**Technology Strategy**

What is Strategy?

Strategy at its simplest is just a way to determine how to allocate the finite resources within a company, all the other structure, models and decisions taken are used as a way to reach this aim. Technology Strategy is no different, technology strategy is just how we allocate technological resources in order to reach the overarching goals of the company.

What is Technology?

This would seem like an easy question to answer, being technologists ourselves the answer would seem obvious but there are two types of technology to consider.

1. Technology as an artefact such as an iPhone\* this is known as product technology and is a way to describe products that are delivered to someone else once complete.
2. Production technology which stays with the producer when the product is sold, an example is the production line used for producing an iPhone\*.

When we talk about technology it is normally the first type of tangible “things” but the other is just and important and without it the product technology cannot exist.

\*other phone manufacturers exist

Technology Strategy influence

Different organisations treat technology strategy differently depending on their objectives and the industry they are in, it can also vary within a company based on each of the objectives and can be summed up in a 5 point scale.

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| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |
| Technology is a tool for efficiency | Technology is a tool for achieving business strategy | Technology is a function alongside HR, Marketing etc. it is usually split into R&D (GP&D) and operations (Foundation services) | Technology strategy influences business strategy in a bottom-up manner | Technology strategy leads the business, determining the business strategy |

Types of strategy

There are two types of strategy deliberate and emergent, a deliberate strategy is one where it has been planned and executed according to an overarching plan (that doesn’t mean everything worked just that it followed a plan), an emergent strategy is one where a company happened to be in the right place at the right time and took advantage of the situation, an example is an employee of Intel who in 1959 created the world’s first integrated circuit not to start a new industry in microprocessors but out of laziness, he wanted to save time by having pre-packaged units rather than needing to solder every piece by hand as it had been done previously.

When Strategy goes wrong

We are not always lucky enough to have our strategy work out as we had hoped and if the wrong strategy is chosen the results can be disastrous beyond simply lost money and time, history is littered with the remains of companies who have followed a strategic direction to their doom, some examples are Polaroid who didn’t take the threat of new digital imaging technology seriously, relying on their traditional markets and in our own industry the collapse of RBS due to their strategy of acquisition (specifically of ABN-AMRO) which emphasised their unclear decision making which led to poor strategic decisions.

No strategy

This is where there is a technological free for all where there is no thought given to either short or long term return on the investment made, there is no coordination between departments and no thought is given to how new technology brought in can be integrated into the existing systems, these leads to islands of technology where for example HR buys a new system to maintain employee records but no thought is given to how that ties into the payroll system.

Lost Strategy

This is where rules for strategy exist but the ones actually used in the organisation are different to the “official” policy, these can be where projects work to local goals instead of global ones, projects are prioritised based on a “cult of personality” or in a wide reaching decentralised company some parts may simply be unaware of what the central strategy is or they may not receive additional resources for extra local costs (irrespective of strategic gain).

Wrong strategy

Sometimes the strategy a company decides to take is simply wrong, Polaroid are one of the few companies who didn’t make the leap into the digital age, this is despite their instant picture product was ideal as a basis for digital photography, as they made most of their money from film they didn’t want to undermine their existing product, this shows that a company’s strategy can be formed by the perception of people inside it rather than what the market or outside forces is doing.