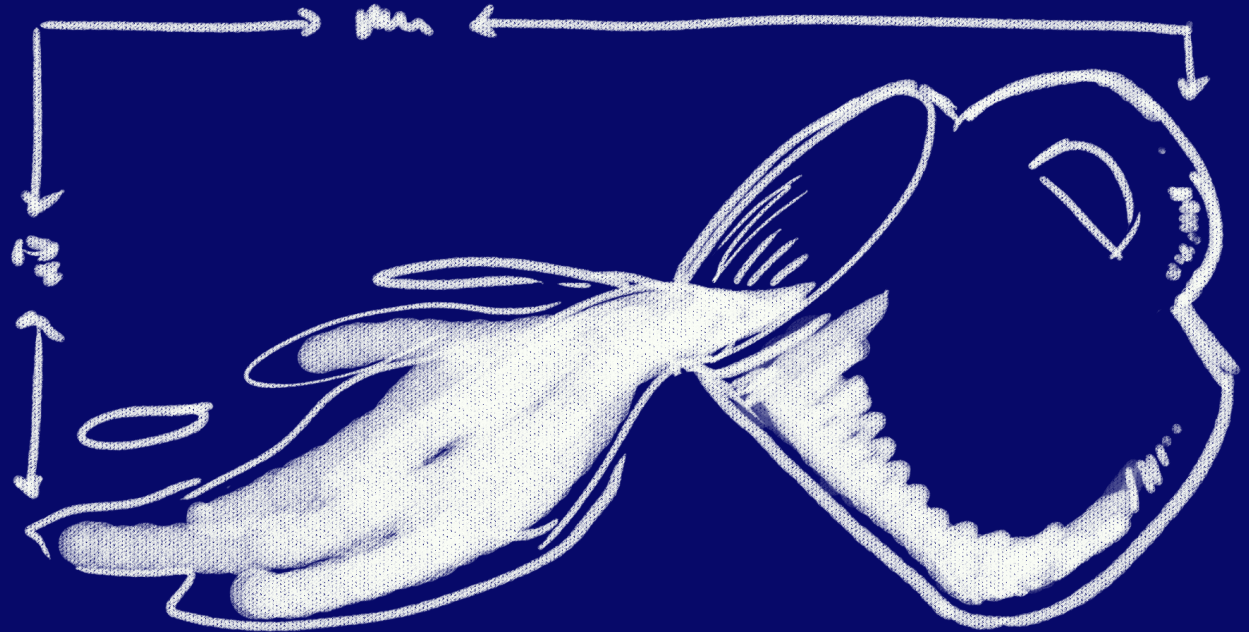
Software is eating the world

- Routine cognitive tasks vs creative tasks
- Technology/Software can directly replaces routine cognitive tasks (step by step instructions)
- Creative task repurpose routine tasks in a new way
- Has eaten some job fields



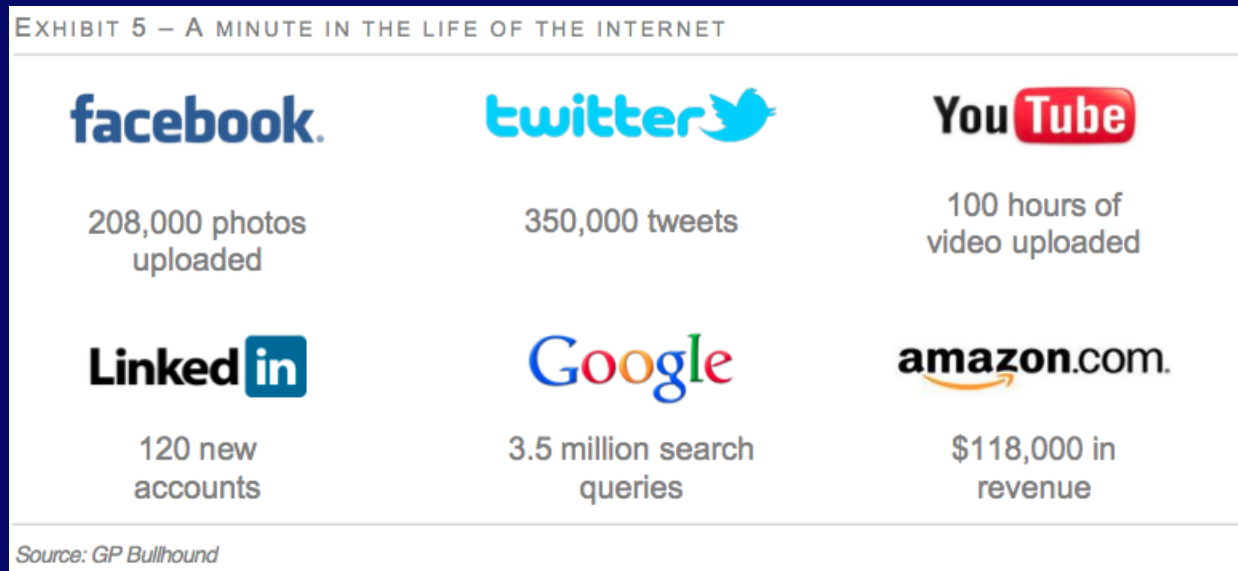
Disruption

- The potential for technologies or services to change the status quo, alter the way people live and work, rearrange value pools, and lead to entirely new products or services.



Rise of the internet

- 25 years old (world wide web)



Software/Technology

- EBooks
- Smartphone/tablet
- Internet
- Streaming Video
- Social Media
- SAS: Software as a Service / Cloud
- Voice recognition
- Artificial Intelligence



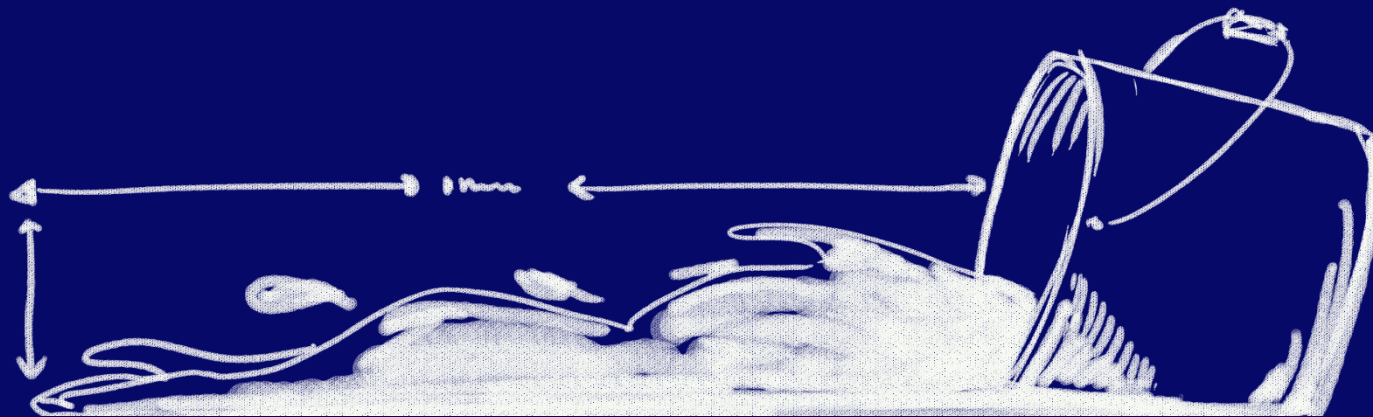
Watson

- Winner of 2011 Jeopardy! competition
- Deciphers patterns
- Appearing in new markets



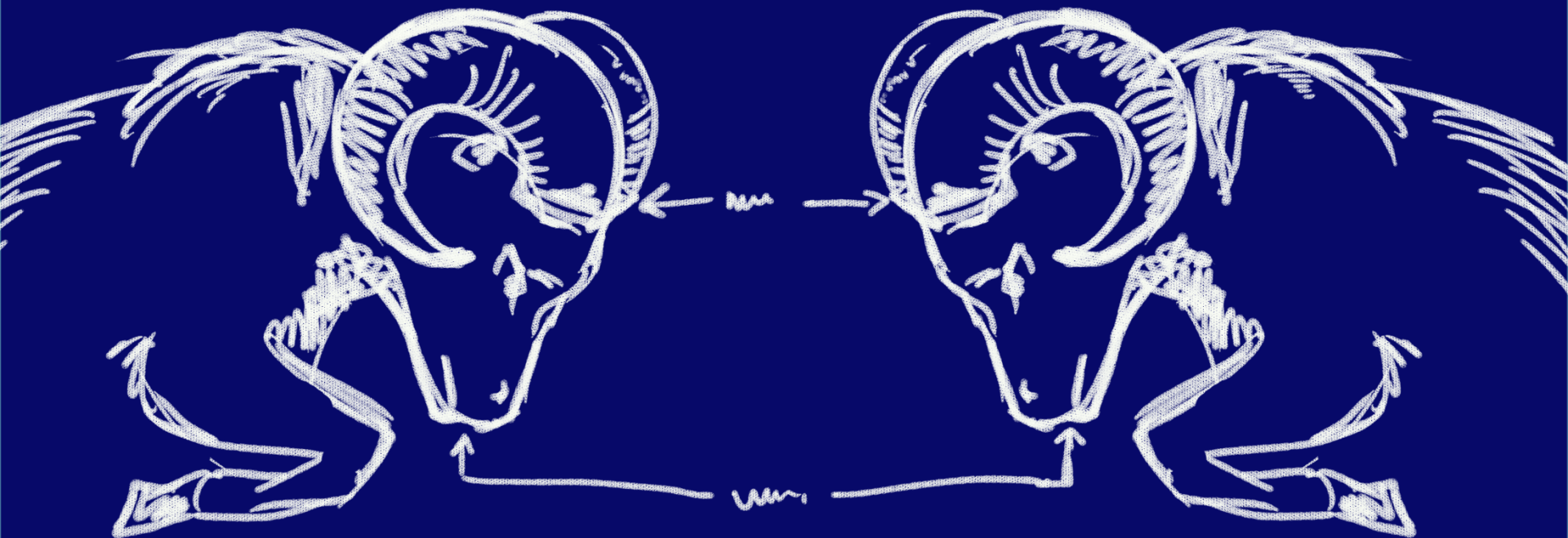
A little more disruption

- Something can always be done cheaper or easier
- Occur without advancements in new technology
- Not necessarily associated with job growth
- Can open up new goods and services



Convergence

- The disruptive power of technology to transform the creation, distribution and consumption of information and media.

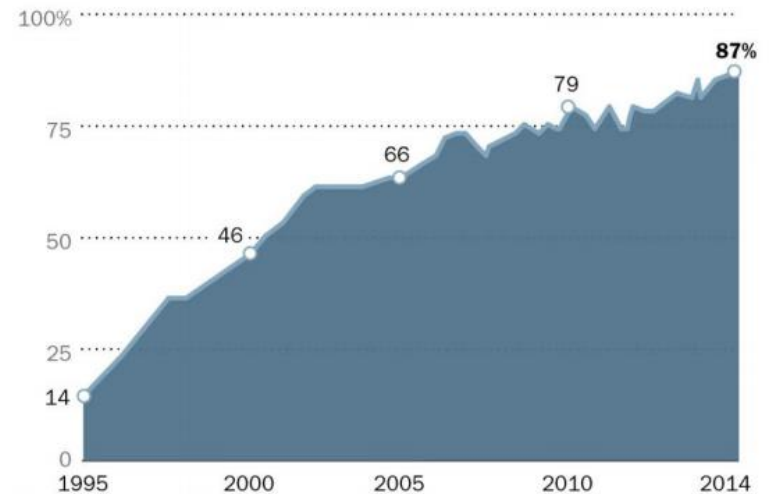


Examples

- Rise of high speed internet to a point of market saturation
- Rise of fixed and mobile internet connections
- Expectation that information and media are instantly accessible

Internet use, 1995-2014

% of American adults who use the internet, over time

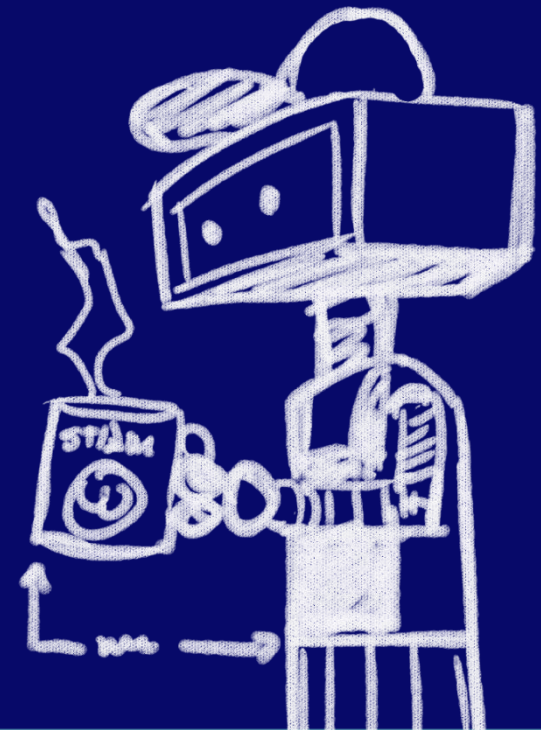


Source: Pew Research Center surveys, 1995-2014.

PEW RESEARCH CENTER

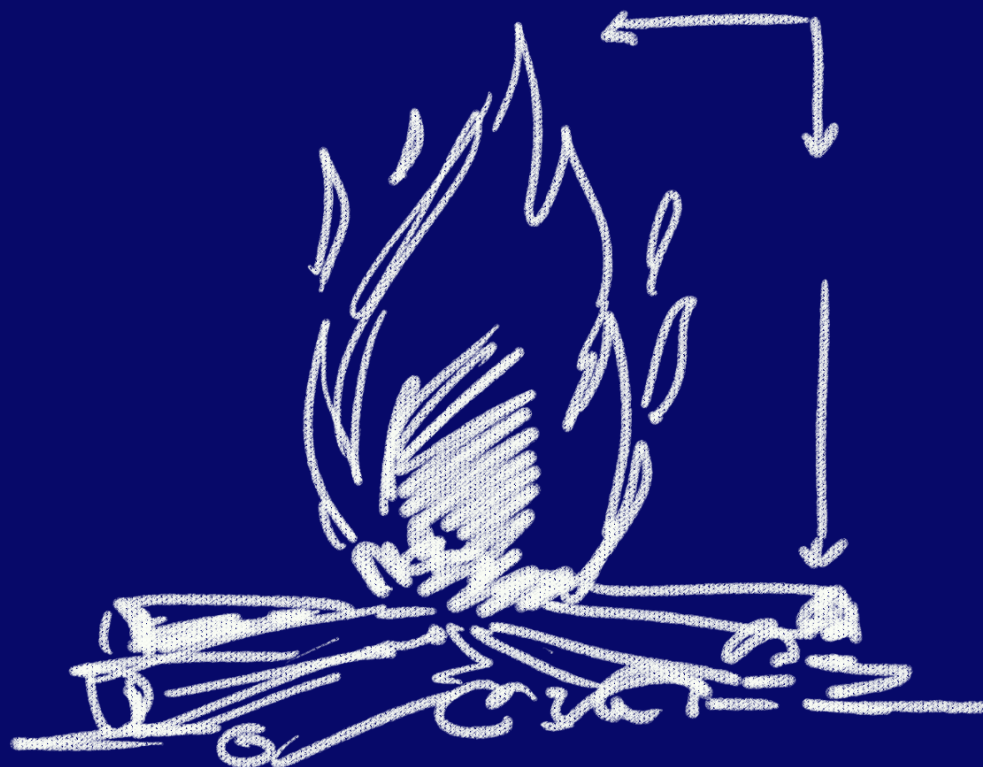
Knowledge Management

- Automation of the knowledge worker
- Voice recognition, pattern recognition and complex communication are fundamentally working
- Computers are demonstrating skills and abilities that used to belong exclusively to human workers



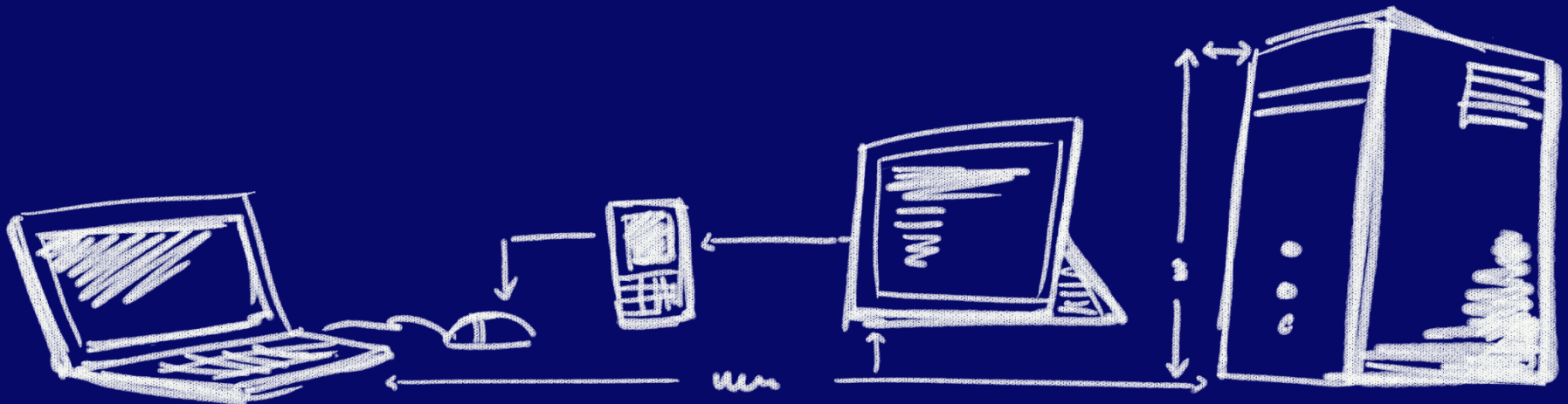
General Purpose Technology

- A small group of technological innovations so powerful that they interrupt and accelerate the normal march of economic progress



GPT

- Computers are the GPT of our times
- Increase productivity in all industries
- Ever-expanding opportunities as software is written for platforms
- Advances don't expire or fade over time



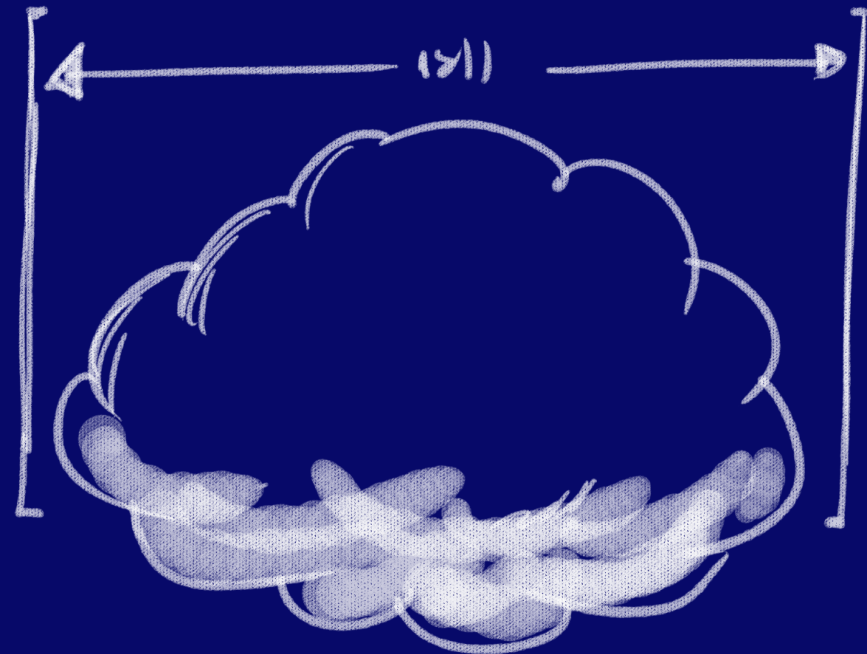
Information Technology

- IT on a as-needed basis
- Playing field is being leveled as technology can reach all aspects of consumers and businesses
- Legacy infrastructure
- IT may become a service broker



Cloud based technology

- “Asset-light” model
- Infrastructure as a service
- Software as a service
- Trust issues
- Pricing war



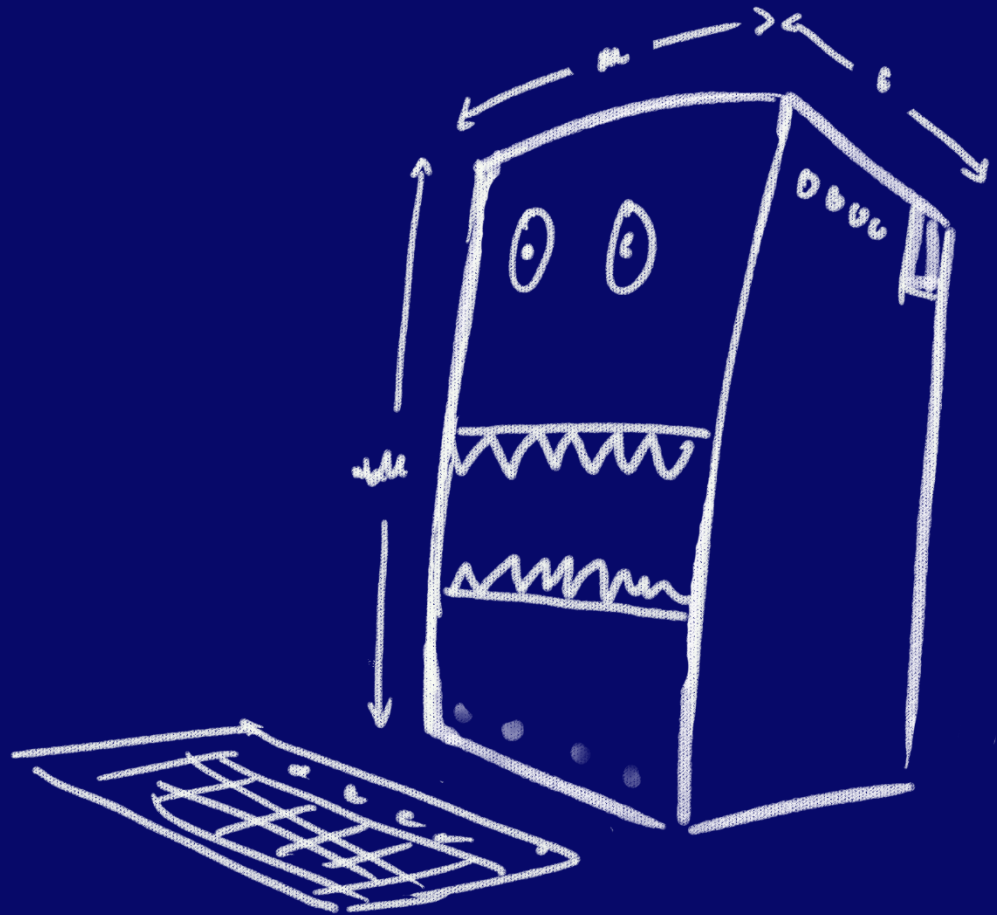
Collaboration

Connecting people and information together



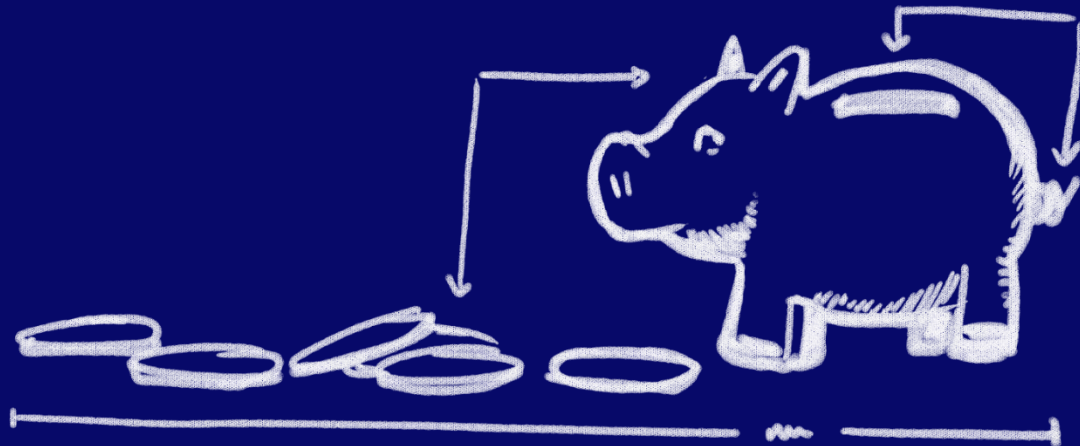
Collaboration Concerns

- Fear
- Complexity
- Obsolescence



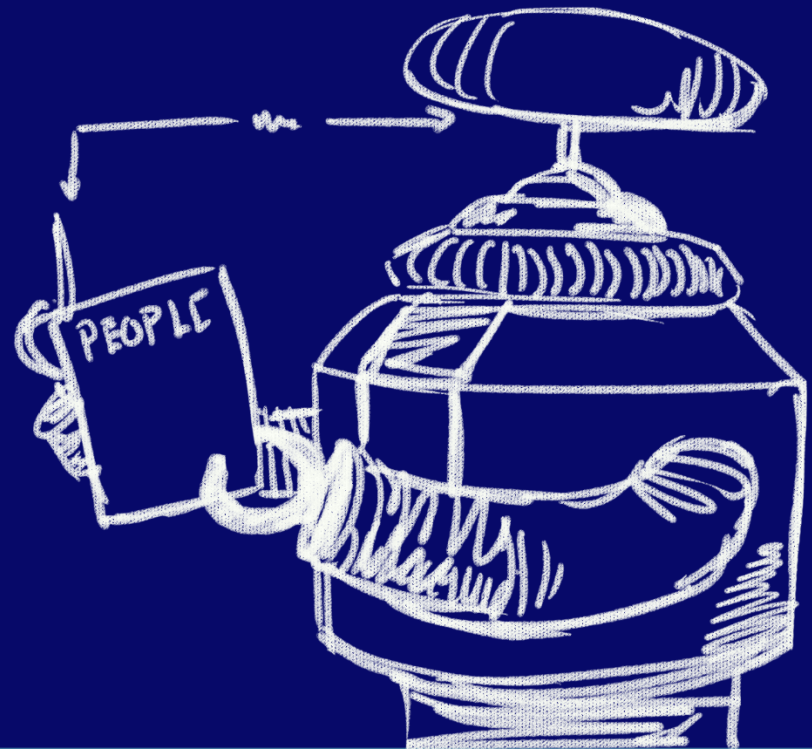
Value

- **Demonstrate to our communities that our services are valuable**
- **Staff must be versed in technology and software to demonstrate that value**
- **Connected to our communities in ways that fall outside of traditional business models for libraries**



Digital Literacy

- Services will be longer centralized
- Digital is the new norm
- Expectation that libraries will be a source of technological knowledge



Opportunities

- **Playing field is being leveled between IT, Librarians and library members**
- **Information is abundant**
- **Technology is abundant**
- **Train both staff and community members**



Transitions for Librarians

- IT experience
- Technology is not leaving
- The benefit of technology is not diminishing
- The nature of the internet is changing, and not in a good way



Transitions for IT

- IT is now abundant
- Member Service is part of the job
- Integrated into core business of the library



Conclusion

- **Library is a 24 hour a day digital service**
- **We don't want to do old things in a new way**
- **We want to do new things in a new way.**
- **Focus on staff/customer service**
- **We need to add our own disruption**

“The world of A.D. 2014 will have few routine jobs that cannot be done better by some machine than by any human being. Mankind will therefore have become largely a race of machine tenders.”

-1964 Isaac Asimov