Innovating Together: Making a Success of Collaboration

Rapid technology changes and international competitive pressures are forcing companies to re-examine how they develop new products and services. Research collaborations involving large companies, smaller companies and academic institutions can bring benefits all round.

Why Should I Collaborate?

Innovation demands access to new skills and the right technologies. The mix of skills and technologies needed to innovate successfully is prompting companies to supplement their own expertise with that of suitable partners. Increasingly, companies large and small are realising that collaboration can offer distinct advantages over 'going it alone'.

The advantages of collaborating are as great for small firms as for large ones. Indeed the resource constraints facing smaller firms may make collaboration particularly beneficial. Teaming up with a large partner or with other firms of a similar size can make manufacture and market entry far easier, though naturally SMEs need to weigh the pros and cons of each option.

For instance, a small firm may have a great product but not the resources to develop it. Working with a larger partner to achieve a 20 per cent benefit from a product success would be better than retaining 100 per cent ownership of an unexploited idea, however good it is.

> Access to research or technology is only one of the potential benefits of collaboration. Partners might, for instance, provide a stronger customer focus, better market knowledge or manufacturing capacity.

How do I Find the Right Partners?

A successful project will require a lot more than just research and technology. You need to take a broad view of what will be required to move from the initial research stage through to full exploitation. Potential partners need to be assessed comprehensively and systematically. Factors to take into account include:

- Strategic fit: Are partners' business and technology strategies clear and compatible? Is there complementarity of motives and ambitions? Do all partners have the commitment of senior management to the project?
- Resources and financial issues: Are the partners committed to delivering the resources required for their role in the project? Do they have good financial security? Have other partners had experience of collaboration? Is there a fair balance of risk and reward among partners?
- Technical ability: Is there a balance of technical skills, knowledge and resources? Is there a technical interdependence within the consortium?
- Trust and rapport: Do potential partners have a good reputation? Are the company cultures compatible? Do you have similar business values? Do you trust them?

Collaborating with Universities and Research Organisations

Universities and research institutes are also potential partners and are increasingly looking to work with industry on collaborative research projects. Such organisations have a wealth of expertise and knowledge which may help you to realise your goals much more quickly. However the motives of researchers for getting involved in a particular project are likely to be different to those of the industrial partners. Companies therefore need to make sure that the project retains its commercial focus and that the agreed project timetable is adhered to.

Innovating Together: Making a Success of Collaboration

How Should I Go About Managing Risks?

Risk analysis should play an integral part in the process of managing collaboration. Different options have different types of risks. For example, doing a project in-house may reduce the risk of IPR leakage but increase other risks, e.g. by monopolising R&D resources. There can also be risks involved in not doing a project at all.

Whilst collaborative R&D is bound to entail a certain amount of uncertainty, simple approaches can be used to assess and manage the resultant risks. Quantitative risk evaluation approaches can be used to attach scores to qualitative judgements. This enables participants to focus on important variables and allows options to be analysed and compared on a consistent basis.

Putting Collaboration into Practice

Before embarking upon collaboration it is important that all participants develop a clear understanding of each others' contributions to the project and what they expect to get out of it. Open communication at the early planning stage is vital and, if necessary, much senior management effort should be put into clarifying key issues, such as project aims, resource needs and exploitation arrangements. Without a straightforward understanding of the balance of risk and reward disaffection is likely to result later on.

Once partners are sure they have common aims and goals, they can draw up a formal collaboration agreement, documented as a legal contract. The agreement needs to clearly set out the roles and responsibilities of each of the parties. It can be used to help each partner to prepare its contribution to the project and should cover:

- the rights and obligations of the partners in clear and simple language
- project management and communications arrangements
- intellectual property rights (IPR) and ownership of the results
- exploitation routes and agreements

- procedures for partners changing
- arbitration procedures
- termination provisions
- which national law should apply
- the project plan, timescale and milestones.

Frequently contractual arrangements become firmer and more exhaustive as the project evolves. It is also possible that the composition of the consortium will change as the project progresses.

Avoiding the Pitfalls

Finally, some tips for getting the most from collaborative working:

- Protect your intellectual property: Make sure there are clear arrangements for how to treat background IPR – that owned by each partner at the outset of the project – and foreground IPR which is developed within the project. For instance, all participants may agree in advance that they will each own the foreground IPR that they develop within the project. However, if exploitation by any of the partners depends upon access to IPR owned by others, licensing arrangements would also need to be agreed in advance.
- Don't underestimate the importance of cultural differences: These can be significant in collaborative projects, especially where there is an international element. Yet a mutual understanding of cultural factors within a consortium is vital to project success.
- Organise for success, but plan for failure: Think in advance what you will do if partners drop out. Try to plan your participation in a way that the impact of failure will not be too severe, and that even if the project collapses you at least get something out of the experience.