

A Case for Public Process Documentation: Robodebt an Automated Decision Making System

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Abstract. Governments worldwide are embracing the evolution of digital economies and automation for efficiency gains to overcome scarce resourcing. However, achieving efficiencies without burdening the government or community they serve is not trivial. We explore a case study following the creation of an automated system to recover debts from welfare recipients who supposedly misrepresented their income, colloquially known as ‘Robodebt’. Business process management was extensively used in the project’s design and implementation; however, the owners and agents struggled to achieve their desired outcomes. On the flip side, the recipients of the automated system faced erroneous debts and a faceless system that ignored their existence. The system would ultimately fail; ruled illegal due to its process assumptions and, never came close to the goal of \$4.772 billion in savings. Our analysis synthesises the project’s design choices, deriving how the process mindset failed the owners and agents. We posit that public process documentation is required to prevent similar failures in the future.

Keywords: Australia · Public Service · Business Process Improvement · Business Process Management · Robodebt.

1 Introduction

Public sector organisations around the world are constantly faced with demands for improving and providing efficient services by adopting digital solutions [15,17]. Business process management (BPM) is a field that provides a wide range of tools and techniques for process owners to strategically identify improvements and quantify their impact *before* they are implemented. Integrating Information Technology (IT) with Business Process Improvement (BPI) is seen as a viable solution to enhance transparency and tackle the persistent problem of resource scarcity in public sector organisations [13].

Government departments provide social benefits and many “services” to their communities and, like corporate companies, face the need to improve processes to efficiently use their limited resources. We explore how BPM was used in an Australian government department enacting and implementing a BPI project.

We investigate the implementation of a specific budget measure (Scheme) from the Australian government, enacted into policy by the Department of Social Services (DSS), and operationalised by the Department of Human Services

(DHS). The budget measure aimed to return **\$4.772 billion** to the Commonwealth of Australia by raising debts on welfare recipients, who had supposedly incorrectly reported earned income while receiving social welfare. The Scheme cost **\$971.391 million** to implement, administer, and ultimately wind back. However, it returned **\$406.196 million** in actual savings, resulting in a net loss [14].

Relying on publicly available evidence, we conduct an exploratory case study, ascertaining how the Scheme failed to achieve desired outcomes. Specifically, we address the question: *How did a process mindset influence the operationalisation of the Scheme?* We use three terms throughout this paper. Firstly, “[the] Scheme” refers to the continual operationalisation of the budget measure, ‘Strengthening the Integrity of Welfare Payments’, or its more colloquially known term of ‘Robodebt’. We reason that using the term ‘Robodebt’ may form a biased view of the Scheme. Secondly, “*recipient/s*” refers to an individual/s targeted by the Scheme’s mechanisms [14, pp.viii-ix]. We use *recipient* over “customer” as no value was derived for these individuals; instead, only business value was derived for the Australian government. Finally, we use “*owner/s*” to refer to employees of DSS and “*agent/s*” to refer to employees of DHS.

We analyse evidence procured by the Royal Commission into the Scheme [14] and provide links to the evidence that supports our conclusions and reasoning¹. For example, the first referenced piece of evidence is from a previous DHS CEO²:

“There appears to have been assumptions underlying [the Scheme] that everyone was computer literate and that debt was widespread. This is contrary to the knowledge of frontline workers and external agencies. Nothing was checked before hand”, Sue Vardon AO

Our analysis focuses on how the owners and agents operationalised a process to handle discrepancies between a recipient’s claims and their annual taxation information. During normal operations, agents would perform compliance activities on historical welfare payments and use governmental powers to procure information. These efforts would result in a discrepancy being placed on a recipient, which may result in a debt being raised against them. However, their processes at the time meant that they could only handle the most likely or the most at-risk discrepancies. The introduction of the budget measure meant that owners and agents had responsibilities to increase processing capacity, by a factor of 50, to ensure that all discrepancies were processed within the year they were raised. The resultant was a purposefully designed system to automate the processing of discrepancies into debts, based on several dubious assumptions. For recipients, it was a nightmarish experience that surprised them when the Scheme extracted wealth from them. One recalls³:

¹ The paper references evidence from the commission in the following manner: rc-[document-id]. ² rc-ANO.9999.0001.0056 ³ rc-FBU.9999.0001.0002_R, p 10, para 49

"I have never had a good understanding of why the debt was raised against me or what had caused the debt to exist...To this day, I feel worried when I check the mail out of a fear that [the Scheme] will have written to me about further debts or raising the amount that I owe them", Recipient

Notably, our discussion is not an attack on stakeholders handling the thankless job of facilitating public service in Australia. From a process perspective, typical owners have many options on hand to consider when *choosing* what processes should be improved or *what* new processes to implement [4]. It is reasonable to assume that typical owners have at least five options: fully commit to change, a short term change, a mid-term change, a long-term change, or ignore the process, moving on to bigger issues [10]. In contrast, public service *owners* have one: faithfully implement the elected officials goals into policy, and then the *agents* need to operationalise that policy [14, pp.xxiij]⁴. They never stood a chance of changing anything, unless the elected voices said so [14, pp.iii]. These forces can unwillingly combine to confuse/mislead excelling public service in Australia, the Scheme is one such anomaly to *learn from*.

One might question whether owners and agents were process-minded, but it is clear that processes were thoughtfully modelled (in BPMN); for example, the detailed requirements for the initial version of the scheme⁵. Thus, we apply a process lens to the Scheme's designs to show that simple solutions exist [14]. Our findings present how public process documentation might have aided in clarifying the behavioural changes and their impact on the performance of processes. Lastly, we synthesise how aforementioned constrained process change mindset affected the owners and agents. For instance, it can lead to an echo-chamber, where they start shouting "*We know boats*"⁶ as reasoning for their good work.

We argue that BPM affords opportunities to increase transparency in the operationalisation of public policy. As learning from the scheme's finale, it may not be until the public can question the process changes in detail, or ask for a debt to be repaid with *interest* [14, pp. 288,297-298,316-317] in Federal Court (as without interest it can be easily side-stepped), that an anomaly can be halted. We posit that by having publicly available process documentation that accurately reflects process changes when automated delegation is adopted will not only prevent future similar schemes but also may increase the likelihood of recipient's participation when they stand to gain nothing except disillusionment.

We structure our discussion as follows: Sec. 2 present existing discussions, Sec. 3 presents our methodology, Sec. 4 describes the unfolding of the scheme, Sec. 5 contains our synthesise, Sec. 6 articulates our insights, Sec. 7 concludes.

2 Related Work

Discussions of the Scheme have spanned several contexts, such as managerial governance [9], automated decision-making [19], public service [18], social justice [5]

⁴ rc-RBD.9999.0001.0216 ⁵ rc-CTH.3023.0004.8451_R, pages 70 -76, 110, 111, 168. ⁶ Transcript, Scott Britton, 23 February 2023 [p 3686: lines 38-46].

and legal administration [30]. Previous work that most extensively looked at the findings of the Royal Commission was presented by Clarke, Michael, and Abbas [9]. Using a socio-technical framing, the authors present an in-depth chronological timeline based on several public commentaries on the Scheme. While their timeline touched on the process lens, our discussion distils this aspect in greater detail. Work by Braithwaite [5] positions the strategic goals of the Scheme and its design choice within the context of nudging, a reward philosophy of nudging people down the “correct” path to achieving a desired outcome. Rinta-Kahila et. al. [19] discussed how algorithmic decision-making (ADM) is influencing governments, but to be successful, implementations must overcome several unique challenges as the scheme demonstrates. Finally, Nikidehaghani, Andrew, Cortese [17] considered another perspective on the Scheme, whether basing accountability on algorithms affects the uni-directionality of the relationship and reinforces instrumentation power. The authors [17] argue that the Scheme should be considered in the broader context of digital economies and the growing reliance on data-driven decision-making. Their work showed and discussed how the lived experiences demonstrated that the Scheme was indifferent to the circumstances or difficulties of proving that the debt was incorrect. Notably, prior studies have *hardly* investigated the Scheme from a process lens.

Process Mindset. BPM adopts a socio-technical approach to improve operational excellence [6,10,28]. Within the BPM toolkit are a range of techniques and approaches, some more qualitatively focused [10], and others, like process mining [28], are more quantitative. Nonetheless, a key characteristic of BPM is a *process mindset*, which starts by viewing organisations as interconnected, end-to-end business processes [20]. But the goal of those embracing a process mindset is not perfection or to be “done”; instead the goal is to achieve a constant state of change [3,6]. vom Brocke et al. [6] describes the mindset as the study of socio-technical processes over time, which consist of a coherent series of changes involving actions between actors and technologies on various levels. The process mindset is framed by the BPM lifecycle [10] to institutionalise continuous improvement and iterative change towards operational excellence.

Embracing the process mindset at the operational level is not enough; leadership has to support longer and continuous improvement projects [16]. Even when the mindset is embraced at the operational and managerial levels, a naive approach can lead to fail-fix cycles of growing complexity [1]. Notably, in terms of flexibility within the mindset, tensions can occur between the differences in strategic goals and operational expertise [2]. In the public domain, these tensions are further stressed by the need to provide efficient services while meeting public expectations and their diverse interests [23]. Thus, it is important to consider the role that a *process mindset* played in the development of the Scheme.

Theoretical Lens: Technology Discontinuity. Technology implementations require thoughtful planning and execution strategies to yield the required results. For technology to be successful, its acceptance and appropriate use is a critical element [27,8]. For the Scheme, the tension between the design of the system and processes was influenced by different pressures that emerged from

a variety of stakeholders. This tension requires exploring and understanding the key factors that influence the objectives, performance expectations, political norms, and design variables that result in the discontinuation of a technology.

Therefore, we explored discontinuity and technology adoption theories as a theoretical lens to analyse the case [24]. The technology discontinuation theory offers two aspects to understand how technology use can be discontinued by stakeholders in a social system [26]. The ***Competence-destroying*** practices explains how new processes requiring new skills and technologies are fundamentally different from existing practices. Whereas, ***Competence-enhancing*** practices explain the improvements to existing methods that do not render current skills obsolete but incrementally improve technology [26].

These discontinuities often arise from competing and competitive changes that give birth to new initiatives and innovative technologies. Moreover, introducing new technology can lead to organisational change and resistance, as stakeholders must abandon old practices. The goal is to replace old technologies with new concepts, processes, and systems. Old technologies, initially innovative, can become obstacles due to their familiarity, experience, and sustained long-term practices [29]. Using the technology discontinuity lens will help explain the tensions that arose as stakeholders abandoned the Scheme and reverted to old processes and systems discussed in this case study.

3 Methodology

This section presents our methodological approach. Typical to the case study methodology [31], this study provides an in-depth analysis of the chronology and key occurrences of the scheme from a process lens. Relying on publicly available secondary evidence (see Table 1), we conduct a document analysis to ascertain how the Scheme failed despite owners and agents having a process mindset. Publicly available qualitative data are a rich source for investigating and theorising about socio-technical systems [11], providing a diverse coverage that would otherwise have been impossible to collect first-hand.

3.1 Case description

The case was sanctioned by elected officials of the Commonwealth of Australia and operationalised by the owners and agents. The owners had oversight responsibility of the Scheme while the agents was responsible for its implementation. The goal was to generate revenue, supporting a surplus in the governmental budget, estimated at AUD \$4.772 billion.

These estimates were based on the prior success of a manual process that reconciled discrepancies between a recipient's welfare remittances and their earned income. Owing to a growing backlog of unprocessed discrepancies, which was a major justification for the implementation of the Scheme. The response to the growing backlog was to introduce and adopt automation, increasing processing

Table 1. Data sources considered in our analysis.

Document	Year	Source Type	# of items	Content
Royal Commission [14]	2023	Primary	1	1052 pp.
Deloitte report	2023	Primary	1	76 pp.
Procured Docs	2021-23	Secondary	10,933	\geq 10,933 pp.
Hearings	2022-23	Secondary	46 days	4,998 pp.
Whiteford report	2023	Tertiary	1	114 pp.
Podger report	2023	Tertiary	1	42 pp.
Public Submissions	2022-23	Tertiary	293	\geq 293 pp.
Unpub. PwC report	2017	Tertiary	1	106 pp.
Budget Reports (DHS)				
2014-15	2015	Secondary	1	325 pp.
2015-16	2016	Secondary	1	316 pp.
2016-17	2017	Secondary	1	322 pp.
2017-18	2018	Secondary	1	352 pp.
2018-19	2019	Secondary	1	392 pp.
Senate reports				
2017	2017	Tertiary	1	155 pp.
2022	2022	Tertiary	1	62 pp.
Ombudsman reports				
2017	2017	Primary	1	113 pp.
2019	2019	Secondary	1	45 pp.
Legal proceedings				
Masterton	2019	Tertiary	3	43 pp.
Amato	2019	Tertiary	2	12 pp.
Prygodicz	2019	Tertiary	4	258 pp.
2015 advice	2015	Tertiary	1	6 pp.
2017 advice	2017	Tertiary	1	2 pp.
Solicitor-General	2019	Tertiary	1	47 pp.
total:			11,298	\geq 20,084 pp.

capacity. Therefore, an automated decision-making system was used to mass-produce debt invoices for outstanding discrepancies. This change from a manual to an automated system is the focus of our investigation. The Scheme was mostly driven by management (both owners and agents) in a top-down manner, hunting for the savings to become reality. The key change was that agents were not going to use their powers to produce evidence to support debts; instead, responsibility was shifted to recipients to “disprove” a presumptuous debt.

3.2 Data Extraction and Analysis

Table 1 describes the included data sources. Qualitative data was grouped into primary, secondary and tertiary sources. Primary sources were used as our basis for synthesising insights. Secondary sources provided specifications on our synthesis, such as process performance, culture insights, and management mindsets. Tertiary sources provided additional perspectives on the Scheme but were not explored in-depth. In total 20,084 pages of reports and supplementary documents were inductively searched.

Following the Gioia et al. [12] approach, we inductively extracted initial insights and considered how emanating themes could be viewed from a theoretical perspective. First, two authors extracted stakeholder narratives of key occurrences of the Scheme’s implementation from 2016 to 2020 from the Primary sources (see Table 1). These first-level codes described the chronology of events

and challenges encountered during the Scheme's operationalisation. Where reference was made to secondary or tertiary data sources, relevant sections were extracted. Secondly, three authors reviewed the extracted first-level codes to derive key themes around the operationalisation of the Scheme. This began with comparing first-level codes and reviewing emanating themes to ensure proper alignment and parsimony. Thirdly, we sought to identify a theoretical lens to best describe and explain how the Scheme failed despite the owners and agents having a process mindset. A dominant feature in our data was that the Scheme's failure resulted from stakeholder tensions regarding maintaining legacy practices and implementing a process innovation. We selected the theory of technology discontinuity [25] to explain the discontinuities in the Scheme.

4 Chronology of the Scheme

This section outlines the public reports that became available during the duration of the Scheme and at high-level describes the unfolding of the Scheme.

One of the first pieces of public information about the Scheme came from the then-incoming minister, who proclaimed that they were going to be a “*strong welfare cop*”⁷ and that the relationship between ministers, owners, and agents needs to be corrected⁸. It is within this culture of *welfare cops* that the initial idea was born, grown and evolved into a budget measure, *Strengthening the Integrity of Welfare Payments*, in the 2015-2016 Budget⁹.

It would not be until the first online refinement of the Scheme went live that further public information would be released. The first iteration, the online compliance intervention system (OCI), went live in July of 2016¹⁰, and by December of 2016 major criticism of the Scheme was being presented by media outlets¹¹. Criticism was voiced as incorrect debts being mass produced by the Scheme. The outrage from the public in the media and a large number of complaints meant that during this time Ombudsman's office contacted the agents to request information for an upcoming inquiry report¹². In 2017, several public reports and inquiries were published. Responding to growing criticism of the Scheme, owners proclaimed the following in a media release [14, p.156]¹³:

“I think this [Scheme] is about as reasonable a process as you could possibly derive...It really is an incredibly reasonable process...It’s very significant. Four billion dollars over four years is evidently a very significant amount of money. That is helping us get back into surplus”, 3 January 2017, Mr Porter

These media statements by the minister did little to address the more serious claims of the public outrage being covered in the media. In April of 2017, the Ombudsman would release its findings about the Scheme¹⁴, containing real incidents surrounding the scheme over 113 pages, including eight recommendations.

⁷ rc-RBD.9999.0002.0002

⁸ rc-RBD.9999.0001.0216, p.4
2015-2016 Budget Paper 2: Budget Measures, p.132

⁹ rc-DSS.5124.0001.1240_R,
¹⁰ rc-KHA.9999.0001.0001_2_R2, para.

¹¹ rc-CTH.3000.0023.6773

¹² rc-CTH.1000.0006.8741_R

¹³ rc-CPO.9999.0001.0009

¹⁴ rc-CTH.3044.0003.7539

Notably, the report is only 30 pages and the remaining are left to appendices which somewhat defend the Scheme and design choices. However, the findings of the commission was that wording used within the report were “...given a great opportunity to effectively co-write the report...”¹⁵. Nonetheless, the report sheds light on the machinations of the scheme, albeit in the best possible light. In June of 2017, a parliamentary committee presented findings on the Scheme [21], outlining (emphasis added):

“It was made clear to the committee during the course of this inquiry that the evidence consistently demonstrated a key flaw in the [Scheme], a flaw which filtered throughout the [Scheme]: a fundamental lack of procedural fairness... This lack of procedural fairness disempowered people, causing emotional trauma, stress and shame... What also became clear through the inquiry is that the department has a fundamental conflict of interest – the harder it is for people to navigate this system and prove their correct income data, the more money the department recoups...”, Commonwealth of Australia 2017

This senate inquiry also presents 21 recommendations, starting off with the recommendation that the OCI program should be put on hold until all procedural fairness flaws are addressed. Notably, the dissenting deport [21, pp.115-122] relied on influenced the Ombudsman report to dismiss the findings.

Throughout 2018, the Scheme rolled on with little to no pushback from its owners and agents [14, p.259]. However, the year did produce new public information in terms of Administrative Appeals Tribunal (AAT) decisions on recipients claims against the Scheme. In the previous year, a growing number of decisions from the AAT had set aside decisions surrounding the Scheme [14, pp.239,240]. In September of 2017, a decision was made by the AAT on a previous decision in March of 2017, setting aside a debt based on income averaging for want of an evidentiary basis [14, p.268]. Following on in April of 2018, an article by an AAT member (Professor Carney AO) is published [7], and opens with:

“...the so-called ‘practical onus’ to establish a debt and its size continues to remain with [the Scheme]; the failure of a person to ‘disprove’ the possibility of a debt is not a legal foundation for a debt... when confronted with suggestions of having an overpayment, often from up to seven years ago, the least literate, least powerful, and most vulnerable alleged debtors will simply throw up their hands...”, Professor Carney AO

The response to the article was to state that the process was reasonable¹⁶ and the esteemed law professor was mistaken¹⁷ [14, p.271] in saying that the onus of proof had been transferred to the recipient [14, p.269].

In 2019, two major legal cases occurred in the Federal Court of Australia¹⁸¹⁹. The first case, *Masterton vs DHS*¹⁸, would be sidestepped by the owners by simply reducing the debt to zero and repaying the recipient. In the second case, *Amato vs the Commonwealth of Australia*²⁰, a difference was that the recipient had already been garnished from their tax return to recover part of their debt [14,

¹⁵ rc-CTH.3007.0004.4949_R

¹⁶ rc-CTH.3007.0008.5900

¹⁷ rc-CTH.4750.0003.3228_R,

“A former member of the AAT - what a lofty authority”

¹⁸ rc-VLA.9999.0001.0001

¹⁹ rc-VLA.9999.0001.0075_R

²⁰ rc-VLA.9999.0001.0075_R

p.298]. However, for this case, the extinguishment of the debt did not stop the proceedings as their claim for interest had not been handled²¹.

In parallel, the agents received legal advice noting that if the case would proceed, it would be unfavourable for the Scheme²²²³. The opinion would later conclude that recipients had no duty to act on the discrepancy notices, and in the event that they didn't respond, agents should have used their compulsory power to make inquiries²⁴. The effect of this opinion made clear that the Scheme in all iterations had been unlawfully raising debts against recipients [14, p.305]. It wouldn't be until 18th November 2019 that the Scheme would stop using the averaging approach, almost two months after the opinion was received.

By May of 2020, recipients would be refunded for all repayments made on debts raised using averaging²⁵. The Scheme was closed altogether on 30 June 2020. The commission clarifies the importance of the court cases as [14, p.317]:

"[They] succeeded in exposing the illegality of [the Scheme] where other possible forms of check on the scheme – the AAT, the Commonwealth Ombudsman, the sound advice of some lawyers – did not or could not", Royal Commission into the Robodebt Scheme

At the end of 2019, the Senate referred an inquiry into the Scheme to the Senate Community Affairs References Committee [22]. In May 2022, the inquiry would publish its final report [22] with one recommendation:

"...that the Commonwealth Government establishes a Royal Commission into the [Scheme]", Commonwealth of Australia 2022

The *Royal Commission into the Robodebt Scheme* [14] exercised powers forcing entities to produce evidence, producing over 958,000 documents. However, not all documents produced were made publicly available. Those that were, often had some redaction applied. In total 10,933 documents were made public through the commission²⁶. The commission held four separate hearing blocks between October 2022 and March 2023, calling 115 witnesses to discuss the Scheme; video and transcripts of these hearings are publicly available²⁷.

5 The Scheme

This section synthesises the development of the Scheme across two stages. We first consider the manual process leading to the generation of a debt for a recipient, followed by the first iteration of the automated version for the Scheme. We synthesise process documentation for these phases and use document analysis to inductively derive key problems faced by the Scheme. These problems are positioned into pulling and pushing forces over tensions for the Scheme [25,24].

²¹ rc-CTH.3004.0014.3119_R ²² rc-CTH.3007.0011.6407_R ²³ rc-CTH.3007.0011.6408_R,
para.A2 ²⁴ rc-CTH.2013.0012.5070_R, Answer 3, Answer 4

²⁵ rc-DSS.5015.0001.0048_R ²⁶ robodebt.royalcommission.gov.au/document-library

²⁷ robodebt.royalcommission.gov.au/hearings

5.1 Manual Process

This section outlines the manual processing of discrepancies between fuzzy data [14, ch.16.5.3] derived from taxation information and reported income to the agents. The manual process for handling discrepancies is shown in Fig. 1. This BPMN model was derived from procured evidence from Dr Elea Wurth, Deloitte²⁸ and further synthesised using the commission’s findings [14]. The process model describes five phases that could occur while handling a discrepancy for a recipient: *initial outreach*, optionally an *extended outreach*, *confirmation*, optionally *third party collection*, and finally *entitlement assessment*.

In the *initial outreach* phase, a compliance officer would generate a notice from the intervention case data and post/email the notice to the recipient. The officer may attempt to contact the recipient before sending a notice if the recipient meets vulnerability criteria. If the recipient makes contact, the process moves to *confirmation*. Otherwise, the process moves to *extended outreach*. During the *extended outreach* phase, the officer makes several attempts to contact the recipient, waiting up to 35 days across several races. If contact is made, the process moves to *confirmation*; otherwise, it moves to *third party collection*.

The *confirmation* phase is a communication between agents and the recipient to discuss information that may influence the assessment of the discrepancy. A period of waiting may occur in this phase while a race between documents being provided by the recipient resolves. If the recipient is unable to provide acceptable documentation for the discrepancy, the process moves to *third party collection*. *Third party collection* consists of a series of races between collecting information from entities about the recipient and a long waiting period for a response. Otherwise, it moves to *entitlement assessment*, where the discrepancy is considered in light of additional information to determine if a debt should be raised.

Problems The nature of the problems faced by the implementation of the scheme under this design was somewhat unorthodox in comparison to a typical case in business process management. The first is that the process does not have an arrival rate of process instances waiting to be enacted, instead large batches of instances are added to the backlog after receiving updated fuzzy profiles for recipients. For example, by October 2014, there were 866,857 unique recipients with a discrepancy and a total of 1,080,028 discrepancies²⁹³⁰ [14, pp.39] in the backlog from the taxation matching in previous years. This aspect is unusual as process instances are typically received in the form of say, 5 instances a day or once a week, meaning analysts focus on improving process time to be faster than the arrival rate. However, in this case, the large batching of awaiting discrepancies made manual processing significantly inefficient in handling the backlog. We synthesise these issues into a pulling force, *automation* over the tension for transparency in later iterations.

²⁸ rc-RBD.9999.0001.0485

²⁹ rc-CTH.3000.0001.8417

³⁰ rc-CTH.3000.0001.8680_R

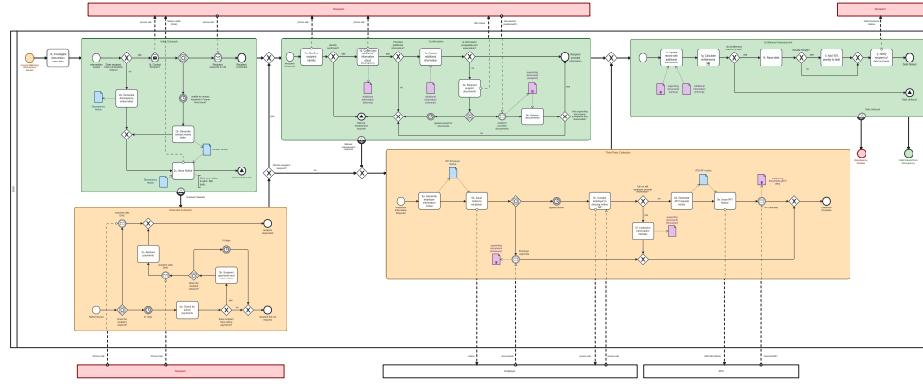


Fig. 1. The BPMN model for the process before the implementation of the robodebt. Green expanded sub-processes highlight the non-optimal phases, gold sub-processes highlight optional phases.

The second problem was the processing time was on average 186 days per discrepancy³¹, mainly due to several phases, *initial outreach*, *extended outreach* and *third party collection*, due to races with long deadlines with external entities. These waiting periods can be seen in Fig. 1 when we have a race between a deadline and a response from either a recipient or a third party. Due to the long processing time, the agents opted to enact discrepancies which were high risk, or when a large discrepancy was identified, resulting in 20,000 discrepancies being processed each year out of the 1,080,028 in the backlog³². However, in this case, the large batching of awaiting discrepancies made manual processing significantly inefficient in handling the backlog. We synthesise a pulling force where *owners & agents* needed to increase processing capacity. This force would interact with the tensions of transparency and generating debts.

The third problem was the assessment and processing of information related to a discrepancy required an expert agent to apply complex business rules. This problem meant the process could only be scaled up by hiring a larger resource pool. Estimates were that over 1,000 new employees would need to be hired and trained over the coming three years to handle incoming backlogs³³. Ultimately, this ended up happening³⁴ at great cost. We synthesise a pulling force, *Expertise*, related to this problem for the scheme over the tension of generating debt.

These problems are not unique to the scheme and, in fact, are common problems faced by any business, regardless of domain. Scaling up process capacity is not a trivial task for any analyst, but is ideal for a process mindset to handle.

5.2 The Online Compliance Intervention Process

This section outlines the first implementation of the Scheme for processing discrepancies between income reported by recipients and taxation income iden-

³¹ rc-CTH.3023.0002.0503

³² rc-CTH.3001.0030.3987_R

³³ rc-CTH.3053.0044.0425_R

³⁴ rc-CTH.3004.0009.0076

tified by an internal assessment by agents, known as the “Online Compliance Intervention” process (OCI). The OCI process was *officially* launched after completing a pilot program³⁵, a manual mirroring program and a staging program.

In Fig. 2 shows our synthesis of the OCI process for the (staging) version that was “launched” at the end of September 2016 and operated unchanged until February 2017. Once again, the Deloitte process maps were used as a base³⁶ model and further information from the commission was used to annotate our process model [14, Chapters 5-6]³⁷³⁸³⁹. We synthesised six phases: *Issue Notice*, *Intervention*, *Assessment*, and optionally *Update*, *Disagreement*, and *Override*.

The process starts with *initial notice*, where a compliance officer issues a notice to a recipient and raises an intervention activity in the OCI system, moving to *intervention*. Importantly, no communication with the recipient occurs as the notice is sent to the last known contact address for the recipient. The intervention starts a race between its resolution and a deadline of 21 days.

The *intervention* phase is a race between the deadline and the recipient interacting with the system to provide further information about the discrepancy. If the recipient interacts, they have three options: accept the information, supply further information, or deny the employer information. The latter two require the recipient to provide documents through the system to prove their disagreements.

If the recipient supplies further information, the process moves to the *update* phase where the information is processed in a somewhat similar fashion to the *confirmation* phase in Sec. 5.1, after which moves to *assessment*. If the recipient denies the employer, the process moves to the *disagreement* phase where a case officer processes the claim, either reissuing the intervention or moving to *assessment*. In all other cases, the process moves to *assessment*. The *assessment* phase consists of an automated evaluation, which uses the averaging approach in 94.9% of cases where a debt may be raised. However, many IT issues⁴⁰⁴¹ were present in the system at the time, meaning that a manual override may occur to complete the evaluation. After which, a raised debt usually includes an additional 10% fee and a debt advice notice is sent to the recipient. Otherwise, if no debt is raised, no further interaction with the recipient occurs.

Problems In response to the lengthy processing time of the scheme in Sec. 5.1, owners and agents sought ways to reduce the needed actions before a debt was raised. Their conclusion was to simply do *less work* and at a strategic level, change their business model to place the full onus of “correcting” the discrepancy on the recipient⁴². Going as far as creating a script that compliance officer should follow⁴³, which reinforced that no additional work should be undertaken *unless* explicitly asked by the recipient. This strict handling of behaviour created a tension over *whose* expertise should be emphasised while generating debts. The change in operation was in the face of many experienced compliance officers noting that information in the discrepancy was prone to erroneous data and

³⁵ rc-CTH.9999.0001.0033_R, para.1.5,2.1,3.1

³⁶ rc-RBD.9999.0001.0486

³⁷ rc-CTH.3715.0002.6783_R, frequencies

³⁸ rc-CTH.3715.0002.4820, guide

³⁹ rc-RBD.9999.0001.0451_R, 40 rc-RBD.9999.0001.0486

⁴¹ rc-CTH.3018.0020.8802

⁴² rc-CTH.3715.0001.4283_R, 43 rc-CTH.3001.0035.3159_R

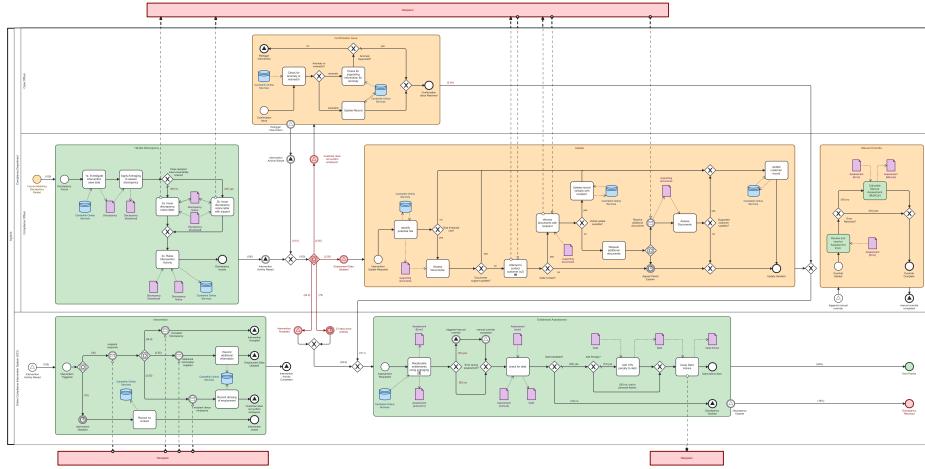


Fig. 2. The BPMN model for the process after OCI implementation, initiating the robodebt scheme.

duplication of income, leading to larger and incorrect debts⁴³. Creating tensions between management and frontline operators, one compliance officer expressed their lived experience at the time as⁴³ (emphasis not added):

*"I know that not all our [recipients] have the capacity to engage in a meaningful discussion about what their circumstances were and what they have provided to [agents]... There will be [recipients] who will repay debts that they should never have had... we are being asked to ignore evidence that no debt exists and to 'collude' in raising a debt when none should exist. **That is, we are being asked to commit a fraudulent act**',*

an agent with 30 years of expertise, Jan 2016

We synthesise several forces from this problem: a pushing force, *Compliance Officers*; a pulling force, *Strategic Decisions*; and a pulling force, *Expertise*; these forces melded over a tension on generating debts.

The change of operation and its impact on the behaviour of the process is also quite pronounced in terms of communication to the recipient in Fig. 2. The change in onus on the recipient can be seen in the fact that 70% of recipients were not interacting with the system at all. Management pushed for the dubious assumption that these recipients had simply accepted the discrepancy, not the more likely case that they were unaware of the letter or misunderstood the hidden meanings behind them [14, ch.5.2]. This decision created tensions over the surrounding culture handling the Scheme and over these one-sided assumptions chosen to suit the mass generation of debt. If our modelling truly reflects the scheme of the time, 94.9% of instances never interacted with a compliance officer, in contrast with the nearly 0% in the pre-scheme process. Unsurprisingly, the reduced interaction meant processing time was now 22 days⁴⁴, compared to 186

⁴⁴ rc-CTH.3023.0002.8902_R

days previously. The short-term thinking, coupled with the dubious assumption of acceptance, generated short-term value but fed into long-term issues.

One might jump to the conclusion that the implementation of the scheme was unthoughtful. We argue against this notion of unthoughtfulness based on the following information. Before launching the OCI, several implementation phases were conducted, and in each of these phases, they considered several metrics for "success"⁴⁵. These are not the acts of the unthoughtful, but did they rush over many problems? Absolutely [14, p.136]. Several forces were permeating from the top-level (i.e. politicians) down to the owners and their culture issues, which led to hyper-toxic culture [14, p.243], and from agents needing to show their excellence for career progression [14, chp.23]. These exogenous forces [18] had only one place to go under the constrained process mindset, *forward towards the goal*; as such, these forces often turned heads away from underlying problems. We synthesise these exogenous forces into a pulling force for the *Ministers* influences over public servants, adding to the tension for generating debts.

6 Discussion

This study synthesises secondary evidence to understand how the process mindset failed the owners and agents of a process improvement initiative for a Scheme within the Australian public service. Using publicly available data, we elucidate insights into the prior and post-states of the Scheme. We also identify the tensions and push and pull factors between actors of the Scheme.

Our conceptual model (Fig. 3) identifies transparency in operational behaviour and the generation of debts as the key tension areas.

The first tension was over the **transparent operationalisation** of the Scheme. The pushing away forces consist of recipients and independent bodies, such as the senate inquiries [22] or AAT decisions [30], which questioned how these debts came to be and why clear errors were not addressed. This tension is crystallised in lived experiences describing the sudden appearance of debts in their lives, as 70% did not respond to the so-called "call-to-action" letters. The pulling forces continued on with their debt collection regardless of these experiences, and the owners and agents saw their non-response as an informed decision. In result, the overall acceptance was heavily impacted, the Scheme was viewed negatively by the general public, causing the agents and owners to defend their choices. They defended their operationalisation by influencing the ombudsman report in 2017 to clear them of any wrong doing.

The second tension was over the **automated generation of debts**. Concerns were raised on the validity of material evidence, change in business model and legality of the averaging approach used to generate debts at a mass scale. Ministers influenced owners and agents to increase processing capability to crack down on welfare frauds. The owners and agents insisted that averaging was a standard calculation measure for debts. This was one of the many strategic decisions to reduce the burden of the business model. Relying on their domain expertise, they justified the legal and business ramifications of the Scheme.

⁴⁵ rc-CTH.3715.0002.6783_R

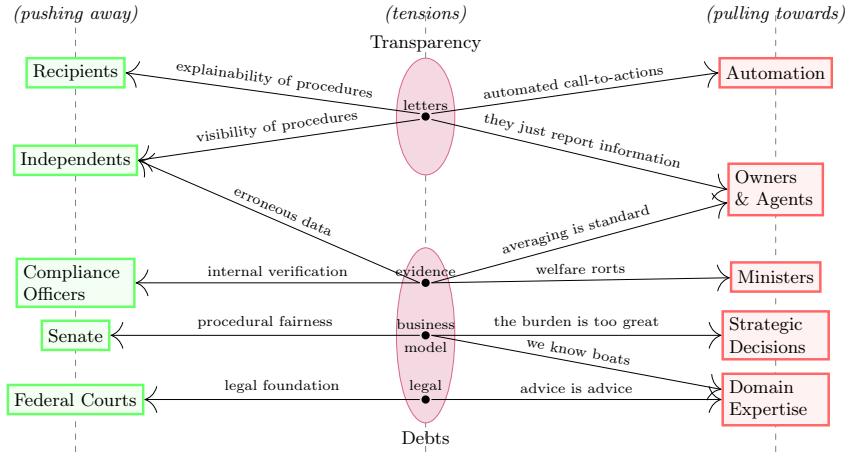


Fig. 3. The transparency and debt generation tensions within the Scheme.

The management of the agents and owners used the tensions to twist outcomes towards generating perceived value about the Scheme in media and to presumptuously generate debts. Recall that the Scheme’s goal was to generate debt from discrepancies; inducing a lot of short-term thinking without understanding the growing long-term consequences. From our analysis, it is clear that they forced themselves into a constrained process mindset of finding success wherever possible. As they were locked into faithfully implementing and operationalising policy without any recourse to make the decision to stop the scheme.

We posit that a constrained process mindset, albeit agents and owners could do little about this, could quickly be replaced. When process improvement projects are placed under such a constrained mindset, the only lever to stop the project tends to be from the outside. Agents and owners must create ways for reality to pull that lever with some amount of authority. Otherwise, the hunt for “savings” will be unstoppable and affect another 526,000 Australians⁴⁶ [14]. Public process documentation, as demonstrated in Sec. 5, may have enlightened reality in ways that could not be misdirected or dismissed in a public discourse.

7 Conclusion

Scaling processing capacity despite scarce resources will continue to be a pain-point for public services. Our exploratory case study unfolds the Scheme to investigate how owners and agents failed to achieve desired improvement outcomes despite having a process mindset. We presented a chronology of the Scheme and its related implementation challenges, based on publicly available data. Our findings identify two tensions influencing the adoption and continuation of the scheme: a tension over its transparency and another on the generation

⁴⁶ rc-DSS.9999.0001.0051_R

of debt. These tensions were significant in the Scheme's failure. We posit that the constrained process mindset created a myopic vision to continue the project, whereby tensions were resolved in favour of the continuation, feeding into long-term problems. To ensure process owners do not fall into constrained process mindsets, meaningful transparency into process documentation must be introduced to prevent similar failures.

Our study holds some limitations. It relies on sources not collected for our purpose of investigation. Our findings are bounded by the scope, bias and limitations of the data, such as personal views and interview codes. We acknowledge that we are limited by selection and researcher bias in the code selection and data analysis. In future work we will expand the scope to cover all iterations of the Scheme and further improve our initial framework.

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