



The changing nature of the Australian furniture industry

by Peter McCutcheon, chairman AFRDI Board

The 'poles' in our local furniture industry as well as the general market place appear to be moving further apart and, as with many things in life, there's equal measure of good and bad for our industry and for the community.

Having been involved in sales and marketing with a number of international and Australian companies across different industries over the years, we always used to develop our product or service offer to be structured around a **good, better, best** approach. That meant you would typically have at least two but usually three products that fitted the parameters of good, better, best, and this strategy would cover most segments of the market.

However, in the past few years this has changed dramatically. There are numerous examples in both consumer and business to business (B2B) market places where the middle ground has almost disappeared (or is on the way to disappearing).

I believe this is because as the lower end of the market has become cheaper (look at electronics and electrical equipment) and the top end of the market has become better featured, it leaves the middle ground in no man's land. If you are trying to market as a middle ground supplier you find yourself too expensive as compared to lower end suppliers, and with an offering not as well featured as the top-end products.

The shrinking middle ground

If you think about many different industries and products I am sure you can come up with plenty of your own examples of this trend. Look at the car industry: sales of Mercedes-Benz, Audi and BMW are growing, as are sales of the smaller 4 cylinder models. What are the ones in decline: it's the middle ground occupied by Commodore and Falcon.

How does this relate to our industry? We have always had a robust industry with offerings across the board including cheap furniture and quality furniture. Nothing's changed, except that now, the cheap furniture really is - by historic standards - very cheap indeed.

You can pick up a no-name branded office-style height-adjustable chair for considerably less than one hundred dollars that is probably OK for youngsters and students, providing they haven't outgrown their parents! The chair will probably be a 'knock-off' of a design that someone else has spent time and money developing, but that's the nature of the furniture business in the world today – there are the chancers, virtual businesses that are here today (on a flashy website) and gone tomorrow, and there are the solid bricks and mortar players (who also use websites for promotion, but maintain traditional physical sales outlets).

You buy cheap furniture and you take your chances. There are many stories about the cheap student's chair that fails after just a few weeks of use. Expensive furniture usually provides better value, but what do we get for the extra money? Expensive in this case includes not just the product, but a range of services that go with the price: extended warranty, design, take-backs, installation - the list goes on.

As a representative of a manufacturer and also chairman of the AFRDI board, I have always felt that the overriding concern has to be, is the product 'fit for purpose'.

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Not only will this typically ensure the product is both robust and has a potential for longevity, but this issue, I believe, should be at the heart of most sustainability issues. Does the product do its job and last for a decent period of time whilst still looking good? If it does, then it will not be needlessly replaced creating greater pressure on landfill and utilizing resources to make the replacement.

I would also hope that it's been tested and certified. Certainly, it's a growing trend for both the government and the private sector to demand solid evidence of the credentials of office furniture, and I think that's a good thing. At the very least, it means that as a society we may move away from buying on low price alone, and start to consider the implications of buying cheaply, throwing away, and repeating the cycle. Quite bluntly, we should expect that what we are buying is a safe item, one that doesn't suddenly collapse and maybe cause us injury.

Focus on supply chain management

What of the future for the Australian industry? My crystal ball can be as clouded as the next industry player's, but I believe the key phrase is **'supply chain management.'** To me, it's all about the ability to be able to source your products and deliver on time whilst making a dollar. If your own factory can provide you the products and components that can do this, fantastic.

However, many companies are finding that to provide that extra quality and design, and to have the ability to supply relatively limited quantities of special product to meet a particular style or performance need, they are obliged to look to other parts of the supply chain to achieve this. Whether it is a local artisan producing a special piece of soft furnishing or it is an off-shore factory turning out thousands of widgets at incredibly low prices, they are all part of a process that we expect to deliver the right products at the right time, and most importantly, at the right price.

What's AFRDI's reaction?

Speaking for AFRDI, we are always considering different initiatives to benefit the industry, particularly in relation to sustainability issues. Our traditional activities are not being neglected: we have been developing new testing machinery, refurbishing the testing areas to make them more efficient, and the next evolution of the Rated Load series, AFRDI Standard 151, for fixed height chairs, is about to be published. This will cover chairs from the commercial level right through to bariatric and hospital use.

Is there more that we could or should be doing for our industry? You tell me, and we'll consider it.

In a sign of things that may be to come in Australia as well, from the UK and Europe comes a story about certain classes of chemicals.

All companies in the supply chain providing products for the EU are now required by law to give information on potentially harmful chemicals.

Chemicals are divided into two groups, 'substances' and 'preparations' (a mixture of substances). However, there is an additional class of product, referred to in regulations as 'articles' and **these include furniture.** Suppliers of articles have obligations which are different to suppliers of substances and preparations. These are referred to as **'Substances of Very High Concern' (SVHCs).** Chemicals are placed on a list of SVHCs due to their potential harm to human health or the environment. The expectation is that by the end of this year, 106 chemicals will be listed, bringing with it an increased need for assessment of materials.

ISSUES OF INTEREST

It's a rare company these days that doesn't think about sustainability, and work towards achieving tangible improvements.

But what about the staff who are tasked with achieving these new gains? Should they be recompensed for the additional responsibilities they're carrying.

That's been the focus of some studies in the United States recently, and the consensus is yes, there should be reward for the new field of work.

The thinking goes like this: as the economy is coming out of the financial crisis, most employees are overworked as they make up for lost time, and taking on sustainability is just another job on an already over-loaded plate.

Surveys indicate that not too many major companies are rewarding staff just yet, but the feeling is that to reap the benefits of sustainability over the long term, management must ensure that sustainability performance is tied to evaluation, and equally as importantly, to employee compensation.

The UK's new Construction Product Regulation laws (CPR) mean that from July next year, all wood-based panel products must carry a CE mark.

This will be easy for distributors of mass produced products like plywood, OSB, chipboard and MDF, because it is the manufacturer's responsibility to test the product and prove it fit for its intended purpose.

The difficulty, though, is for post-treated flame retardant products (FR), where under the new law, any distributor who arranges the FR processing of their free issue panels and places them back on the market with a reaction to fire classification, must have acquired a Factory Production Control (FPC) certificate issued by a Notified Body. This in turn must be supported by full and valid test evidence and provide a valid CE mark for the FR element of the panel's performance.

This is not as easy as it sounds. Not all flame retardant processes available in the UK are properly tested and unless the technical file that contains the test evidence is complete and valid, it cannot support an application for a FPC certificate and without one, the distributor cannot fulfil obligations to publish a Declaration of Performance for the product.
from timberbiz.com.au

AFRDI launches new Rated Load Standard for Fixed Height Chairs

AFRDI is now designing and constructing specialised equipment to test to its latest standard, AFRDI Standard 151, Rated Load Testing for Fixed Height Chairs, to be officially launched next month.

The standard introduces new testing points for fixed height chairs, at 135, 160, 185 kilograms, and for bariatric testing, up to 300 kg. As usual, under testing, chairs will be subjected to loads considerably above the point at which their performance is guaranteed.

Technical manager Ian Burton says the new standard will supplement the existing 4688 Standard for fixed height chairs. Testing prices for AFRDI 151 will be about 25% higher than 4688 Level 6.

Like its cousin for rated load testing for gas-lift office chairs, AFRDI Standard 142, the new standard has been written to meet the rapid changes in human sizing which have arisen over the past four decades.

A recent UK news report claims that the changes are so pronounced that the average adult male now weighs three stone (around 19 kg) more than he would have in 1970. At the same time, the report suggests that clothing sizes are being 'adjusted' so that what was formerly large is now men's or medium.

Desks and workstations update:

An update of an existing standard is being prepared, taking into account new materials, designs and techniques. The new standard is intended to be in five parts or six:

1. General requirements.
2. Dimensional requirements.
3. Stability, strength and durability requirements (desks and tables), evolution of the existing AS/NZS 4442.
4. Stability, strength and durability requirements (workstations), evolution of the existing AS/NZS 4443.
5. General, dimensional, stability, strength and durability requirements (accessories), based on various standards.
6. Work surface resistance to mechanical and chemical agents.

NOTE: It is intended to merge parts three and four if possible.



A 109 mech is not an AFRDI 4438 chair!

Recently at AFRDI, we've been concerned at a growing advertising trend, in which a chair is said to have an 'AFRDI approved mechanism,' and thereby presumably conferring upon it highly desirable attributes.

There's no doubt that the mech may have been approved under AFRDI Standard 109, but that does not by inference mean that the chair in total is AFRDI certified.

Only full Blue Tick testing under AS/NZS 4438:1997 or the AFRDI Rated Load standards establishes the performance bona fides of an office chair overall, and it is not reasonable to suggest that a chair is AFRDI certified just because it has a 109 certified mech.

Re-Shoring Manufacturing – an emerging trend in the United States

Facing the practical problems involved in dealing with a country 12 times zones away (China) and negotiating details of trading in Mandarin, a growing number of North American industries are re-examining the benefits and the pitfalls of what has become conventional wisdom – to largely offshore manufacturing to China.

It has even prompted Forbes magazine to run a series of articles questioning whether re-shoring is a trend or a trickle. The assessment so far seems to be that the practice is more than a passing fad, and that there are sound reasons why it may grow.

Identified drivers for re-shoring include:

- An ability to gear production runs more in keeping with local market demand
- Not getting stuck with excess inventory and cash tied up in the process
- Savings in logistics
- Product quality
- Ease of doing business
- Proximity to customers, and
- The rising cost of skilled labour in China, which will continue to drive up prices

Forbes claims some manufacturers rationalise the move back to local manufacture and its unavoidable increased unit costs because it lowers overall risk and brings flexibility to manufacturing. It's a message echoed by the Boston Consulting Group, which says around one third of US large companies are planning to bring production back home.

There's another factor in the equation, and that's the ability to rapidly modify products to suit local market tastes – custom manufacturing for niche market demand. This is coupled with the decreasing life expectancy for some product types, and once again, the necessity not be stuck with stock which has little chance of being sold.

It's happening in the UK too

British shoe manufacturer Hotter's cites the ability to scale production to its perceived needs as a good reason for re-building its local manufacturing base. In an article in the Telegraph, a company official said that if they wanted to produce just 20,000 examples of a particular shoe, they didn't have to convince a Chinese factory owner of the need to make a small test order. Hotter's quote a reluctance of the Chinese to manufacture in less than commercial quantities, which in some fields, can amount to a great number of products, most of which obviously have to be sold to guarantee an overall return.

Why the change in focus?

According to the US based McGladrey Monitor, the recent recession provided an opportunity for companies to do a 'reset', to critically look at their business and align their staffing, investment and sales efforts with current orders.

The furniture industry

A year ago, we reported that several US furniture factories were being taken out of mothballs and re-commissioned, and that IKEA commissioned a major new domestic factory, to bring manufacturing closer to the end-user.

Australian industries also re-considering where to base their manufacturing

In early July, the Australian company Solarwise reported that it had decided to bring manufacturing of its Miracle heat pump back to Australia.

Company development manager Chris Fitch said quality control was the main reason for the move, and issues over choice of materials in the overseas-made articles.

And a Sydney-based fashion company has brought its work back to the greater Sydney area, quoting one of the key drivers as short lead times – 2-3 weeks compared with three to four months. The ability to quickly follow fashion trends outweighed possible cost savings from manufacturing in China.

We'd like to hear of any similar decisions in Australian industry, so that others may benefit from the decision-making processes involved.

News from the CPSC

From the United States, evidence that chair weight ratings do have meaning in real life.

The Consumer Product Safety Commission (CPSC) recently announced the recall of a folding deck chair, because the chair was found unable to support the stated weight capacity, thereby posing a hazard to consumers. The manufacturer, West Marine, had reported six incidents of the chair collapsing, although no actual injuries occurred.

In another report from the CPSC, a kitchen table set has been recalled, due to chairs collapsing during normal use. Neither the deck chair nor the kitchen set was sold in Australia.

Underlining the need for independent product safety assessment, comes news of the recall of a high chair, due to laceration injuries.

The rear legs of the chairs, sold only in the US and Canada, were fitted with protruding pegs as a fixing point for an under-seat storage tray. The CPSC received reports of 21 injuries due to the positioning of the pegs.

The sharp end of product sustainability certification: how BFX met the criteria

Over the past year, Bizfurn Express Furniture (BFX) has been one of the first major AFRDI clients deciding to have significant numbers of its education product range AFRDI Green Tick certified. BFX's Matthew Moore took a break from his new role as first-time father to speak to AFRDI.

AFRDI: How difficult/easy was it for BFX to understand what was required of the company to meet the requirements of the certification process? The initial understanding we found was quite satisfactory. But soon we found we had difficulty in applying the various undertakings required for the AFRDI Green Tick (AGT) to the every day processes of manufacturing and to the *suppliers* of product to our company. Documentation became a stumbling block, to create the necessary chain of custody from the source of the product, through to the production process, and then on to the client.

We found that there was a considerable amount of pressure placed on suppliers to either establish policies or to release their existing policies to us for identification. Many just had not done the paper work, and apparently did not place a high importance on this part of their business.

AFRDI: What factors were you thinking of when you weighed up the cost of testing versus likely business returns?

There was always the view that this was the next step in our company model in regard to certifications.

Many business and government groups had been asking when we were moving ahead with our green certification process, and said they would look to this as a positive move for Bizfurn in the education furniture world.

At the time, we had 23 AFRDI Blue Tick education products (now more than 50) and saw these first 23 as candidates for AGT certification.

AFRDI: Are there any benefits showing up already in attracting new trade now that you have sustainability certification?

We saw a benefit in identifying BFX as an Australian industry standard bearer for education furniture. We wanted to make a mark for others to follow, with products not driven by budget or price alone, but with the longer term value for money spent, and for clients to have the knowledge that all product was TVOC tested.

AFRDI: What benefits did you see in going with AFRDI vs some other less stringent green certification programs?

We felt AGT had a transparency throughout the process, there were no grey areas. Everything is cross-checked.

As well, with AGT there was a financial benefit through a one-time payment instead of ongoing costs that could increase as we expanded business volume.

AFRDI: What changes has the process made in the way your company thinks, and about the way it does its day to day business?

Well, all the processes of our manufacturing were placed under the spotlight and were scrutinized. Every supplier had a look at their chain of custody, from the purchasing of a product to the way it was disposed of.

AFRDI: Following on, has there been a change in the company's culture?

Leading up to getting AGT certification there was a definite change in our culture and the culture of those businesses that supplied us.

There is now a connection between our product and the environment. We feel we are not just furniture manufacturers but a company that can make a difference, not only in the class room, but to Australia and the world. Bizfurn employees were excited to be in a position to offer a product that could be an industry standard.

AFRDI: AFRDI includes strength and durability testing in sustainability testing. Is this a plus?

A major plus advantage to our product life is the fact that it is AFRDI Blue Tick tested. For us, it is an efficient way of looking at product durability in the long term. We can identify weaknesses and strengths immediately and act on changing our product before it goes to market. Innovative products are fine, but they need to be tested to simulate real world use before reaching the market.

To us, strength and durability are critical – why have something that is green, but will not perform in the market?

AFRDI: Would you recommend sustainability testing to others?

Yes, and I recommend the sharing of information on a manufacturing level, as this could benefit all related Australian industries and help to make us more efficient and globally competitive.

AFRDI: Your thoughts on the VOC testing requirements?

With TVOC (total volatile organic compound testing) you can see as a way forward. Without it, there is always the doubt that something wasn't tested, and that could be significant in an education furniture product.

Why AFRDI tests furniture the way we do...and problems with some forms of advertising

By Bob Panitzki, CEO Furntech-AFRDI

As the question of certification of consumer goods grows in complexity, and monitoring for sustainability becomes more and more part of mainstream business, AFRDI sometimes attracts criticism for the way we include requirements for strength and durability when we test under the AFRDI 150 Sustainability Standard.

Unlike many of our more generally focused competitors in the field of sustainability certification, AFRDI concentrates on one field only – and that's furniture. Because furniture is a product that is subjected to occasional heavy use and sometimes even abuse, we maintain that not to test for strength and durability (and a range of other criteria which together describe 'fitness for purpose') would be a dereliction of our duty. The fact that furniture has the potential to cause personal injury only strengthens our resolve to test for sustainability our way.

Following on, in a way, has been our decision to write to a number of businesses recently, asking them to modify their advertising, in particular, to drop what we consider are inappropriate claims about chair weight ratings. It is because we have tested office chairs in considerable detail that we know what is reasonable to expect from them.



Designer Guy Manley with AFRDI technical manager, Ian Burton. The machine simulates the forces on chair arms when someone gets up from a chair, pressing down and outwards on the arms.

Correspondingly, because the standard we mostly use, AS/NZS 4438, has been around for quite a while, manufacturers also tend to produce a range of components that perform well under the rigours imposed. All is well until the ante is upped, so to speak, and a chair is subjected to a really heavy load. Sometimes the 'wheels fall off' when chairs are asked to sustain loadings much higher than their designers intended.

When AFRDI introduced the Rated Load Standard, AFRDI Standard 142, we expected that a few chairs which easily passed 4438 would 'fly through' 142. As the classic song says, It Ain't Necessarily So – a significant number of chairs could not pass at 135 kg let alone the more severe 160 kg testing point.

So imagine how we feel when a dealer advertises an office chair 'rated at 160kg' and we know it has been tested under the 4438 Standard, which assumes a maximum loading by a person up to around 110kg. We know that a chair will perform well at this loading point – we also know that to push much beyond it may be to enter into dangerous territory.

The key ingredients in our testing are strength and durability coupled with stability: together they are the key elements of good furniture design. The other tests we have evolved are essentially refinements, but necessary ones, to explore the possibilities of what happens when chairs in particular are subjected to sudden or dynamic loads. These may momentarily far exceed the chair's normal performance envelope, but as responsible testers, it's for these out of the ordinary circumstances that we must test.

The *AFRDI* family



welcomes a new member

AFRDI Standard 151, the Rated Load Standard for Fixed Height Chairs for heavy people

The ***Rated Load*** concept has been developed by AFRDI to test and certify chairs for safe use by a much wider range of the population than covered by the current Australian Standard AS/NZS 4688, with its nominal maximum user rating of around 100 kg.

AFRDI Standard 151 has four test options: 135 kg, 160 kg, 185 kg and 300 kg (into the bariatric range, for use in hospitals, clinics etc).

Rated Load is a response to the rapid increase in human sizing over the past three to four decades. It also meets demands by consumers and clients for certified extreme duty chairs.

AFRDI recommends that any chair used in a public space – cafes, libraries, restaurants, auditoriums – should be a ***Rated Load*** chair, because the weight of the user cannot be pre-determined.