Key success factors in commercialising research and development and taking research to market

Modified timber – why?

Softwood timber users wanted a source of better timber
There was a desire to upgrade local softwood to that similar to hardwoods
A challenge was set for technologists to improve existing timber resource
There was a recognised opportunity to add value to existing timber
It was predicted that the sourcing tropical and premium hardwoods would become more difficult
Who are Fibre7?

The initial modified timber was called Greenseal and made by Pacific Hardwood. 
Timber was rebranded Indurite. 
Pacific Hardwood was bought and Fibre7 was founded. 
Major improvements to the formulation were made and Lignia was launched. 
Now Fibre7 manufacture and market Lignia for interior applications and LigniaXD for exterior applications. 
Processing facility in New Zealand with commercial head quarters in London.

Research

Modified timber is the ability to add more than durability to timber without the use of biocides. 
Process was developed by Forest Research, New Zealand specific to New Zealand radiata pine. 
A number of modification technologies have been developed and commercialised. 
The first densification technology only delivered part of the modified timber solution – it improved performance but not necessarily value. 
Original technology did not have colour – we developed the colour management system to give improved timber and improved appearance so it could be positioned against premium hardwood species in terms of price. 
Technology and processing development is only the start – then begins the work of researching and establishing the best applications the benchmarking and validating the offer.
Programme roll out

- Lab based programme to establish foundations of the technology
- Full scale production required process engineering to achieve consistent results
- Market required additional value to justify cost – colouring is developed
- Working with customers wider opportunities identified if timber performance could be further improved
- New formulation developed to meet and exceed international standards in terms of performance and emissions
- Commercialise and develop with key customers
- Develop and launch new offers in line with market demand and acceptance of modified timber

Commercial challenges

- Having to change perceptions of the timber industry and convince the market to try a new material
- Delivering consistent product quality with stop start production whilst order books are firmed up
- Keeping within forecast costs whilst processing through the start up
- Finding companies willing to try innovative new product
- Understanding your customers customer and tuning the offer to suit them and drive sales
- Creating a robust commercial blueprint to engage with customers
- Having a plan and staying focused, concentrate on winning the first order to validate the offer and get the market moving
- Technology may be transportable but resource may not
Market development

There is no substitute to local market knowledge especially when working internationally the most subtle difference may have a profound effect of applications and opportunities

Make absolutely sure you target the right customer with a salient offer otherwise they will not see the opportunity

Invest in product manufacture to demonstrate the benefits and advantages of your technology

Do not be afraid to alter or change your offer – listen to feedback from the market

Future planning

Recruiting the right skill sets

Product development in line with market feedback and demand

Leverage success and use this to plan business development

Ensure your business infrastructure has the processes to cope with, manage and report as the business grows

Invest in market awareness
Lignia and LigniaXD

Interiors and exterior applications
- Colour management and locked in all the way through the board
- Added weight and density
- Additional stability and resistance to impact
- Ease of machining, laminating and coating
- No acids used to improve timber performance
- Excellent resistance to termites
- Easily recyclable at end of life