# FIT1052
# DIGITAL FUTURES: IT Shaping Society?

Exam Date: 21/06/2017

## Week 1 - Introduction

**Do we live in an information society?**

Two decades ago, Nick Moore (1997: 271, 272) argued that an information society was marked by:
– the use of 'information … as an economic resource'
– 'greater use of information among the general public'
– 'the development of an information sector within the economy'

'Information, in its broadest sense, e.g. as communication of knowledge, has been critical in all societies'

By contrast, an **'informational society'** is one where: 'information generation, processing and transmission become the fundamental sources of productivity and power because of new technological conditions emerging in this historical period' (Castells 2000: 21).

**What would Manuel say?**

'Our societies are being totally redefined by electronically based information technologies, and this is creating a new world -- not the technology itself but the uses of this technology on the basis of social and economic and political interests'. (Kreisler 2001)

### Killer App of the Week: Powerpoint

'In 2003 (no data is available since then) it was estimated that 30 million PowerPoint presentations were given every day.

Yes, daily. And if the number was 30 million 13 years ago, what might be PowerPoint's usage today?

I cannot imagine … So how many times have you attended a meeting where PowerPoint was used? My guess is at least hundreds, and maybe thousands'.

'PowerPoint -- the must-have presentation software of the corporate world -- has infiltrated the schoolhouse. In the coming weeks, students from 12th grade to, yes, kindergarten will finish science projects and polish end-of-the-year presentations on computerized slide shows filled with colorful animation, bold topic headings and neat rows of points, each introduced with a bullet mark. Software designed for business people has found an audience among the spiral notebook set'.

**Graphics in PowerPoint**

'Although related graphics may be beneficial, unrelated graphics are not helpful for enjoyment or learning. Also, graphics are not necessary for simple declarative information, but may help with more difficult, complex, or abstract concepts presented through [the] lecture'.

'At a minimum, a presentation format should do no harm. Yet the PowerPoint style routinely disrupts, dominates, and trivializes content. Thus PowerPoint presentations too often resemble a school play — very loud, very slow, and very simple'.

## Week 2 - Hardware's Evolution

If you use a desktop computer, you might already know that there isn't any single part called the "computer." A computer is really a system of many parts working together.

The physical parts, which you can see and touch, are collectively called hardware. (Software, on the other hand, refers to the instructions, or programs, that tell the hardware what to do).

**Computers have been:**

- Primarily for scientific and military research (1940s)
- Introduced into administration (1950s)
- Increasingly interactive (1960s)
- Personal as well as business tools (1970s)

- Generic (& often smaller) devices driven by specialist application software (1980s)
- Increasingly means of communication (1990s)

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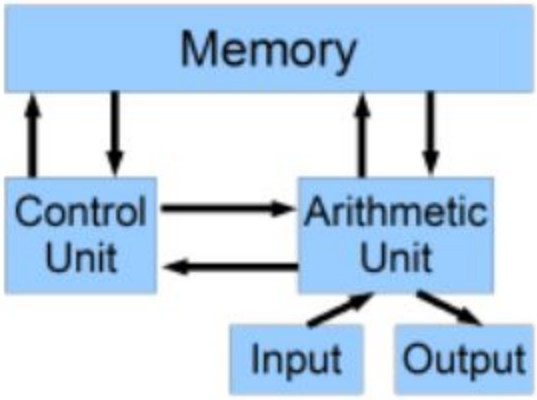
**Challenges working with early computers:**

'Setting up the ENIAC meant plugging and unplugging a maze of cables and setting arrays of switches. In effect, the machine had to be rebuilt for each new problem it was to solve … while it could solve a complex mathematical problem in seconds, it might take days to set up the machine properly to do that.'

**The innovation of von Neumann architecture:**

'The computer's storage device would be used to hold both the instructions of a program and the numbers on which it operated'.




The von Neumann architecture is a design model for a stored-program digital computer that uses a processing unit and a single separate storage structure to hold both instructions and data.

**Moore's law**

'The speed of computers, as measured by the number of transistors that can be placed on a single chip, will double every year or two.'

**What would Manuel say?**

Crucial precondition for computers becoming ubiquitous is the creation of microprocessors – 'the computer on a chip'

'This wonderful technological revolution was shaped by the cultural values of freedom. For instance, the simple notion of a personal computer -- a personal computer, certainly in the Soviet Union, was subversive by definition; typewriters were forbidden. And in the capitalist society, a personal computer was not something that was even thought of by major companies'