



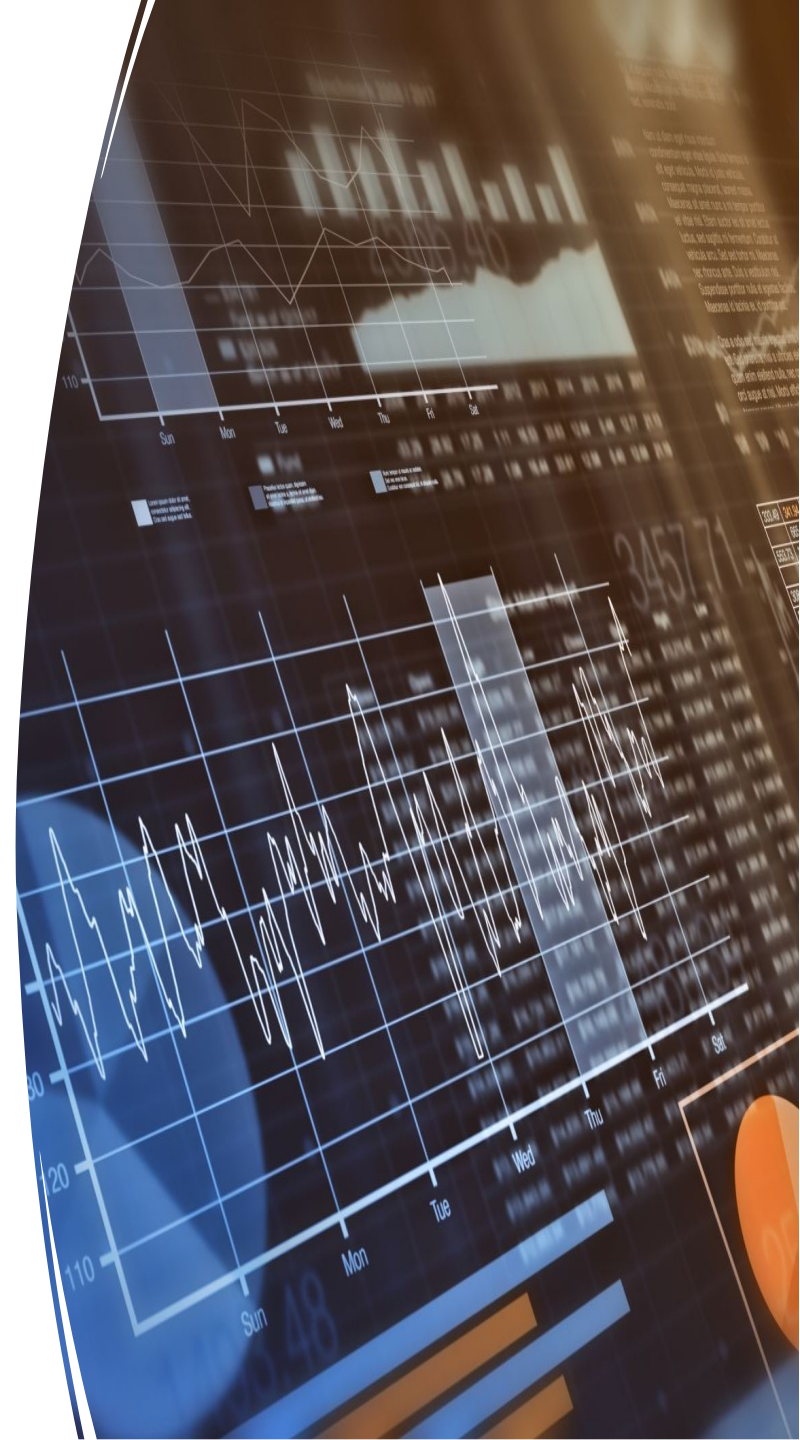
KENYA LIBRARIES AND INFORMATION  
SERVICES CONSORTIUM

# Role Of Systems Librarians: New Trends and Emerging Issues

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# Who?

- **A Systems Librarian is a professional who manages and maintains the technology infrastructure of a library**
- **They are responsible for ensuring these systems function correctly and for implementing new technologies that improve library services.**
- **Initially it was mainly Library Automation and management of Integrated Library Management Systems**





# Library Automation-History

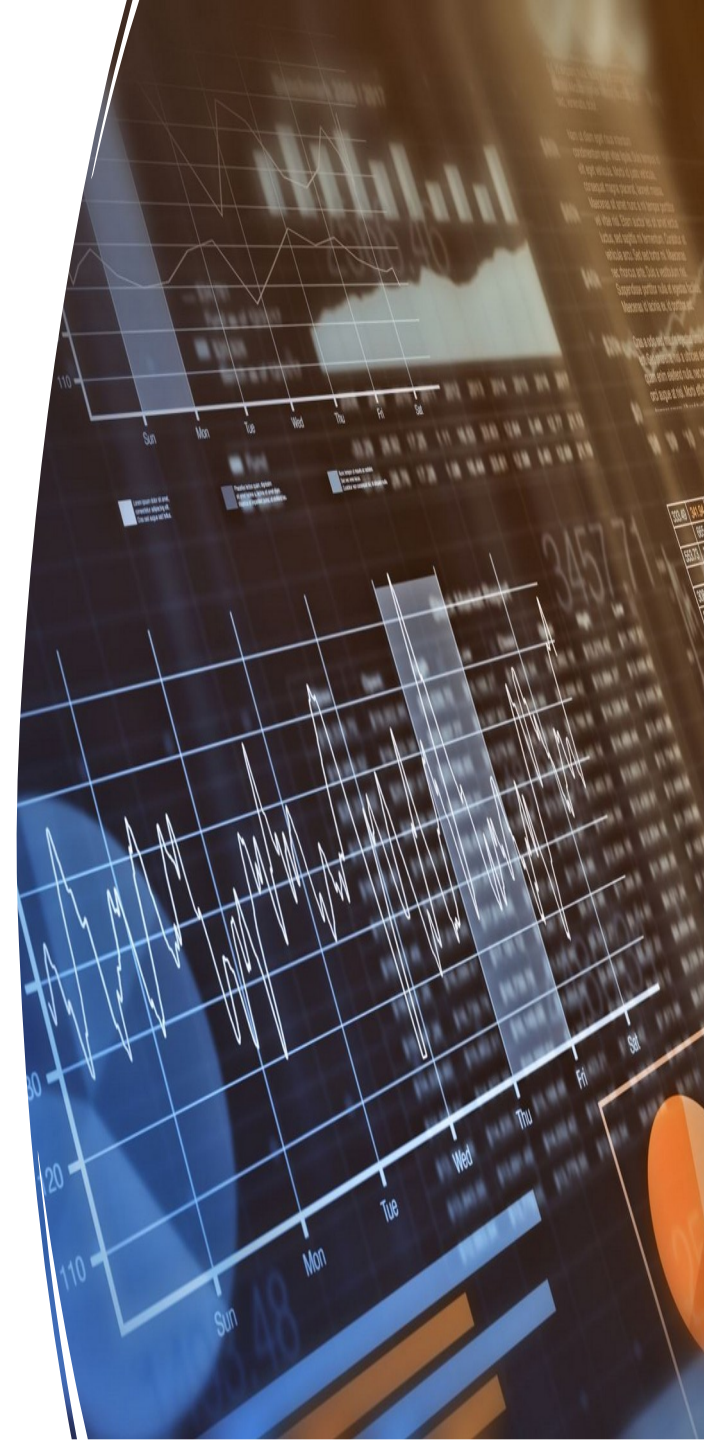
- Library automation began way back in 1950s with use of punch cards to the times transistors were developed thus reducing the size of computers and also software development in terms of operating systems.

Borgman, Christine L. "From acting locally to thinking globally: A brief history of library automation." The Library Quarterly 67, no. 3 (1997): 215-249.



# Library Automation- History

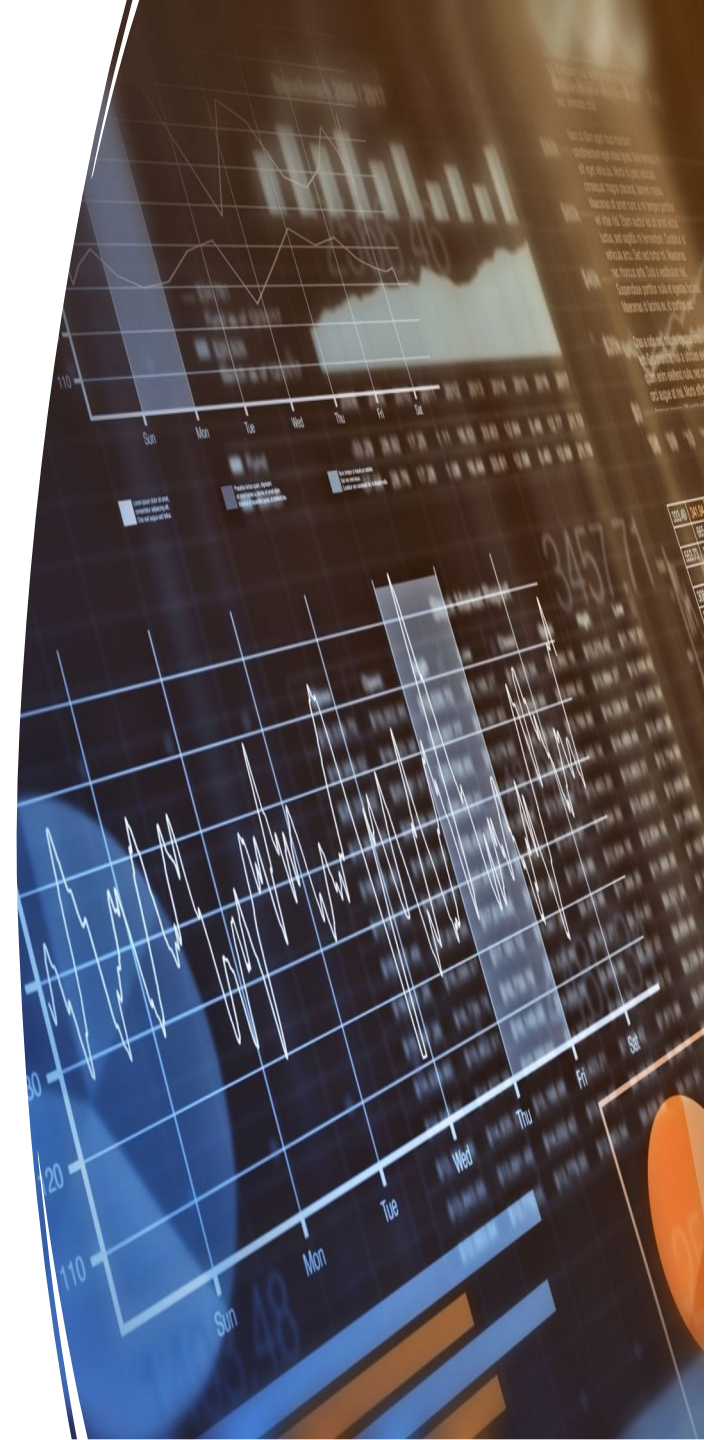
- **Library automation may generally be defined as the use of ICT and techniques to replace manual systems in the Library**
- **Sharing a common database (for patrons and documents) to perform all the basic functions of a library.**

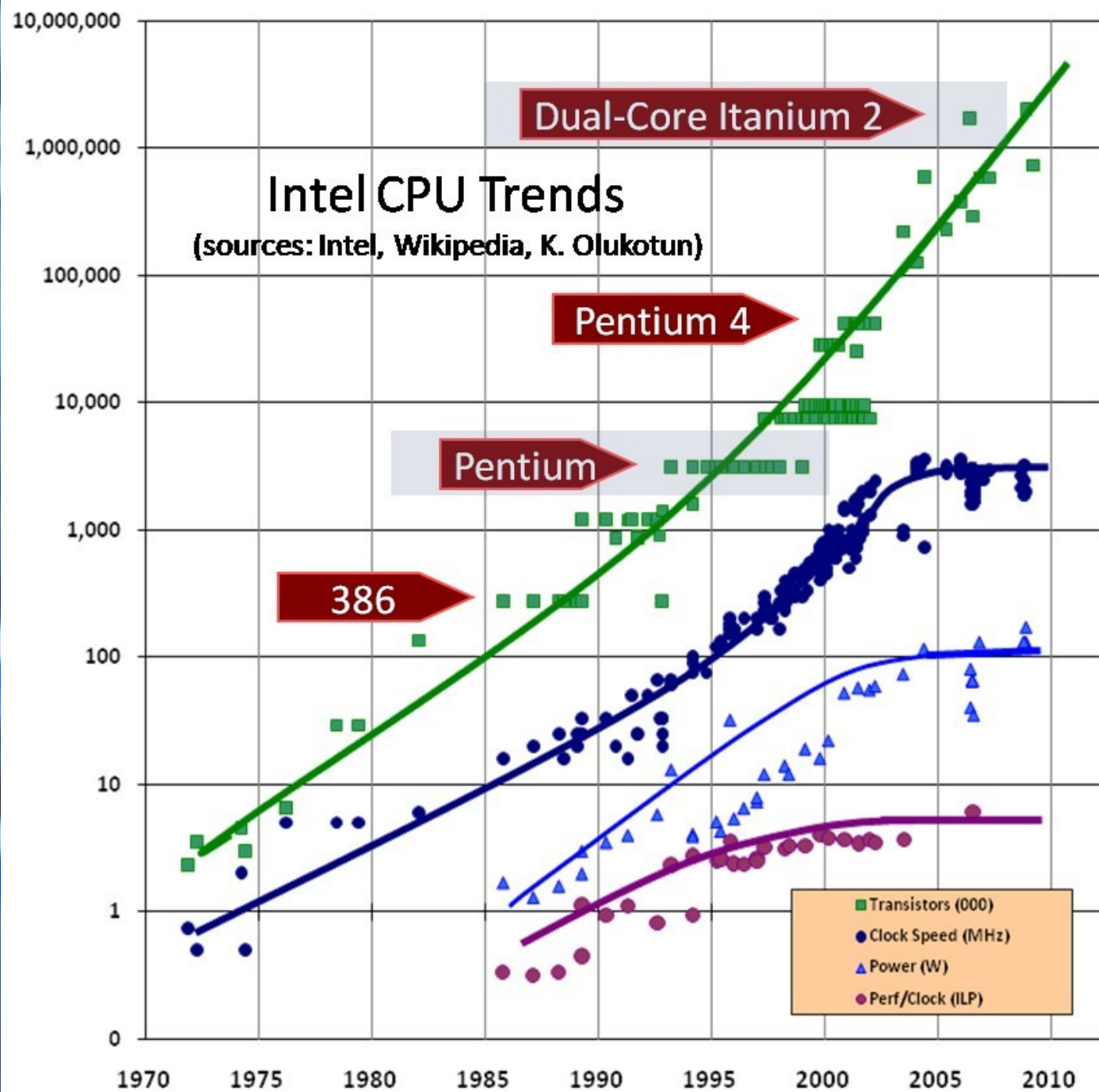




# Library Automation- History

- Fully integrated system to be used in Moi ~~University was TinLib.~~ Powerfull tool then, using very “small” computing power then.
- Desktop specs (1994) – Intel 80486, 25Mhz, ISA bus, 4MB RAM, 80MB HDD, 2 expansion slots, combo card 1.44 FDD, MS DOS 6, Windows 3.1
- Server: 16MB RAM, 1GB HDD EISA, Novell Netware ....



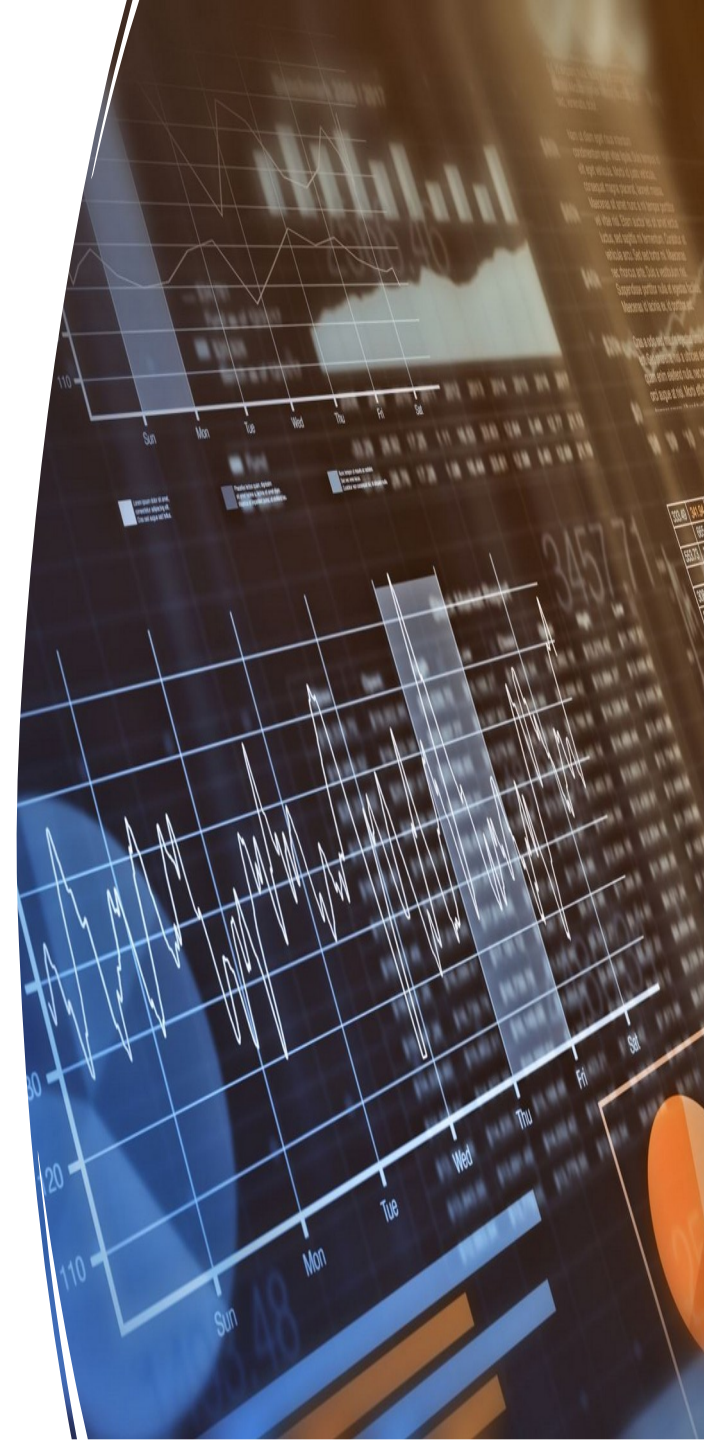






# Current library platforms in use

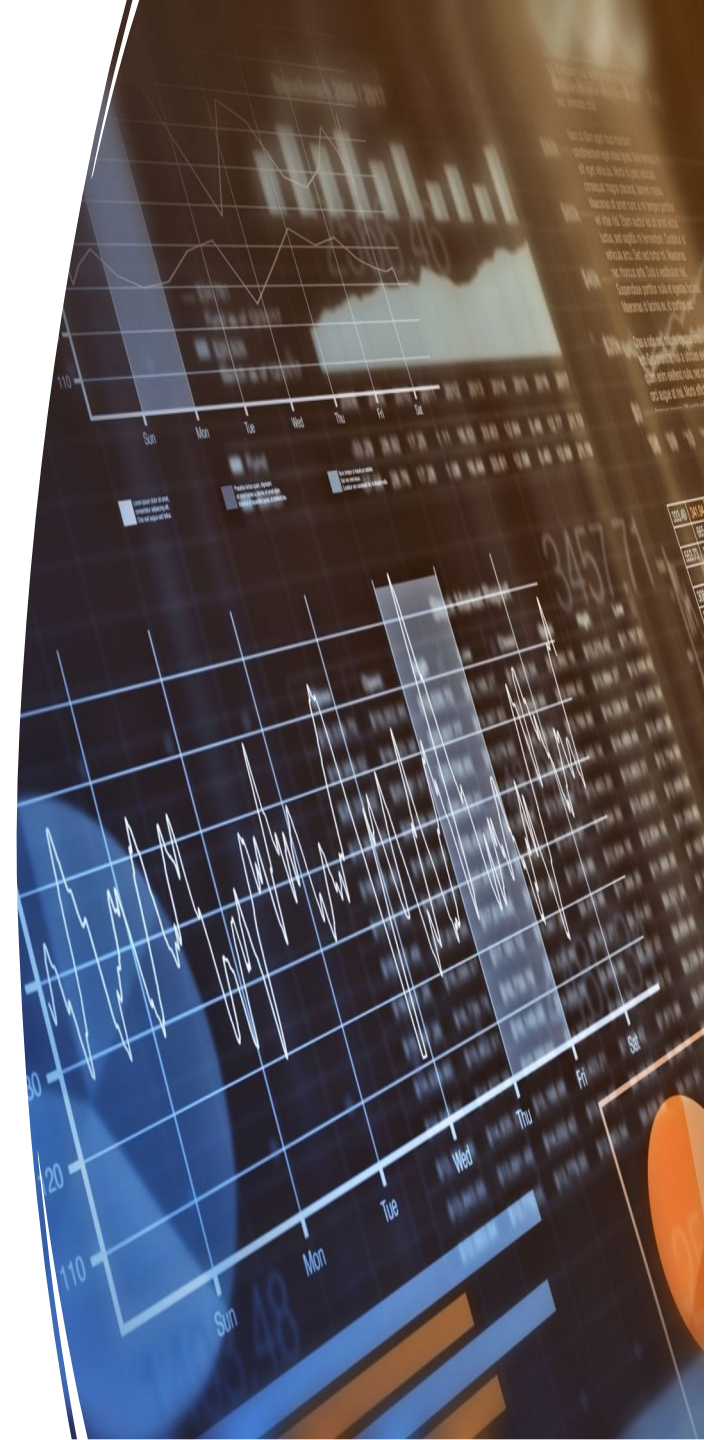
- Library Management Software
- Website
- Institutional Repository
- Open Journal System
- Issue: Handling various programming tools, databases (MySQL, PostgreSQL etc), Web servers etc





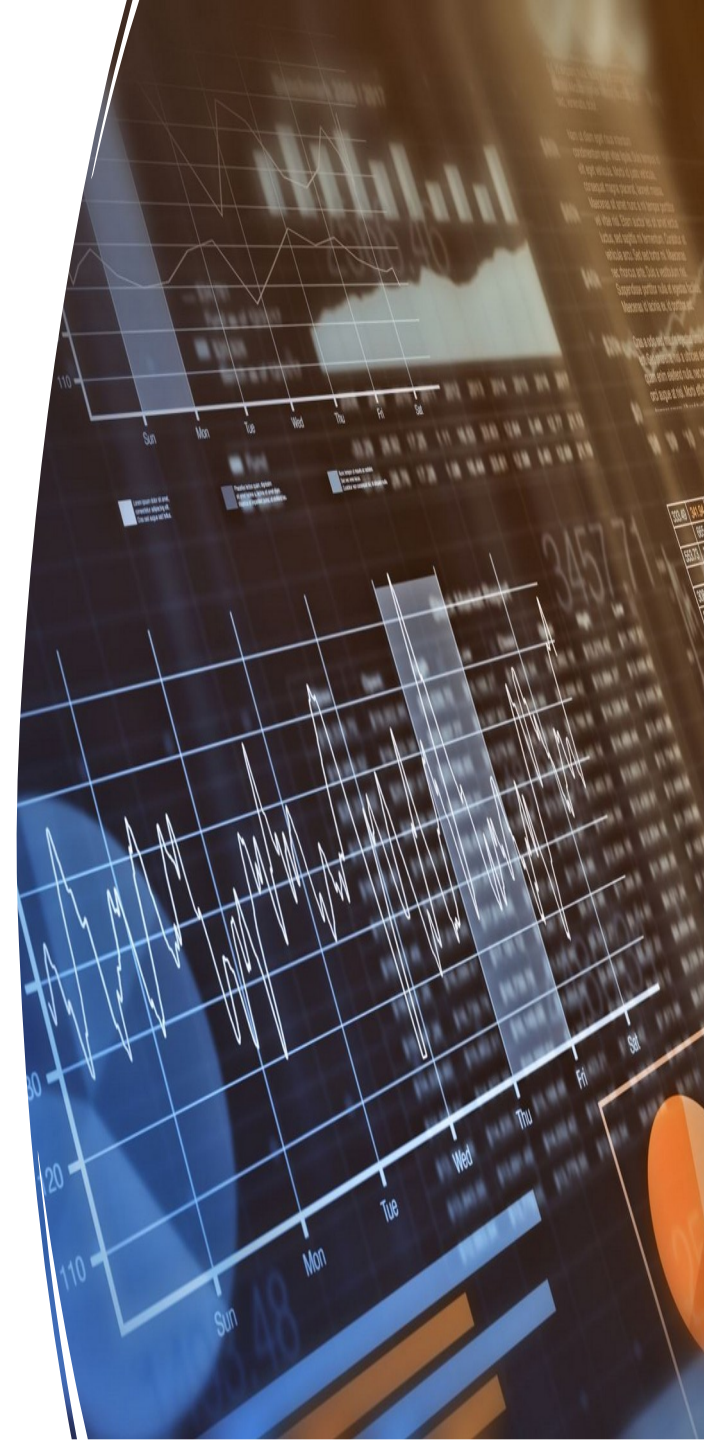
# Subscription

- E-Resources databases (eBooks and Journals)
- Discovery tools
- Remote Access to these resources
- Plagiarism checker
- ETC



# Need to Integrate with ..

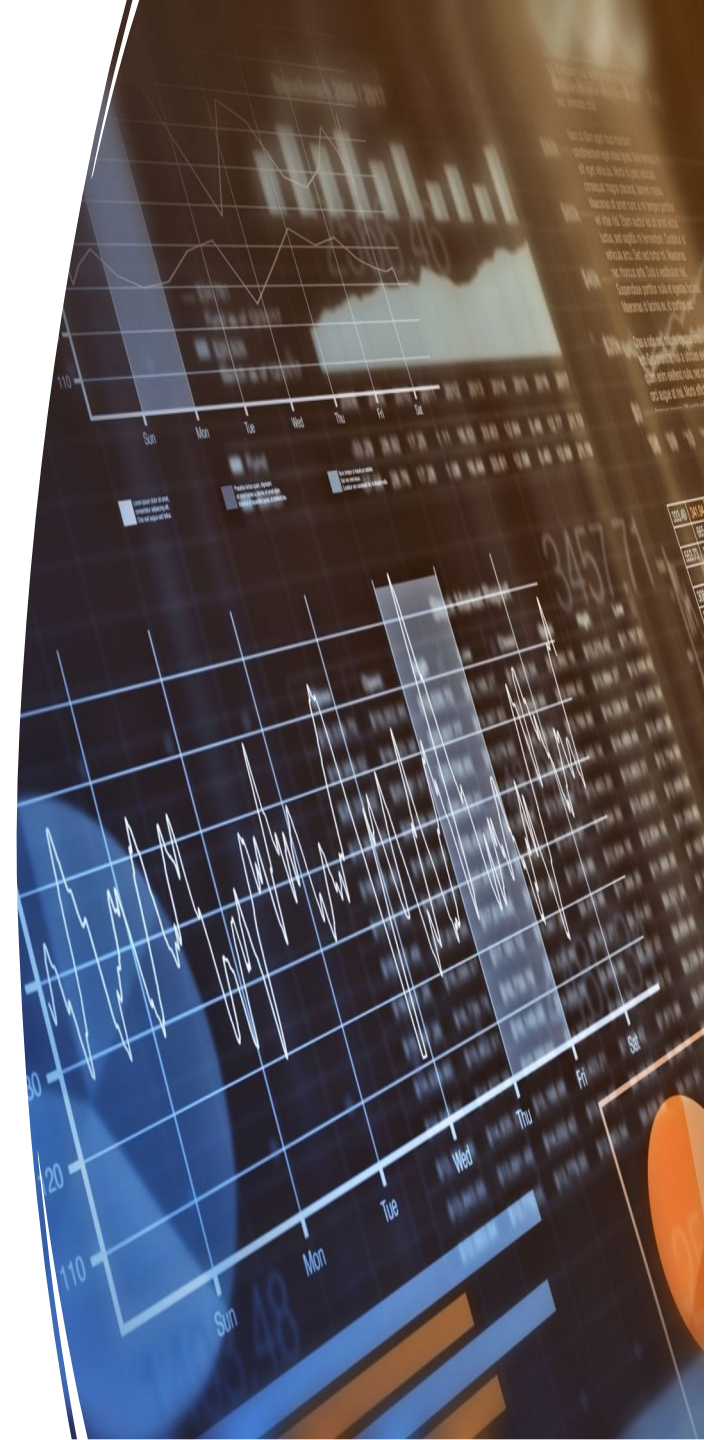
- Enterprise Resource Planning (ERP)
- Customer Relationship Management
- Learning Management Systems





# Technological integration

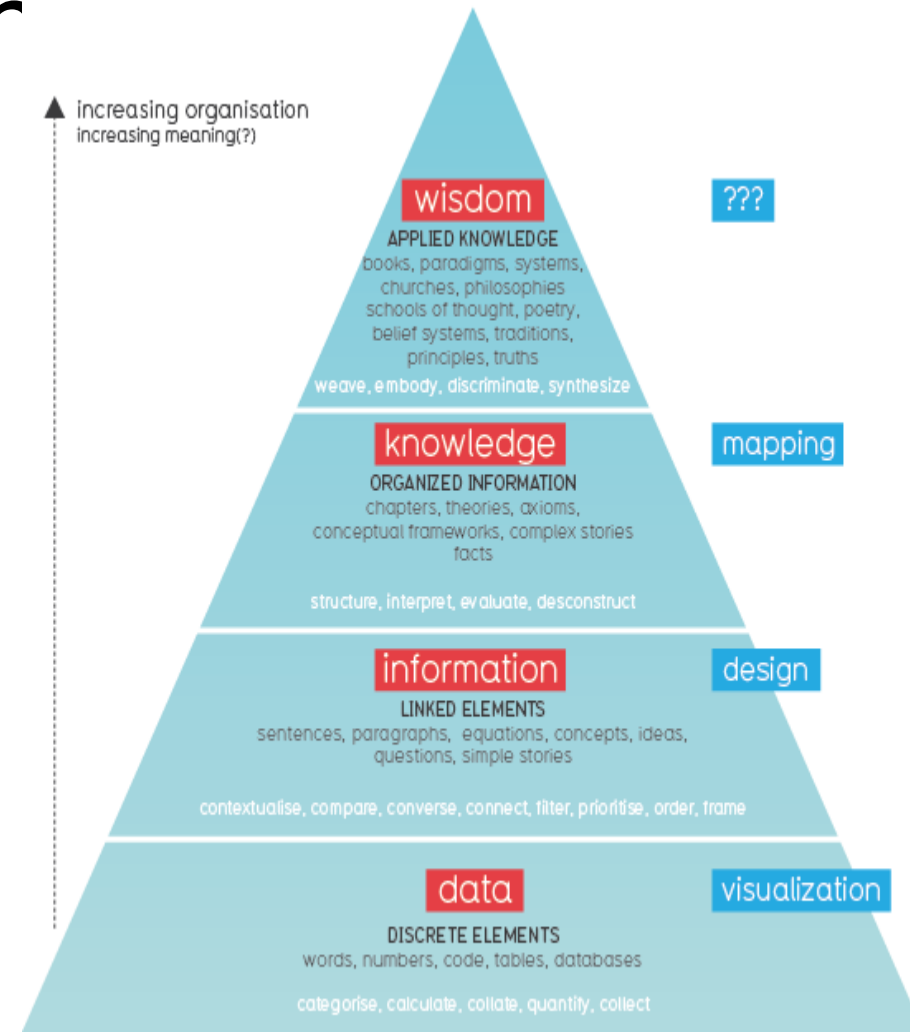
- New responsibilities – Overseeing **Library automation projects**, guiding implementation of new technologies which necessitates new skill requirements from library staff.
- Library staff are overwhelmed with new technologies – “technostress” and thus – systems librarians take up more instruction roles.



# Technological integration

- Where do Data, Information, and Knowledge Management Sciences converge?
- Research funding requiring research data being stored for storage and reuse among disciplines.

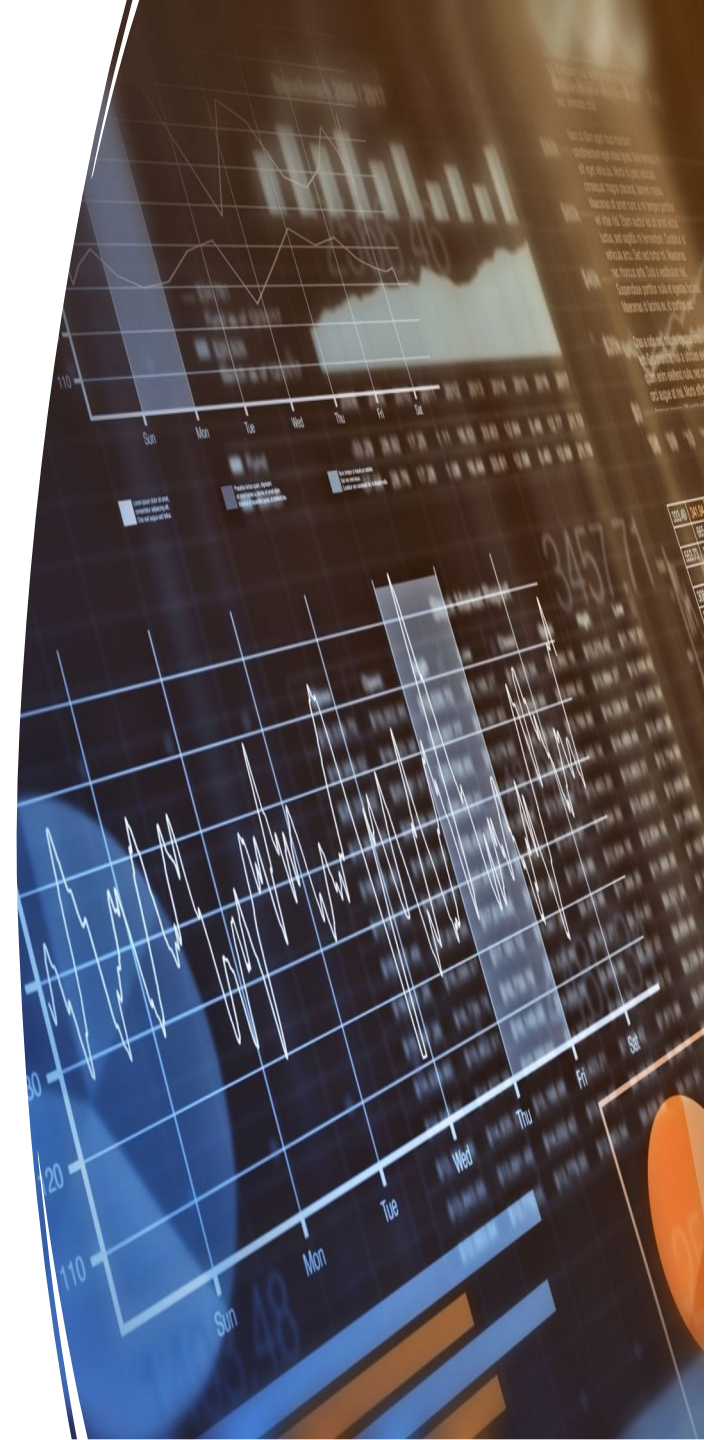
Hierarchy Of Visual Understanding?  
Just playing. Something in this?





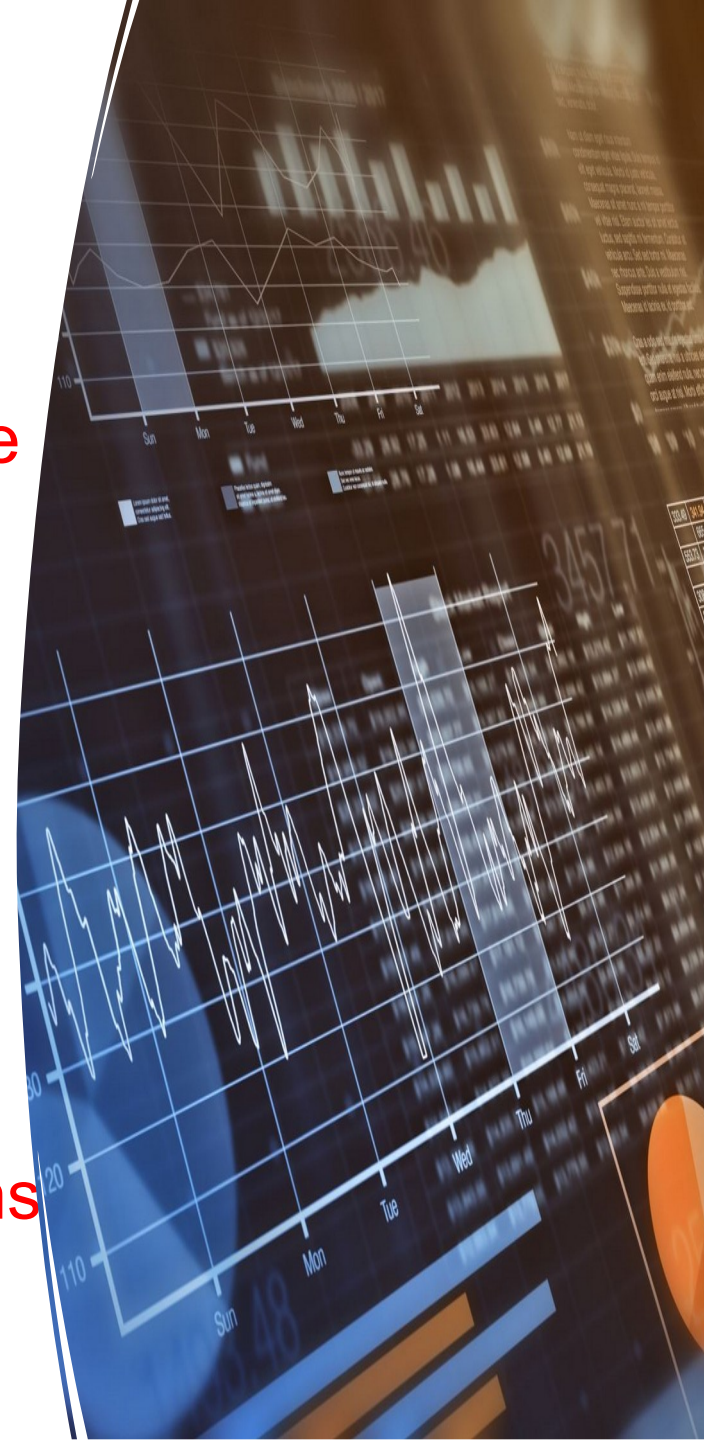
# Technological integration ...

- Information literacy and research skills – more required in citation, referencing and personal library building -e.g Zotero and other referencing tools
- Integration of public and technical services - which allows for more holistic approach to user services
- Move from collection-centric model to user-centric approach – less clicks to reach resources



# New Trends and emerging Issues

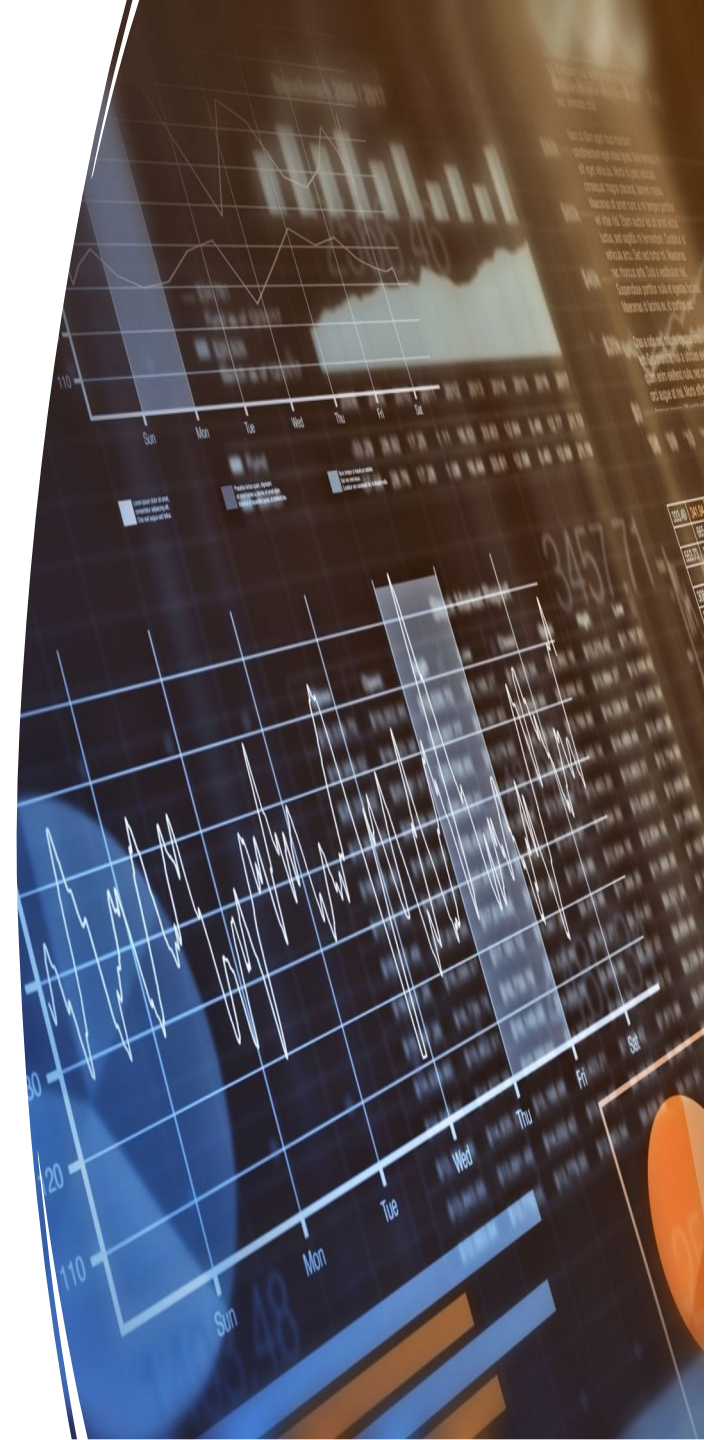
- Open Source solutions – **What level of technical expertise do we have for setup and Maintenance?**
- Data management and digital preservation – **What tools do use for long term access and preservation?**
- Integration and interoperability – **How do we ensure diverse systems communicate without compromising the user experience?**
- Cloud computing and Software as a service (SaaS) – **Issues -vendor lock-in, data security, and privacy concerns**





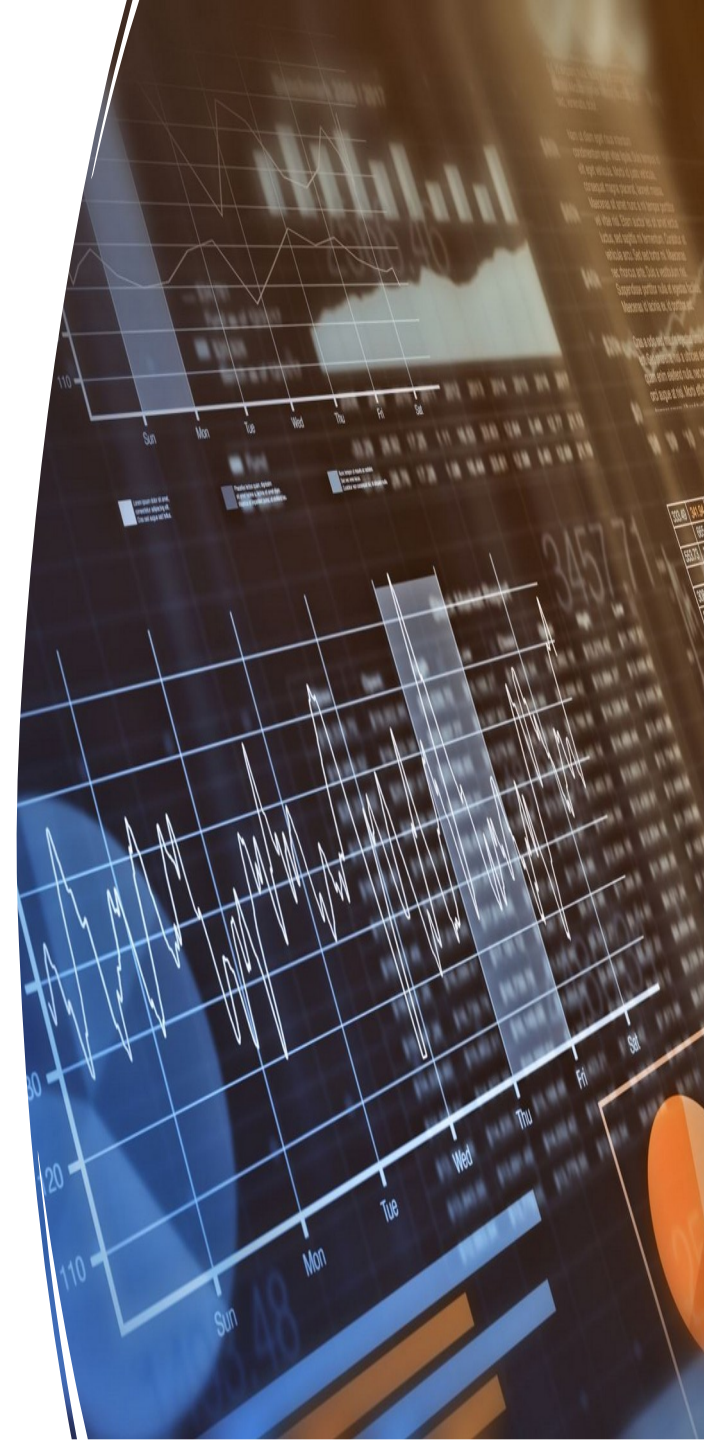
# New Trends and emerging Issues

- Automation and Artificial Intelligence – **How do we ensure there are no algorithm bias, accuracy and accountability?**
- Vendor relationship and licensing – **Issue of managing access to resources across multiple platforms and ensuring compliance to licensing agreements**
- Cybersecurity and Privacy – **How do we stay updated on the latest Cyber security practices?**



# New Trends and emerging Issues

- Emerging technologies and tools – **Explore**  
possible adoption of new learning experiences such as Virtual Reality, Augmented Reality and 3-D printing.





# Collaboration and Networking

- Needs to collaborate with other institutions, ~~consortia, and technology~~ developers to share resources, tools, and expertise.
- Mostly ICT in our institutions – e.g. impulsive IP changes
- **More specific to smaller institutions but also apply to larger ones.**





**THANK YOU**

**FOR LISTENING**