AAPT Business Transformation Case Study

 Delivering AAPT’s ‘Hyperbaric’ – a groundbreaking Business and Operational Support solution in a turbulent market
CONTENTS

Introduction ....................................................................................................................................................................... 3
Intended readership................................................................................................................................................................ 3
Purpose of this paper.......................................................................................................................................................... 3
Executive summary ............................................................................................................................................................ 3
Background ........................................................................................................................................................................ 5
Transformation.................................................................................................................................................................. 6
Phase 1 Strategy – Ruthless implementation as an attacker in the market................................................................. 6
Phase 2 Greenfield focus – A clean start and aggressive migration.............................................................................. 7
Phase 3 Defining the ‘hyperbaric’ solution – The role of the BOs .................................................................................. 8
Phase 4 First Delivery – Legacy billing integration ...................................................................................................... 9
Phase 5 Implementing the strategy – to deliver ‘Hyperbaric’ ......................................................................................... 10
Phase 6 The build – to deliver ‘Hyperbaric’ .................................................................................................................. 11
Phase 7 Implementation and Rollout – WHAT HAPPENED? ..................................................................................... 13
Phase 8 What was finally delivered – and were the benefits realised? ......................................................................... 17
Phase 9 Balanced assessment of commercial success ............................................................................................ 21
The lessons to be learnt and advice for those considering a similar strategy ........................................................... 22
INTRODUCTION

INTENDED READERSHIP

This paper is aimed at senior management considering business transformation or a greenfield implementation of a new and more flexible business support environment.

PURPOSE OF THIS PAPER

AAPT’s selection and implementation of Infonova’s next-generation, BSS also known as ‘Project Hyperbaric,’ which enabled a radical business transformation and claimed to have taken 50% of the cost out of a significant operational business, has had a mixed reception in Australia. Here the technical transformation process was initially applauded, but the commercial success and delivered capability was questioned. There is strong evidence that the Hyperbaric achievements have not been given the balanced, independent assessment that they deserve. When the strategic, political, financial and management issues that weighed down the delivery of this solution are stripped away, a fuller realisation and understanding of what was achieved can be appreciated.

EXECUTIVE SUMMARY

By 2004 AAPT, owned by New Zealand Telecom, was the third-largest telco in Australia with a $1.4bn turnover and was the challenger to incumbents Telstra and Optus, offering competitive rates to the mass consumer market. After a series of corporate acquisitions that multiplied its product and service offerings but complicated their overall management, it was clear that the IT infrastructure needed a radical overhaul. It was also clear that the outbound customer acquisition, which was based on “door-knocking commission agents” supported by large call centres, was failing to reduce churn because the systems they used were ineffective in supporting the bundled products and quality of customer service required.

In 2004, two pilot projects designed to transition AAPT’s business to a more integrated structure were stopped by David Watson, then AAPT’s Head of Strategy. This was because he and Bob Hennessy, the CIO, realised that the costs and timescales associated with re-engineering and unifying existing silos were going to potentially cost hundreds of millions of dollars and would take over five years to implement since the undertaking was excessively complex.

Historically AAPT had been a successful attacker and was known for ‘punching above its weight’ in the mass consumer market. Therefore, AAPT’s strategy team developed a ruthless and focused strategy to build a greenfield implementation onto which they could leverage and reinvigorate this brand positioning and migrate and grow the company’s customer base.

A paper presented to the board initially in December 2004 and the new strategy based on Infonova’s BSS platform was eventually approved in Feb 2005, with the program name “Hyperbaric”.

Three important areas lay at the heart of the new strategy:

- Triple-play bundled service offerings with configurable business rules to enable AAPT to aggregate more profitable long-distance telephony with combinations of incumbent or competitive local and Internet services, in order to create the right attractive options for the mass-market customer.
Customer self-service and automated provisioning to radically reduce costs and move to an in-bound customer acquisition model.

Service abstraction / white labelling – to enable AAPT to consume services from multiple providers and offer them bundled as products to multiple separately branded tenants using the same platform.

New processes and functionality were defined by a tightly knit group of six executives under David, called the Business Owner group, which took responsibility for every key decision throughout the transformation process. This approach was highly successful, and it was clear as the team approached rollout that the transformation to a set of “simplified” triple-play products based on the highly agile Infonova platform was going to be able to deliver at least a 50% reduction in staff costs.

The strategic vision and the effectiveness of the transformational process under David and Bob’s guidance as well as the technical implementation under Dennis Cutrupi was exceptional. However, the project’s reputation was severely damaged by a number of factors that impacted on its final implementation and rollout.

A change of management and strategy.

Telecom NZ acquired Powertel. Powertel’s CEO took over AAPT and shifted the emphasis to targeting the corporate business market with wholesale network products, where Powertel believed there were higher-yield opportunities. In doing this Powertel radically changed Hyperbaric’s intended strategic approach to market by repricing the mass-market products with increases of 10% to 25%. This drove massive churn and dissatisfaction amongst the consumer base, for which price was a major attraction of AAPT up till that point.

Migration issues and reduced customer support capabilities

The initial migration moved over half the consumer base, taking data from the original provisioning of their services. This data had not been kept in synch with changes to services and was thus out of date. This caused consumers to contact AAPT to correct issues which resulted in call centre overload and further consumer dissatisfaction.

The problems with customer support were exacerbated by the outsourcing of legacy support centres in regional Queensland and regional Victoria and the introduction of a new consolidated customer support centre in Sydney with massively reduced staff. In a steady state post implementation, the number of call centre staff would have been more than enough given the improved self-service and radical automation delivered by Infonova. However, during the migration the customer support team was overstretched and customers experienced excessive wait times.

The implementation went live in June 2007 and despite the setbacks, the actual resulting solution has been highly effective. David’s original aims of a highly automated end-to-end business-rule-driven operating model with white labelling, service abstraction, bundling and self-service were all delivered as promised, and the Infonova solution has been robust and is meeting all its performance targets. It also enabled:

- A complete switch to an inbound model of new customer acquisition, which was achieved in 43 days.
- Massively reduced staff costs, significantly exceeding the 50% less staff commitment while servicing an equivalent number of customers.
- Reduced customer churn and more proactive customer support.
- Dramatically increased speed to market of new product offerings, reducing the time from months to days.
Doubts have been cast over the cost effectiveness of the transformation, which cost A$80m for the technical and consulting aspects of the work. The consumer business of AAPT seems, in fact, to have remained profitable throughout the transition if one excludes the excessive overheads placed on it after the Powertel strategy changes. It is now providing iiNET, the new owner of the Hyperbaric solution, with a healthy profit, albeit on a reduced customer base.

Ovum’s view, based on first-hand experience of those involved, is that this was an extraordinarily well managed transition and a technical and commercial success, although the journey it has endured appears to have unfairly damaged its market reputation.

BACKGROUND

AAPT was established in 1991 and became a wholly owned subsidiary of Telecom New Zealand in 2000. For many years AAPT was the third-largest Australian telco with revenues of some A$1.4bn in 2004. It presented a broad range of offerings enabled by its acquisition of 42 companies and its preparedness to aggregate its own long-distance and ISP network services with those of its larger rivals, Telstra and Optus, which saw it was as an attacker in the market. Essentially like most telecommunications companies that had rapidly grown through deregulation of the market through the 1990s, AAPT had acquired three separate service towers, including a Sydney-based fixed-line mainframe legacy platform originally sourced from MCI, a Brisbane-based mobile service provision platform, and a Melbourne-based ISP.

David Watson, who joined in 2002 and was in charge of strategy, explains the company’s position.

‘AAPT had a $70m capital spend, but was spending less than 1% of their investment in anything that could be deemed customer facing. With the legacy of acquisitions, the complexity of the back end was worse than the parent company of Telecom NZ: with 23 different provisioning platforms, 15 in the mediation space and nine in the ratings area, six in billing, and around 15 significant customer care solutions.

‘If you looked across the linkage, quite a few of these platforms had multiple functions and were tightly bound, very much a spaghetti solution, and trying to find the single truth about a customer was really hard. And with online customers at the time we were having to choose which mediation device to pick to determine if people were really customers and what they were consuming. It was a really complex scenario.’

Bob Hennessy, then CIO, explains a fundamental shift in thinking driven by David’s strategic analysis.

‘AAPT had decided at this time that they should shift from their infrastructure focus, where they could never hope to out-invest Telstra and Optus, and turn themselves into a service company, but this required significant changes to systems and processes.’

Telecom NZ had already started a more component-based, best-of-breed platforms approach, which included using ADC’s billing product, with which they wanted AAPT to be compatible. By the end of the year David was offering the executive a roadmap that he called ‘putting the lipstick on the pig’, to put on a front end overlaying the mess of AAPT systems to get a common view of customers and products, etc. He then looked at the integration layer and started to do the ‘heart surgery’ on the core systems to get the three streams of data, voice, and mobile to converge at some point in the future around a common billing system. Two A$20m programmes were initiated to cover the front end and the back-end billing and data integration work. However, both programs struck difficulties, with the company having growing pains in relation to the management of software programmes that were larger and more complex than it had ever previously encountered.
With a run rate of over A$500m and difficult decisions to make regarding priorities associated with the change of direction, ‘we clearly did need a new strategy, because we needed to make choices about investment such as whether to invest first in mobile or voice, for example.’

David decided that the company had better review its position. ‘The billing project had its requirements defined and was starting to build, but I decided to shut it down a couple of months later, post-delivery of the first functionality of the data project after a $17m spend. The front-end work was also suspended after the first tranche of functionality.’

Bob explained why they stopped development. ‘We initially tried to do this change incrementally using middleware to transition into a new structure, with process automation across the top of the separate towers of operational systems. Adding differentiated services wasn’t even on the chart, and then who knows how long to build the new capability? We costed it at hundreds of millions and five-plus years to get where we wanted. We had a year banging on down that road before we said, “no, this isn’t the way to go”.’

So David, with the help of Telecom NZ’s relatively deep pockets and the support of a couple of McKinsey’s consultants, set about defining a more formal strategy and transformation plan.

TRANSFORMATION

It is important to understand the strategy as well as the phases of the technical transformation and how that enabled a business and operational transformation. We are also going to examine the commercial and political realities that coloured the work. Much of what is said here will ring bells in the heads of those readers responsible for similar-scale transformations. Ovum believes the following story offers many lessons to the unwary, and will make compelling although sometimes uncomfortable reading.

PHASE 1 STRATEGY – RUTHLESS IMPLEMENTATION AS AN ATTACKER IN THE MARKET

First, let’s start with an understanding of AAPT’s position and its strategic options. In rough terms, by 1997 AAPT was a challenger to the market following deregulation in 1992. It was successful in the early days because as the first challenger it was often seen as the alternative to the incumbent brands (Optus and Telstra).

David and his team looked at what worked well and what did not. ‘We had punched above our weight in the mass market, covering the consumer, small office, home office, and small enterprise. Australia had over 800,000 small companies for only a 20 million population, and we had a relatively higher share of that mass market, which was 50% of the $31.2bn Australian telco market.’

That mass market also accounted for 49% of the Australian market’s profits. However, AAPT was struggling to sustain profitability, and the team determined that a shift of emphasis to offer value to that market would achieve profitability at these levels within a percentage or two.

David says: ‘We looked at characteristics of attackers globally in fast-growing markets such as France, where we saw businesses like Free and Neuf offering broadband, who had really started to take lumps of the incumbent’s market share. We saw that they had common characteristics. They were segment players with a strong price proposition, and they executed with ruthless focus. AAPT, on the other hand, was behaving like a mini-incumbent, trying to do everything, playing in every segment including retail, and over 70% of its capital went into building networks. The successful attackers had lean propositions that were price focused and executed with ruthless efficiency; they only did what they said they would, with no scope creep and stark simplicity and clarity of purpose.’
The team was now more confident about spending a disproportional amount of capital in the mass-market area, where they had had success above their natural market share.

They looked closely at their ability to suit the mass market with online self-service for the customer and the double benefit of the efficiencies that could be delivered, by benchmarking themselves against the best of breed. They examined capabilities in pre- and post-sales, technical and product development, channels to market, and the level and quality of required account management, customer relationship management, reliability and the scalability of the back end.

As David explains, ‘not surprisingly, when we looked at our segment performance on the post-sales side in particular, we were well behind the market, and to be successful we needed to be best in the market.

‘We started working in parallel, benchmarking our strategic options and starting to talk with Infonova about possibilities of starting afresh in a “greenfield scenario”, versus putting more weight behind the original roadmap hinged around a core billing capability. It was about being confident in sharing value with virtual partners; it was about brand leverage and scalability issues such as mass customer support that you might get from a partner.’

In a previous role as head of strategy at Optus, David proposed another attacker model that created the Australian Virgin Mobile business. However, in the build phase of Virgin Mobile, Optus failed to leverage its operating platform and ended up duplicating another service tower and costs. David had started on this route considering the concepts of the virtual operator and shared value, but it had failed to deliver the dream. Now with AAPT, when people started talking about virtual platforms and white labelling, he paid close attention. He recognised that there was another opportunity to realize this.

Bob says: ‘We realized that we needed to do wholesale replacement rather than an incremental change. The choice was whether it was a progressive changing over, swapping in new for old over time, or whether it was a greenfield build.’

**PHASE 2 GREENFIELD FOCUS – A CLEAN START AND AGGRESSIVE MIGRATION**

The subsequent Australian strategy paper, which sought approximately A$68m of capex, was presented by Jon Stretch, then AAPT CEO, in December 2004. It proved contentious to a divided telecoms board, requiring a follow-up board meeting in February 2005. David was queried by the board on the possibility of a fresh start, and they asked the key question. ‘David, do you really believe that we could build a greenfield business?’

David said, ‘Yes, I really do think so.’ He got the job of doing a feasibility study and determining if he could present a case to convince the business that this was a realistic option. Jon Stretch oversaw the feasibility paper led by David and supported by Infonova that recommended the greenfield approach. By April 2005, Jon gave David his go-ahead for the greenfield project to proceed.

At this point it is worth noting that as David admits: ‘Although we talked about a strategy and being fast to market with products and an ability to deliver full self-service, etc., in truth the business case for Hyperbaric was distinctive because it was relatively underwhelming based upon the team’s belief of the benefits it would drive. It was very safe as it was only built around FTE savings based on delivering efficiency. It was presented as being all about taking at least 50% of cost out of the business; there was no value attached to the other capabilities we knew it would drive.’
Nevertheless, given the green light, Bob explains that they were really excited at the prospect ahead of them. ‘This was a clean start with a new organisation, undertaking dramatic simplification that was end-to-end process, not functionally (as in departmentally) structured. Stuff we’d always talked about over the years but seldom ever really gets done – supporting the full business lifecycle of “concept to cash” and “trouble to resolve”. We set up a deliberate approach to govern the project and deliver a clean-skin organisation where none of us as executives of the organisation walked into a steering committee with our functional hats on. We were a “Business Owners group” under David, who owned the new business detail from top to bottom, empowered by the CIO.’

![Figure 1: AAPT Transformational Timeline](source)

The transformation project started with a feasibility study undertaken in April 2005, began in earnest in May 2005. It ran until June 4, 2007, when they implemented.

**PHASE 3 DEFINING THE ‘HYPERBARIC’ SOLUTION – THE ROLE OF THE BOS**

BearingPoint had introduced the Infonova platform and demonstrated different aspects of its capability in various European sites. David explains: ‘In all honesty we knew this wasn’t going to be a walk in the park. One issue was the scale of the change, and a key thing was while we saw evidence of Infonova working in various applications, notably at Telekom Austria, where although they’d only used a sliver of its capability, it was demonstrating great success in the way it was being applied to the broadband market. What hadn’t been done at the time was their tight integration of multiple lines of business, fixed, mobile and broadband.’

Bob says: ‘We thought that the solution was more complete than it actually was, and we found we had a bit more to do than we expected. We spent a lot of money actually doing some fantastic work from strategies through low-level use cases building out the requirements, and David created a powerful project governance model by bringing together and empowering six highly regarded business leaders, taking them out of their day jobs and making them the “Business Owners” (BOs). The Business Owners were Greg Armstrong, Product and Marketing; David Willis, Business Process; Hilda Clune, Business Change; David Ackland, Financial Management; Matt Jones, Customer Experience; and Dennis Cutrupi, Architecture and Technical Delivery. [They] owned every level of that and signed off on each of the use cases. There was no delegation; they read every case and signed it off. This ensured a fantastic alignment from the strategy idea through to the real thing that we were going to build in the technology. We’d assimilated business and technology people into a single set of brains, and the technology was fused back to the strategy in a way that I’ve never seen before or since. It was a very powerful alignment.’
Dennis said: ‘90% of the time the first decision is the right decision if you have the right people with the experience and knowledge required to make those decisions. Key part of that was that the Business Owner group had lived the business for a number of years and knew what AAPT was trying to achieve. They also knew what the limitations were and what they needed to engineer out, both on process and technology shortcomings, to deliver the outcome.’

PHASE 4 FIRST DELIVERY – LEGACY BILLING INTEGRATION

Moving from feasibility to design and build of the first phase was a big step up for AAPT. Eventually AAPT took the role of systems integrator. The first delivery stage was all about having to integrate into AAPT’s monolithic legacy billing and provisioning system mega. David says: ‘We were told, “You can go ahead, but integration into legacy has to be the first step.” It was a nervous one for me given our earlier billing program experience, as I was both the business sponsor and program director.’

Well into the 2000s, AAPT was still receiving a tape feed for the vast majority of its revenues from Telstra, its network and local call provider. It was costly and gave the company time delays, in that when it signed on customers and eventually billed them, there could be up to three months of billing lag. This meant that the first time a customer received a bill, it seemed excessive. As a cheap and cheerful competitor in the market, this just did not wash with the customers, and drove enormous churn. AAPT had to do this because it had not created its own wholesale product; it had instead marked up a retail product that it received from Telstra. However, the large volume purchased from Telstra carried significant discounts, which is why AAPT could offer a competitive price to its customers.

David explained: ‘We had to get electronic and more automated interfaces into Telstra’s e-bill program. But first, we had to discover how to do that from within our 6 million lines of undocumented code!’

The requirement involved taking over one million retail product lines from Telstra and turning them into wholesale products to deliver a truly wholesale feed that could be consumed by the new rating system within the Infonova platform. (This wholesale feed was also used in the later transformational release.) In the past, every time Telstra made a change to its price plans, the new price was automatically applied to AAPT’s customers, often without AAPT’s knowledge, and customers would call to ask why the price had changed. AAPT had to de-couple this concept of ‘retail plus’ to wholesale to resolve the issue.

An additional and significant driver for integrating the legacy system was that if AAPT could change over to Telstra’s new e-billing platform within a certain timeframe, it would receive a one-off incentive payment of A$20m. The work involved integrating into the billing systems using the new rating functionality of the Infonova platform tightly coupled into the legacy platform, having de-coupled the rating of the legacy platform so the legacy could be used to deliver the provisioning system for the new business. It was an enormously complex job that Infonova achieved in time and on budget, and gave the board the confidence to finance the further phases of the work.

Through undertaking and delivering this first software drop and working in partnership with AAPT and the Business Owners who were experienced operating in a purely wholesale-driven service provision model, Infonova realised that combining software from earlier Infonova solutions was not going to be enough to handle the complexity associated with abstracting and orchestrating highly complex third-party suppliers. Hence, Infonova decided to build new Infonova software in Java Technology that would allow for the API interconnected architecture necessary to deliver the required multi-tenant concept-to-cash platform.
The methodology and stages

Figure 2: Transformation streams

The program incorporated seven parallel and co-ordinated streams:

- Business & program management including the business case, business definitions, the products/services to be supported, migration of customers
- Organization including change management, workforce transition, job impact, workforce realignment and user training
- Business process including the high level design, detailed process design, system requirements and user documentation
- Systems including systems and integration architecture, interface detailed designs, systems build, and unit test
- Testing including master test plan, test case preparation and test execution
- Infrastructure including infrastructure conceptual architecture, establishment of test environments, establishment of production environments
- Production services including production services strategy, establish services and SLA, establish operational capabilities and deliver production services

Overall, the transformation program was led by AAPT using a jointly developed end-to-end methodology and BearingPoint's ProvenCourse. The program incorporated seven parallel and coordinated streams shown, in Figure 2. In parallel with the first phase delivery, AAPT started work defining and designing the new business model and associated workflow.

Key required outcomes

At the start of this process David said: ‘I did too many deep dives into detail and was told by the Business Owners that I was holding back progress and needed to give them more space, but we soon settled down into a pattern where there was no overlap and each fulfilled their role. There were conflicts, of course, but we always resolved them.’

David had by then determined that there were a number of crucial outcomes to this work, and so he articulated three things that must be done. He said, “If any of these three things are impacted, I want you to come and talk to me.” These were bundled service provision, provision of self-service and service abstraction/white labelling. We will focus on these now to explain why they were important.
- **Bundled service provision**

  AAPT gained greatest value in the consumer market from fixed-line work. As a switched voice arbitrager it leveraged last-mile capability, but made all the money on national and long-distance telephony. Even well into the mid-2000s, gross margin on voice excluding local calls was sitting at a 60% margin. The markup price for Telstra supplied services was at a considerably lower margin, so the coupling with fixed line was really important. The margins in mobile were also considerably less, as the company was a service provider to the Vodafone network, but the margins were still healthy – better than the fixed-line local. As AAPT entered the Internet market, where people were shopping for good deals around broadband adoption, the ability to bundle voice services with Internet became imperative as a way to increase margins while still being positioned as an aggressive attacker on price.

- **Provision of self-service**

  AAPT needed to switch from outbound customer capture and management to inbound acquisition of customer accounts through customer self-service and the provision of a limited number of easily understood bundled products if it was to reduce customer churn and the headcount required to manage its customer base.

  Dennis pointed out: ‘Every time we went to the market with a campaign, it was received very well and we got inundated by customers enquiring about it. But to convert that into an order we had to involve a whole bunch of people, and we lost 80% of the orders because it was all such a slow, manual process that the customers got sick and tired of waiting.’

  David confirmed this: ‘AAPT had a record sales month in June 2006, selling 22,000 to 23,000 services, but we lost 26,000 customers in that month because our churn was massive because service capability was so poor. Our sales on an in-bound basis was obviously very low, so I spent the next six months in the legacy environment building in-bound capabilities to get the skill set ready for the new business model. I knew if we could deliver traffic to online, we would deliver our new service model.’

- **Service abstraction / white labelling.**

  AAPT had tightly coupled its functionality to network capabilities so it was immediately tied to a Vodafone or Telstra service when clients requested a product. A multi-tenant platform was really important as it would also allow them to work with multiple brands and clearly partitioned databases.

**PHASE 6 THE BUILD – TO DELIVER ‘HYPERBARIC’**

By February 2006 the Telstra automated bill feed was delivered, realising the one-off incentive. The team had defined the key capabilities required for the new business model, and the design phase was nearing an end. The Telecom Board had confidence to proceed. With this confidence David stepped away from the program director leadership and the build phase, giving it to the ‘safe hands’ of Bob, who would leverage his 30 years of technology build experience.

With the build of an operationally different AAPT mass-market business and the then-uncertainty of the medium-enterprise and corporate AAPT business, the CEO and CFO left the company. David and Bob became two Australian-based directors of the business; Bob acted as COO, and David managed the commercial bottom line and was tasked with bringing together a “mass-market” business. He was to assemble around 1,500 staff, manage the 1,200 staff directly accountable for sales, marketing and the call centres, and work with the 300-odd legacy provisioning, billing and credit staff sitting in Bob’s shared services operations.
The assembly of a mass-market business allowed AAPT to prepare for transformation. To ensure tight linkage of this, David maintained direct control of the Business Change team within the project as they were tasked with designing, modelling and sizing the future organisation. Throughout the project and this phase, Dennis Cutrupi was a key thought partner to both David and Bob, influencing strategy and technology selection. He was central to the development and delivery phase as technical lead responsible for software and hardware delivery to operationalise the strategy.

Figure 3: Key players

![Key players image]

Source: The individuals

Complexity and exception handling

There was a great deal of new ground being broken on this project and, not surprisingly, issues arose that the team had to resolve to progress.

Bob, speaking of Infonova, said: ‘It had never been implemented into a reseller before, so we had to deal with the whole business of never being able to be sure that events would be reported back to you in the order that you’d expect. Events are out of your control and you don’t necessarily get information in the sequence that the events actually occurred. So you might be pulling out work orders to get something provisioned, and you get told about activity three before you know about activity one because, maybe, one interface had a turnaround of a day and another of three hours. What we had to build in was a whole lot of resilience to ensure that we sequenced actions correctly in response to the messages we were receiving. It was because we weren’t the network owner in the model; a massive amount of extra work on exception activity had to be defined. This has had the effect of making the whole platform much more sophisticated.’

Planning for implementation

Bob explained how the Business Change team planned the new environment. ‘We used computerised simulation techniques to design the organisation and the required resourcing as well as the cycle times of all the key processes to understand where bottlenecks might occur.'
‘We synthesised the people, processes and training so we understood what the work activities were, and the whole approach was a sophisticated way of ensuring that even though it was a clean-skin organisation, we had a good sense of what resources would be required to run it. There was also a lot of process design around this in parallel to cover the services that we wanted to deliver.

‘The plan was to take new companies and customers onto the platform and form a migration strategy to move existing clients onto it, with an aggressive timetable to get the whole business onto the new platform.’

Reducing FTE and consolidating the call centres

David explains some of the cost saving expected. ‘By the end of 2006 we got confident looking at the models of the business change with the automation and workflow. We were confident of delivering the 50% cost savings promised and I told the board in November 2006 that we’d get these FTE savings in the mass market with this model. The objective was to take the 1,200 staff down to 500–600 and deliver the same or better services. It was a pretty radical transformation from old to new. The genie was then out of the bottle and we had to manage the concerns and expectations of staff as they saw their jobs on the line. Getting this out and public worked, as we eventually outsourced and sold the legacy call centres, saving hundreds and hundreds of jobs.’

PHASE 7 IMPLEMENTATION AND ROLLOUT – WHAT HAPPENED?

Figure 4: Key events during rollout

Key events at rollout

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerTel interest</td>
<td>Go live</td>
<td>Call center consolidation</td>
<td>Week 17</td>
</tr>
<tr>
<td>PowerTel acquisition</td>
<td>Early success</td>
<td>90% bundling rate</td>
<td>Call center meltdown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 months in</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Final migration</td>
</tr>
</tbody>
</table>

- PowerTel interest – influences direction
- PowerTel acquisition – has implications on strategy and rollout
- Go live – taking 10% of all new customer orders on day 1
- Initial migration lasting 2 months – converting the data of 30,000 clients per day
- Call centre consolidation
- Early success – 80% bundling rate by 7th July
- Day 43 – taking 100% of new sales
- Week 17 – re-pricing
- Call center meltdown
- Final migration – after a gap

Source: Infonova

The final run-up to software delivery on 4 June 2007 and the events that followed have not been described in detail before, and many in the market saw only the negatives that have left them with poor opinions of the transformation and its outcome. Without getting too bogged down in detail, it is worth explaining the politics, decisions, actions and operational mistakes that were made as well as finally looking in the next phase at what has actually been achieved.
Powertel acquisition

In November 2006 Marko Bogoievski, who was CFO of Telecom NZ, told David about a tight partner agreement planned with a group called Powertel, which had built a company punching above its weight in the corporate business market, and it was about to bring networks and partnership around wholesale. David did not realise it then, but in February 2007, when this became a full acquisition, the implications hit home. Powertel was managed by a seasoned CEO who was supported by the board to manage what effectively became a reverse takeover, bringing in his team and taking control of AAPT.

As well as delivering the planned new systems, a new emphasis on building out network capability meant that, as David says: ‘What we had to do by March 2007 was to integrate a new network to deliver a Powertel broadband product for delivery through the Infonova Platform very quickly because my new boss was telling me it was critical to the success of the acquisition that we have such a product. This was achieved in less than three months, whilst delivering a brand-new business in a new location with 95% new staff.’

Go live

Although Dennis had to leave out a great deal of the online lifecycle functionality that the team had wanted to deliver at the start, the team realised that they had to make the agreed delivery date above all else. They did, going live on 4 June.

Dennis says: ‘There was a bit of “smoke and mirrors” that to this day I haven’t told Bob and David about, because we had to go live with various faults and defects. We sat down as a delivery team with an external test team, and we categorised the defects and worked out their impact, timing and possible workarounds. Those visible to customers, those visible to agents servicing them, and those in the back end were prioritized and eliminated. Anything the customer might see working 24×7, but with provisioning we had 10 days to sort out problems, and billing we had a month to engineer or fix up problems. It was a make or break, but I was confident in the team, and with Infonova, which would move heaven and earth to make this happen. We made a pact and we said, “Let’s do it.”’

Initial migration

David admits to one key error in his strategy ‘I will put up my hand up for one bit of damage I did to the business: the migration was poorly executed and thought through.’ They added a team of seven to eight people to drive the migration, which, at its peak, was transferring 30,000 customers per day. However, they did this at data level based on static data acquired at customer acquisition time from the legacy provisioning engines. This data proved to be out of date, with no updates to address, service IDs, etc., since initial customer acquisition could have been years earlier, and the team was halfway through the migration before the problems really hit them.

This caused problems because, as well as migrating, they needed to transfer customers onto new price plans. David explained: ‘We had active in the market at design time about 177 voice rate types. We had 320 mobile and 53 different Internet product rate types. Our aspiration prior to launch was to deliver five voice plans, five mobile plans and six Internet broadband plans. And we wanted to drive to simplicity. Realigning our customers to new plans was quite high-touch, so the migration was pretty painful. We tried to move too many people too quickly. I ended up migrating about 180,000 customers into the new platform with 50% of the base in the new environment and a bit less than 50% in the legacy environment.’
Early success

Despite changes in management, incorporation of the Powertel team’s broadband products and the initial migration problems, the launch date was met and the Hyperbaric solution started to more than match its performance expectations.

By the first week, 25% of sales were online and 80% of AAPT sales took more than one product. At a steady state, it was more like 75% of all customers took more than one product. All of this was significantly better than anything AAPT had achieved on the legacy system.

Call centre consolidation

AAPT had two legacy call centres, one in regional Queensland and one in regional Victoria. With the radical efficiencies expected from Infonova and the ability to accommodate a smaller business within AAPT’s Sydney properties, the new business was built in Sydney. Experienced call centre staff were offered relocation incentives, and small group of about 20 staff chose to relocate to the new business in Sydney. For the highly automated and online systems, this was not a problem. Bob says: ‘Something like 99% of customer self-service orders on the Web were going straight through successfully, but only 65–70% through the call centres were going straight through. We thought that was a problem we had to address, but when we dug in deeper, we found that those staff who’d not been in the business were getting 85% success rate. But those who’d relocated from our highly complex legacy call centres who’d learnt not to trust the old systems and do workarounds, etc., were getting only 35%. We had to get these people “re-cultured to trust the new systems and processes”. It was a different world by design.’

Day 43 – taking 100% of new sales

The platform delivered rapid growth over the first 17 weeks. On the go-live date, Hyperbaric was taking 10% of all new sales; by day 43, it was up to 100%. David says: “We demonstrated that we were growing at an acquisition rate that exceeded our previous record month. By week 17, we were acquiring more services than we’d ever acquired at AAPT. All through inbound, with no push-selling and the reduction of $30m of sales commission by not paying third-party channels. We had demonstrated explosive linear growth to over 24,000 service additions per month.

Repricing

Dennis says: ‘The cost allocation in AAPT had a large corporate overhead, and these costs were allocated back to the business based on revenue rather than on actual true costs. The consumer business was burdened with a high percentage based on end-to-end costs. And as we were reporting at AAPT level rather than a line of business, it wasn’t easy to demonstrate profitability. The result was that the new management thought that the consumer business was unprofitable and wanted to get what they saw as the unprofitable customers out. We knew that none of these customers were in fact unprofitable, and that these costs should have been allocated against the cost of product, and that AAPT network should have been seen as a wholesaler to us and we should be buying from them the services we sell on, but instead we were overly burdened with cost. A review of fees and charges, for example, late payments and reconnection fees, etc., were introduced. These charges made revenue streams out of customer “misfortune”, which drove customer dissatisfaction and churn.

‘This increased churn, but they (the new AAPT management) still thought they had unprofitable business, and so they determined what margin they wanted and repriced all customers. At that point in time we didn’t have any contracts in place, and so customers were free to leave, which they did in droves. It was a shocking moment of truth for the team.'
‘With the success the former Powertel management team had in driving increased profitability out of their previous wholesale and business-based business, they drove a plan to increase consumer pricing. In the end, we were forced to move from per-second billing in fixed and mobile to 30-second billing increments and increase prices. This went against market trends and took us back eight years or more in time. All these things drove a massive reaction in our customer base. It had nothing to do with the platform. It had everything to do with the pricing model. The Powertel team had got themselves convinced that by increasing prices we would get high-yield customers. Instead, what we did was to drive a mass exodus of mass-market customers.

‘Some 63% of our legacy and all our new customers received an increase on their bill of between 10 and 25%. Our acquisition rate dropped to 3,000 customers per month from 24,000. So the acquisition rate went through the floor and the churn rate through the roof. In less than 12 months we lost as much as 50% of our base.’

Call centre meltdown

With the complexity of realigning customers to the new product structure and issues on repricing and billing, the load on the call centres was far higher than expected. Dennis explained: ‘We extrapolated to determine what we were going to take out by moving to the new platform. Things like IT development costs, manual provisioning, jeopardy management, and all those sorts of back-office functions where AAPT probably had 300 to 400 people in those roles. We now have nobody in those roles; the new operational model allowed the front-of-house customer care agents to manage 95% of the “order-to-cash” processes and customer interactions. That left only 5% of the work to my team that had to manage fallout in automated workflow, business logic, etc. With the level of automation that was delivered, we thought we could also radically reduce headcount in the contact centre, and that was a flaw! What’s now stark in my mind is that where the rubber hits the road is that interaction between agent and customer. If you don’t give the agents the knowledge of the industry they are in and the products they are selling and supporting and the time to deal appropriately with the customer and build a warm and fuzzy relationship, you will lose the battle. At the end of the day with AAPT, we consolidated call centres but were told they were too expensive and had too many staff and so we took them down to minimal levels where service was measured in how long it took to answer the phone and how fast could you deal with the client. This instilled all the wrong drivers for good service. Agents were penalized for taking too long, resulting in a checklist approach and requests to ring back tomorrow! It resulted in a self-defeating outcome, call rates went up, there was reduced quality of service, customers were unhappy, and the result was that the call centres’ workload drivers went up exponentially, resulting in very long wait times.

‘We had always envisaged and budgeted for a “bubble force” – a team in addition to the teams sized to run the new business and the legacy business while in migration and bedding down the new business model. With the new AAPT management there was pressure to get to savings quickly, and the additional $3–4m+ reserved for this was banked before we got to migration. This turned out to be a big mistake.’

Final migration

Once they had reached a steady state and resolved the most pressing support issues, David had a team look at the rate of business change, separate from the Infonova team, and realised that the transition deadlines were too tight. They had migrated 60% of the base and decided to stop for a while. AAPT then took time migrating the final 40%. David says: ‘Whilst there was lots of noise and some customer frustration, the churn of customers once we successfully moved them to the new platform did not increase significantly.’

Dennis redefined the migration plan over the next six months and eventually migrated customers using the full workflow and business logic of Infonova, going via the front end with Infonova helping clean the data and then re-provision customers. That gave them clean data, and they could manage the customer accurately.
Ovum’s assessment of the troubles encountered and their cause

Clearly, the switch in market focus and some aspect of the transition strategy and rollout damaged the reputation of the Hyperbaric solution at this time. We could summarise as:

- The new management team had every right to switch focus away from the price-focused mass consumer market if they wished to, but the repricing to drive a smaller higher-yield customer base and timing of the changes had disastrous impact on the level of customer satisfaction in the mass consumer market.
- The cost allocation model appears to have unfairly coloured the view of profitability of the solution – something we will return to later.
- The data-driven migration was a mistake, compounded by doing it too fast without an adequate trial to enable them to realise the problems of realigning customers to new products, the need to correct errors in account details, and the removal of the safety net of a “bubble force” to handle this provided no-risk mitigation.
- Taking out so many call centre staff before they had proven that they could cope without them added to customer dissatisfaction and drove churn. An emphasis on cost reduction seems to have compounded this as well as leading to the occasional meltdown of the call centres themselves.

PHASE 8 WHAT WAS FINALLY DELIVERED – AND WERE THE BENEFITS REALISED?

If some aspects of the implementation and rollout had been painful, the actual core systems delivered seem to have been highly successful. Let us examine what was finally put in place by the end of 2007.

Massive simplification and reduced headcount

The massive simplification that was strategized was certainly delivered. As an example Bob said: ‘Billing reconciliation had previously been a major issue. When people design systems, they get a mindset about solving the problems they are used to getting. The old reconciliation team wanted all sorts of things that they’d think would make their lives easier. But in the new world, there was no reconciliation process. We have a fully integrated world where there was only a single integrated mediation and rating engine. That activity went away.’

The number of people reduced radically according to Dennis, who was responsible for final delivery of the technical solution. ‘We took 1,200 people, 1,500 if we include the shared service people in Bob’s team and collapse that into one focused consumer business. We had three regional call centres of 1100 people and about 140 attached to marketing, provisioning and billing. In the final model, we have 17 internal staff managing the technical environment, provisioning and billing, 12 in marketing and business support and 20 in the Sydney call centre with 320 in Manila and a partnership with BearingPoint/Infonova for the IT operations, and they were part of the “transition to the new business”.

Reduced cost

David explained the major cost savings achieved with the new solution. ‘As we started the migration, we’d already taken something like 80% of the cost savings we envisaged out of the business at that point, taking $40m out of the cost of services on an annualised run rate. I was also getting the benefit of being able to benchmark the sort of savings we were now getting against the legacy and further optimise.'
‘As I was doing budgets for 2008 I had 46% less customer-facing staff servicing my new customers in the Infonova platform, so the FTE numbers per thousand services was 46% less. On a customer basis, the FTE per thousand customers was 56% less, remembering that bundling drove more services. I had said to the board that I would drive 50% less cost, and we had delivered this on a customer basis, although it was not simple to demonstrate this because of the muddying of the waters around the price plans and migration.’

Reduced churn

David explained: ‘Churn was horrific in AAPT, with less than 4% of the base having more than one product in 2003 and with no cross-selling and bundling. Before Hyperbaric we had to put real energy into cross-selling, and this drove bundling up to about a 40% mark by 7 July 2007. With the new business capabilities of Infonova’s platform, our bundling rate had gone up to 80% at point of sale. In the old business we couldn’t sell two products at once. We had over 400 IT applications in the call centre, with a typical call centre rep using 80 applications in any one day. We had to sign up a customer around a voice product and then call them back to add on any additional service such as a mobile. We couldn’t do this in realtime on the phone; it would drive the customers insane. We couldn’t bundle, and everything was a cross-sale. Introducing online realtime bundling was a breakthrough.’

White label capability

David said: ‘Within six weeks of going live, having started up our new business, we did a trial with Vodafone customers of a fixed-line and mobile capability built specifically for them using our platform. It wasn’t a fully baked white label, but demonstrated that we had the concepts in place.’
Dennis says: ‘We now have a white-label customer in Community Telco CTA, and this took three months, and that was because it was the first time we’d done it and we needed to build a new AR (accounts receivable) which we could not virtualise.’

David maintains that: ‘White labelling is still one of the best-kept secrets in town. Had the AAPT management team not changed out and had we kept true to our strategy, we’d be in a very different place in the market now.’

Speed to market

The building of products used to take over 12 months, but with the new system they were delivering new bundles of products in days. Dennis says: ‘This timeframe was gravity defying. Now, with the new capability and the latest release of infonova 6.3, we could build new products in a month, sometimes bringing them in in days.’

Proactive support

Because the new technology is robust, the organisation no longer requires a team to support old platform failures. Therefore, they are freed up to be proactive on actions such as process queue monitoring so that they can be ready for issues where things go over thresholds or red lights go on. Dennis said: ‘In the old world someone would wait for the call from a customer to tell them something was wrong because there was no way to pre-empt it with the help desk then hunting for a fix. Now we fix things before customers notice and escalate problems occurring with providers so that we can respond quickly to meet service levels.’

![Figure 6: AAPT’S implementation of Hyperbaric](image)
Ovum’s assessment of the quality of what has been achieved technically

The Hyperbaric solution seems to have delivered all that could be asked from a technical and functional viewpoint. Since the initial implementation, AAPT has deployed the productised, multi-tenant version of Infonova’s platform that further strengthens the capabilities and its agility. AAPT now has an additional tenant operator by the name of Community Telco Australia. A second business has now also deployed the platform and is running three different retail brands on it today.

Figure 6 shows the capabilities of Hyperbaric to deliver virtualised, multi-tenanted and white-labelled products and services integrated from a wide selection of service providers.

Figure 7 gives a summary of the Infonova capabilities.

![Figure 7: Key features of the AAPT implementation](source: Infonova)

- Delivers business rule driven triple play services for the Australian market. Products can be bundled from different services with a single common bill for all services (fixed, BB, mobile, ISP, etc.)
- Provides an integrated 360° view of customer delivering real time ease of use to enable customer self-care with single view of customer, and visibility of installed services
- Reduces the product development cycle from 10-12 months to days
- Automates all 45 interfaces, delivering Zero Touch Fulfillment
- Enables product configuration by agents online
- Delivers fully define-able process automation delivers massive FTE reduction
- Eradicates irreconcilable revenues
- Enables multiple “VNE” tenants
- Flow Through Processing, delivering automated workflows/scheduling/status for order management, provisioning & billing
- Billing, fully online with mediation, rating and discounts for all services and integrated revenue assurance
- Low Cost, significantly reduced operations and support costs with the ability to support multiple channels
PHASE 9 BALANCED ASSESSMENT OF COMMERCIAL SUCCESS

What was spent on delivering the solution?

Bob says: ‘Telecom NZ and the team sat down after six months and agreed that if this thing got implemented for less than $100m it would probably be an outstanding effort. The original budget was about $30m, with an expected timescale of nine months, which was clearly ridiculously optimistic. It actually cost 80m.’

Dennis said: ‘It was done quickly and for a reasonable sum of money because we had a tightly knit group of business owners who took responsibility for this definition. I worked in IT for 40 years and I’ve seen a lot of waste and money spent on ideas without delivery. Delivering the IT component was closer to $60m, with the extra $20m on consultancy support and setting up the project and call centre issues, training, etc.’

What is the current status?

Dennis explains the current status: ‘The current state is that the AAPT consumer business is in a steady state, with a churn rate of 1.8%. iiNET, who eventually took over the consumer business including the Hyperbaric environment, aren’t actively promoting the AAPT brand, so there isn’t a lot of new customer acquisition at the moment. As a result the brand recognition survey shows that the AAPT brand is diminished, and it would need money and very competitive market pricing to resurrect it.’

There is now a team of 17 internal iiNet staff managing the full process of order to cash, running all the interfaces, the billing, and everything for approximately 200,000 customers and approximately 390,000 services, and BearingPoint is offering technology support.

Dennis says: ‘Suffice to say, the solution is currently delivering positive EBITDA to iiNet that they are very happy with. Having properly accounted for the real costs of delivery, this may well become known as the best acquisition they have ever done.’

So was the transformation a commercial success?

David states that in his opinion: ‘The AAPT consumer business was, in fact, profitable standalone, although it was bound with carrying a lot of legacy costs and significant ones that were related to legacy IT platforms and provisioning teams. As we also absorbed the Powertel business, there was also quite a high cost to serve model and additional legacy integration issues. The consumer business inherited a further $100m of indirect costs not attributed to customers, but to the way AAPT was and had been doing business. The standalone contribution was just under 20%, albeit with a smaller base and the impact of the reprice.’

Ovum’s comment

Those involved closely with this transformation throughout its lifetime are clearly certain that Hyperbaric was a cost-effective and fundamental transformation of AAPT’s business that could have been far more successful if their original strategy of slower and resourced migration had been adhered to and perhaps the lower price attacker model was retained versus the smaller, higher-yield customer business model. Clearly it is not Ovum’s role to question the business or financial strategy of the owners and managers at Telecom NZ. What does appear to be corroborated is that the current business is effective and that the solution has far greater capacity than is being used. Thus, there is still an excellent opportunity to expand its use and improve the financial return, perhaps by consolidating fragmented network service providers onto a shared platform.
THE LESSONS TO BE LEARNT AND ADVICE FOR THOSE CONSIDERING A SIMILAR STRATEGY

It is Ovum’s opinion that despite the trials and tribulations involved in shifting strategies and priorities, this was a truly excellent transformational project. As we understand it from those involved, what has been delivered is an exceptional solution with a great deal of agility based on a robust and advanced architecture.

The transformational project threw up some very interesting lessons that we can readily transform into suggested best practice.

1. **Place responsibility in the hands of a committed Business Owner group.** Dennis said: ‘Get the people there who understand the pain and know what needs to be done to resolve it, and line up all the ducks in a line that need to be considered. Don’t bring in those external to the business to help too fast; look internally at the experience you have in-house. Also, you need to ensure that your team get on and work well together, and despite a few stressful moments, this team had a single focus on an outcome and worked exceptionally well.’

2. **Check the actual solution fit carefully.** AAPT recognised that the solution being offered was less complete than required and while its team did a brilliant job of filling out the processes, there was a great deal more to do than they had expected.

3. **Make sure that you know what will be regarded as success.** The goalposts clearly changed during this transformation and rollout, but that is not uncommon. Knowing what is expected and being measured against it consistently makes proving success or failure more transparent. All successful projects start with good scope management; deciding how you will govern a project when unforeseen organisational or non-organic change occurs should be considered at the outset of the program.

4. **Do not be too optimistic.** The team, including BearingPoint, started off with rather unrealistic expectations of timescale and cost. What they achieved was still exceptional, so it would have been in their better interest to have been more realistic at the start.

5. **Provide the best-possible customer care through a migration.** The reduction in staff numbers and change in attitude towards customer care badly affected customer satisfaction and, ultimately, churn rates and perception of AAPT in the market. The maintenance of some ‘bubble force’ to manage through transition is important, and it can create the operational headroom you need to manage through unexpected events.

6. **Stress and test the migration path carefully.** In this case, the initial migration was undertaken too fast and did not deliver the quality of outcome required to move customers onto new product packages under Hyperbaric. Maybe this could have been resolved earlier had more testing of the proposed path been undertaken. A big lesson learnt was that changing customer behaviour (i.e. reducing call propensity) did not occur until customers became comfortable with their new bill, despite its simplicity and vastly improved processes.

At the end of our interview with Bob Hennessy, who is now at BearingPoint, we asked: ‘If you were offered the same opportunity again, but now with Infonova’s latest release, how do you think things would go?’ He replied: ‘If we had then the new release we have now. I guess the first 15 months of the project would have been a three-month pilot. We had to re-engineer the security model down to the data level, whereas now we have a genuine multi-tenanted platform that can handle the multiple branding on top and that’s properly productised. Now we know what we know, I’d go there faster and I still don’t know anyone who’s built something as a multi-tenanted solution from scratch in this way.’
Ovum believes that on the evidence presented, this was an excellent transformation and Infonova’s BSS platform is a strong solution that should be considered by any organisation in this market looking at business support solutions. However, the final word should go to Dennis, who still remains at the helm. ‘Why I’m still here is that every time they tried to throw a rock at what we’d done, the rock bounced off. We always delivered what we promised, and the team that I took and went live with are still with me today. None has left.’

Table 1: Contact Details

<table>
<thead>
<tr>
<th>Infonova GmbH</th>
<th>Seering 6, 8141 Unterpremstätten</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graz</td>
<td>Austria</td>
</tr>
<tr>
<td>Tel: +43 316 8003</td>
<td>Fax: +43 316 8003 1080</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:infonova@infonova.com">infonova@infonova.com</a></td>
<td><a href="http://www.infonova.com">www.infonova.com</a></td>
</tr>
</tbody>
</table>

Source: Infonova