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Invetech



Editorial

Over the last three months we have continued to build our reputation as a leading provider of product development and custom automation services. In this time, we have showcased our expertise in the US and Europe through exhibitions and speaking engagements, strengthening our global position.

Internationally, companies are discovering that borders or distance no longer dictate where research and product development should occur. Instead, they are searching the world for the best team to get the job done. For Invetech, the emergence of international collaboration in R&D has given our brand a truly international focus, with our company undertaking 78 projects across 14 countries over the last 12 months.

In this edition we preview one of these projects - a recent collaboration with MDS Sciex, a global supplier of analytical instruments and technology solutions.

Whilst we continue to be heavily involved in the overseas consumer goods and biomedical markets, we are acutely aware of the challenges facing Australian manufacturing industry and are working with several companies – large and small - to overcome hurdles and enable their own international expansion.

To compete in a global economy, Australian companies need the vision to create, develop and exploit new ideas and technologies internationally. To be successful, companies need a culture that is open to generating ideas and the wisdom to draw on the scale and experience of specialists to turn these ideas into reality.

This edition of Innovation shifts the attention back to our home market and Invetech's efforts to support Australian industry. We have included a number of articles that describe awardwinning designs, ground-breaking new product development and process improvements that have enabled Australian companies to compete on an international scale.

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Innovative disc storage system wins top design award

Invetech played a key role in helping develop and design a novel compact disc storage and managing system for a local company that recently won a major Australian Design Award in the Business & Technology category.

The Imation Disc Stakka CD & DVD system stores, manages and protects CDs, DVDs and all other types of 12cm discs. Each Disc Stakka holds up to 100 discs and is easily scalable to more than 60,000 discs. Its intuitive OpdiTracker software is simple to use and enables a search-friendly database for stored discs by title, keyword, directory or file name.

"This design award is testament to the value of Invetech's multi-disciplinary approach to new product development," said Alan Morris, manager of Invetech's industrial design group. "Our project team of designers, CAD, electronic and mechanical engineers took just 90 days to go from a blank sheet of paper to a fully-detailed, functioning prototype and delivered the product to market in less than six months."

This unique product's hardware and software were invented by Opdicom P/L, a Melbourne-based startup company that partnered with US-based Imation Corporation to market and distribute the project worldwide. To date, more than 120,000 units have been sold in over 80 countries.



The Imation Disc Stakka CD & DVD system from Opdicom

Marty Crosby, Opdicom's CEO, accepted the honour at the Australian Design Awards gala event held in Sydney in May. "It is remarkable that a small start-up company can achieve such global success in such a short span of time and be honoured with a design excellence award.

"The teams at Opdicom, Invetech and Imation all deserve credit for their ingenuity and dedication," he said during the Awards presentation.

Invetech also figured prominently in another category at the 2006 Australian Design Awards event, taking out a gong for its design work on an aspirating smoke

Auto parts supplier wins major automotive contract

A Dandenong, Victoria-based, automotive parts, accessories and Defence Company has fended off bids from more than 20 global competitors to secure a lucrative contract with a major Victorian automotive manufacturer.

Kevin Hooper, CEO of Frontline Australasia, recently announced that the Company had been successful in winning a \$21 million, three-year contract for supply of an estimated 750,000 precision components to this car company.

Since 1988, Frontline Australasia has manufactured and supplied precision components and assemblies to domestic and overseas markets, including such brand names as Ford, Mitsubishi, Holden, Tenix, Boeing, GM Defence and the Royal Australian Navy.

"Frontline have come a long way in the last few years and are now well established as a preferred and 'best in class' supplier to the Automotive Parts and Accessories and Marine Technology sectors. This has been in no small measure due to the strong alliances we have forged with key technology and consulting partners, including Iscar for cutting tools and Intercast and Forge for castings."

Kevin paid particular tribute to Invetech and the team headed up by Jim Glover, who "have provided key mentoring and support for our staff in the field of operational excellence; assisting us transform into a truly 'lean' supplier and ensuring that Frontline remains competitive in a very volatile market."

Invetech's work with Frontline regarding other contracts also has paid dividends. Sam Rabinovich, of Frontline's Marine Valves Group, said improvements to their production line by Invetech – most notably the 'lean single piece flow' methodology in valves, meant that a recent job was ready for the customer in six days when previously it would have required 10 days.



Continuous flow machining of engine manifolds at Frontline

Executives from the largest Japanese-based OEM in Australia recently visited Frontline were so impressed with the Dandenong operations, that one member of the delegation told Kevin "We should be doing lots more work with Frontline in the future!"

Kevin closed by saying: "The ongoing success story at Frontline is also enabling the company to re-locate into a brand new and purpose-built facility later this year. This will not only herald a new era of excellence for our company, but will truly establish Frontline Australasia on the map as the supplier of choice.

"I take this opportunity to thank Invetech and our partner companies for your support and encouragement."





Marty Crosby, CEO of Opdicom, and Alan Morris of Invetech, accept the award

detector system called VESDA LaserFocus for Vision Fire & Security.

These latest two awards further enhance Invetech's reputation as a leading international product development and design partner, having achieved similar design award recognition for work on a novel mouse trap in 2005, a world-leading cancer detection system in 2003, an innovative point-of-care health testing device in 2003 and for the Optim™ Wool Fibre Processing Machine in 2002.



Developing better products, faster

Learn how to harness the world's best knowledge and expertise, to develop better products, faster — confidently and reliably.

MDS Sciex, a leading global supplier of analytical instruments and technology solutions, recently collaborated with Invetech to develop the ground-breaking CellKey $^{\text{TM}}$ system.

The system is a revolutionary medium-throughput drug discovery instrument that measures the impedance of live cells cultured in custom 96-well microplates.





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MDS Sciex assembled a global team, including Invetech, to help with the CellKey development. The result is a quality product that was developed in under 21 months from product concept to product launch.

This month, Invetech and MDS Sciex will jointly present this success at Drug Discovery Technology, in Boston.

We will bring you an associated article in the next issue of Innovation, but if you can't wait till then please contact Robyn Barnes at *rmb@invetech.com.au* to find out more.

Innovative device provides 'write' stuff for vision impaired

Making account payments by phone is a fairly common practice for many people. Following the acknowledgement of your payment, simply note down your 11-digit receipt number and the transaction is completed – quickly and efficiently.

The process isn't quite so simple for the vision impaired – at least till now, thanks to a new portable Braille writing device that has been developed, manufactured and marketed by Sydney-based Quantum Technology.

Designed to provide vision-impaired people with writing convenience analogous to pen and notepaper, Jot a Dot has achieved significant recognition as a finalist in the worldwide Saatchi & Saatchi Awards for World-changing Ideas, and as a weekly winner on ABC Television's "New Inventors".

Invetech's part in Jot a Dot's development was acknowledged by Tim Connell, CEO of Quantum Technology, at its official launch in late June. Tim said the company had sold a significant number of products in Australia and USA, with good prospects in the UK and Europe, and that the 1,000th unit had been manufactured the previous day.

Invetech provided design review and consulting on materials properties for some of the moulded components.

Jot a Dot is a fraction of the size and weight of traditional mechanical Braille writing instruments and uses ordinary paper. It has a standard six-dot Braille keyboard and enables writing from left to right. The six keys have been ergonomically designed to suit a range of hand sizes and shapes.

Jot a Dot is made of high impact-resistant plastics and weighs less than 0.5kg, so it can be carried easily by anyone to read and write Braille anywhere, efficiently and conveniently.







In the last issue of Innovation, we introduced you to the Victorian Food Industry High Performance Consortium (VFIHPC) - a new program aimed at fast-tracking improvements in vital manufacturing sectors.

The VFIHPC's aim is to develop new technologies in the food, beverage, meat manufacturing and packaging sectors by:

- Adapting and applying Lean Manufacturing practices, developed and fine-tuned in the automotive sector; and
- Identifying common opportunities for the development of new technologies for those companies participating in the Consortium.

Ultimately, the Consortium seeks to improve commercial competitiveness in the international marketplace.

As part of ongoing efforts to encourage interaction between participating companies, a Value Stream Mapping workshop was recently facilitated by Jim Glover, of Invetech's Manufacturing Innovation group, at Campbell's Soups in Shepparton.

"Value Stream Mapping is a pencil and paper tool interpreted from Japanese origins by the Lean Enterprise Institute in the US," says Jim. "It helps you see and understand the flow of product and information, as it makes its way from raw materials to the eventual customer. This is done by a visual representation of every step of the process - 'as it really is' - and then exploiting the opportunities this mapping process highlights."

During the two-day workshop, the 30 attendees from 11 consortium members were asked to collect data and create a Current State Map of the soup making process, highlighting waste activities that constitute non-value add from the customer's viewpoint. Strategies to eliminate and reduce these unproductive steps were then introduced, enabling an improved Future State Map to be created. This process is then used to create a clear vision and route map for improvement activity and an actionable implementation plan.

Right: Using techniques taught during the two-day workshop, one participant creates a Value Stream Map for his own company. Below: More than 30 people, from 11 of the 14 consortium members, attended the Shepparton workshop.

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These companies make up the Victorian Food Industry High Performance Consortium:

- Bonlac Foods
- Bulla Dairy Foods
- Cambbell's
- Coca Cola Amatil
- CRF (Colac Otway)
- Fonterra Brands
- Goodman Fielder
- Heinz Australia

- KR Castlemaine
- Foods
- Kraft Foods Australia
- Montague Fresh
- Nestlé
- SPC Ardmona
- Tip Top Bakeries

Participants were taught essential techniques during the workshop and then encouraged to adapt and apply the theories learnt within their own company's processes. Following the workshop, many consortium members identified improvement opportunities in their own plants.

"Some improvements have included increased productivity in new product lines, ways of shortening the time from production to market, and opportunities to improve throughput and reduce waste processes. These changes have enabled significant savings and created new ways of reducing product costs and improving margins," said

For further information about the program contact Jim Glover, Project Leader, on 03 9211 7700. Alternatively, visit the website at www.foodconsortium.com.au

Please be advised that all mailing details are kept confidential. If you no longer wish to receive this mailing, please contact Kim Chew at Invetech Pty Ltd, Private Bag 44, Mount Waverley Victoria 3149 Australia, or via e-mail (kmc@invetech.com.au).