

Organisation for innovation

# Organisation for innovation

How firms need to organise themselves for innovation?

The answer to this question depends on which of two very different perspectives we take on the creative and innovative process.

- Division of labour
- Network

We shall see that these two perspectives have very different implications: an organisation designed to facilitate the first will tend to look very different from an organisation designed to facilitate the second.

# TWO PERSPECTIVES ON INNOVATION

We encountered two very different perspectives on creativity and innovation.

1. In the first, innovation follows from specialisation and the division of labour.
2. In the second, innovation follows from the combination and reorganisation of existing but previously distinct knowledge and competencies (Koestler used the term bisociation).

These different perspectives have different implications:

1. in terms of the **types of innovations** to which they give rise;
2. in terms of the **design of innovative organisations**.

# The types of innovations

- **Specialisation and division of labour** tends to produce predominantly **incremental innovations**
  - The first approach to innovation works within an existing structure
- **Combination and bisociation** is often required for **radical innovations**.
  - The second approach requires the innovator to cut across existing structures.

# ORGANISATION FOR DIVISION OF LABOUR

Specialisation and division of labour tends to be most developed within **hierarchies**.

This is especially true in the U-form organisation.

- In a U-form organisation, each unit of the firm manages a particular business function (e.g. finance, marketing, or manufacturing).

This structure facilitates the division of labour, and hence allows the firm to exploit scale economies from specialisation.

The U-form structure is best suited to relatively stable conditions and stable markets with little innovation or technical change, where job descriptions are stable and most decisions are routine.

# ORGANISATION FOR DIVISION OF LABOUR

By contrast, the U-form structure is not well designed to cope with radical innovation, where job descriptions must change frequently and where many decisions are non-routine.

Those sorts of changes conflict with accepted norms and routines, and in that business environment, U-form puts too much decision-making pressure on the CEO.

As firms grow, they often evolve from U-form into M-form – or, multidivisional form.

- This is a structure where the organisation is broken into units, but not along functional lines. So, for example, while the U-form organisation's units may be different functions (e.g. finance, marketing, or manufacturing) the M-form organisation's units may represent different products (e.g. mainframe computers, desktop computers, laptop computers)

For a given size of organisation, the M-form structure is, arguably, somewhat better designed than U-form to cope with innovations that call for a redefinition of routines within a specific product area.

However, no hierarchy (whether U-form or M-form) is really suited to the challenges of radical innovation.

# ORGANISATION FOR COMBINATION

Combination and bisociation requires a rather different form of organisation.

The idea that bisociation involves combining the habitually unfamiliar means that such innovation calls for communication that cuts across existing structures and communication with unfamiliar communities using unfamiliar channels. That is by definition hard to develop in hierarchies (especially U-form, but also M-form) because the required channels do not exist and to create them involves a substantial and painful organisational change.

But such communication is easier to develop within a network structure.

A network structure is one in which relationships among work groups are not described by formal lines of authority but are governed by the often- changing implicit and explicit requirements of common tasks.

Workers or work groups can be reconfigured and recombined as the tasks of the organisation change.

# ORGANISATION FOR COMBINATION – An example

A very striking example of this was provided in a pioneering study of firms in the electronics industry.

After interviewing many managers in UK electronics firms, Burns and Stalker argued that:

*In the electronics industry there is often a deliberate attempt to avoid specifying individual tasks, and to forbid any dependence on management hierarchy as a structure of defined functions and authority.*

The head of one concern, at the beginning of the first interview, attacked the idea of the organisation chart as inapplicable in his concern and as a dangerous method of thinking about the working of industrial management.



# ORGANISATION FOR COMBINATION

Sometimes this network structure is created within a single company.

But sometimes it is created by an alliance between several network firms.

These network firms specialise in a small part of the value chain, and trade with a network of other firms to complete the vertical chain.

And once again, these network firms tend to form clusters or industrial districts.

The advantages of this network structure are that structures can be changed frequently and rapidly.

This means that these structures are well adapted to cope with radical innovation.

In addition, network firms well placed to concentrate on core competencies in house, and outsource the rest.

# ORGANISATION FOR COMBINATION

The disadvantages of this network structure are:

- a) that it encounters problems with multiple lines of authority and divided loyalties (even more than in the matrix structure);
- b) that unstable job descriptions make it hard to achieve economies of specialisation. The very factors that make this structure well designed for innovation by combination make it poorly designed to achieve innovation by specialisation.

# The Essential Difference

The essential difference between these two different approaches to organisation can be:

A hierarchical organisation has limited communication channels.

- This is quite satisfactory for incremental innovations because in creating such innovations, extensive networks are of limited value – and may even be counter-productive.

By contrast, organisations that need to cope with radical innovation need organic form, flat structures and copious networking.

To achieve these innovations, the company must develop a continually changing 'coupling process', and such change would put severe strains on any rigid internal structures

# WHO HAS THE ADVANTAGE IN INNOVATION?

‘it depends’.

- It depends on what sort of innovation we are discussing.
- We can draw some rough generalisations about the conditions in which large companies or small companies hold the advantage in innovation.

# WHO HAS THE ADVANTAGE IN INNOVATION?

**Large companies** adopt organisational structures that allow them to develop economies of scale – especially U-form (but sometimes also M- form).

- These companies operating globally, can develop a high degree of labour specialisation, and are well placed to excel in incremental innovation.
- These hierarchical organisational forms are not designed to promote information-sharing across diverse functions and therefore such large organisations are not well adapted to encouraging the sort of creative combination that is needed for radical innovation.
- For that reason, large companies tend to find radical innovations are disruptive or competence-destroying.

# WHO HAS THE ADVANTAGE IN INNOVATION?

When do **small startups** have the advantage?

Startups find it easier to bring together a new combination of competencies ab initio.

Such a recombination involves no organisational change and challenges no existing organisational structures.

Startups, 'organic' firms and network firms more generally, have the flexibility that makes them well adapted to develop radical innovations.

- Startups cannot achieve the same economies of scale available to large global players, or to specialised component suppliers operating on a global scale.
- Nor can startups achieve the same degree of labour specialisation, and are generally not well placed to challenge large players in supplying incremental innovations

# THE VISION

**The vision is something between a forecast and a strategic plan, stating what technological developments the company expects and what products and technologies it plans.**

- Some large companies find it helpful to develop a corporate technology vision to help them compete in rapidly changing markets.

# THE ROLE OF VISION

Why is vision important in helping the company organise for radical innovation?

- It is important because careful use of vision can help to turn what might appear to be radical innovation into incremental innovation.

Why is that?

- Because it is easier for a company to anticipate and make plans for those innovations which it can see coming.
- And, as we argued, radical innovation tends to be de-stabilising for the large hierarchical organisation while incremental innovation need not be.



# THE ROLE OF VISION

So who needs a vision to help them organise for innovation?

The answer to this is the same as the answer to this question: which companies find radical change the hardest to cope with?

- Large, mechanistic and hierarchical organisations cope with incremental change but find radical change much harder.
- Small, organic and 'flat' organisations are better at coping with radical change and therefore have less need for a vision.

# THE ROLE OF VISION

A simple analogy can help to explain this point.

- *Consider the different experiences involved in trying to navigate a narrow waterway in a large ship or a small rowing boat. In the large ship, such navigation is hazardous because the ship has so much inertia. Any change in direction has to be planned well in advance for otherwise the ship runs the risk of a collision or going aground. By contrast, in the rowing, such navigation is not hazardous because the boat has no inertia. The 'skipper' can change direction at the last moment and without much planning or risk.*

In this metaphor, the corporate vision is akin to a nautical chart of the waterway. The pilot of the large ship will benefit from careful inspection of the chart so that he is well aware of shallow areas and can work out well in advance how to manoeuvre through the waterway without running risks. By contrast, the skipper of a 'rowing boat' has no real need for a chart.

In just the same way, the manager of the large firm (which has much inertia) will benefit much from having a vision to allow strategic planning, while the manager of the small firm (which has little inertia) can do without.