



### Business challenge

With market disruptors and new technologies rapidly changing the face of business, how could established computer services provider Computer Merchants maintain its competitive edge?

### Transformation

The business of tomorrow promises to be radically different to today's business. By tapping into new markets with innovative product development supported by IBM® i on Power Systems™, Computer Merchants sharpened its competitive advantage and diversified its business—transforming today's challenges into tomorrow's opportunities.



**Norm Jefferies**  
Managing Director at  
Computer Merchants

### Business benefits

#### Launches

into new markets, driving business development and revenue growth

#### Enables

staff to dedicate more time to value-add activities

#### Helps

the company identify and nourish great customer experiences

# Computer Merchants Drives growth and adds value with cutting-edge innovation on IBM i

All sorts of businesses, from the small local specialists to some of Australia's best-known names, depend on [Computer Merchants](#) to get the most from technology. Since 1979, the company has been creating the right blend of innovation and proven business results to plan, design and implement solutions that are based on its clients' unique situations and requirements.

*“Our new applications powered by IBM have truly sparked a cultural change within the company.”*

— Norm Jefferies, Managing Director, Computer Merchants

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## Laying the seeds of change

As technology evolves, so does the face of business — especially in the enterprise technology sector. An increasing number of companies in this industry have seen their business models dramatically disrupted by new applications of technology. For instance, the emergence of cloud-based technology and the increasing shift towards commoditization across aspects of enterprise IT, including infrastructure services, support services, and hosting platforms, has prompted many established companies to re-evaluate their models of operation.

For traditional vendors of IT solutions, this rapid switch to service-based IT consumption presents a fresh set of challenges: how can they safeguard their place in the market and ward off new market disruptors? Australia-based firm Computer Merchants was faced with precisely this challenge.

Norm Jefferies, Managing Director at Computer Merchants, explains: “Traditionally, we have been vendors of hardware solutions for IBM, Dell, HP, and other IT companies. Because the enterprise IT sector is changing rapidly, with new models of operation and disruptive technologies able to

swallow up existing markets and create new ones overnight, traditional vendors like us need to adapt quickly. This creates a pressing need to diversify, modify and streamline our business as much as possible, or we risk losing our competitive advantage.

“To put this in perspective, seven years ago one of the products we sold was worth approximately \$100,000, now the same product is worth only \$30,000, which means that we have to work more than three times as hard to generate the same amount of value. An additional factor compounding this market pressure has been the slow growth of the Australian economy over recent years, making the need for us to innovate and generate new revenue streams all the more urgent.”

Computer Merchants realised that if it could automate manual, non-value-add maintenance activities, and transform its systems of record by adding systems of engagement, it stood a better chance of boosting staff productivity, enhancing customer satisfaction, and increasing revenues — protecting its competitive edge. How could Computer Merchants turn its vision into a reality?

## Tapping into the potential of automation and machine learning

Computer Merchants undertook a series of innovation projects which spurred the creation of two new tools: CM View (for automated system maintenance), and CM Care (for customer asset management).

Both applications are hosted on IBM Power Systems servers running the IBM i operating system, as Norm Jefferies explains: “IBM i and IBM Power Systems technologies have been at the heart of our infrastructure for a very long time — since the 1970s, in fact! During this time, we have become very familiar with the systems, and we know how to operate them well. By choosing IBM i to develop our new applications, we knew that we were going to benefit from a reliable, stable, and established system, which would enable us to ensure the continuity of our business during these times of change.

***“With IBM i on IBM Power Systems we have been able to build new, innovative services on top of the established and reliable core applications that power our business on a daily basis.”***

—Norm Jefferies, Managing Director, Computer Merchants

“Additionally, we chose to deploy IBM systems because we knew that they would enable us to run our traditional business model alongside cutting-edge technologies such as analytics, automation, and machine learning.”

CM View is a tool that Computer Merchants initially created to help it monitor its own internal systems, which the company then developed further to help support its clients’ infrastructures. Featuring free mobile and tablet capabilities, the application provides a consolidated, real-time view of system performance, so that Computer Merchants can proactively offer assistance to its clients whenever an issue arises.

Norm Jefferies notes: “CM View started out as an internal tool for Computer Merchants, which we offered to a handful of our clients as a free trial—they loved it, so we developed it further, creating an easy to use graphical user interface [GUI] that gives our clients a view into the health of their systems. Now, our fully developed CM View tool totally automates machine maintenance for our clients, by detecting degradation in service levels, flagging up potential root causes, and keeping our clients and engineers notified.

Computer Merchants is enhancing CM View with IBM Artificial Intelligence capability. It is also leveraging open-source machine-learning algorithms from the Python Scikit-learn library which the company runs on IBM Power to train a Decision Tree Classifier (DTC) with past outcomes. CM View will help Computer Merchants anticipate the behaviour of maintenance tickets in future with better than 90 percent accuracy. This figure is set to rise as the system analyses more data.

Norm Jefferies adds: “The machine-learning technology underpinning this new version of CM View means that we can see which tickets are most likely to need assistance from an engineer, and which tickets can be solved automatically, which helps us to optimize our use of human resources.

“Building on the success of CM View, we developed CM Care—an asset management tool also running on IBM i. This free tool provides our clients with a view of the status of the support or maintenance contract they have with us, so they know exactly when their contract will expire and when to take necessary action. In the same portal, we also display exactly when a ticket has been created and when action has been taken by one of our engineers. This way our clients not only have a transparent view into the health of their systems, but also into the action we have taken to support their infrastructure.”

Eager to find new ways to improve customer service, Computer Merchants launched a project to integrate customer emails from its customer relationship management (CRM) system with an application program interface (API) on IBM Watson™.

“First, we separate customer emails from non-customer related mail, such as emails from our suppliers and vendors,” says Norm Jefferies. “Then, we send those customer emails up to Watson Tone Analyzer in the cloud to determine how satisfied or unsatisfied a customer is, distributing these results across a scale of positive-negative.”

“The negative customer interactions are flagged up, so we can look into the issue, identify trends and transform processes. Using this tool, we found that most customer dissatisfaction originated from the fact that we simply didn’t return or answer customer calls. Unlocking this type of insight is crucial if we want to deliver excellent service and assistance to our clients at all times, and minimise the risk of having dissatisfied customers in the future.”

## Reaping the rewards of renewed growth

By harnessing the power of automation, machine learning and analytics delivered by its new CM View and CM Care tools, running on the

IBM i operating system, Computer Merchants has succeeded in its goal of entering new markets and safeguarding its business against new disruptors. The company achieved this by offering a commodity-based maintenance model to better meet the ever-evolving demands and challenges of the digital age.

Norm Jefferies remarks: “Our new CM applications, powered by IBM i, have enabled us to create new value networks and revenue streams. Not only have we turned our vision into a reality, we have also done so without increasing costs and while improving staff and customer satisfaction.

“Each of these innovations helps our IT team to save a few minutes here and there, but this adds up into a big saving. For instance, based on the developments our IT has made in the past 6 months, they have been able to save 40 hours of work a month, enabling them to spend more time working directly with our customers. What’s more, CM View alone generates the same amount of billable work every day that two full-time engineers would produce!

“Thanks to the automated ticket creation in CM View, we incur no cost of sale: the software carries out the work that we would need several full-time team members to perform. We project a financial return during the first year of up to 160 percent of the original one-off development cost, and from then on it will be an ongoing source of profit for the business.”

Automation of maintenance workload also means that Computer Merchants’ engineers are free to focus on developing new applications instead of spending excessive time on lower-value, more repetitive IT-related tasks.

“Our staff are absolutely delighted to be able to engage in more business-critical, value-add activities—the CM tools powered by IBM have truly sparked a cultural change within the company,” confirms Norm Jefferies. “At our company meeting each Wednesday we celebrate the innovative achievements of our team—it’s a great meeting to host!”

The new CM tools have also significantly enhanced customer satisfaction for Computer Merchants’ clients, as Norm Jefferies states: “The customer engagement project with Watson is prompting us to re-imagine our business processes, to weed out anything that could leave our customers dissatisfied, in line with our objective of delivering stellar customer experiences. And with CM Care we can provide customers with much greater transparency into how we solve issues to support their systems, enabling us to manage customer expectations much more easily.

“Continually improving our processes in this way helps us safeguard against customer dissatisfaction—at the end of the day, happier customers are likely to lead to positive recommendations and more sales, so it’s a win-win situation.

“With IBM i on IBM Power Systems we have been able to build new, innovative services on top of the established and reliable core applications that power our business on a daily basis. We aim to help our customers follow the same path, and reap the rewards of connecting their systems of record and systems of engagement through automation. This will enable them to boost the agility and robustness of their business even in the face of market disruption, just as we did.”

Norm Jefferies concludes: “We are so satisfied with the outcome of this project with IBM that we are already planning to bring our CM View and CM Care applications to the Northern hemisphere, to continue to enlarge our customer base and boost our productivity beyond Australia.”

## Solution components

- IBM® i on IBM Power Systems™
- IBM Watson Analytics™
- IBM Watson Tone Analyzer

## Connect with us



## Take the next step

To learn more about IBM i, please contact your IBM representative or IBM Business Partner, or visit the following website: [ibm.com/power/operating-systems/ibm-i](http://ibm.com/power/operating-systems/ibm-i)

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