

THE BUSINESS CASE FOR PACKAGING SUSTAINABILITY

Bundaberg Brewed Drinks

Delivering packaging innovation through stakeholder partnerships



Australian Packaging Covenant

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Summary

Bundaberg Brewed Drinks uses traditional brewing processes to produce non-alcoholic products including ginger beer, lemon lime and bitters and sarsaparilla. This case study describes two packaging projects that were initiated from very different business drivers. The first, which aims to reduce the weight of beverage bottles, came about through a blue sky innovation day in which suppliers and staff were encouraged to develop new ideas to deliver business value. The second project, a redesign of the secondary carton for ginger beer, was prompted by a 'Non-Conformance notice' from a supermarket customer. In both examples, a high level of collaboration between Bundaberg and its supply chain partners has meant that Bundaberg is on track to deliver significant cost savings as well as marketing and sustainability benefits.

Lessons from this case study

- Medium-sized organisations can draw on the expertise of their packaging suppliers to develop new ideas and to solve packaging problems. The value of this relationship can be enhanced by creating opportunities to understand and share ideas for improving operating processes. Meetings, line audits and dedicated innovation workshops that encourage new ideas can all help to build trust and accelerate packaging innovation through supply chain partnerships.
- Understanding and accounting for the needs of key stakeholders helps to ensure that solutions deliver multiple benefits over sustained periods.
- Business challenges can provide the impetus for a packaging redesign. For Bundaberg the Non-Conformance notice presented an opportunity to redesign their packaging to achieve multiple business benefits. These benefits include: a more versatile distribution pack that can also be used for retail display; less product waste; improved visual impact on the pack contributing to an increase in sales; and a stronger relationship with their customer.



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About the company

Bundaberg Brewed Drinks Pty Ltd (referred to as Bundaberg in this case study) is a family owned beverage manufacturer with over 150 staff. Bundaberg uses traditional brewing processes to produce non-alcoholic products. The company's flagship product is Bundaberg Ginger Beer. Established in 1960, Bundaberg currently exports its products to over 36 countries around the World. Sales are growing rapidly in both the domestic and international market. The main manufacturing site is located in Bundaberg, Queensland. In some domestic and overseas markets Bundaberg ships the brewed concentrate to contract manufacturers who then mix and bottle the drinks.

As a medium-sized business, Bundaberg is unable to justify the resources required to support a dedicated department to manage sustainability initiatives. Instead, they have developed an Environmental and Sustainability plan (managed by the Operations team), which integrates with the Annual Operating Plans developed by each department. In this way responsibility for packaging sustainability and other environmental initiatives is shared and integrated within normal business operations.

Regular meetings between managers in each department help to maintain the focus on packaging improvements and quarterly meetings are held with contractors and suppliers to draw on their ideas for improvement. Packaging suppliers are valued for their experience across multiple industries. This means that they have exposure to new packaging ideas and technologies that Bundaberg staff may not have access too.



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Approach to packaging sustainability

'Blue sky day' initiates glass bottle lightweighting project

Each year Bundaberg suppliers are invited to a 'blue sky' innovation workshop which is run over a full day. At this event Bundaberg staff and suppliers share perspectives on existing business plans. They are then prompted to brainstorm new ideas that will add value to the Bundaberg business and its suppliers.

One idea that was raised by a supplier at the 2013 'blue sky' event was to reduce the weight of the bottles in order to reduce glass and freight costs. When the idea was raised, other participants were able to provide feedback on the potential opportunities and constraints of the idea. For example, the engineering team expressed some concern that lighter bottles could lead to more 'blow ups'. That is, sometimes bottles explode when they are pressurised in the bottling process. This early feedback highlighted the types of risks that would need to be carefully managed throughout the bottle redesign process.

Following the 'blue sky' event, meetings were held between the engineering team at Bundaberg and the packaging supplier. Bundaberg's initial 'stretch target' was to reduce bottle weight by 15 grams. The bottle supplier then began their in-house redesign process to look at what was achievable. Conscious of the concerns of the Bundaberg operations team the supplier provided a series of briefings as they progressed through the process. They emphasised that glass would only be taken from parts of the bottle that will not compromise its integrity when pressurised. The new bottle is currently undergoing factory trials and the project is expected to be finalised by the end of 2014.

This example highlights the importance of a strong partnership between the manufacturer and the packaging supplier in order to jointly create innovations that lead to business value. The relationship between the packaging supplier is enhanced through the collaboration, but is also based on a strong understanding of each other's processes (Figure 1). In the case of the supplier, they provide regular line audits to identify issues such as bottle scoring and to provide suggestions for ways in which the bottling process can be improved. The Bundaberg operations team also has a good understanding of the suppliers' operations. The severe flood in 2011 helped to build a spirit of collaboration and trust between the two organisations. The Bundaberg team helped the supplier to get their production up and running again after the factory was flooded. The project also demonstrates the importance of identifying issues early on in the process so that opportunities and challenges can be discussed and accounted for throughout the process.

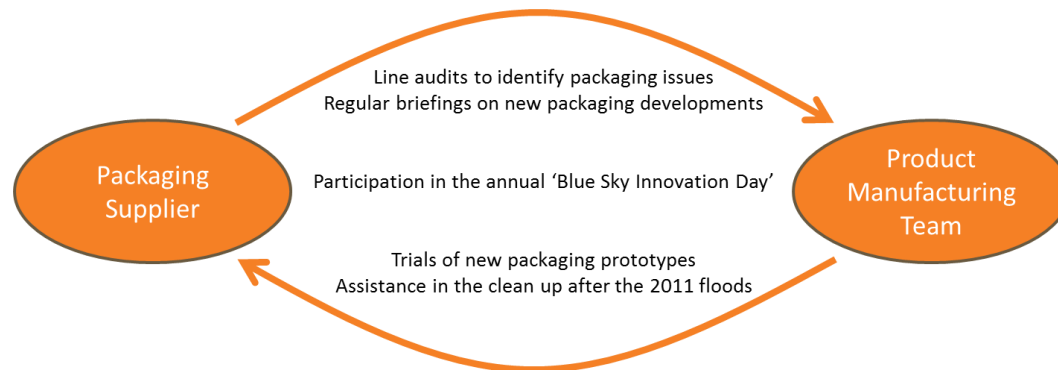
"We have a great relationship with our packaging suppliers. We know that if they are down then we are down. It is a long-term relationship built on collaboration and trust that has developed over many years."

Glen Rethamel, GM Operations for Brewed Drinks



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Figure 1: Collaboration between the product manufacturing team at Bundaberg and their packaging supplier



Unpacking 'Non-Conformance' leads to a solution with multiple business benefits

Another packaging redesign project came about through a contrasting business driver. Bundaberg received a Non-Conformance notice from a supermarket customer. This related to the 6x4 packs of 375 ml bottles of ginger beer distributed in a larger carton for transport (**Figure 2**). As shelf stackers opened the carton in the supermarket, the 4-pack sleeves were frequently being torn and some bottles were falling out. This meant that the product could not be accessed and placed on the shelf within the allocated time, and broken bottles presented a safety hazard. Any product losses were being charged back to Bundaberg, so the situation was unsatisfactory for both companies. When the supermarket submitted a Non-Conformance notice, Bundaberg initiated a packaging redesign process.

Figure 2: The original carton



The first step was to talk to and observe the shelf stackers in the supermarket. This helped Bundaberg to better understand the problem by obtaining direct input from the stackers themselves. The marketing team, packaging suppliers and operations team were also consulted early in the design process to establish the performance criteria that would inform the packaging redesign process. Through these consultations it was established that the new pack could be designed to address more than just the accessibility issue. Rather, it had created an opportunity to enhance the marketability, safety and integrity of the product.



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Following initial design meetings with the carton and sleeve suppliers it was agreed that the packaging design should incorporate:

- Perforations that would enable the carton to be easily opened and used for retail display
- Better promotion on the carton to enhance visual impact and avoid the need for a separate header or banner
- Thinner cartonboard to achieve environmental benefits.

Once the prototype was ready samples were run through the line. A freight trial was then conducted with the assistance of the freight forwarder. Rail was selected for the trial since it was considered the transport mode that has the most impact on the product and pack. Finally, the pack was trialled in a retail store. Supermarket stackers were pleased that they could open the pack without a knife. Feedback from the trial included the need for some minor changes to the instructions on the carton make them clearer. The final product is shown in **Figure 3**. A QR code linking to a how to open video was also incorporated. This can be viewed at www.bundaberg.com/eo.

Figure 3: The new retail-ready carton



This process took around 18 months from receipt of the Non-Conformance notice. It involved substantial communication and coordination between the marketing and operations team at Bundaberg together with the retailer, packaging suppliers and freight forwarder.

While the initial motivation for this packaging change was a Non-Conformance due to stacking issues in the retail store, the new retail-ready packaging delivered a number of additional benefits:

- The outer carton is more versatile and can be used in three different ways to market the product (on supermarket shelves as shown in **Figure 3** and as pallet and theatre displays as shown in **Figure 4**)
- The sleeve has been strengthened to improve safety and reduce product and packaging waste
- The new header has enhanced visual appeal, which has contributed to an increase in sales
- The relationship with the retailer has improved.



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Within the manufacturing plant the new pack can only be used on one of the two packing lines, which is a disadvantage. However, the success of this project has supported a request to modernise the second line when the factory undergoes a major upgrade in the next few years.

The aim of lightweighting the carton has not yet been achieved, but further trials are planned.

Figure 4: Pallet and theatre displays with the new carton



Selling the benefits of a project to stakeholders: keys to success

- **Encourage stakeholder to present *new* ideas.** Rather than focusing on existing problems, create opportunities for internal and external stakeholders to present new ideas. One way in which this is done at Bundaberg is through their annual 'Blue Sky' event with suppliers. At the full day event Bundaberg staff and suppliers are encouraged to brainstorm new ideas that will add value to the Bundaberg business.
- **Understand stakeholder interests in order to create solutions that deliver multiple benefits.** For Bundaberg, solving the unpacking problem at the supermarket involved multiple stakeholders. The project did not just focus on the packing issue – rather, it was used to reconsider the overall pack and the needs of various stakeholders in the process. The result was a solution that solved the packing problem while also creating a more versatile and attractive pack that is helping to build sales.

