

Excellence in Small & Midmarket Cloud Solutions

Microsoft Partner

Gold Small and Midmarket Cloud Solutions

A review of 2 Gold Coast Business success stories
combining Construction and Technology!

It all started as a chance introduction and has turned into a fantastic and mutually beneficial partnership. When they first sat down over a coffee at Condev Constructions' late 2011, no one would have predicted the evolution that these 2 companies would undergo over the coming years; the accolades that would accompany their journeys and how the Cloud has contributed to both.

Condev Constructions founder, Tracy Marais and ONGC Systems' director, Damien Rossiter instantly hit it off. They shared many business interests; personal values and the entrepreneurial spirit. Both Tracy and Damien passionately believe: people are the major assets within their own or any business in fact. They are always working at maintaining the highest possible level of communication and interpersonal relations with everyone, including staff and not limited to clients and suppliers.

That first meeting has now resulted in a partnership where Condev trust ONGC to continue to oversee and advise on their technology needs and manage growth requirements. Armed with a suite of Microsoft products and services including: Windows Server 2012 R2; Hyper V with Clustering and Replication; Load Balanced Remote Desktop Farms and the Cloud products of Office 365 and Azure. ONGC has been able to facilitate this expansion, maintain stability and increase staff productivity and profitability with the introduction of these new and collaborative technologies.

This case study demonstrates that growth from Small TO Midmarket is easily achievable with the right business model (Condev), the right technologies (Microsoft & the Cloud) and the right team (ONGC) to implement them.

Background

The Gold Coast is one of the fastest growing cities in Australia and shares the title with Brisbane as one of the most desirable places in the world to live, based on political, social, economic and environmental factors, personal safety and health. Spanning two local government areas; Gold Coast City and Tweed Shire Council, the population tops just under 500,000 in one of Australia's fastest growing communities. The population is expected to tip 700,000 residents by 2021.

<http://www.gccec.com.au/quick-facts.html>



The Gold coast is also known as one of the leading Small & Medium Business Market (SMB) places per capita in Australia, with the traditional industries of tourism, construction and retail employment making up 33.9 per cent of the Gold Coast economy, compared with 19.8 per cent of the national economy.

<http://www.brisbanetimes.com.au/queensland/gold-coast-must-be-more-than-sun-and-surf-tate-20130808-2rksk.html>



The Construction Client, Condev Construction :



Condev was formed in 2002 with the objective of establishing a sustainable and continually improving construction company which was able to provide predictable and quality constructions to their clients, while concurrently fostering lasting relationships with professionals, local councils, government bodies, trade contractors and suppliers.

As building contractors and developers, Condev Construction is well equipped to undertake the most technically advanced constructions and to direct and manage the works from design to handover. Whether you require the construction only or you require a full design and construction package, they can manage the process and deliver you the finished product.

Condev undertake the majority of works in the \$1,000,000 to \$30,000,000 range. They are a well-established mid-tier company with an exceptional skill base undertaking educational, commercial, multi-level residential and industrial constructions as well as design and construction projects throughout south east Queensland and Northern New South Wales.



They are also QBuild registered and Queensland Government PQC 3 graded indicating that their systems and management are “Industry Best Practice”. Their staff have been trained in Green Star and NABERS compliant constructions and continually strive towards achieving greater environmental awareness and recycling construction waste. Please visit their web site www.condevconstruction.com.au.



The Technology Partner – ONGC Systems :

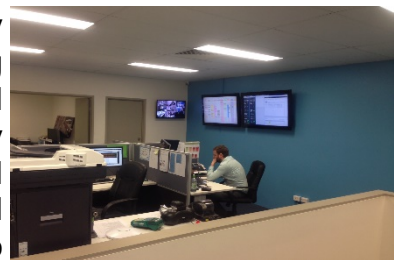


ONGC Systems focus on providing value for service has seen them in good stead during the GFC years with the company still achieving 20% year on year growth during this period with turnover now well exceeding \$2M per annum. They have grown every year since inception in 2003. The growth to date has been organic, with the majority of new clients being introduced to the company through existing customers who have been more than happy to actively recommend us. In the past 3 years

ONGC has increased their work force from 10 to 17 staff to support this growth. To house the staff the organisation has recently completed the purchase and customised fit out of new state of the art premises at Arundel.

This growth has occurred over a period of rebuilding. Traditionally, ONGC would have been considered as a 'Break-Fix' company, reliant on hardware and software sales. Now, the company is a streamlined managed services provider, concentrating on the advantages of Cloud technologies. This organisational re-engineering has seen the business join the CRN fast 50 for back to back years; pick up Gold Coast Business excellence Awards in IT and other accolades along the way. Over the next 12 months ONGC Systems will be embarking on an aggressive digital marketing strategy to further enhance their standing in the South East Queensland technology market place. With the final aim of becoming the premium service provider to the region in the lead up to the 2018 Commonwealth Games.

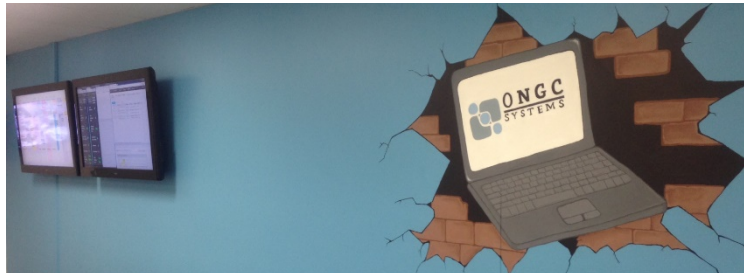
Loyalty to suppliers can be equally as important to loyalty to clients. ONGC has prided itself on not regularly jumping ships to the flavour of the month but sticking with tried and tested technologies. The consistency and dependability has enabled ONGC's clients to have a stable and predictable technology base. This stability has additional benefits that flow through to budgeting and the ability to utilise IT to actively grow their business



As a company ONGC Systems preference is to recruit young staff and train them in-house, rather than try to recruit from competitors or out of town. The horizontal business structure allows all team members a 'voice' and ensures every individual contributes to the customer service process. ONGC realises that the work environment needs to be more than just a job. They also recognise that not all motivation comes from money. ONGC provides regular training and personal advancement opportunities discussed later. With these factors in mind, ONGC's facilities include a state of the art

gym for blowing off steam, a pool table, Basketball hoops, driving simulators, fully stocked bar and an 80's style arcade machine.

Because of the very nature of the IT industry, change and updating means the discarding of computers, printers, keyboards, monitors and the like. ONGC actively engage in repairing and recycling old computers to be used in schools, with charities and other community groups.



We developed a proactive customer management – our server monitoring screens above actually glow red and send out an audible alarm if a client's server goes offline. Often we are contacting our customer before they know they have a problem!

Our office has a solar power array and our vehicle fleet have all been replaced with energy efficient 4 cylinder or diesel models. We also practice what we preach to our customers and have migrated our own infrastructure to Virtual to minimise power usage and we make sure all systems and power points (excluding critical infrastructure) are shut off nightly. ONGC prides itself as being an early adopter of energy saving techniques in: Virtual servers & Hardware consolidation; Power management with low voltage/power efficient (Green) Systems and we implemented an organisation wide recycling program for e-waste and packaging recyclables.

ONGC Systems' aim is to provide a 'cost effective solution that meets the needs of each individual business' requirements'. In essence, this meant that instead of



providing service and supply of goods that simply solved short-term problems and difficulties, ONGC Systems listened to the whole problem the business was experiencing and presented solutions that were holistic and comprehensive – macro versus micro – thus enabling customers to not only recover from short-term set-backs but to grow with the new ONGC Systems solutions in place. This seemingly small point of difference has made a

very big impact on how IT solutions are viewed and managed for ONGC Systems customers.

From day one, ONGC has always posed the question ***"If it was my money how would I spend it?"*** when dealing with customers - a point that resonates loudly with nearly all businesses.

Our growth is tied to a strong knowledge of IT and system networking but a larger factor is how our customers can get the most value from their limited IT budgets. Computing in the workspace have long been accepted as a necessary evil, however ONGC Systems challenged the status quo and turned this around to allow SMB's to embrace and develop through their IT investments. You don't always have to buy the biggest and brightest, just invest wisely in the most relevant technologies for your business. For more see: <http://www.ongc.com.au/> or Pinpoint us: <https://pinpoint.microsoft.com/en-AU/Companies/4295623243>

The Beginning :

In late 2011 after an introduction from a mutual business contact, ONGC sat down to meet with the directors of Condev to discuss some growing pains they were undergoing. It was obvious they had outgrown their current provider. There were issues around security, stability, speed and backups. At the time ONGC successfully implemented a virtualised solution for around 35 staff and contractors, utilising Hyper V; 2008 Enterprise Server and SBS2011. A Remote desktop solution was rolled out to administration users and Exchange/Outlook became the backbone of the company's communication. The company also started to utilise some of the features of the integrated SharePoint within SBS. This solution continued to work as required, resilient and stable whilst providing a solid platform from which to expand also with a predictable and cost effective licencing model. *"Thanks for a good year. We're very happy we made the big change to ONGC"* **Tracy Marais - Director (Nov 2012)**

Growth, a good problem to have, but a problem none the less :

Over the next few years Condev continued to succeed in winning tenders and infrastructure development programs across South East Qld. They were already looking for new premises and developed their own state of the art facility at Varsity Lakes. Their technology needed to keep pace with their growth. The growth was also beginning to stretch other technical resources such as bandwidth, performance limitations of existing hardware and software (only 32 GB ram for the core server doing nearly everything).

ONGC identified that the inherent limitations of the SBS2011 product would soon need to be addressed. This was in addition to other issues such as concerns over reliability/single point of failure of one in-house SBS server. Now holding all critical roles – File Server, Domain Controller, Email, SharePoint and the large user base now dependant on it. There were increasing volumes of email and a mailbox size limitation of 2 GB per user was implemented. PST files were being utilised by all users for archiving/storage of critical project correspondence. As the site grew, data increased and issues with PST corruptions and PST restores from backups became more frequent.

The centralisation around one server combined with massive user growth was now starting to show the strain:

*"I would like a follow up on the recent events where our server became extremely slow resulting in the SBS to be restarted on two occasions. We have not experienced any problems like this previously and now it seems to be starting to become a common occurrence. Each time this happens we have many staff members pretty much well stop, so please understand my concern in relation to this matter. Can you please call me to discuss." - **Jason Chilman** Administration and Systems Manager*

In late 2013 - early 2014, ONGC undertook a systems review with a view to create a long term scalable solution that could grow with the business and utilise existing infrastructure already in place at Condev. Other considerations at the time included the introduction of a new Core Line of Business Application, limited bandwidth at the new Head Office and remote sites, IT staffing and management overhead and ease of on boarding new users.

Their need for information onsite away from head office was also growing. As the staffing numbers grew, bandwidth could not economically keep pace and users were experiencing inconsistent remote access performance when connecting in from site. Direct RDP access offered limited security and certain restrictions.

It was recognised early on that the existing SBS was insufficient and did not provide the growth platform required by the Condev. At the clients request ONGC provided a comparative between Google Apps and Office 365 & local Exchange. ONGC was able to provide all the relevant information to Condev about the comparative benefits of these products after accessing much of the information through the Microsoft Partner Portal.



The Microsoft Office 365 product proved far superior to its competitor due to its integration abilities; Collaboration features, the familiarity of the products already used across the enterprise; and very importantly addressed certain privacy concerns. The decision between local Exchange and the hosted 365 product was an exercise in cost benefit analysis. It was determined, that due to the licencing

model; the flexibility for users; data sovereignty and the requirement of minimal ongoing systems management, that the Cloud based product proved a clear and decisive winner.

The rest of the solution was then tailored around the company's current needs, growth projections and integrations between Office 365 and the Line of Business applications. There was a significant amount of server hardware that could be re-purposed in order to provide a cost effective solution.

'We have a commitment to being leaders in the field and also internally when it comes to IT and technology, which is the reason we engaged ONGC to assist us in reconfiguring our entire infrastructure to enable us to move to a more flexible yet adaptable cloud based system with Microsoft Office 365.' - **Glenn Cream - Operations Manager**

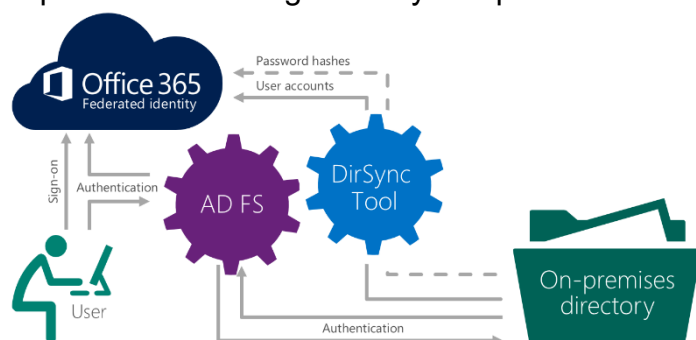
The Journey to the Destination :

The process began with an upgrade of one of the physical servers' onsite to Server 2012 R2 as Hyper V 2012 R2 Host. Rather than moving to the core product only as we did on subsequent servers, this machine acted as a visual management point for in-house staff without the risk of them having to migrate through the core product and utilise scripting in PowerShell alone. Subsequent machines were then run up.

The end result is: Head Office at Robina, containing physical servers running Microsoft Windows Server 2012 R2 with Hyper V; All the operational systems were virtualised including a Domain Controller; File server; Application Servers and load balanced and redundant Remote Desktop server farms. A core satellite office connected by dedicated VPN was then configured in Brisbane CBD. This contained a physical server running Microsoft Windows Server 2012 R2 with Hyper V, running a virtual Domain Controller; File server and Remote Desktop server.

The site offices fluctuate regularly in both location and staffing levels as each new project has different demands. Many of the site teams and remote workers are now utilising Microsoft Windows Pro laptops (Either version 7 or 8.1) and Windows Tablets with GSM connectivity for email (Office 365) & access to site files through SharePoint and OneDrive. These users can now, when required, achieve faster and more stable remote access to the load balanced Remote Desktop Server farms. Microsoft Remote Desktop Gateway was implemented to allow for controlled/secure remote access based on user/group requirements and security levels to external users. Roaming Terminal Server profiles and redirected folders were used to ensure all user data was stored safely on company file servers. Microsoft Remote Desktop Farms were configured to allow for Terminal Server redundancy and offline maintenance of RDS servers, with nil downtime to users.

The migration to Office 365 was able to be spread across a 2 week period so as to not impact bandwidth significantly and provide a smooth and controlled handoff. This was



achieved via a hybrid deployment to Office 365 - allowing for pilot users to be commissioned and fully tested, followed by a gradual migration of all users. This guaranteed there was nil downtime in the migration process. DirSync was installed and configured to allow for seamless user account migration

between Condev on premise SBS Active Directory and Office 365. This ensured there was not the hassle of dealing with multiple accounts and passwords and subsequent

user prompts. The advent of 50 GB mailbox per user was also a huge benefit. This eliminated the problem of corrupt PST's, allowing users to maintain all correspondence – a massive improvement from the previous 2 GB restrictions in-house. We have also put data retention and auto archiving facilities in place to assist if ever the client need to refer to historic correspondence and possibly protect them from possible future litigation.

To focus on a final concern in relation to backup and redundancy, Microsoft Hyper-V Replication is utilised between sites for hardware and site redundancy. As all the virtual servers now replicate, another copy of any server is always available offsite. Should a disaster occur, replica servers can be powered up either at a satellite office or in Azure very quickly to restore business operation until faults have been rectified.



The software and associated licencing comfortably ran on all existing hardware that was already in place prior to the upgrades, providing a very cost effective solution. The one exception was, additional ram and storage facilities being added to the server at the Brisbane office. This would act as the first point failover site utilising Hyper V Replica should any fears of disaster be realised.

Are we there yet? :

It is actually impossible to answer. Yes, we have implemented a robust and efficient infrastructure for Condev. No, because the landscape is always changing and as a trusted advisor ONGC is continuing to strive for areas that assist Condev and their team in gaining a competitive advantage through technology.

*“ONGC provided fantastic guidance and delivered the ‘upgrade’ timely and in an efficient manor with minimal disruption. We highly recommend ONGC and thank them for continued partnership in ensuring Condev are ahead of the game with technology solutions.”- **Glenn Cream** - Operations Manager*

Since the upgrade occurred, Condev has received 0 hours of downtime, let alone days. This marks a dramatic improvement from the systems predecessor. It is difficult to accurately measure quantitative figures such as ROI. One of the core reasons for this is: as the client continues to grow, old benchmarks and cost comparatives quickly out date. What can be confidently announced is that the overall 'IT Spend' per user has significantly dropped and the on boarding process of new staff is virtually instantaneous and seamless.

“I believe the limited day to day management required to maintain the systems and infrastructure is actually saving us from employing a dedicated IT staff member. Also the ‘always there’ communications and the ‘anytime, anyplace’ document availability saves us from investing in extra administration staff in our offices. These two items

*alone give us a competitive edge and saves Condev well in excess of \$100,000.00 pa” - **Jason Chilman** Administration and Systems Manager*

So where to from here? :

It is not out of the question that Condev will expand well beyond the boundaries of South East Queensland to interstate or even international. ONGC will ensure that their technologies clear the way and compliment this expansion rather than impede the growth.

Condev is continuing to grow and current hardware has finite limits on both performance and lifecycle. Since the original scope was provided an Azure server has also now been commissioned in the event of a catastrophic failure as an added redundancy point and providing a clear path for future expansion and path when existing hardware life cycle limits are reached. The system is currently replicating Active Directory and performing offsite backups of critical company databases. We also have a second RDS image on Azure that we spin up when required to test new software before rolling out to the live sites. As time continues and Condev continues to grow we will look to move more ‘Line of Business’ applications away from site and up into Azure to allow for future expansion, reliability and eventually relieve dependence on onsite server hardware.



ONGC are constantly aware of the changing technology landscape and the ‘Internet of Things’. A pilot project has recently begun at Condev, in which there is further migration to SharePoint for company data and specific project information. This will allow for more secure and seamless access to company information ANYWHERE from ANY device and lessen the load on bandwidth at Head Office. Should this prove successful we will look to roll out organisation wide. Currently we are waiting for the release of the new and revised One Drive client, due in the near future. This we understand will address a couple of the operational hurdles we are facing currently.

*“I am looking forward to discovering new technologies with ONGC Systems, whether it be expanding our SharePoint usage or identifying another application or Cloud technology that will continue to allow Condev to operate and remain at the forefront of our industry” - **Jason Chilman** Administration and Systems Manager*

Future plans also involve the possibility of an upgrade to Azure Active Directory Premium – to allow for higher levels of security and multi factor authentication to safeguard ensure company data is kept secure and protected. As end points continue to roll from Windows 8.1 and through to Windows 10 we will further utilise GPO to secure the network and investigate the implementation of programs such as AppLocker. Furthermore, many Condev staff are now migrating to either Windows

tablets &/or phones the Authenticator App will assist in adding this corporate level of security. With the advent of all these connecting devices, ONGC is also currently investigating specifications and requirements of Microsoft Intune for mobile device management. The current aim is to introduce a trial early 2016, to manage and secure the ever growing device fleet.

Where's the Happy Ending? –

In a nutshell, the happy ending has come, been and gone and even come again a number of times. In a way ONGC Systems would like to think that we can deliver a happy ending not just for Condev, but for all our clients. However, technology doesn't allow us to relax and take our eyes off the road. We are comfortable that Condev has a best of breed solution that compliments their business today and provides them with a solid platform moving forward.

As a technology partner, issues are always going to arise and challenge the 'happiness state'. At ONGC, we believe it is the way you respond to these challenges and try to rise above the crowd that continues to separate companies like ours from other IT businesses. Much the same as Condev, who have risen above the crowd in the construction industry here in Queensland.

The aforementioned example represents that growth from **Small TO Midmarket** is easily achievable. With the right business model (**Condev**), the right technologies (**Microsoft & the Cloud**) and the right team (**ONGC**) to implement them.

By continuing to focus on staff and continue to commit to their growth and development; and by recognising and aligning with the best technology providers we believe ONGC's customers will continue to benefit. A happy, dedicated and educated team will continue to provide the highest level of customer service. This in turn will continue to grow the customer base of ONGC as happy customers will continue to be vocal customers singing the praises of ONGC Systems to their peers.

And this is why our tag line is – ***ONGC Systems, we're on I.T.***

