

Successful IT Systems

- Information technology (IT) systems are a critical part of our world, **used in business, public sector and voluntary sector environments**, etc.
- They are often highly complex and interconnected **combinations of technology, organisations and people**.
- Yet they frequently fail, often spectacularly.
- Examples of failed IT systems are everywhere. **Banks are unable to release money** to their customers – because of failed IT systems.
- **Aircrafts fall out of the sky** or are routed in wrong directions – because of failed IT systems.

What exactly do we mean by **success or failure** in an IT system?

- First, most **technologies** used in organisations are a **complex mixture** of **hardware, software, networks and other infrastructure** (such as data centres).
- Secondly, the **success of such technologies** depends on **factors that go well beyond** the purely technical, to include, especially, human and organisational factors, but also **many others**.

When we talk about IT systems **we mean both** *more than technology* and – *within the technology* – *more than software*.

- **Hardware technology** is just as important for IT success as software technology; and
- **Human and organisational** issues are just as important as technology.

What is meant by success and failure.

The answer may often depend on the stakeholders from whose perspective the success or failure is being judged: →

- → a project manager may consider a **system successful** if it comes to **completion on time and in budget**;
- → a software developer may consider it **successful** if it contains **good-quality code that runs well**;
- → an end-user may consider it **successful** if it helps them **do their job effectively**; and so on.

- a ***successful*** IT system is one that meets the needs (i.e. the goals or strategy) of an organisation within which it is used, as well as relevant needs of other key stakeholders related to, but external from, that organization.
- a ***failed*** IT system is one that does not meet the needs of an organisation within which it is used and/or its other key stakeholders.

Success and failure of IT systems can be seen in many different settings. They occur in private businesses, in the public sector and in the voluntary sector.

They can be found in very large or very small systems. The smallest implementation of an IT system in a company can be very successful or very problematic.

Large public-sector failures get a lot of publicity because they are spending public money and are subject to public audit; **but private sector failures** are perhaps equally common, even though they are not widely discussed.

TWO case studies:

We will now look at an example of an IT system that was successful / failed.

Question:

Apart from one being public sector and one being private sector, **what do you think are the three main differences between these two case studies?** Make notes (around half a page in each case) on what you think made the first system a success and the second one a failure.