Digital Government Case Studies: NovoPay

Novopay is an IT solution that pays 110,000 teachers and others employed by 2, 500 schools, on 15 different employment agreements, a total of around \$3.4 billion annually.

In 2004 the Ministry of Education (MoE) released a Request for Proposals (RFP) for 'Schools Payroll' to replace the aging digital payments system infrastructure then outsourced to Datacom. Service Centre 'pay clerk services' for individual schools were to continue. Synergy/Talent 2 were selected as the preferred vendor and the project to deliver the new School payroll became known as Novopay.

Novopay went live and performed its first pay run in September 2012. By this time, Novopay was designed to be a completely outsourced solution to the schools' payroll, replacing both the Datacom and Service Centre components of the previous arrangements. The project had cost materially more than originally estimated and the go-live date was a year later than originally planned. While many of the payees received the correct pay, a significant number did not, causing serious reputational damage and further costs to the Ministry of Education. Failure to satisfactorily resolve the issues quickly caused ministers to initiate an inquiry in 2013.

The causes of the Novopay failure are a complex interplay of issues which the Ministerial Inquiry authors pointed out could have been averted if the lessons from the INCIS Inquiry a decade earlier had been attended to adequately (Jack & Wevers, 2013). These included that the Go Live decision was confirmed when it was clear that not all testing had been completed; systems development was continuing through the code freeze right up to Go Live; the sector was not sufficiently ready; the replacement Service Centre had failed some of its tests and was not sufficiently ready. An 'inadequate quality of governance' and not exercising an option to exercise breaches of contract conditions when milestones were missed as early as 2010, were major failings.

Business process change factors were not mentioned in the Inquiry and yet significantly according to Jack and Wevers (2013) there appears to have been no clear or single view of the business process being replaced or a detailed view of what the new business process would look like.

Schools payroll is an extremely complicated business process. It is compounded by the fact that, up until 1989, schools' personnel needs including management of payroll were mostly met by district education boards for primary schools and regional offices of the Department of Education for secondary schools. Even though schools have been the legal employer of teachers and other staff since 1989, most did not have in-school capability on payroll matters and relied on the contracted pay clerk arrangements through Service Centres, that also acted as an intermediary to the payments contract managed by Datacom since 1996.

Most of the people employed in schools are employed under one of a number of collective employment agreements negotiated centrally by the Ministry of Education on behalf of the School Trustees (the actual employers). There are as many as 15 agreements to be complied with in making payments. People paid might work in more than one school and also have more than one employer or employment contract. Funding to meet the schools' payrolls comes from both the Government directly through the Ministry of Education to meet the full cost of a school's teacher entitlement and from the individual school board's funds to meet the cost of extra teachers and non-teaching staff. As an added complication, government policy had allowed schools to 'bank' their unused teacher staffing entitlement and use it flexibly to suit their local staffing needs across the year.

The business objective which informed the 2004 RFP was to leave the outsourced pay clerk arrangements in place and replace only the outsourced salary payments capability, then paid by a soon-to-be-obsolescent Datacom infrastructure, by building a new IT-enabled infrastructure that could support a number of policy and operational functions including payroll. These included data on teacher numbers, demand and supply forecasting and teacher registrations.

Development of the Stage 2 Business Case commenced with Talent 2 contracted by MoE. Then from 2005-7 there was a slowdown in development. This was enabled because the urgency for a solution was eased by Datacom upgrading their platform so that it could continue to provide the existing payroll service until at least 2013 (and arguably beyond). 2005-7 was also a time of organizational restructuring at MoE and key personnel changes. In fact a contingency plan put in place in 2011 could have allowed Datacom to continue to deliver for 5-13 years. This option was allowed to lapse by MoE in July 2012.

By the time MoE took their full Business Case for Novopay to Cabinet for approval of the funding in 2007, there had been a 're-evaluation of requirements' and MoE advised Cabinet that 'a full Business Process Outsourcing (BPO) approach would provide lower risk and a higher quality outcome. Part of the justification for the case was the unsustainability of the Datacom solution which by that time was no longer true because Datacom had developed a new platform and was moving its other clients to that new platform and has continued its contracts with other employers on the new platform since then.

Significantly, at this time there was not a single authoritative detailed picture of the business process being replaced because the three existing Service Centres all work separately and have developed their own business rules, interpretations, work-arounds, interface and working relationships with their client schools. Much of the information input into the payroll system was via manual input of faxed paper timesheets, phone and mail communications. Not all schools had reliable Internet and there were a wide variety of school-based information systems in use across the 2,500 schools.

Talent 2 was selected to deliver the Education Service Payroll including managing any third parties to support delivery of the payroll. Prince 2, as an industry standard Project management tool, was to be used throughout. Ministry signed their contract with Talent 2 in August 2008 and work on the system began. By January 2010, several milestones had not been met and an external review of the project advised the Ministry that the original contract dates were unachievable. Although backup and contingency options were put in place with Datacom at this time, the decision was made to continue to work with Talent 2 on the Novopay solution and not to exercise a contract clause that would have allowed termination. A contract variation with a new Go Live date of June 2011 was signed with Talent 2. This was revised to 3 July 2012 in October 2011.

Talent 2 brought in additional resources to help it deliver and test the system. In fact, in audits of acceptance testing, it was later found: there were unclear testing responsibilities; no coherent or integrated testing approach; few test artefacts and limited repeatable testing; inadequate requirements or architectural artefacts; poor traceability.

In February 2012, the Ministry's internal Project Board, as business owners of the Novopay project, noted 14 August was the "absolutely last preferred date" for Go Live. Two Confidence Points were defined intended to act as stage gates. The Project re-baselined the plan and confirmed 14 August as Go-live date with first pay run on 5 September.

In April 2012, around the time of Confidence Point One, an independent project auditor concluded that "the readiness capability for Go Live and service delivery is not, and is very unlikely to be, at a level required for fit-for-purpose outcomes". The Ministerial Inquiry observed that at "Confidence Point one there were 102 open defects, and multiple testing phases to be completed to prove that the product would work as specified. It was clear that there would be defects remaining at Go Live" (Jack & Wevers, p.44).

When the Confidence Two assessment point occurred in May 2012, seven of eight points were deemed either to have been met or expected to be met by the User Acceptance Test date planned for June. The Project Board's acceptance of Confidence Point 2 was seen by the project manager as a 'no turning back' point although it was never clear whether the Board realised this at the time.

From then on Novopay barrels ahead towards Go Live despite a number of warning signals about the schools readiness for Novopay. A survey was sent to more than 5700 school users to assess state of sector readiness; only 1500 (26%) responded and only 210 people (14%) understood the impacts the changes would bring. Ministers were briefed and advised that the Go Live date on 20 August should proceed. All Ministry Project Board members were in agreement with this decision.

The new Service Centres to interface with the schools were deployed on 18-18 August ready for the Go Live on 20 August and the first Pay run on 5 September. Leading up to the pay

run service calls were averaging 10 minutes; wait times were 10 minutes and there was a 50% abandonment rate. The Ministerial Inquiry noted that no call centre metrics were collected after 28 Aug.

The Project Board met on 6 August, the day after the pay run. They were advised: Novopay had executed a successful pay run that paid 89,126 staff; there were also errors; and the sector had been 'noisy'. The business owner tabled a memo recommending an urgent meeting of Project Board to identify the key issues and problems faced by schools and develop a plan to address them.

Talent 2 reported that there has been no "systematic system failure". Issues with the pay run were attributed to transactions not being processed on time, late and password protected payslips, and technical issues with report. Also, Service Centres had received significantly more payroll instructions than expected; 5000 people had been underpaid and 15 not paid at all. This occurred for various reasons: system defects, user errors, unexpected school practices and an unexpected large number of timesheets. 700 people were overpaid (one by \$15000) due to data entry errors by Talent 2 Staff and other errors.

The issues did not abate over subsequent pay runs and the 'noise' from the sector only got louder. In early February the Associate Minister of Finance and Education who had been one of the three Ministers reported to during the project instituted a Ministerial Inquiry into the issues leading to the project's failures, the adequacy of the project's governance and management and any steps to be taken to address the ongoing performance and confidence in the system.

Questions for discussion:

What lessons from INCIS is it apparent had been learned? Where do you think the causes for the failures lay?

References:

Jack, M., & Wevers, M. (2013). *Report of the ministerial inquiry into Novopay*. Wellington: Ministry of Education <u>http://www.education.govt.nz/assets/Documents/Ministry/Information-release/MIN130501InquiryReport.pdf</u>.

Novopay Timeline of events

Date	Decision/Event	Comments on changes
1996	EY review of Schools Payroll project and lessons for future	
Sept 2004	MOE releases RFP for 'Schools Payroll' Ministry to host infrastructure and 'pay clerk services' to continue to be provided by the existing providers. Need to address the technology obsolescence of the existing provider's (Datacom) platform.	Aim is to replace existing payroll service provision through Datacom
21 Feb 2005	Rob McIntosh informs Howard Fancy that Synergy using Talent 2 as its payroll platform is the successful tender in RPF process and their selection will be announced.	http://www.education.govt.nz/ assets/Documents/Ministry/Inf ormation-releases/Novopay- information- release/PreferredSuppliersForN ewSystem.pdf
May 2005	Stage 2 Business Case Development	See PWC comments 2005 version of Business Case
May 2005	Datacom upgrades their platform making it able to continue provision until at least 2013.	
	MOE revaluates its requirements. "as a result of this work it was decided that a full BPO approach would provide lower risk and a higher quality outcome, and better value for money"	Changes of Minister and changes of MoE CEO and other key personnel such as Teacher Labour Market Policy
3 April 2007		
6 Nov 2007	Revised Stage 2 Business Case	3 options Status quo; Ministry insourcing; BPO BPO recommended as lowest risk
21 Nov 2007	Cabinet approved MoE Business case to acquire a BPO vendor for the schools payroll	Look for copy of this BC and Cab paper
11 Aug 2008	Minister of Education signed of the Education Service Payroll (ESP) Outsourcing Agreement with Talent 2.	"ESP contract defines project approach that MoE is purchasing payroll services from Talent 2. MoE is not purchasing or leasing IT systems or hardware, managing any payroll staff (except ESP staff) or managing any third parties."
January 2010	Extrinsic report to MoE advised that the original contract target dates for delivery of the system were unachievable	

31 May	Contract Variation 1 signed by MoE and Talent 2.	
2010	Extends Novopay go-live date to 30 June 2011	
August 2010	MoE creates back up and contingency options with Datacom given delays and uncertainties in Novopay Go Live. Extension option had Datacom continue to deliver payroll until Novopay went live (expiry 20 Nov 2012; Contingency option to renew Datacom contract if Novopay project failed.	Ministry did not attempt to extend the fall-back extension date beyond Nov 2013 even though Datacom offered June 2013). A contingency option to extend Datacom contract for at least 5 and up to 13 5 years was allowed, negotiated in May 2012, was allowed to expire on 1 July 2012 (see p 28)
During	Talent 2 contracts Assurity Consulting Ltd and	
2010	Asparona to assist with critically important	
	deliverables and testing	
Nov 2010	PWC Audit Report	See Report p. 40
Oct 2011	Contract Variation 1 signed by MoE and Talent 2.	Budget up or down?
	Extends Novopay go-live date to 3 July 2012	
	MoE and Talent 2 agree to revised project budget.	
Dec 2011	Assurity engaged to manage User Acceptance	
	Testing.	
	Assurity found that the project had	
	unclear testing responsibilities; no coherent or	
	integrated testing approach; few test artefacts and	
	limited repeatable testing; inadequate requirements	
	or architectural artefacts; poor traceability	
July 2012	Project Initiation Document (PID) 3.5	
	Novopay project will transition payroll from existing	
	provider by agreed go-live date.	
	The project will follow Prince 2 project management methodology which is MoE standard.	
	The ESP outsourcing agreement sets the scope	
	quality and cost of the deliverables of the project.	
2011	Build, customisation and User Acceptance testing	
Oct 2011-	System Training Plan developed.	
Jan 2012	PRG consulted on content of training; expressed	
Jan 2012	concern that their feedback did not make it into the	
	training modules developed by Talent 2 with MoE	
	involvement	
Dec 2011	Change Impact Assessment carried out by MoE	
Feb 2012	Project Board, the business owner indicated that go	
	live date of 14 August was "absolutely last preferred	
	date" (p. 43).	
	-Two Confidence Points defined intended to act as	
	stage gates	Implications of not meeting
	- Project re-baselined the plan and confirmed 14 Aug	stage point criteria or actions to
	as Go-live date with first pay 5 Sept.	be taken in that event not clear;
		Go Live later pushed back to 20
		Sept.

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2012	Third party training	
2012	Third party training -Face to face training for 88 Novopay online	
	specialists who were experienced payroll specialists	
	from various regions and school types;	
	-Novopay Beta environment made available for user	
	practice	
2 Apr	Confidence Point One scheduled: 2 of 4 criteria not	"At Confidence Point one there
2012	met.	were 102 open defects, and
	Board told they could be delivered within the next	multiple testing phases to be
	few weeks and recommended continuation through	completed to prove that the
	the stage gate.	product would work as
	Subsequently MoE and Talent 2 agree that the	specified. It was clear that
	System Integration Testing (SIT) milestone could not	there would be defects
Augu 2012	be met and moved it to Confidence Point 2.	remaining at Go Live" (p. 44)
Apr 2012	PWC independent report	"the readiness capability for Go
		Live and service delivery is not
		and is very unlikely to be, at a level required for fit-for-purpose
		outcomes." P.45
31 May	Service desk required to be ready for School training	NB this is only 10 weeks before
2012		accepted project go-live date of
		14 Aug 2012
31 May	Confidence Point two assessment takes place with	Confidence Point 2 was the real
2012	seven of eight points deemed either to have been	Go Live decision point. (p. 47)
	met or expected to be met by User Acceptance Test	
	date planned for June.	
	Project Manager sees acceptance of Confidence	
	Point 2 as a 'no turning back' point	
May 2012	Survey sent to more than 5700 users to assess state	
,	of sector readiness; only 1500 (26%) responded and	
	only 210 people (14%) understood the impacts the	
	changes would bring,	
5 June	Ministers (Finance, Educn and Assoc Educn) briefed	
2012	on Confidence Point two assessment	
	Ministry assured ministers that remaining issues	
	could be addressed and that project should proceed	
	to Go Live.	
	Cabinet approval given on the basis of the Ministry's advice.	
June 2012	MoE's Chief Internal Auditor reported to Project	
	Board that he was unable to provide assurance on	
	the full inclusion of the system and the manual	
	controls.	
	MOE relied on assurances from Talent 2 that all	
	system controls were in place.	
21 June	Training of school users commences	Inquiry concluded that MoE
2012	MoE measure success of training by registration not	underestimated the impact of
	training actually undertaken	the changes required of the
		schools and the execution of
		the change management plans
		inadequate

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Live decision was confirmed
15 August when it was clear
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to Go Live; the sector was
sufficiently ready; Service
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dy; crucial end of year/start
year process was not yet fully
veloped or tested.

		Project governance and
		leadership allowed a
		combination of significant risks
		to be carried into Go Live; and
		overestimated the ability of the
		Ministry, Talent 2 and the
		schools to manage them. (p. 51)
9 Feb	New Acting Secretary for Education appointed	
2013		