What is New Media?

New Forms of Media

- Shift of all culture to computer- mediated forms of production, distribution and communication
- Previous new media affected only one stage of cultural communication (e.g. printing press, photography)

- Today's new media affects all stages:
  - acquisition, manipulation, storage, distribution
- and all types of media:
  - texts, still images, moving images, sound & spatial constructions

Inescapable Data Vision

- There is a way in which technology is inexorable, so I doubt there is a way to stop an of this. (Harvard Univ Sociologist Nicholas Christakis)

- Data collection & emission devices everywhere often discreet & barely detectable -> ubiquitous & pervasive devices
- Growing demand for continuous connectivity -- blending of tools for business & personal lives

Chris Statukis & John Webster, *Inescapable Data*

3 categories of reactions

- **Fascination**. Early adopters of gadgetry (from computers to handheld communication devices, to home electronics such as TiVo, to high-tech kitchen gizmos such as remote-control cooking thermometers).
- **Hate or suspicion. Avoidance & frustration.** Prefer full-service over self-service. Concern about privacy rights & potential for intrusion that 'online' world represents.
- **Take technology for granted.** Do not seek out tec hnology & often are quizzical & skeptical. Convinced tech will make their life better or easier, but not really interested. (Majority)

Computing's new fundamentals & impact

- **Data** – data-everywhere devices (cell phones, bio-sensors, miniature digital video cams, GPS transceivers) generate massive amounts of new data for capture & mining for new value in real time.

- **Communications** – demand for more 'asynchronous-yet-immediate' conversation technologies (e.g. wireless e-mail, IM) will drive further conveniences & efficiencies in personal & business lives.

Chris Statukis & John Webster

Computing's new fundamentals & impact

- **Networking** – Radical new strategies for networking of anything electrified (fridge, cars)

- **Information processing** – info will become more easily accessible to increasingly greater numbers.
  - Info traditionally locked up within machines available to computer science degree holders will rapidly become more open, aided by self-describing data representation styles

The digital revolution

Continuous increase in:

processing power + storage capacity + speed of data transmission

+

Continuous decrease in costs & size of equipment

+

Standardisation revolving around PC / Windows

=

Micro-computing at professional then domestic levels (1980’s)

Interconnection of computers

+

Development of digital networks

+

Generalisation of digital encoding

+

Improved data transmission (transmission capacity, digital compression, packet transmission)

=

Internet & the Web (1990’s)

Today: Convergence and Mobility

Benefits

- Digital data can be stored and transmitted via multiple physical media (electrical cables, optic fibres, satellite airwaves, etc.)
- On many kinds of networks (telephone, cable, satellite, optical networks, etc.)
- Digital data can be transmitted and copied without information loss any number of times (easy reconstruction of data)
- Dynamic and automatised processing with precision and speed on a large quantitative scale

Framework

- Digital revolution inseparable from concept of deregulation & liberalisation of telecoms on a global scale resulting in:
  - Significant decrease in costs
  - Increasing competition
  - New services offered in telecoms
- Process started in 1980's in USA & in 1990's in Europe
- ➔ convergence of 3 key sectors (informatics + telecoms + audiovisual) on 3 levels (communication networks, individual terminals, whole industries and services)

The new economy

- Initially → macro-economic perspective in USA in 1990's to designate exceptional situation of US economy (strong and long-term growth, weak inflation, quasi-full employment)

- More recently, micro-economic perspective
  - Sector of info & communications industries (computer, telecoms, audiovisual, Internet)
  - Transformation of whole economic system, in production & distribution modes + spread of ICTs through Internet phenomenon

Impact of ICTs

- Organisation of work
- Cultural industries & practices
- Research and transmission of knowledge
- Political and democratic life