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### Demystifying the Role of the Steward in Joined-Up Government Services Delivery

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#### **Abstract**

This study seeks to enhance understanding regarding the public sector stewardship of integrated services delivery initiatives in joined-up digital government, with a particular focus on understanding the nature of the steward's role in practice. This specifically includes the skills required of those performing stewardship, and the key challenges stewards faced. Eight interviews supplemented by the use of reflective journals were completed with stewards of the New Zealand public sector to understand their practice and perception of the steward concept. Three tiers of stewardship practice were identified: (1) Internal Stewardship, (2) Inter-Agency Stewardship, and (3) Stewardship as a Governance Model. Each tier exhibited unique challenges. Participants overcame these challenges through performing complementary sub-roles: Navigator and Storyteller. Understanding the operational challenges of the stewardship tiers and how the stewardship roles were enacted has implications for both practitioners and researchers.

#### 1. Introduction

The theme of Joined Up Government (JUG) in conjunction with all-of-government transformation has developed impetus in recent years as many governments seek to achieve horizontal and vertical coordination in thinking and action [28]; [10]. However complexities of achieving JUG in practice are becoming apparent, particularly through conflicting public administration values, the challenges of balancing short and long-term priorities, and differing ways of delivering joined-up projects in a "Digital Age" [6]; [18]; [3]. Prior studies have identified nine kinds of constraints affecting government integration and interoperability: constitutional and/or legal, jurisdictional, organisational, collaborative,

informational, managerial, cost, technological, and performance [30].

With substantial organisational and cultural challenges remaining to achieving effective JUG [15]. the principles of public sector stewardship, notably the primacy of citizen interests [2], are seen as critical for driving change in the JUG context. According to stewardship theory [11] behaviour should be proorganisational and collectivistic, achieving higher utility by serving a group (organisation/citizen/population), instead of satisfying personal goals [27]. Our interest in this study is in understanding the active stewardship work that is performed by individual stewards in the context of JUG. Stewards in this context, as they are defined above, clearly differ from the role of a business owner, or manager, through these ideas of fulfilling collectivistic priorities, taking into account interests of diverse stakeholder groups, as opposed to fulfilling or satisfying personal goals [6]; [11]; [27]. This study aims to develop a better understanding of the role of the steward in digital government practice, relating to the delivery of digital services in JUG [37]; [39].

The setting for this study is the New Zealand (NZ) public sector. The NZ public sector is undergoing a dramatic transformation in digital service delivery, creating a challenging operating environment for public servants. A key aspect to this transformation is the reorganisation of the public sector to reflect JUG principles, with horizontal coordination to deliver system-wide digital solutions. The Government ICT Strategy has mandated a focus to "put citizens and businesses at the centre of digital services" [13].

The perceived importance of stewardship to government reform in this context was vividly outlined in a 2013 speech by Gabriel Makhlouf, chief executive of New Zealand's Treasury, who stated, "The public service is changing the way it does business to a degree not seen since the 1980s...We're designing services around what people and businesses need. We're lifting efficiency and capability... and we're trying to strengthen leadership within and across the system – not just to change and raise performance, but to embed a

greater level of stewardship needed to position us for the medium and long-term challenges ahead" [22]. In recognition of the challenges involved in JUG, amendments to the NZ State Sector Act have highlighted the need to foster a culture of stewardship across the sector [32]. Stewardship is described as being necessary at all levels; agency, sector and system level, and being inclusive of failure as a means to learn and improve. Furthermore, this transformation has been described as being a "knock down walls, rewire and put in new plumbing" transformation [22].

With stewardship having taken on a critical emphasis, there is a need for research to understand how the abstract stewardship expectations prescribed in governmental legislation and guidelines are enacted and experienced on the part of individuals who are engaged in stewardship. There is a lack of understanding of what stewardship-as-practice entails in terms of the real-life experiences of public servants collaborating on interagency IT projects. This study seeks to contribute to this gap. The research questions were, (a) what are the key operational challenges of stewardship in relationship to digital government? And (b) what are the essential skills of a steward operating in the digital government sector? We used qualitative methods to explore this gap. After summarising the background literature, the paper outlines the study method, then reports on findings and their implications.

#### 2. Literature review

The concept of JUG views governments as being horizontally and vertically coordinated in their planning and action [28]; [7]. Central to achieving this high level of cross and intra-agency coordination is digital government, as digital technologies are now being viewed not only as a driver of public sector reform, but also an enabler [19]. In this context, we see a transformation of government from a previous model of public administration, New Public Management (NPM), which placed value on highly autonomous agencies [25]; [12], to the JUG model, which combined with E-Government and digital government concepts, seeks to integrate agencies and services where possible, to increase the accessibility of government to citizens [14]. Examples of this can be seen in many public sector systems across the world, most prominently in the, United Kingdom (UK), Canada, Australia and New Zealand (NZ) [7]. In doing so, key benefits of JUG have been realised such as, improved quality of service, improved efficiency, as well as improved citizen orientation [25], further fueling adoption of the concept. These developments have built a foundational understanding of "digital age" JUG practice, in practice

and academia, as well as the motivations and barriers of implementing joined-up solutions.

Although understanding of JUG practice has developed significantly, there are still a number of significant challenges to its effective practice that are yet to be resolved. These challenges have been primarily fueled by JUG system barriers. The JUG literature identifies several key barriers such as, complexity of inter-agency collaboration [4], lack of Information Technology (IT) support [39], and misalignment of objectives between agencies [7]. In an evidence-based review of what works in JUG, it was found that there is a critical need for strong leaders at strategic, managerial, and local levels to make JUG successful [5]. Successful initiatives had leaders who created a supportive, trusting culture conducive to problem solving, where staff are free to find work-arounds [5].

Stewardship theory in the public sector has come to the fore in recent years. One conceptual area that has been well explored is information stewardship, which explores how organisations govern information assets [17]. A further area of stewardship theory is in public policy literature, particularly in the development of policy [29]; [16], largely out of the UK and the JUG initiative 'Big Society' [16]. In this research, we are concerned with stewardship during the implementation of digital government initiatives, specifically instances of complex cross sector technology change. Statements from central NZ Government emphasise the potential importance of this line of work, yet there is a scarcity of research into how this kind of stewardship work is actually performed.

In NZ, the passing of the State Sector Amendment Act (2013) created a new drive to promote a culture of stewardship across the State services, aiming to link regulatory regimes with best practice [34]. Although prior studies [23]; [17] have recognised and considered the role of stewardship in the management of information assets and in public policy development, the government's emphasis on stewardship as being key to the operationalisation of public policy - actively applying stewardship to the translation and realisation of policy in practice – was new. With the Amendment Act, an accompanying release document noted that "that significant regulatory failures [had provided a reminder that]... how well government policy is translated into workable legislation, and how well regulatory regimes are monitored, implemented, enforced and maintained is just as important for regulatory performance as the policy design." [34]. As evidence of system stewardship, sector leaders would need to demonstrate success by (1) collectively owing system performance and reform, (2) focusing on building strong, innovative, customer-focused public agencies, and (3) collaborating across agency boundaries, with communities and the sector, to deliver common results for a better New Zealand [33]. These expectations are "a starting point which signals the direction...to improve regulatory [34]. Subsequently, the management in NZ" government published a set of agency-level guidelines summarising "general rules of thumb about what makes a good regulatory system and what is good stewardship practice for a regulatory agency" [36]. Among the prescribed expectations, agencies are expected to "adopt a whole-of-system view, and a proactive, collaborative approach to the care of the regulatory system(s) within which they work". This includes the need to develop relationships with other agencies to share intelligence and co-ordinate activities to help manage gaps or overlaps, minimize the burden on regulated parties, and maximize the use of scarce resources [11].

### 3. Study Setting and Method

This research required an approach that enabled a greater understanding of the real-life experiences of public servants collaborating on inter-agency IT transformation projects. Accordingly this study employed a qualitative research method that included a set of eight semi-structured interviews and the use of a reflective journal by the same participants. Participants were gathered with assistance from the NZ Government Chief Information Officer (GCIO), who suggested appropriate stewards and project staff that had worked under a stewardship framework. Stewards of the NZ public sector are individuals who have been appointed to fulfil the steward role, in addition to their official business role or title, which would typically be in a tier three or four managerial position. All participants were involved implementing service transformation, to a model of integrated services. This meant that participants were typically involved in directing the integration of diverse information systems, operational delivery models, and business processes.

A qualitative method is best suited to extracting opinions or soft data, given the requirement of extracting experiences a qualitative method is a natural fit. Interpretivist research accepts the fact that multiple realities exist, as a result of human perception [24], which means that interview data can then be accordingly analysed to understand why these differences exist, without the strict boundaries of confirming a singular reality that exists in positivistic research [24]. Adopting this philosophy was crucial to understanding the development of a steward's skill set. The use of semi-structured interviews enabled flexibility during the interview process [24], so that if an interesting perspective or experience arose questions could be

altered to explore it in more depth. Interview length in this study ranged between 45 and 90 minutes.

Following these qualitative interviews, participants were invited to complete a journal of reflective practice. Willing participants were asked to reflect on personal experiences of challenges in their work as a steward in a participant research diary [20]. Further, participants were asked to provide context for the situation, exploration of the challenge that they faced and how they overcame it using stewardship tools or skills. This method was adopted as a means of enriching interview data through the provision of practical examples, and to give an understanding of how these concepts interact in each participant's perspective.

Analysis of the interview and journal data was carried out using inductive, thematic coding to draw out common themes. During this stage it was important to identify not only challenges and barriers facing stewards, but also the stewardship skills being used that assisted in overcoming those challenges. A major challenge was analysing the data and exploring it in an area of knowledge that to this point had been largely unexplored. This round of coding informed further iterations of coding that organised data into meaningful categories for analysis. What became clear at this stage of coding was that a number of the themes and codes were occurring at distinct organisational and sector levels. This led to the organisation of codes and themes into the operational tiers explored in the research framework of this study. Member checks and peer reviews were used to ensure the rigour of data collection and analysis. This ensured that the analysis was being completed rigorously and logically, and that the findings were accurate and reasonable, based on the interview data.

#### 4. Results

Three different operating tiers were identified in the stewardship practice reported by study participants: (1) Internal (intra-agency) Stewardship, (2) Inter-Agency Stewardship and (3) Stewardship as a Governance Model. Each tier had unique challenges and a different metric of stewardship success. Further, the analysis of data identified two sub-roles that were performed by the participants: *steward-as-storyteller* and *steward-as-navigator*. The skills necessary for the storyteller role included influencing, and selling the vision. For the steward-as-navigator role, the skills of sense making, negotiating, championing the 'grand' vision and innovating were required. These findings are discussed in depth below.

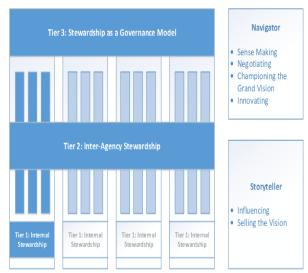


Figure 1: Research Framework

### 4.1. Stewardship Operating Tiers

4.1.1. Stewardship Operating Tier 1: Internal (Intraagency) Stewardship. This first stewardship operating environment reported by all participants, involved working within one's own agency and is referred to in this study as internal (intra-agency) stewardship. Stewardship challenges in this tier surfaced as a result of pre-existing internal agency silos, where departments would prioritise departmental objectives before those of the organisation or perceived citizen need. Participants recognised that projects operated internally, still required the application of the stewardship lens. One participant noted, "We're quite a big ministry so it's not as simple as - 'you do this'. With all our different internal functions, they can even have different priorities and motivations, which throws up internal stewardship challenges (P6)." This clearly highlights the need for agencies to practice stewardship internally in order to balance those differing priorities and motivations. Furthermore, this environment had the unique quality of being more than just applicable to those carrying the title of steward and in fact, applied much more broadly to members of project teams involved in the delivery of quality outcomes to citizens, or alternatively, contributing to an all of government vision.

A key challenge of the internal stewardship tier was conflicting priorities. Due to the nature of attempting to achieve joined-up solutions through the avenue of interagency projects, the strategic priorities that agencies are used to protecting have become increasingly intertwined creating tensions and challenges. As a participant recalled, regarding these strategic priorities, "the challenge is resolving the differences, a steward may agree that yes this is a priority area but going back and getting that lined up in their organisations is a challenge

(P4)." What this underscores is the need for willingness on the part of the steward to set this as a priority for their organisation, but how challenging it is get that approval or adjust current priorities to accommodate for this change. Given the large-scale transformational change in progress at many of the agencies this has meant that an agency's ability to reallocate resources has been curtailed, which has in turn affected a steward's ability to do so.

4.1.2. Stewardship Operating Tier 2: Inter-Agency Stewardship. The tier two stewardship environment focused on joined-up solutions. Accordingly, this tier of steward work spanned agencies and sought to ensure that agency priorities were effectively balanced and that the system vision was communicated to the project team. Traditionally, public sector organisations have fulfilled service offerings in a siloed manner, however, with policy initiatives such as Better Public Services in NZ and JUG more broadly, this has created a drive for agencies to deliver services in a more joined-up fashion has made the role of the steward vital. This is due to the unique quality of stewardship and stewards rising above agency biases or politics and instead focusing on communicating a vision for the future. One participant noted, "When it's an interagency situation you can get stuck into patch protection and thinking yours is the most important and I think that mind-set occurs because it's not a model we're used to working under (P6)." This draws attention to the relatively unexplored nature of stewardship in the NZ public sector, but also alludes to challenges or tensions of making a transition towards inter-agency stewardship.

The key challenge identified in this tier was the complexity of interagency collaboration. This was experienced by many of the participants operating in this stewardship tier and related to, not only clarity of boundary spanning, but also the multiplicity of boundaries to span. One participant alluded to this when they said, "The main challenge is understanding, and having others understand when I'm wearing the different hats, because it's cross agency and because it's a product which doesn't have an owner in the traditional sense, I need to be clear with myself and with others what role I am fulfilling at that time (P4)." This articulates the multiplicity of roles being fulfilled by this one steward, as well as the requirement of them fulfilling those roles in the inter-agency stewardship environment.

**4.1.3. Stewardship Operating Tier 3: Stewardship as a model of Governance.** The tier three stewardship environment had a key focus on the application of stewardship as a model of governance. In this tier stewards operated across the sector in a more strategic

advisory and guidance capacity, trying to maintain separation between themselves and the inter-agency projects they govern. Furthermore, stewards at this level looked to make sense of information passed up to them, in order to deliver innovative solutions, or create powerful visions to guide governed projects. When asked about accountability for stewards, one participant noted, "I think in terms of what we deliver and should deliver, how does it sit against what have been the visions for the principals we've set out and are we managing to achieve that... Stewards, to me, sit more to those principles that we've agreed we would follow (P7)." These ideas neatly capture the strategic view that stewards at this tier must bring to be successful, thus reinforcing that need to maintain separation between this stewardship governance body and the service delivery mechanism.

The key challenge of this tier was conflicting governance models. This came as a result of changes in models of governance and accountability. Traditional models of government governance and accountability have been vertical, meaning that all benefits and cost savings signed off can be traced all the way up to cabinet. whereas the stewardship model of governance and accountability is much more horizontally focused. This is particularly so in the case of inter-agency projects, where agencies were expected take on a model of collective responsibility for project successes and losses. One participant noted, "There are challenges in terms of how do stewardship groups fit with other governance, how does it all fit together in terms of relative lines of accountability and who is responsible for what, where would the actual accountability sit (P7)." This idea was reinforced through the difficulty of realising benefits across agency boundaries. For stewards operating in this tier, it is not only important to understand that tensions exist reagrding governance and accountabilities, but importantly how to best mitigate those tensions when they arise.

#### 4.2. Sub-roles of the Steward

**4.2.1. Steward-as-Storyteller**. The storyteller role is defined in this study, as a steward communicating stories about a JUG-related vision, so as to build relationships and/or influence people. This role was performed by participants in both the tier one (intraagency) and the tier two (inter-agency) environments. Two key skills were associated with it: influencing and selling the vision. The skill of influencing, importantly enabled stewards to leverage their existing reputation, credibility and connections to assist projects in achieving their goals. As one participant noted "I think the secret of [being a] steward is having that personal commitment and drive to make things happen, which you're only weapon here is influence and credibility and

the public good of the programme (P1)." Ultimately this reflects the value of experience in the industry, as well as maintaining credibility and building connections, to allow a steward's influence to drive projects forward.

The final skill of selling the vision was consistently reported across participant's experiences. Ultimately this skill required stewards to perform their role, removed from organisational biases, in order to maintain impartiality. Stewards would use the skill of selling the vision as a means of refocusing agencies and project members behind the core principles or goals of the project. This maybe through the means of anecdotal references, or by helping people see the vision on a personal level. One participant noted this when they said, "If I want to sell something to you as a stakeholder as, 'I really want you to engage Better Public Services Result area 10', where as if I told you that I want you and your partner to have a really good experience, be aware of all your entitlements and key dates regardless of language barriers, then that's a much better sell (P1)." Being able sell agencies and project members on joinedup services initiatives was a challenge, particularly when they did not carry strong benefits in each agency silo. This meant that communicating this vision through the means that evoked a more personal reaction were more effective.

**4.2.2. Steward-as-navigator** The navigator role is defined in this study, as a steward processing information from a diverse range stakeholders, and creating an innovative strategy for delivering on joined-up digital government. This role was reported as being performed in the tier 3 operating environment. It involved four skills: sense-making, negotiating, vision championing, and innovating.

The skill of sense-making was described by participants, as being able to filter relevant information effectively and efficiently. Given the nature of stewardship operating in a strategic sense, a lot of information was relayed upwards for advice and guidance. Furthermore this skill relied on a steward's communication skills, as it was not only being able to quickly digest complex information, but also then relaying that clearly back to the relevant stakeholders. One participant noted regarding sense making skills, "Having that strong customer focus or connection with the broader stakeholders is important, quite thick skinned and determined and a little bit single minded ... some people get a little bit lost in detail or side issues (P4)." Once sense had been made of that information, stewards would need to effectively and clearly relay that message back to key stakeholders.

Another skill required of the steward-as-navigator was negotiating, which encompassed applying agility and flexibility in the brokering of interests. What is important to note is that all participants noted a sense of boundaries to negotiation. This was in the sense that there were a set of principles for a project that could not be brokered or negotiated, but the other could be flexed and changed if the change presented clear benefits for end users of the service. One participant recalled, "I think that flexibility is essential. If any steward was to take a really hard line on something that was different to another in the group, I think there would be problems. We didn't have that: our steward would sit back and ponder conversation and only reign it in when absolutely necessary (P5)." The participant aptly notes that stewards would let conversation run, providing it was constructive and within those boundaries. However, if those boundaries were crossed, stewards would be able to bring discussion back to a space where requirements could be negotiated. Accordingly, the skill of Negotiating, clearly requires a certain amount of restraint as well as control of the room, making this an important but challenging skill to practice.

Championing the Grand Vision was mentioned in depth by all participants and operated in this sense on a more strategic level. One participant stated, "A steward needs to and must own the mission on behalf of the consumer or progress, whereas the business owner is more interested in protecting their patch or the agency's interests rather than the cross-agency space. I think it's wider than just a cross agency thing, particularly with government (P1)." What this quote alludes to is a level of stewardship that operates above the cross-agency level. It highlights the need for oversight in this context, and underscores the importance of not only creating a vision that is tightly integrated strategically, but also transcends traditional ministry boundaries.

The skill of innovating was referred to by a number of participants as the ability to have a risk appetite, as well as a willingness to be open minded and question the accepted practices. One participant said, "If a steward is more interested in maintaining the status quo then it is very difficult to get them involved and engaged with the progress that is being made in other areas and adopting new strategies that have been successful elsewhere (P2)." This idea demonstrates the importance of this skill as a steward. The use of the words involved and engaged is telling, as stewards have to be active in the use of the innovator skill in order to extract the greatest value from it. Being a passive steward would result in them not fulfilling the role to its full potential, thus highlighting the importance of this skill.

#### 5. Discussion

# **5.1.** Key operational challenges of Stewardship in Digital Government

The scope of internal (intra-agency) stewardship work was the narrowest of the three operating tiers. Despite the narrow scope, participants noted this as the area where stewardship was most broadly applied. What this underscores is successful efforts from central government to communicate the value of the concept to stewards, and in turn, being able to effectively communicate this to project teams. Being able to stress the value of stewardships' application at levels below that of those titled steward reinforces the steward-asstoryteller role that applied in this tier. This clearly evidences the skill of being able to sell the vision being constructed at the governance level at an individual agency level. Furthermore, as the nature of joining up government is a transformational process, many agencies are still in the process of overcoming internal departmental silos. Accordingly these departments have objectives and goals that may conflict with each other and require the work of a steward to overcome these internal tensions. These ideas of internal departmentalism discovered as findings in this research, are a feature of the existing literature, which also credits the process of transition from NPM to JUG as the core driver [29]. Interestingly however, tier one constituted a new area of stewardship operation, as the existing literature in the field highlights the value of stewardship at higher levels of organisations, but not as a general purpose lens. This does neglect the value of its application as a lens to be applied in a more operational setting, as was observed in this study.

The tier two inter-agency stewardship environment looked at how stewardship operated in relation to, in particular, the All of Government style projects being undertaken currently. In this tier, stewards would operate, not only in an inter-agency boundary spanning sense, but also as a boundary spanner between tier two and three. Understanding that the stewards that operated in tier two, also had a role to play in tier three highlighted the challenging nature of this role, for both the stewards and those operating around them. The literature explores these ideas through looking at the multiplicity of boundary spanning with emphasis on the multiple contexts that have to be bridged in the process [1]; [21]. This was explored in the data through the noting of the difficulty that a steward and their colleagues had in understanding which role they were fulfilling, as a result of the boundary spanning nature of the role (P4). Moreover, in this context stewardship was viewed as being an essential enabler of inter-agency IT projects [31]. Importantly too the extant literature confirms a motivation of stewardship being encouraging joined-up initiatives [21]; [31]. This operating tier, whilst being highly rewarding for all stewards, as they could see the value of this style of working (P6, P3),

proved challenging due to the untested nature of the concept in this context.

Stewardship as a governance model encapsulated stewardship operating in a strategic, sector wide sphere. This is where the principles and oversight that stewardship provides were practised. The tier three environment asked stewards to remain above agency biases and provide proper direction to projects in order to fulfil the overall vision for that project. This was important as it confirmed an existing motivating factor of stewardship identified in the literature of fulfilling an institutionalised vision [2]; [29]. A key difference between the literatures's understanding of fulfilling this vision and this study is in the stewards' defence of the vision through the use of citizen centricity. Many participants noted the value of maintaining focus on delivering services that provided citizens with a better interaction with government. One participant going as far to say "We shouldn't be doing anything in government if we are not benefiting citizens, stewardship should take us back and remind us why we are doing things and why we are making changes (P7)." This illustrates the power of citizen centric thinking in the eyes of stewards in the NZ public sector and also alludes to why it had appeared in this context. Citizen centricity has been a key feature of NZ public sector thinking, as well as central to JUG [25]. Most studies analysed in this research were done outside of the NZ context. Given that this study was centred in the NZ public sector, it is not surprising that this difference has occurred. Understanding how to more effectively support these types of projects going forward will be critical in driving effective practice in JUG.

# **5.2.** Essential skills of a steward operating in the Digital Government sector

The skills of the story teller have largely been explored in the extant literature, confirming the skills of influencing and selling the vision. A key quality of the influencing skill as identified in this research was the ability to build and maintain networks or connections, which is also a central skill of the knowledge broker and boundary spanner [38]. These ideas were explored through the strong reliance on personal relationships, as well as references to the leveraging of professional networks to get sign-on. Finally, the skill of selling the vision, is confirmed through the concept of brokering skills [5]. This study viewed vision championing in much the same way, as stewards would use a variety of different ways to persuade, as well as remind, people of the overarching vision, as one participant noted, "If I want to sell something to you as a stakeholder as, 'I really want you to engage Better Public Services Result

area 10', whereas if I told you that I want you and your partner to have a really good experience, be aware of all your entitlements and key dates regardless of language barriers, then that's a much better sell (P1)." The vision championing skill also importantly carried citizen centric ideals as they have become a central focus of the All of Government vision, making it a key consideration to a steward's skill set.

As previously noted, the second stewardship role, steward-as-navigator was only applied in operating tier three, stewardship as a governance model environment. As a result the steward role in this environment was largely strategic in nature, and also made it necessary to ensure separation between stewards and projects, in order to provide effective, unbiased governance. These qualities of the navigator are captured in the extant literature through the idea from the knowledge broker and boundary spanning literature areas of relinquishing ownership to maintain objectivity [26]. This role embodied what many participants of this research saw as the purest form of stewardship, as that objectivity could be maintained, as there was little or no involvement in implementation of project work. Moreover the literature reviewed in this study confirms all of the skills of the navigator. The navigator embodied the principles of the tier three: stewardship as a governance model environment through the application of its skills. The four skills of the navigator included, sense making, negotiating, vision championing and innovating. This was exhibited in the data through the nature of the strategic advisory role fulfilled by the navigator role. One participant evidenced this through stating that it was necessary as a steward to be able to take on a lot of information, but also then filter that very quickly according to the guiding vision of each project they were across (P4). The negotiating skill presented a strong connection to the facilitator of knowledge sharing and creation role of the gatekeeper. This role required the gatekeeper to perform negotiation style tasks, gaining input from different parts of organisations and stakeholders too [39]. This was seen in through the necessity of stewards understanding what resources, human or monetary, were negotiable and what was not. In terms of the innovating, this skill was explored through the concept of surfacing and challenging assumptions. These findings were of interest as they strengthened the existing public sector leadership skill set research [5]. They discuss the importance of flexibility in a public sector leader's skill set, in order to pursue an option that challenges the accepted method. The innovating skill was experienced by a number of participants in this research, particularly through the ideas of, having a strong risk appetite and being prepared to fail, but ultimately learn from that experience. The final navigator skill of vision

championing corresponded to the [9] gatekeeper role of the flag bearer. The flag-bearer performed an important role externally to their organisation, in terms of discussions at the working group level. This was an interesting finding, as in the tier three: stewardship as a governance model environment, this was how the steward operated. It was being that removed representative of an organisation, whilst also balancing the interests of other stakeholders such as citizens. The above four skills combined to create a very complex skill set particularly given the operating environment conditions of being both an employee of the organisation, as well as remaining independent of agency biases.

# 6. Limitations, Implications, and Conclusion

The key limitation of this study is the constraint of the study setting, which limits generalisability. However findings will be applicable to other jurisdictions that are undergoing similar digital Government transformation. This research also has implications for practitioners and the field of IS. A key implication for practitioners is highlighting the complexity of JUG. Whilst the existing efforts of central agencies and ministries are moving in a positive direction, continuing this effort is essential. Increased focus could be brought to the use of Information Technologies (IT) and Information Systems (IS) to simplify backend systems across government to remove software and hardware silos. This should make the removal of physical ministry silos a smoother transition. A project targeted at creating all of government infrastructure should be accelerated, as a first measure. This study has highlighted stewardship as a model of the governance operating environment in which tensions exist around conflicting success metrics. One potential solution is to provide comprehensive understanding to agencies of collective models of benefits ownership. Elevating understanding would have profound potential to eliminate conflicting metrics. This research has also made some key contributions to the field of Information Systems. First is the clarification of the nature of stewardship's operation in the NZ public sector. This study identified three tiers that explored the functions of stewardship at different levels of an all of government environment. Understanding the interconnections between the layers was also of interest in the sense of underscoring the multiplicity of a steward's role. Further studies in this area could look to further understand the challenges or tensions that exist in operating across the tiers and how the steward's role will transform as Government does.

The value of joining-up government in a modern NZ is evident and the vision around achieving that is becoming increasingly clear [13]. Accordingly understanding the roles of the steward in enabling integrated service initiatives, such as the life events programme [13], has great value in improving the ability to achieve that vision. The investigation of stewardship in the course of this study, not only has important consequences for practice of the concept in the New Zealand public sector, but also takes the first step to clarifying an otherwise unpopulated area of knowledge in the field of Information Systems. This clarification has been achieved through the use of a semi-structured interview process, as well as a reflective journal. Doing so enabled participants to engage in an open and honest sharing of opinions and yielded important and relevant findings. This began with the clarification of the operating environments of stewardship being split into three operating tiers, internal stewardship, inter-agency stewardship and stewardship as a model of governance. Furthermore, associated challenges were linked to each of these environments and discussion uncovered that with the right application of the steward's role and skill, could be overcome. These highly specialised roles were the navigator and the storyteller. Each of these had a set of profoundly sophisticated skills, which the navigator comprised, sense making, negotiating, innovating and vision championing. Whereas the Storyteller used, influencing, relationship building and vision championing. Understanding the gravity of these contributions to the stewardship literature is significant, but also the aiding of effective practice of stewardship is critical in the creation of a more connected and coordinated public service.

The complexity of the performed steward roles that were uncovered in this research are significant, given that stewardship in the delivery of JUG has hitherto been viewed as a largely abstract, yet important concept. While technology is a critical enabler of JUG, specialist human roles are required in order for digital government to address system barriers and thus help agencies deliver on the JUG vision. By building a better understanding of the steward role, its operating tiers, sub-roles and skill sets, this study can be seen as contributing towards understanding of the complex socio-technological system that is involved in creating JUG. Future research could explore whether the role of steward is performed differently in different contexts, and whether maturity of JUG impacts on the nature of stewardship needs. The study's contribution to practice lies in the practical understanding it creates of the challenges faced by stewards, and how they go about tackling these challenges. Through gaining better visibility of the value and nature of steward work, and of the specific skills required in stewardship, managers in the public

sector have the opportunity to capture and reinforce what is working, can select suitable candidates for stewardship work, and identify ways of fostering and rewarding the requisite skills.

#### 10. References

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