Application of ICT in Research

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- Identify appropriate information sources

- Critically analyse information

- Research effectively

- Manage information

- Use the information to extend and communicate

- Knowledge across subject fields

- Search databases and electronic resources simultaneously

- Receive results in a common format

- Link to individual databases for more specialized searching

- Select favourite resources and e-journals, save searches and records, and set up email alerts

Applications of ICT in pre-data analysis

- Literature Search, Article Availability, Thesis and Dissertation Availability

- Content Search

- Literature Tracking

- Data Collection

Literature Search

ShodhGanga: Indian theses repository where you can search and download the theses.

Google Scholar: Provides a way to broadly search for scholarly literature across disciplines and sources.

Microsoft Academic Search: Find information about academic papers, authors, conferences, journals, and organizations from multiple sources.

Mendeley: A unique platform comprising a social network, reference manager, article visualization tools.

SSRN: Multi-disciplinary online repository of scholarly research and related materials in social sciences.

Some other Famous Database for Research Articles and literature:

- AMS Annual Reviews

- ASME Digital Collection

- Cambridge Core

- Chemical Abstracts Service (CAS)

- Cochrane Library

- eBook Academic collection

- EBSCO Databases, Discovery Service, eBooks, Point of Care Products, DynaMed and

  Journal Collections

- EBSCO Information Services

- Taylor & Francis Online

- Web of Knowledge

Some other Famous Database for Research Articles and literature:

- Economic & Political Weekly
- Elsevier
- Emerald eJournals
- Encyclopedia Britannica
- IEEE Xplore
- Indian Citation Index.
- Indian Journals IOPscience
- JSTOR
- Portland Press
- Project Euclid
- Project MUSE
- ProQuest databases
- Royal Society of Chemistry Journals
- Royal Society of Chemistry Publications Online
- Sage Online Journals
- Science Mag
- Scitation
- SIAM Journals Online
- Springer Link
- Supreme Court Cases Online

Content Search

- To search for specific keywords or phrases

Literature Tracking

- Researchers now are using software like Mendeley which can help manage, share and discover the literature contents and contacts that they had reviewed.

Data Collection

Important Data Collection Application of ICT:

- Google Forms

- Survey Monkey

Applications of ICT in data analysis

Application of ICT in data analysis includes the ICTs are applied on activities during the stage of data analysis and can be divided into:

- **Quantitative Data Analysis**

- **Qualitative Data Analysis**

Quantitative Data Analysis

The exploratory factor analysis, multiple regression, t-test and Analysis of Variance (ANOVA) are some common data analysis techniques used among researchers conducting quantitative research.

There are also some advanced and popular data analysis techniques like

- Path analysis

- Covariance-based Structural Equation Modeling (SEM),

- Variance-based SEM (partial least squares),

- Hierarchical regression analysis,

- Hierarchical linear modelling

- Statistical Package for Social Science / SPSS

- R (R Foundation for Statistical Computing)

- MATLAB (The Mathworks)

- Microsoft Excel

- SAS (Statistical Analysis Software)

- GraphPad Prism

- Minitab

Qualitative Data Analysis:

The following statistical software packages are for qualitative data analysis

- Nvivo

- ATLAS.ti

- MAXQDA

- SPSS Text Analytics

- Transana can be used for video transcribing in certain qualitative research

Application of ICT in post-data analysis

 References and Bibliography Compilation

 Article and Thesis / Dissertation's Discussion among Researchers, Supervisorss etc.

 Plagiarism Detection

 Journal Manuscripts Submission.

References and Bibliography Compilation

- EndNote

- Zotero

- Mendeley

Article and Thesis / Dissertation's Discussion

- Academia.edu

- ResearchGate

Plagiarism Detection:

- Grammarly
- Article Checker
- Turnitin
- DupliChecker etc.

Journal Manuscripts Submission:

- Elsevier
- Wiley
- Sage Publications etc.