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Creating value in online communities through governance and stakeholder engagement

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ABSTRACT

The spread of the internet has led to the evolution of on-line communities (OCs) as collectives of members who share common goals. Whilst many OCs involve individuals who engage voluntarily for mutual interest, commercial and government organizations engage involuntary stakeholders in their less egalitarian OCs. Although research has explored how members perceive and achieve value in voluntary OCs, exploration of the strategies used to engage stakeholders and deliver value in OCs where the membership is more diverse and less than voluntary, is required. We investigate this issue through a longitudinal case study of two OCs related to delivering government employment services. Our findings demonstrate the role of governance in fostering stakeholders' cognitive, emotional and behavioral engagement in two OCs, and related governance of the IT system that was subsequently deployed. Further, assessment of the performance outcomes, reported in terms of the primary stakeholder's objectives, indicates that value has been achieved for the mutual benefit of the OCs' multiple stakeholders. Analysis of the processes of value creation, in terms of Makadok's four causal mechanisms for generating profit, show that whilst the key stakeholder preemptively committed timelines, governance mechanisms that generated competition and flexibility (rather than restraining rivalry), and delivered competitive advantage and information asymmetry, produced value for government, service providers, jobseekers and employers.

1. Introduction

On-line communities (OCs) are open collectives of dispersed members who share common interests or goals, and for whom that community offers some benefit (Barrett et al., 2016; Sproull and Arriaga, 2007). They are increasingly evident in a variety of forms, including: communities of social contact, such as Facebook; communities of knowledge, where members share information such as health; and communities of interest focused on social and environmental issues (Boudreau and Lakhani, 2013; Plant, 2004). As a virtual form of community, OC members are typically voluntary individuals. However, with the spread of the internet, OCs are evolving (Faraj et al., 2011; Plant, 2004) as technology offers increasingly real-time, low-cost transmissions that are more widely accessible. Businesses have recognized the opportunity to engage more directly with external stakeholders (customers, clients or

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suppliers) and create business value by identifying and delivering upon needs (Barrett et al., 2016). Similarly, governmental institutions are moving beyond a dyadic community of engagement between government departments and out-sourced service providers, using technology (often tailor-made) to more actively engage with constituent clients and explore how to create value for all OC participants.

Research into OCs has generated insights about knowledge collaboration (Faraj et al., 2011); building stakeholder attachment (Ren et al., 2012); management of boundaries (Jarvenpaa and Lang, 2011); and social motivations (Wang and Chen, 2012). Yet there is little in the information technology (IT)-related literature about how member engagement with OCs is conceptualized (Ray et al., 2014); nor about how value is created and governed in such OCs (Barrett et al., 2016). Moreover, whilst there has been prior research regarding supply chains and intra-organizational contexts, our context is different in that it presents a more complex relationship between five stakeholder groups (individual and organizational) where the focus of activity relates to employment outcomes rather than discrete economic transactions per se. Our research focusses on understanding how the processes and practices associated with governing two inter-organizational OCs created engagement and value for public and private stakeholders. These OCs relate to the deployment and utilization of two IT-enabled employment services systems, with five stakeholder/member groups – the Australian Government, the government agency responsible for national employment policies and programs, service providers, employers and jobseekers. Rather than simply delivering technology systems, the contributions of members' knowledge and expertise to development of employment services is fundamental to performance. As such, both employment service systems constitute OCs. Through a longitudinal case study of the Department of Employment's[3] (DOE) development of these employment services, delivered principally through a tailor-made information system (IS) to geographically dispersed service providers and their clients (employers and job seekers), our findings show stakeholders were engaged through careful governance. This fostered their contribution of knowledge to these OCs, with this engagement and knowledge guiding governance of development of the IT system. Evaluation against Makadok's (2010, 2011) causal mechanisms for profit generation (rivalry restraint, competitive advantage, information asymmetry and commitment timing) show, given the OC context, some unexpected findings. Whilst the DOE, as the key stakeholder, preemptively committed timelines, its governance accommodated the introduction of some competition and flexibility (rather than restraining rivalry), and permitted some competitive advantage and self-developed information asymmetry that generated value for stakeholders (the Australian Government, DOE itself, service providers, jobseekers and employers).

After outlining the theoretical background, the context of the longitudinal case study and methodology are presented. Next, to ascertain the processes of stakeholder engagement and value-generation, we analyze DOE's governance of these OCs as two IT-enabled employment services systems were iteratively reviewed and developed (the first in 2008/2009, the second in 2011/2015). Findings are then evaluated against the four causal mechanisms for profit generation. The paper concludes with discussion of the study's limitations and contribution to knowledge.

2. Related literature

2.1. On-line communities (OCs)

OCs are widespread, existing as collectives of people whose communications are transacted primarily through the internet. Defined as “a collective group of entities, individuals or organizations that come together either temporarily or permanently through an electronic medium to interact in a common problem or interest space” (Plant, 2004, 54), prior research has focused on the factors that motivate engagement. Individual members' motivation (Kankanhalli et al., 2005) includes self-interest, social capital, social exchange (Faraj and Johnson, 2011) and knowledge collaboration (Faraj et al., 2011; Ray et al., 2014). As the value derived from OCs relates to harnessing members' knowledge and ideas (Barrett et al., 2016) towards achieving a common goal, knowledge contribution is a key concern. For voluntary OCs, their boundaries are fluid as participants, interactions and artefacts may change over time, with subsequent impact on the value-generating outcomes for members (Jarvenpaa and Lang, 2011). This fluidity is a distinguishing characteristic of these OCs.

Other OCs have evolved that may be less fluid, with their membership less voluntary, and their technology more driven by the key stakeholder, despite members coming together to network about a common problem. For example, businesses may create community forums by which to interact with suppliers or customers. In such OCs, marketing, knowledge sharing and service delivery at the personal, functional or entity level are commercially motivated. Similarly, government departments may develop OCs to share knowledge and deliver services to their citizens (Plant, 2004). When enabled as part of a strategy to facilitate client engagement, these OCs challenge organizational boundaries, power and accountabilities (Barrett et al., 2016). For example, their technologies may enable content through browsing and search functions, hold data (personal and commercial) related to required services, offer tools by which to deliver services, aggregate or modify certain content, and enable reporting (Murray and O'Mahony, 2007).

When the key stakeholder and driver for such an OC is government, its dynamics are likely to differ from voluntary OCs. Differences may include: being inter-organizational; the role of leadership (Haefliger et al., 2011); as well as how one stakeholder being a primary source of funds affects accountabilities, service delivery, motivation and value propositions (Barrett et al., 2016).

[3] Initially, the Australian Government Department involved in delivering employment services was called the Department of Education, Employment and Workplace Services (DEEWR). At the time this paper was written, the name changed to the Department of Employment (DOE). Very recently the name changed to the Department of Jobs and Small Business.

To generate collective capacity requires an "ability to engage in acts of rejuvenating, reconfiguring, reframing and revolutionizing within a particular goal-driven context" (Van Osch and Avital, 2010, 2). When an OC is orchestrated by one key stakeholder, refining, defining and negotiating the strategy, resources and actions to deliver required goals necessitates careful governance as the diversity of stakeholders may perceive different value propositions. These are accommodated within social OCs because voluntary engagement and collaboration mean members may leave if they perceive a lack of value. However, in situations involving less voluntary OCs and diverse stakeholders, the mechanisms used to generate stakeholder engagement and value are less clear (Jarvenpaa and Lang, 2011).

2.2. Engagement

Active membership of voluntary OCs relates to a sense of engagement (Ray et al., 2014) that is linked to perceived value from knowledge collaboration (Barrett et al., 2016). Engagement "refers to the behaviors by which people bring in or leave out their personal selves during work role performances" (Kahn, 1990, 694). As a personal decision, this is driven by an individual, not the organization, who may be seeking employee engagement (Shuck and Wollard, 2010). Given it is a psychological choice, it is evidenced in behavior. As employees decide when and if they are willing to engage, their resultant adaptive behaviors are consciously focused on delivering organizational outcomes that directly relate to each individual's primary work (Shuck and Wollard, 2010). Although some studies allude to only one type of general engagement (Czarnowsky, 2008), three types are regarded as identifiable: (a) cognitive; (b) emotional; and (c) behavioral engagement (Shuck and Wollard, 2010). Each, being separate, builds upon the other (Macey and Schneider, 2008; Saks, 2006) in a manner consistent with Maslow's hierarchy of needs (Maslow, 1970).

Since engagement is demonstrably essential to meaningful involvement in voluntary OCs (Ray et al., 2014), it is important to clarify what it is not. Engagement differs from commitment, which refers to people's attitude and attachment towards their organization (Macey and Schneider, 2008; Saks, 2006). Engagement concerns the extent of an individual's attentiveness to and absorption in performing his/her role (Saks, 2006). Similarly, it has been closely linked to satisfaction. For example, IT research, which has investigated the role of knowledge contribution in OCs (Faraj et al., 2011), has related contributory behavior to OC members' satisfaction (Ma and Agarwal, 2007). Yet, satisfaction relates to a cost/benefit assessment of how well an individual's needs may be satisfied by an action and is indicative of behavioral intentions (Venkatesh et al., 2003). Recent research (Ray et al., 2014) shows satisfaction being relevant to sustaining OCs through fostering word-of-mouth intentions, but not to knowledge contribution (a key factor for value generation in OCs).

Much of the research regarding engagement has focused on students engaging for educational outcomes (Kearsley and Shneiderman, 1998; Mandernach, 2015); and employee engagement for improved organizational performance (Kahn, 1990; Saks, 2006). Regarding engagement with IT-enabled systems, Straub (2009) alludes to its cognitive, emotional and behavioral components, concluding that "the predictors of that behavioral change can be understood through contextual, cognitive, and affective factors. Existing theories deal independently with these factors but no one theory accounts for all three" (p. 627). Recent research has begun to investigate factors related to stakeholder engagement with IT-enabled systems. For example, one stream has investigated engagement in sustaining individual user relationships with interactive sites (such as smartphones), with findings linking engagement to technology dependence (Fan et al., 2017) and use (Di Gangi and Wasko, 2016). This research relates to customer engagement (Hollebeek et al., 2016), where outcomes have an individual or voluntary, rather than collective, focus. What is lacking is research into engagement processes used to create value in socio-technical OCs (Ray et al., 2014).

2.3. Governance and IT governance

In engaging with its community, prudent governance "ensures that stakeholder needs, conditions and options are evaluated to determine balanced, agreed-on enterprise objectives to be achieved; setting direction through prioritization and decision-making; and monitoring performance and compliance against agreed-on direction and objectives" (ISACA, 2012, 14). According to the Institute on Governance, five principles of good governance include: (1) legitimacy and voice; (2) direction; (3) performance; (4) accountability; and (5) fairness (Graham et al., 2003).

When the context concerns major IT investment and development, governance may specifically focus on IT governance as "the process by which organizations seek to ensure that their investment in information technology facilitates strategic and tactical goals … focusing on the role played by information technology within the organization" (Debreceny, 2013, 129). Its mechanisms are typically framed as strategic alignment, risk management, resource management, performance measurement and value delivery (ITGI, 2005). Whilst research into IT governance has explored its role in generating stakeholder participation (Wilkin et al., 2013), and engagement of key organizational stakeholders (Debreceny, 2013; Fonstad and Robertson, 2006), there is little that specifically relates to engagement of diverse stakeholders (Wilkin and Chenhall, 2010). Yet as "enterprises exist to create value for their stakeholders", governance objectives related to performance and value creation are addressed by meeting stakeholder needs (ISACA, 2012, 17).

2.4. Evaluating performance

When evaluating the strategic value of information technology resources, the resource-based view is widely regarded, with competitive advantage argued as the primary causal mechanism for firm performance (Wade and Hulland, 2004). Herein resource value is regarded as a precursor to sustained competitive advantage, as organizations achieve such advantage by possessing both valuable, inimitable and non-substitutable resources and the organizational capabilities to exploit those resources (Barney, 2001). Yet studies of organizational performance involving the resource-based view have shown inconsistencies, with differences between organizations in the same industry and within specific industry groups (Wade and Hulland, 2004). In seeking a strategic perspective, studies into the causes for persistent profit have focused on three additional mechanisms, namely: *rivalry restraint* (or collusion-based mechanisms); *information asymmetry* (or governance mechanisms); and *commitment timing* (Makadok, 2010; Reynolds and Yetton, 2015). The aim of this study is to use this wider perspective as a means to analyze value creation.

Rivalry restraint is regarded as any condition that limits competitors in an industry from aggressively competing with each other. Conversely *competitive advantage* asserts that some organizations in an industry are more effective at creating economic value through unique combinations of resources and capabilities. *Information asymmetry* mechanisms apply when some organizations are better informed about services and resources, and exploit this to the disadvantage of those less informed. Finally, for organizations with equivalent value-creating resources and information, differences in the *timing* of strategic *commitments* may affect their profits (Makadok, 2010, 2011).

In summary, whilst considerable research exists that looks at how members perceive and achieve value in voluntary OCs, there is need for research concerning strategies to achieve stakeholder engagement and value delivery in OCs where membership is inter-organizational, more diverse, and less voluntary (Barrett et al., 2016; Ray et al., 2014). Accordingly, by framing our analysis of a longitudinal case study involving the evolution of two variants of an OC (IT-enabled employment services) around the governance strategies used to engage diverse stakeholders, we contribute new knowledge, including about the causal mechanisms related to value creation.

3. Context

In Australia, the DOE (previously the Department of Education, Employment and Workplace Relations or DEEWR for the OC related to Job Services Australia [JSA]) delivers employment services and disability employment services (for jobseekers assessed as having a significant physical or intellectual disability) to its citizens in an accessible, timely, equitable and financially viable manner. The goal is to assist unemployed or underemployed Australians to achieve economic participation and social inclusion. Delivery of these services and programs to client stakeholders (job seekers and employers) is managed through contractual outsourcing arrangements with public and private sector service providers. Both provider and client stakeholders are geographically dispersed, with services delivered through IT systems that access and deliver knowledge through government databases. These employment services (JSA and jobactive) have five stakeholder/member groups (the Australian Government, DEEWR/DOE, service providers, employers and jobseekers). They are more than technology-enabled systems, as members' contributions of knowledge are fundamental to the performance of these services. For example, the Australian Government contributes knowledge about employment, financial trends and business performance; DEEWR/DOE about employment trends, provider performance and job seeker data; service providers about all of these matters, particularly at social and regional levels; employers about vacancies and job placement performance; and job seekers about their social and employment needs. As such JSA and jobactive constitute OCs, albeit less than voluntary. Prior research has shown that engagement predisposes members to meaningfully contribute to voluntary OCs (Ray et al., 2014). Hence, we posit that rather than measuring user acceptance as an indicator of a technology's success, investigating value creation in OCs requires investigation of engagement, and the mechanisms that foster members' knowledge contribution.

Besides assisting recipients to find suitable employment, the Australian Government aims to create value by reducing demand for social welfare payments, enabling employers to hire suitable workers and thereby expanding business activity. Providers (public and private) are contractually obligated to deliver employment services and reimbursed for costs associated with providing permissible training and case management services, as well as earning payments for obtaining employment outcomes for jobseekers within their caseload. As such, DOE/DEEWR's reporting links to Centrelink, which is the government agency that manages and delivers benefits and payments to qualifying unemployed and jobseekers.

In 2008 and 2011 the Australian Government required a review of its employment services in order to: improve employment outcomes for jobseekers; reduce job vacancies; and improve business activity, payment timelines for providers and service delivery effectiveness (see Table 1). In 2008, a review of employment services was conducted through DEEWR, as the relevant Australian Government department at that time. The outcome was commitment to completely redevelop the system, resulting in a new employment services system JSA, which was deployed in 2009 through collaborative involvement of a wide cohort of stakeholders (Wilkin et al., 2013). In 2013 the government decided once again to revamp the system through the DOE, which had evolved from DEEWR. Under the same CIO, the process commenced with a review, adoption of key recommendations, and collaborative development of a new web-based employment services system, culminating in deployment of jobactive in July 2015 (DOE, 2016).

Table 1
Evolving Australian employment services 2008–2015.

ES (prior to 2009)* Complex and quite rigid, with emphasis on compliance	**JSA (2009)*** Windows-based. Wider access with individual job seeker plans. Training + charter with service providers to manage delivery. Star ratings of providers assessed quality. Improved link with Centrelink	**jobactive (2015)** Web-based. Streamlined resulting in a reduction in categories and payment types. Training, accreditation scheme, star ratings and provider-tendered service delivery contracts. Co-ordinated reporting time-lines with Centrelink payments
Review of ES (2008)* Issues included: a lack of incentives for skills and training to address skill shortages; complex employment services; and fragmented, excessive red tape with insufficient focus on employers and fragmentation of services in remote locations	**Review of JSA (2011)** Review showed a need to reduce service streams and simplify payment types, permit more innovation by service providers, reduce employee turnover in providers, accredit and quality assess providers, extend providers' contracts and rewards to employers for holding onto employed jobseekers	

*Adapted from Wilkin et al. (2013).

4. Method

Using an interpretive case study approach (Walsham, 1995) we explored the use of governance in redeveloping the processes and practices in two OCs (DEEWR's JSA and DOE's jobactive), their related IS, and how this created value through stakeholder engagement that fosters members' knowledge contribution. This approach has been used to understand the interplay of pro-action and reaction (Yin, 2003) in situations involving social issues (Walsham, 1995), as well as managerial and IT phenomena (Onita and Dhaliwal, 2010).

Information was collected over a three year period with many documents publicly available. Data sources gathered and reviewed include: observations; interviews; a survey; working artefacts; agendas; minutes of meetings; presentations; webinars[4]; web releases; and reports such as the independent JSA review. Analysis focused on understanding stakeholders' responses and interpretations as accurately as possible. One author was a part-time observer in the DOE for a period of 12 months, one was a key stakeholder, and the others were outside observers. Whilst this variance among the researchers addresses perceptions of the authors having a stake in the results, we acknowledge the potential for bias in analyzing qualitative data. We addressed this by independently reviewing and classifying the available data, making inferences from the text, and validating our conclusions through discussions with a key stakeholder.

5. Case study

Our analysis focuses on the processes concerned with DEEWR/DOE's governance of these two OCs in relation to development of JSA and jobactive. There is general acceptance in the literature (see Section 2.2) that engagement, as a personal factor, correlates with stakeholders feeling competent, purposeful and valued, and that knowledge contribution is a key factor in perceived value from the membership of voluntary OCs. This is not established with regard to less than voluntary OCs (Barrett et al., 2016; Ray et al., 2014). Accordingly, the processes used in development of JSA[5] and jobactive are analyzed in terms of whether, how and why cognitive, emotional and/or behavioral engagement are displayed by the constituent stakeholders (see Table 2 below) i.e., as it relates to their contribution of knowledge.

However, because these forms of engagement are variously defined in existing research (Shuck and Wollard, 2010), for the purposes of this analysis we define them as:

- *Cognitive engagement* relates to how stakeholders think about the task, their role and the organization as demonstrated in their intellectual commitment to what the organization requires of them (Shuck and Wollard, 2010);
- *Emotional engagement* relates to the feelings and beliefs held by these stakeholders as demonstrated by involvement, self-efficacy and/or empowerment as they respond to these requirements (Macey and Schneider, 2008); and
- *Behavioral engagement* relates to, and is demonstrated by, stakeholders' adaptive actions and proactive behaviors in addressing the organization's objectives (Macey and Schneider, 2008).

In delivering JSA and jobactive, DEEWR/DOE's governance of the OCs focused on engaging its multiple stakeholders using

[4] Webinars are interactive seminars conducted using video conferencing.
[5] Outcomes from development of JSA have been reported in Wilkin et al. (2013).

strategies that sought their active contribution of knowledge to the tasks and processes required to develop the IT-enabled employment services. As is evident from the analysis presented in Table 2 (see above):

- the key stakeholder's (DEEWR/DOE) CIO, who was responsible for governing both IT-enabled initiatives, used similar strategies in both. However, in response to the 2011 review findings, more widespread consultative exchanges were enacted in the development of jobactive in order to extend JSA's client-focused service delivery (DEEWR, 2012a, 2012b) through a jobseeker-centred approach, professionalization of services, simplified structure, reduced regulatory burden and fostering innovation. DOE's governance of jobactive involved wider engagement than used in JSA through its use of the Advisory Panel on Employment Services Administration and Accountability (APESAA) who consulted widely with all stakeholder groups. This was in contrast to the more passive approach adopted for JSA in which a ministerial letter was sent seeking submissions. Similarly, whereas JSA's Advisory Board was charged with oversight of the development, DOE established an Industry Consultation Forum, with a wider representational stakeholder base, to facilitate cooperation and communication (see Table 2).
- transparency regarding the initial review of both JSA and jobactive generated acceptance and ownership as the issues that affected all stakeholders were acknowledged and valued. This established a common view of the base line from which to rebuild employment services (cognitive and emotional engagement).
- the wider consultation for developing jobactive (via the APESAA and Industry Consultation Forum) improved jobseekers' and employers' confidence that knowledge that they contributed to the review was valued. Other examples included: DOE seeking input from providers' file notes and case management regarding issues with red tape and duplication in JSA practices; and the decision to use a web-based system in response to service provider issues with JSA's use of Windows. These consultative methods improved engagement.
- by tendering for jobactive and instantiating their own service plans, providers could tailor their plans to their individual circumstance and raise DOE awareness. This shared knowledge and contributed to understanding, collaboration, ownership of processes and trust (cognitive, emotional and behavioral engagement).
- relative weighting as the tool by which to assign star ratings meant that performance was judged against others (not against DEEWR/DOE-driven criteria). This improved perceptions of fairness (cognitive and emotional). Star ratings are now displayed on provider websites (fostering providers', jobseekers' and employers' behavioral engagement). Inclusion of quality as a KPI for jobactive's star ratings raised confidence among jobseekers and employers that providers had to deliver more than efficiency and effectiveness (i.e., it encouraged cognitive and emotional engagement with a human focus on quality).
- in general, jobactive's evaluative mechanisms are more substantial. This improves jobseeker and employer ability to accept the relevance of performance evaluations and hence confidence in providers' services (cognitive and emotional engagement that should foster adaptive behavior).
- jobseekers and employers gained improved flexibility in jobactive. Jobseekers wanted flexibility for making bookings with providers, easier input of employment history and capacity to change providers. Employers sought the capacity to list their own vacancies and vet applicants. Both behavioral-related requests increased engagement.

With regard to the governance of development of IT systems that enabled these OCs, DOE/DEEWR used consistent strategies that fostered stakeholder engagement and drew upon their contributed knowledge. For example, with respect to IT governance, DOE's governance in developing jobactive improved:

- *strategic alignment* of two IT Australian Government systems by aligning jobactive reporting timelines with Centrelink; and for its wider stakeholder group by accommodating their requests for a web-based rather than windows interface such that service providers' systems could be aligned with jobseekers' and employers' use of apps.
- *risk management* through conducting surveys and consultations regarding software and data integration issues; engaging service providers at multiple locations in testing display functionality; extending the star rating system; and accreditation and assessment of service providers.
- *resource management* with apps that accommodated employers' requests to list and manage their own vacancies and job seekers' capacity to input their history prior to interviews; and service providers involvement in testing prototypes and being trained in the new system.
- *performance measurement* by widespread public consultations in reviewing where JSA needed improvement and acknowledging the merit of this input; and prototyping and testing design features with service providers at multiple locations.
- *value delivery* for service providers through ensuring the system enabled more timely payments, reduced red tape, and design features that allowed access to multiple screens; to employers through being able to manage their vacancies in the system; to jobseekers by coordinating payments with Centrelink timelines; and to the Australian Government by reducing reporting inefficiencies.

In summary, DOE's governance of jobactive delivered on the five principles of governance. For example: *legitimacy and voice* are evident in the extent and engagement of diverse stakeholders in both the review of JSA and development of jobactive. This knowledge contribution in turn informed *direction* to accommodate the needs of providers, employers, job seekers, as well as the DOE. Delivery of *performance*, *accountability* and *fairness* is evident from the post implementation audit of jobactive, which states that "[t]here was a sound reason for redesigning the employment services model, the governance arrangements established by the department were comprehensive, stakeholders were adequately consulted" … so there is "a reasonable level of assurance that the jobactive

Table 2
Analysis of governance concerning two OCs (JSA and jobactive) related to stakeholder engagement associated with developing IT-enabled employment services.

Governance focus of the CIO + DEEWR/DOE (*G refers to OC governance; ITG refers to governance of the IT component*)	Development of JSA*	Strategies related to stakeholder engagement	Development of jobactive**	Strategies related to stakeholder engagement
Review of the existing system (*G = legitimacy, voice, direction, performance, accountability and fairness*)	• Minister wrote to service providers, employers, welfare organizations and others seeking input regarding what was needed in developing JSA • Priorities for reengineering were based upon feedback – but driven by Government requirements	• Receipt of > 260 submissions • Consultation with stakeholders including their reflections on issues with the existing ES encouraged engagement with the need for change **(*c,e*)**	• The Advisory Panel on Employment Services Administration and Accountability (APESAA) was instituted by the Australian Government to review JSA • APESAA consulted widely with large and small providers (for-profit and not-for-profit), peak bodies, jobseekers and their employers	• Consultation with stakeholders seeking their reflection on issues with JSA, which encouraged engagement with the need for change **(*c,e*)** • Wider consultation fostered engagement with more stakeholders **(*c,e*)**
Advisory bodies assigned to review project, budget and timelines (*ITG = strategic alignment and performance evaluation*)	• Advisory Board was established to plan, resource and commission the project • Board took advice from regular meetings of the IT Advisory Group that reviewed JSA's progress • Using direction from the board/ groups, the Transition Reference Group oversaw the change from ES to JSA	• IT Advisory Group reviewed change-over impacts on providers through consulting regarding alternative cut-off dates for the legacy system **(*c,e*)** • Use of both an IT Advisory Group and the Transition Reference Group provided additional confidence **(*c,e*)**	• Established an Industry Consultation Forum comprising jobseekers, employers, service providers and the Government to facilitate cooperation and communication • The Digital Transformation Office, established by the Australian Government to revamp its online service delivery, required active stakeholder participation in all redesigning of such services	• The forum had participation from actual stakeholder groups c.f. JSA **(*c,e,b*)** • The Digital Transformation Office encouraged the DOE to considerably extend its IT governance style used in JSA (i.e., stakeholder consultation) to develop jobactive. This fostered wider engagement with the design phase **(*c,e,b*)**
Consultation with stakeholders regarding the new design (*G = legitimacy, voice, direction, performance, accountability and fairness; ITG = strategic alignment, risk management and resource management*)	• Public consultation with the CIO via face-to-face and digital (LiveMeet) sessions • Survey of providers regarding 3rd Party Software and Data Integration • Confidential feedback through the Transition Reference Group • Input sought through a survey with jobseekers and use of program evaluations	• Provider CEOs could attend initial face-to-face meetings in capital cities **(*c,b*)**. Topics included presenting the consultation plan, introducing the Advisory Group and gaining their input regarding system priorities **(*c,e,b*)** • Engagement with JSA proposals **(*c,e*)** and encouragement to participate in LiveMeet **(*c,e,b*)**	• Service providers were asked to review their case management and file notes to identify duplication and red tape so they could be removed + DOE replicated this • DOE undertook to foster service innovation among providers including community collaboration • DOE committed to giving longer contracts to service providers to foster investment • DOE committed to fostering professional employment services via training providers and their employees, accreditation with a Quality Framework (QAF) and a transparent approach to auditing their services	• The DOE treated service providers and itself equally **(*c,e,b*)** • DOE fostered service innovation (adaptive), which showed trust in service providers **(*c,e,b*)** • Longer contracts gave better financial security and fostered investment **(*c,e,b*)** • DOE's provision of training for providers and employees encouraged commitment **(*c,e,b*)**
Consultation with providers regarding prototyping (*G = legitimacy, voice, direction, performance, accountability and fairness; ITG = strategic alignment, risk management and resource management*)	• System agents were encouraged to voice issues • Policies helped to ensure all ES functions were delivered via new JSA • Drafts evaluated by the Transition Reference Group and public consultation sessions	• DEEWR consulted providers using system prototypes to graphically present options regarding functionality **(*c,e*)**	• Consultation with service providers (via face-to-face meetings, webinars etc.) regarding design features, desired functionalities and how the prototypes addressed these • Consultation with jobseekers and employers regarding desired	• Consultation with providers about prototypes and design features and engagement of them in reviewing how the options worked **(*c,e,b*)**

(*continued on next page*)

Table 2 (*continued*)

Governance focus of the CIO + DEEWR/DOE (*G refers to OC governance; ITG refers to governance of the IT component*)	Development of JSA*	Strategies related to stakeholder engagement	Development of jobactive**	Strategies related to stakeholder engagement
			functionalities (surveys + consultation with their peak bodies)	
Consultation with providers regarding system development (*ITG = strategic alignment, risk management and resource management*)	• DEEWR ensured service providers were trained in the new system • The tender process required each service provider to have an IT contact person • Advisory Group consulted regarding cut-off date for the old system	• Analysis of business and provider requirements used to develop ESS prototypes **(*c,e,b*)** • LiveMeet presentations allowed review, verification and feedback by service provider staff regarding proposed ESS work flow support, data input and display functionality **(*c,e,b*)** • All provider discussions regarding system design were publicly accessible. These remained available for the project's duration **(*c,e*)** • Providers invited to usability testing sessions at DEEWR's system usability laboratory in Canberra **(*c,e,b*)** • Providers' input sought re training strategies and arrangements **(*c,e,b*)**	• DOE consultation delivered outcomes requested by providers including: graphical dashboards; real-time interfaces with DOE and Centrelink; simpler diary processes that display available interview time slots; provider dashboards individually tailorable via widgets and hyperlinks for drilling, outcome tracking; use of multiple windows; and ability to benchmark performance against regional, state and national results • Delivered outcomes requested by jobseekers including: access to their job history and past providers; graphical timelines; ability to input their job search efforts via a mobile app with past data automatically inputted • Delivered outcomes requested by employers including: a new app enabling them to create and advertise jobs instantly, as well as manage their listings, no. of applications, and contact of candidates	• Surveys, working artefacts, regional meetings and presentations, webinars, web releases, testing and training **(*c,e,b*)** • By addressing the key needs of each stakeholder group **(*c,e,b*)**, the DOE showed that it had listened, thought and tried to deliver on specific needs that reflected how each stakeholder group performed their roles to the best advantage of all parties • This made stakeholders feel competent, purposeful and valued **(*c,e,b*)**
Evaluation processes (*G = legitimacy, voice, direction, performance, accountability and fairness; ITG = performance measurement and value delivery*)	• JSA's Star Ratings measured providers' performance relative to two contractual Key Performance Indicators (KPIs) over the prior 3 years: KPI1 Efficiency – the average time taken by providers compared to other providers to assist jobseekers gain employment; and KPI2 Effectiveness – proportions of jobseekers who achieve placements and outcomes, including social outcomes, for the most disadvantaged participants	• Service providers' IT support staff were given sessions regarding an overview of JSA, the deployment plan and support arrangements. They could ask questions of DEEWR's IT specialists **(*c,e,b*)** • Stars were awarded based on relative assessment: 5 stars ≥40% above average, 4 stars ≥20 ≤ 39% above average etc. This meant that benchmarking was against other providers not an abstract criteria **(*c,e,b*)**	• To deliver employment services, providers had to tender DOE to win a contract to deliver via jobactive. Tenders had to detail their governance (necessary structure, skills and services); demonstrated performance; demonstrated capacity to get jobseekers into work; and demonstrated capacity to meet employer needs • Service providers had to provide a service guarantee detailing what jobseekers can expect from them, what is expected of jobseekers, assurance of confidentiality and compliance mechanisms. This also communicated to employers about the services they can expect	• The DOE sets criteria but is flexible regarding how this is addressed. This encouraged adaptive behavior **(*c,e,b*)** • Providers' service guarantee had to be visible in their offices so jobseekers and employers knew what they should expect **(*c,e,b*)** • The variety of assessment tools gave confidence to: providers that their individual circumstances would be appreciated **(*c,e,b*)**; and jobseekers and employers that providers were answerable for delivery **(*c,e,b*)** • Providers and auditors were trained about assessment via webinars **(*c,e,b*)** • Participants in the QAF pilot were surveyed with results showing favorable responses **(*c,e,b*)**

(*continued on next page*)

Table 2 (*continued*)

Governance focus of the CIO + DEEWR/DOE (*G refers to OC governance; ITG refers to governance of the IT component*)	Development of JSA*	Strategies related to stakeholder engagement	Development of jobactive**	Strategies related to stakeholder engagement
			• DOE undertook to assess provider performance via: desktop audits; program assurance checks; feedback via the national customer service line; visits; and QAF audits • Star ratings are more complex as they are evaluated against 3 KPIs (new one is quality and assurance) with outcomes apportioned in terms of the 3 streams of jobseekers. Evaluations are made quarterly, but emphasis is on 12 months' achievements	• Inclusion of quality as a KPI, linked star ratings to QAFs ***(c,e,b)***

Note: c = cognitive, e = emotional, b = behavioral. *Adapted from Wilkin et al. (2013). **Developed from source documents (see Section 4).

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program is being administered as designed and expected", with "Key Performance Indicators developed by the department, which align with program objectives" (Australian National Audit Office, 2017, 1).

6. Value creation

Since membership of OCs related to commercial or governmental services may well be less than voluntary, their engagement and perceptions of value may differ from voluntary OCs where members may leave if perceived value is lacking. However, as commercial organizations increasingly use OCs to deliver services, financial value or profit becomes an outcome relevant to their customers and shareholders. Similarly, there are return-on-investment considerations that apply to government-created OCs as they too are answerable to their citizens. This was the case when the Australian Government required DEEWR/DOE to revamp its employment services in 2008 and 2011. The JSA review recommended creating an Industry Consultation Forum for informing processes regarding the development of future employment services; consolidating job streams in Job Services Australia and giving providers longer contract periods; encouraging more innovation by providers, through longer contract and system controls; professionalizing employment services personnel; establishing a providers' accreditation scheme and setting industry standards; [and] establishing a risk-based assurance framework (DEEWR, 2012b). The desired outcomes for JSA and jobactive included: more income (more jobseekers becoming taxpaying employees and improved business activity); and reduced costs (reduced welfare payments, reduced overpayments through better links to Centrelink, reduced use of expensive call centres and more streamlined payments to service providers). Whilst tangible profits are difficult to define, achieving these outcomes equates to improved financial value to at least the government.

With respect to stakeholder engagement, the governance mechanisms exercised by DEEWR/DOE addressed the governance principle that "enterprises exist to create value for their stakeholders" (ISACA, 2012, 17). Transparency in the Australian Government's review processes encouraged collective ownership of the issues. When coupled with widespread engagement mechanisms to define needs, options and desired features, the outcomes delivered value to stakeholders in terms of benefits realized, resources optimized and risks optimized, a defined governance objective for value creation (ISACA, 2012, 17). In particular, comparative analysis of strategies for stakeholder engagement (see Table 2) shows that DOE's governance of jobactive achieved more cognitive (c) and emotional (e) engagement in the review, more behavioral (b) engagement regarding design, and significantly more engagement at all levels regarding evaluation processes. For example, as identified by the stakeholders in the JSA review (DEEWR, 2012b), sought by them in the development process (see Table 2), and delivered in jobactive:

- *intangible benefits include:* greater flexibility to change provider (jobseekers); control over job listings (employers); web-based interfaces that allow more flexible access (providers); and better delivery by better trained providers who are more rigorously assessed on performance (Government).
- *tangible benefits include:* longer contracts and more timely payments (providers); payments for retaining jobseekers for 12 months (employers); a direct interface to Centrelink that improves accuracy of records and timely welfare payments (Government and jobseekers); reduced numbers on income support (Government); and both JSA ($AUS 3.9b i.e., DEEWR, 2009) and jobactive ($AUS 6.8b i.e., Hartsuyker, 2015) being delivered on time and on budget (Government).[6]
- *resource optimization includes:* a web-based system that enables apps and hence more flexible access (providers, employers and jobseekers); better access to jobseeker history when a new provider is involved (jobseekers); ability to list and manage vacancies (employers); administration efficiencies by reducing job seeker streams from 4 to 3; and 5 year rather than 3 year provider contracts, which encourage investment and innovation (Government and providers).
- *risks were optimized as:* the web-based system eliminated the constraints imposed by the windows system (all stakeholders); the tender process used to select providers meant needs and opportunities specific to the environment were highlighted (providers and Government); a range of assessment tools were used with a focus on 12 monthly outcomes (providers and Government); employers had more control over vacancies resulting in longer term employment (jobseekers, employers and Government); and the system interfaced with Centrelink that made the welfare payments (jobseekers and Government).

Initial outcomes indicate that value has been created. In its first year report of jobactive (2015–2016), DOE highlights that jobactive was achieving improved outcomes related to employment services i.e.:

- more than 345,000 job placements were recorded by jobactive providers c.f. 324,342 for JSA in 2014–2015 (DOE, 2015) – it is noteworthy that the unemployment rates were comparable being 6.4% at July 2014 and 6.3% at July 2015, yet were 5.7% at July 2016[7];
- 44 jobactive providers operate in > 1700 locations across Australia, with 36 receiving or maintaining QAF certification and the remainder expected by the end of 2016;
- customer service lines reporting significantly fewer complaints (8235 in 2015–16 vs 12,222 in 2014–15); and
- a DOE survey showed that 81% of employers believed that job seekers whom they had employed through jobactive were fully or partially meeting their needs (DOE, 2016).

[6] Jobactive comments are derived by comparing this figure with data from DOE's annual reports.
[7] Available from Australian Bureau of Statistics ref. 6202: Australian Labour Force as reported for 2014, 2015 and 2016.

The same report showed value being achieved with improved work outcomes for jobseekers, improved service provider performance as their clients were actively jobseeking, and improved employer satisfaction. Jobactive figures shown below show improvement on the last year of JSA, when only 72% of the headline annual job placement target was reached (DOE, 2015). For example, assessment of jobactive against its objectives for 2015–2016 shows that regarding:

- Objective 1 (*helping jobseekers get and hold work*), 3 of the 6 targets for sustained job placements were met, with the best performance on 26 week placements (note that JSA similarly failed to meet one related target here in 2011–2012 i.e., DEEWR, 2012a) with more job placements achieved and more sustained placements in 2016–2017 (DOE, 2017);
- Objective 2 (*moving jobseekers from welfare to work*), in 2015–2016 43% of jobseekers moved off income support or significantly reduced reliance (exceeding the 40% target);
- Objective 3 (*helping job seekers to actively seek work*), 94% actively were looking for work (the target was 95%); and
- Objective 4 (*the quality of providers' services*), the target of 80% for each was exceeded as survey results showed 84% of employers were satisfied with the assistance provided and 91% of jobactive organizations met their service delivery requirements for 2015–2016 (DOE, 2016), with this rising to 100% in 2016–2017 (DOE, 2017) i.e., the timeliness for processing entitlements and meeting jobseeker placement targets.

Given this, it is interesting to compare the value generating mechanisms evident in this OC with the four causal mechanisms related to Makadok's theory of profit, namely rivalry restraint, competitive advantage, information asymmetry, and commitment timing (Makadok, 2011). Since jobactive is the current form of employment service delivery and has built upon the processes and practices of JSA, discussion is restricted to DOE's jobactive (see Table 2). As the sole government system for delivery of employment services, which is funded by government money and delivers returns to the government through efficiencies, the value creating mechanisms are driven by DOE's governance (including IT governance) on behalf of the Australian Government. In this industry sector, DOE has exclusive control over these services in Australia and in that sense has a monopoly. However, given its governance processes and practices in engaging its OC members as DOE developed these IT-enabled services, there is merit in analyzing how its actions provide value for the Australian Government and its clients.

Firstly, rivalry restraint creates value when restraints on competition in an industry enable an organization to inflate prices or when industry output is restricted to artificially raise prices (Makadok, 2011). Here:

- when delivering employment services, the DOE is the interface between clients (providers, jobseekers and employers) and the Government. As a monopoly, DOE could have restrained competition (i.e., excluding private providers and stifling provider innovation). Yet the DOE's charter to reduce costs by outsourcing (rather than inflating prices), and permit service providers to submit individualized tenders for service level agreements in order to increase output (more jobseekers in work) is contrary to the market practices related to restraining rivalry in order to gain benefit; and
- jobactive reduces rivalry restraints by increasing flexibility. For jobseekers, booking appointments is now possible online (reducing provider control) and changing providers is easier as their past history is more readily accessible in the system. Similarly, employers have more control, being able to list vacancies and limit applicants, and providers have longer contracts that encourage innovation.

Competitive advantage is generated by an organization's unique and superior assets that allow it to gain market share and appropriate profit. For example, organizations may build IT capabilities that complement their business capabilities, thereby providing advantage (Wade and Hulland, 2004). Here:

- as a government OC involved in service delivery, its stakeholders fundamentally engage to enable required outcomes. Competitive advantage (for the Australian Government) is gained by sharing knowledge and actively collaborating rather than competing; and
- there is some evidence of competitive advantage being rewarded: (1) to the Government and providers through the tender process wherein the DOE selects providers based upon a competitive tender in which the providers self-report against criteria related to prior demonstrated success (see Table 2); (2) public access to providers' star ratings helps jobseekers and employers to identify the best performing providers, which advantages all three stakeholders; and (3) jobseekers' improved ability to move to other providers fosters improved performance by both parties.

Information asymmetry arises when some organizations are better informed about the value of goods or services being transacted and exploit this advantage at the expense of those less informed. Alternatively, through monitoring, incentives and allocating decision rights, governance may be used to mitigate information disadvantages or exploit information advantages, and create profit (Makadok, 2010). Here:

- given the Australian Government's ownership of the databases that control knowledge and payments to providers, employers and jobseekers, theoretically all stakeholders in a particular category should be equally advantaged. Thus, information asymmetry should not arise.
- the nature of the governance mechanisms for enacting jobactive were consistent with the aim of information symmetry, as the mechanisms were inclusive, involving the widespread dissemination of ideas and prototyping (see Table 2). The DOE's improved training of providers and their employees demonstrates commitment to symmetry.

- one key element of jobactive was that the DOE had to adjust its reporting timelines by 2 weeks in order to co-ordinate timelines with Centrelink's payment systems (rather than merely providing a link as was the case with JSA). This created information symmetry regarding jobseekers' welfare payments and employers' bonus payments (for employing long term unemployed) that more quickly rewarded the two groups.
- although the DOE's governance mechanisms sought wide engagement, providers who contributed more input were more informed, more engaged and thus more likely to find their views accepted. This may well have generated jobactive features that advantaged them (asymmetry).
- the DOE was charged with fostering service innovation in jobactive. It responded by awarding providers with longer contracts, which offered more incentive to invest in delivery. This permits information asymmetry and rewards better performers.
- through star ratings, jobactive's KPIs reward service providers who are more effective, efficient and deliver better quality services for getting jobseekers into work and filling employers' vacancies. For jobseekers and employers, these ratings indicate information asymmetry.

Commitment timing relates to a leader's decision-making: early (preemptive) commitment discourages other organizations from having a negative impact. Where there is a delay to gauge environmental circumstances and judge the need for any adaptation, it is flexible (Makadok, 2010). Here:

- the Australian Government's strategic decisions regarding jobactive (review, need, timing, investment and governance mechanisms fostering active stakeholder involvement) were preemptive;
- flexibility was evident in some internal timelines to address prototyping issues about the most desired features and to roll out trials; and
- together these strategies encouraged engagement within a framework that structured the processes, reduced cost blowouts and engendered stakeholder understanding of the scope.

7. Conclusion

Our aim in this study was to: firstly, address the lack of research regarding stakeholders' engagement in OCs where membership is less than voluntary and more diverse. We addressed this by investigating stakeholder engagement and contribution of knowledge in the redevelopment of two employment services systems. The study shows how the use of governance in redeveloping processes and practices in both an OC and its related IT-enabled system, delivers value through stakeholder engagement that fosters members' knowledge contribution. Our findings show that from the outset, DEEWR/DOE consistently governed in a manner that sought active engagement from all OC stakeholder groups despite its role as the key stakeholder and source of funds. JSA and jobactive were delivered by seeking stakeholder perspectives (cognitive engagement), demonstrating acceptance of these (emotional engagement) and translating these into collaborative prototyping, trialing, training and instantiating new services (behavioral engagement). Our analysis extends research showing knowledge contribution as a key factor for value generation in OCs (Ray et al., 2014) by contributing a new multi-party perspective regarding stakeholders' engagement in less than voluntary OCs.

Secondly, voluntary OCs are fluid, with individuals' membership related to the value perceived by contributing knowledge. In other OCs, membership may be less voluntary, as was evident in the case of JSA's and jobactive's OCs. To address the stated need for research into the mechanisms by which value is created in non-voluntary OCs, we evaluated the performance outcomes for the first year of jobactive against its objectives. To extend this understanding, we analyzed the strategies used in developing jobactive in terms of Makadok's four causal mechanisms (Makadok, 2010, 2011). Findings indicate that value had been created for the mutual benefit of stakeholders (government, providers, jobseekers and employers). Moreover, whilst the key stakeholder preemptively committed timelines, governance mechanisms that generated some competition and flexibility (rather than restraining rivalry), and delivered competitive advantage and information asymmetry for more active participants, were the mechanisms that generated value for the government, service providers, jobseekers and employers.

Despite this, our findings are limited in that we only studied two instances regarding development of OCs related to employment services. The dynamics of engagement and their impact on value creation may be different in other OC contexts. For example, future research might look at a comparison against the US healthcare system implemented under what is known as ObamaCare. Equally, from a methodological perspective, despite using a variety of methods to investigate the case study, difficulties arise from the need to report stakeholder contributions and issues from a collective rather than individual viewpoint, the scope and geographical spread of services, and the diversity of stakeholders.

The contribution of the study concerns demonstrating that knowledge contribution is the key to stakeholder engagement in less than voluntary OCs; confirmation of governance ‘best practices’ that can be applied for the benefit of disparate OC stakeholders; and demonstration of a new dimension in mapping Makadok's four causal mechanisms for profit. In summary, whilst specific types of value may vary according to the OC context, culture and purpose, our investigation of the dynamics of OC value creation in terms of stakeholder engagement (cognitive, emotional and behavioral), when linked to the causal mechanisms used to generate profit, yields new and relevant insights.

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