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Digital transformation of business-to-government reporting: An institutional work perspective

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ABSTRACT
Traditional business-to-government reporting is a core remit of the accounting function but is associated with a significant administrative burden on business. This burden is a major obstacle hindering business efforts to achieve core efficiency and innovation objectives. We use the conceptual lens of institutional work to examine how traditional business-to-government reporting is abolished and how digital reporting is established to replace it in attempts to reduce administrative burden but without compromising regulation effectiveness. We adopt a comparative approach to analyse qualitative evidence from three jurisdictions, namely, Netherlands, United Kingdom, and Australia. Regulators across these jurisdictions have been both pioneers and leaders internationally to transform business-to-government reporting in multi-agency settings. Our analyses illustrate how institutional work to develop digital business-to-government reporting across the jurisdictions was shaped by international influences and local factors. We also illuminate how actor engagement issues and the intertwined and mutually reinforcing nature of a mosaic of forms of institutional work shaped the path of these transformations. The study contributes to existing research by explaining how supportive conditions and structures are brought about and made to coalesce in the regulatory business reporting space for digital reporting to become established and widely adopted by business.

1. Introduction
Traditional business-to-government reporting has been widely criticised in many countries around the world for being inefficient, complex and often duplicated (Bozanic et al., 2012; Chen, 2012). It has resulted in a significant administrative burden on business, a major barrier hindering achievement of core business objectives. In response, many regulators around the world have undertaken efforts to transform reporting to government to reduce administrative burdens on business. Key benefits expected from this transformation are to help business focus on core activity, to improve innovation and efficiency, and to enhance competitiveness and well-being in the broader society (Arnold et al., 2011; Bharosa et al., 2015).

In this study, we focus on the work that is carried out by regulators and other actors to achieve this transformation. This
undertaking is challenging: it includes abolishing traditional forms of business-to-government reporting and establishing new forms of reporting that will effectively reduce administrative burden on business but without compromising regulation effectiveness.

The study addresses the research questions of how traditional business-to-government reporting is abolished and how a new form of reporting is established to replace it. The answer to these questions contributes to existing research by illuminating the nature of the efforts that are undertaken to create new forms of reporting to government, including how and why these efforts are undertaken and by whom. This helps explain how supportive conditions emerge and are made to coalesce in the regulatory business reporting arena for a new form of reporting to become established and widely adopted by business (Bozanic et al., 2012).

For the purposes of the study, we conceptualise business-to-government reporting as an institution. According to Jepperson (1991) an institution is “an organized, established procedure” (p.143), a “stable design for chronically repeated activity sequences” (p.145). Institutions support the reproduction of a practice while also restricting what actors can and cannot do as they interact. This conceptualisation is justified because business-to-government reporting is a well-defined and standardised practice that governs patterns of interaction (and associated predictable outcomes) between business and government.

Business-to-government reporting is underpinned by regulation, the legal instruments including rules and laws (e.g., tax legislation) designed by an authority to control conduct in an industry or broader society (Arnold et al., 2011; Bozanic et al., 2012). However, as businesses comply with regulation they incur costs. A significant portion of these costs is called administrative burden: the costs of “complying with information obligations stemming from government regulation” (OECD, 2007a, p.27). Information obligations include the systematic preparation and filing of information in government reports (de Winne et al., 2011). Businesses that decline to fulfil information obligations face sanctions (SCMN, 2003). There is broad agreement that reporting to government imposes a significant administrative burden on business (Bharosa et al., 2015).

We examine the transformation of reporting to government to reduce administrative burden on business. We adopt the conceptual lens of institutional work. Institutional work focuses on how an institution becomes a product of human action (Hopper and Major, 2007; Lawrence et al., 2009). Institutional work perspective can help conceptualise transformation of reporting to government as work that is carried out by actors aiming at removing an established institution, i.e., traditional reporting associated with high administrative burden, and establishing a new form of reporting that is based on different principles aiming at reducing the burden.

The new form of reporting is called digital reporting which is being implemented around the world by using XBRL (eXtensible Business Reporting Language) as key technology. XBRL is based on principles that are radically different to those powering traditional reporting. Although often presented in electronic formats (e.g., PDF), traditional reporting remains fundamentally paper-based, a key reason underpinning inefficiency, complexity, and duplication problems. XBRL facilitates structuring of information in digital reports which helps address these problems (Alles and Piechocki, 2012; Doolin and Troshani, 2004; O'Riain et al., 2012; Troshani et al., 2015).

Our specific focus is on the actual filing mechanism of business reports to government. We examine the transformation work and outcomes associated with the changing of technologies businesses have used to file government reports but which preserve the paper-based nature of traditional reports (e.g., PDF) to digital reporting technology that is enabled by XBRL. Whilst the content of the digital reports (determined by regulation and accounting standards) is retained in the transformation, digital business reporting has significant implications concerning the rationalisation of the ways in which business information obligations are captured and used for compliance assessment across wider government.

Examining institutional work that drives transformation from one institution to another enables unpicking interstitial elements. It directs focus on the gap between traditional reporting, i.e., the institution that dictates how business report to government, and action, that which actors are doing to challenge and abolish it and create digital reporting as a new institution. This setting is useful for closely looking at the relationship between institutions and action (structure and agency), and to better understand why and how actors are working to transform reporting to government and how their actions lead to both intended and unintended consequences (Lawrence et al., 2013; Suddaby et al., 2015).

We contribute to the wider institutional research in several ways. First, we provide extensive empirical evidence based on qualitative data sourced from face-to-face interviews and documentary evidence from across three jurisdictions: Netherlands, United Kingdom (UK) and Australia. We focus specifically on these countries because of action they have undertaken aimed at reducing administrative burden as priority in their regulatory reform and policy agendas. In this process, these countries have often followed each other's lead. Examining them simultaneously thus improves understanding of commonalities and differences in institutional work and the manner in which they influenced each other to generate similar and often different outcomes. Importantly, focusing on these countries side-by-side offers insight that would otherwise be difficult to provide, had they been examined separately. Furthermore, these countries are highly regarded internationally to have built up exemplary institutional capacity for transforming business-to-government reporting as wider multi-agency projects (Katsoulacos et al., 2011; OECD, 2010a, 2010b, 2010c, 2010d). Thus, our examination in these settings presents an ideal opportunity to better understand issues that emerge in multi-agency projects and the manner in which a multi-agency scope strengthens (or threatens) their success.

Second, our examination helps trace the specific types of institutional work alongside the institutional changes that occurred as a result. This adds to the literature by providing a nuanced understanding of the reflexive relationship between forms of institutional work (action), and resulting patterns of institutional change (structure), that is specific to business-to-government reporting. Managing and delivering business reporting (of financial and non-financial information) to regulators (or other actors) constitutes a core remit of the accounting function. There are ongoing calls for further research that improves understanding of the relationship between agency and structure in different domains (Canning and O’Dwyer, 2016; Lawrence and Suddaby, 2006; Suddaby et al., 2015).

Third, existing research has predominantly focused on institutional work aimed at creating and maintaining new institutions (see
3. Prior research

This paper is structured as follows. First we discuss the theoretical underpinning of the study, followed by an overview of related research including XBRL, a key digital reporting technology. Thereafter, data collection and analysis considerations are explained before results are analysed and discussed. The paper is concluded with a discussion of the contribution, limitations and future research.

2. Theoretical underpinning

We examine our evidence by using the conceptual lens of institutional work (Lawrence and Suddaby, 2006). We adapt Lawrence and Suddaby's (2006) institutional work definition as the “purposive action of individuals and organizations” (p. 215) that aims at disrupting an old institution, and creating a new one with which to replace the old (Lawrence et al., 2009).

Action is characterised as purposive, intelligent and situated while actors that undertake it are characterised as “reflexive, goal-oriented and capable” (Lawrence et al., 2013, p.1024). Institutional work focuses on the “internal life” a process and the world inside it, rather than on the process itself as a sequence of activities (Lawrence and Suddaby, 2006). Institutional work examines the “creative and knowledgeable work of actors which may or may not achieve its desired end and which interacts with existing social and technological structures in unintended and unexpected ways” (Lawrence and Suddaby, 2006, p. 219).

The need for disrupting an institution often emerges when contradictions develop between an institution and the organisational field, the broader terrain where an institution operates (Jepperson, 1991). Contradictions occur when the interests of certain actors, who also operate in the organisational field, are not served by an institution as expected. These actors will often engage in action that challenges, undermines and even rejects both the institution and its rationale (Oliver, 1992). Oliver (1992) describes disruption work as “a direct assault on the validity of a long standing tradition or established activity [existing institutions]” (p. 567) that aims “at tearing them down or rendering them ineffectual” (Lawrence and Suddaby, 2006, p. 217).

Disruption work can take many forms. Actors often attempt to disconnect the rewards (sanctions) that are associated with compliance (non-compliance) from specific institutions. In other forms, disruption work disassociates an institution from its moral or normative foundations in a specific context. Disruption work can also undermine key assumptions and beliefs in the organisational field that complying (or not) with an institution is associated with benefits (costs) (Lawrence and Suddaby, 2006).

Creation work establishes a new institution, the new rules which, when repeatedly activated, enable the reproduction of patterns of behaviour by actors (Lawrence and Suddaby, 2006). Creation work establishes rewards (sanctions) ensuring enforcement of the new rules. Rewards and sanctions incentivise actors to comply with institutions and counteract non-compliance (Jepperson, 1991). Creation work can also take many forms. Actors can engage in overt or covert political work attempting to reconstruct rules that govern how actors operate in the organisational field (e.g., rules that determine how certain resources can be accessed or how rights to resource ownership are conferred). Creation work can also attempt to reconfigure belief or normative systems (e.g., redefining identities or normative associations among actors) or altering meaning systems (e.g., concepts). Creation work is generally strengthened by maintaining work which aims at “supporting, repairing or recreating the social mechanisms that insure compliance” (Lawrence and Suddaby, 2006, p. 230). Maintaining work can take many forms, including enabling work that facilitates, supports and supplements institutions and embedding and routinizing work which attempts to infuse institutions into actors' daily routines and practices (Lawrence and Suddaby, 2006).

3. Prior research

Institutional work in parallels earlier efforts of institutional scholars to investigate the interplay between agency and structure (see e.g., Burns and Scapens, 2000; Dillard et al., 2004; Guerreiro et al., 2014; Modell, 2014; Boullanne and Cho, 2009). Institutional work, however, extends traditional institutional research by providing specific fine-grained analytical tools that specifically examine the various types of work (agency) that can be used to shape institutions (structure) (Chiwamit et al., 2014; Lawrence and Suddaby, 2006).

Although relatively new, institutional work has begun influencing the focus of institutional research (Goretzki et al., 2013). For example, institutional work has been adopted as analytical lens to examine the relationship between agency and structure in relation to the creation of some accounting institutions including Economic Value Added (EVA) (Chiwamit et al., 2014), the Committee of Sponsoring Organization’s (COSO) Enterprise Risk Management–Integrated Framework (ERM–IF) (Hayne and Free, 2014), domain change in accounting expertise (Suddaby et al., 2015), regulatory change in the accounting profession (Canning and O'Dwyer, 2016), and interlingual translation of International Financial Reporting Standards (IFRS) (Kettunen, 2017).

These studies constitute some key contributions spanning different accounting domains. However, institutional work is an “umbrella concept and a rallying point” (Hwang and Colyvas, 2011, p.62) that has yet to form into a coherent framework (Hayne and Free, 2014). New opportunities in other domains must be sought that describe and explain the nature of institutional work that is carried out to shape institutions (Hayne and Free, 2014; Suddaby et al., 2015). We argue that business-to-government reporting is an important accounting domain where institutional work has become instrumental to regulators (and others) to achieve
transformations aiming to reduce administrative burden on business.

The actors that populate the field of business-to-government reporting are different and the manner in which they engage or become engaged in institutional work varies since it is often driven by different motivations. Consequently, the manner in which these actors affect a particular outcome or are affected by it is also likely to vary. By focusing on action itself, an institutional work perspective can direct attention to the relational and interactive moments of institutional disruption, creation and maintenance, thereby enabling us to better understand the broader patterns of the actors’ motivation, intent, capacity and effort that effect institutional change (Hwang and Colyvas, 2011).

To illustrate, the field of business-to-government reporting is densely populated by many different actors including business and intermediaries (e.g., accountants, financial advisors, bookkeepers, tax agents, payroll professionals). Intermediaries often assist business to fulfill their information obligations. Business and intermediaries are collectively referred to as preparers since they prepare and file business reports to regulators. Regulators process business reports to fulfill their regulatory functions (e.g., compliance assessment including tax revenue collection). Other relevant actors operating in the field include professional accounting bodies or industry associations which represent the interests of various business groups, and software developers who provide software applications that facilitate reporting interactions between business and regulators.

This organisational field includes organisations and bodies that have created and maintain technologies for powering software applications. For example, XBRL, a digital data standard for codifying business reporting data, was formally developed by XBRL International Inc. (XII), an international consortium that coordinates the efforts in local jurisdictions based on countries or internationally recognised business reporting regimes (Alles and Piechocki, 2012; Locke and Lowe, 2007; Srivastava and Kogan, 2010). Local XBRL consortia of Netherlands, UK, and Australia are XBRL Netherlands, XBRL UK, and XBRL Australia, respectively, all XII members. These consortia have attempted to promote XBRL within their jurisdictions (Troshani and Lymer, 2010).

XBRL is a digital reporting technology that uses ‘tagging’ to associate contextual information with data points in business reports. XBRL structures reports in ways that allow computer-based processes to automatically process financial data at a granular level (Turner, 2005). Digital reporting with XBRL is different to traditional reporting which relies on paper-based or electronic formats (e.g., PDF) that can only be read by humans but which require extensive, inefficient and error-prone manual intervention when further processing is needed (Guilloux et al., 2013; Locke et al., 2018). A key implication is that digital reports in XBRL format can be automatically exchanged and processed by disparate computer platforms and accounting applications. For example, accounting applications used by preparers and regulators can automatically and ‘intelligently’ recognise specific tagged data in digital reports and extract required data without manual intervention. Another implication is that digital reports can also be rendered to formats that are suitable for human users (e.g., PDF) (Troshani et al., 2015).

XBRL tags are based on accounting standards and regulatory reporting regimes, often set by national and international standard-setters and defined in XBRL taxonomies. A taxonomy is a data dictionary that defines XBRL tags and maps them to accounting concepts while also defining their relationships and processing rules (Doolin and Troshani, 2004). XBRL taxonomies are developed on a jurisdictional basis. So the taxonomy of a jurisdiction reflects both its accounting standards and GAAP. To facilitate digital reporting between preparers and regulators, XBRL taxonomies need to be used with accounting applications that must be enabled with additional functionality to process digital reports (Turner, 2005).

Whilst existing research has examined the adoption of XBRL in various jurisdictions (see e.g., Abdolmohammadi et al., 2017; Doolin and Troshani, 2007; Henderson et al., 2012; Premuroso and Bhattacharya, 2008; Shan and Troshani, 2014, 2016; Shani et al., 2015; Troshani and Lymer, 2010; Valentinetti and Rea, 2012; Troshani and Doolin, 2007; Troshani and Rao, 2007), this research treats XBRL as a given technology, while the actors that use it are treated as rational decision makers who are driven by economic and efficiency objectives. Notable exceptions to this research are the works of Troshani et al. (2015), Troshani and Lymer (2011), and Guilloux et al. (2013) which examine XBRL institutionalisation as process. However, these studies focus on XBRL itself and tend to overlook the broader institutional work that is carried out in the organisational field. By focusing on institutional work, this paper extends existing research by elaborating how a wide range of conducive conditions are brought about and how suitable supporting structures have become materialised for the embedding of XBRL into a broader digital business-to-government reporting institution after abolishing traditional filing mechanisms.

4. Data collection and analysis

In this study, actor interpretations concerning the transformation of business-to-government reporting were captured using a qualitative approach. Data were collected by interviewing relevant informants and reviewing supporting documentation pertaining to Netherlands, UK and Australia. The key reason for selecting these countries is that they were key pioneers and internationally recognised exemplars in business-to-government reporting transformation in multi-agency settings (OECD, 2010a, 2010b, 2010c, 2010d).

Australia is a federal coordinated state, whereas the Netherlands is a unitary, but decentralised state. The UK is a unitary centralised state where a single party has been dominant for more than ten years, although typically considered to be a two-party system. In Australia and the UK, decision-making is driven by the majority, whereas in the Netherlands the dominating mechanisms are consensus-based where negotiations among parties take place and all parties have to agree to some extent before subjecting decisions to voting. This can hamper swift progress, but once decisions are made they benefit from being widely accepted which is not always easy to achieve in the other two jurisdictions (Pollitt and Bouckaert, 2011). The consensual approach in the Netherlands results in many consultative and advisory councils which are involved in relatively open processes.

Interviews were used because of their flexibility (Myers and Newman, 2007). Interviews provide rich insights for exploring,
identifying and understanding viewpoints, attitudes, and influences (Myers and Newman, 2007). Moreover, they also allow greater control over the interview situation (e.g., sequencing of questions) while providing opportunities for clarification and collecting supplementary information (Myers and Newman, 2007). In the Netherlands, the interviews took place between January 2008 and August 2016 lasting between 45 and 90 min. The UK interviews took place between September 2008 and April 2015 and ranged between 43 and 80 min. The Australian interviews were conducted between April 2008 and January 2014 and ranged between 37 and 116 min. All interviews were transcribed. The interview periods for each country were deliberately selected as key decisions and developments took place during the selected periods in each country in relation to the justification and formative development for digital reporting to government. Additional data were sourced from technical reports, relevant websites, industry, professional and government publications across jurisdictions to both capture XBRL developments beyond the selected interview periods and also to triangulate interview evidence.

Interviewees were informants who primarily held managerial roles in various organisations that were participating in the transformation of business-to-government reporting. The roles of the interviewees included: managers; heads of accounting, auditing, data assurance and ICT departments; directors of industry associations; software developers and chief executive officers of software development organisations; strategy and policy managers in government departments. The interviewees were identified using theoretical and snowball sampling to ensure representation of key actors. To maintain anonymity, only the categories of interviewees’ organisations have been identified in Table 1.

A summary of the study objectives and open-ended semi-structured questions was provided to interviewees, giving them time to prepare while also allowing them maximum freedom when considering their viewpoints. Questions concerned issues such as: organisational roles, interests and objectives of involvement in business-to-government reporting transformation, the role of professional and industry associations and regulators, and XBRL development and adoption issues (see Appendix).

We used our selected theoretical underpinning as a basis for data collection and thematic analysis. That is, theory was used to frame themes drawn from the data for analysis. Data collection and analysis proceeded hand-in-hand; analysis commenced immediately and progressed as data became available and while collection continued. Data collection and analysis thus informed and guided each other while converging on themes (Myers and Newman, 2007). Rich and diverse textual data collected were analysed on an interpretative basis. Themes were incrementally developed by the condensing, clustering and conceptual grouping of identified categories. To elicit meaning and interpretations, data were read multiple times to carefully target higher-order generalisations, shifting frequently between the general and the specific, and in the process, comparing, contrasting, analysing relations, and triangulating identified patterns of themes against alternative data sources. In the process, the structure and analysis of findings were amended until a thorough and coherent understanding of the phenomena represented in the data was assembled and developed based on a logical chain of evidence (Yin, 2009).

5. Findings and analysis

In this section we discuss the key forms of institutional work observed across the selected jurisdictions. Broadly, the discussion focuses on forms of disrupting, creating, and maintaining work to abolish traditional business-to-government reporting and replace it with digital reporting (Lawrence and Suddaby, 2006). We compare our findings in order to highlight cross-jurisdiction similarities and differences. Our choice of presenting the observed forms of institutional work linearly is broadly driven by historical and presentation considerations, although in practice we find that institutional work occurs in an interwoven and fluid manner.

5.1. Disrupting traditional regulation and advocacy for better regulation

Whilst regulation is considered to be important in the Netherlands, UK and Australia, making business comply with excessive regulation was widely considered by regulators as harmful. A key implication of excessive regulation is high administrative burden on business which threatens competitiveness, productivity and innovation across the jurisdictions (DTI, 1985; Hilmer et al., 1993; OECD, 2004).
While these jurisdictions suffered from excessive regulation, the conditions contributing to excessive regulation were different between them.

Being part of the European Union (EU), there is an obligation for the Netherlands and UK to incorporate EU regulation into their national law. For example, approximately 50% of new Dutch and British regulation originates from the EU (BRTF, 2005; Katsoulacos et al., 2011). Such an obligation had further implications in the UK where ‘gold-plating’ was often used, a practice whereby EU regulation was extended by the UK Government beyond the original minimum requirements before being incorporated into UK national regulation. Whilst the aim of gold-plating was to tailor EU regulation to specific UK conditions, a key implication was that it increased the compliance burden on UK business.¹

The Netherlands is also characterised by a unique regulation-setting culture. Dutch governments are typically structured as coalitions of many political parties while political culture features a strong orientation towards common interests (OECD, 1999a, 1999b). A key implication is that regulation was often outcome of cartel arrangements and a style of decision-making strongly driven by consensus-seeking processes. These processes often led to regulation that was satisfactory to all parties involved in regulation-setting but that was often difficult to implement in practice (OECD, 1999a, 1999b).

Unlike the Netherlands and UK, Australia is a federation of six states and two territories that represent different jurisdictions within Australia. These jurisdictions are administered by their own governments and have different characteristics including size, industry composition and regulatory frameworks (PC, 2008). An implication is that Australian regulation is made at many jurisdictions, i.e., at federal, state and territory levels. Although regulation in each jurisdiction aims to capture specific needs, there are often duplications and inconsistencies across states and territories (OECD, 2010c). This has led to onerous administrative burden on business. The burden is compounded significantly for those that operate across multiple jurisdictions (e.g., having to comply with same type of regulation across jurisdictions) (PC, 2007).

Regulators in the Netherlands, UK and Australia had similar concerns in relation the administrative burden and impact on productivity, growth, innovation, and competitiveness. For example, assessments in the 1980s² found the Dutch regulation-setting to be highly complex and rigid (OECD, 1999a, 1999b) with compliance costs estimated at approximately 10% of the Dutch GDP (OECD, 1999a). Similarly, in the UK there were 62 national regulators in 2004 (Hampton, 2005) and the overall cost of regulation was estimated at 10–12% of the UK GDP (Arculus, 2005; Tate and Clark, 2004; TPA, 2008).

...the system as a whole is uncoordinated and good practice is not uniform. There are overlaps in regulators’ responsibilities and enforcement activities. There are too many forms, and too many duplicated information requests.

(Hampton, 2005, p. 1)

There is a clear rationale for reducing the administrative burden that regulations impose on business. Complying with the information requirements of UK regulations... can hamper business, channelling resources away from more efficient uses and act as a constraint on innovation, productivity and growth.

(BRTF, 2005, p. 4)

After wide-ranging consultations with Australian business and regulators an independent taskforce found that “there is too much regulation and, in many cases, it imposes excessive and unnecessary costs on business” (RegulationTaskforce, 2006, p. i). Administrative burden on Australian business had serious implications on broader Australian economy (Madden, 2009; SBR, 2008b):

The costs of regulation to business involve not just extra time, paperwork and capital outlays, but also deflect management from the core activities of the business. ... Regulation can thus stifle innovation and crowd out productive activity in the 'engine room' of Australia's economy.

(RegulationTaskforce, 2006, p. ii)

Advocacy was used in similar ways in Netherlands, UK and Australia focusing on rhetoric targeting the cause of administrative burden. The common theme was to focus on ‘better regulation’ and on making regulation “business friendly” (OECD, 2010d, p. 28). In the Netherlands, advocacy was framed on need for refoecusing regulation on “what is strictly necessary” (OECD, 2007a, 2007b, 2010a, 2010b). Similarly, advocacy for “better, rather than less, regulation” was used in the UK (BRTF, 2005) while in Australia advocacy targeted regulation that was “unnecessarily burdensome, complex, redundant, or duplicate[d]” (Treasury, 2005).

In this study, we focus on the reduction of administrative burden on business, a key theme of the broader ‘better regulation’ agenda³ of governments in Netherlands, UK and Australia. The annual administrative burden on business was estimated at approximately €350 million in the Netherlands (MvF, 2004; OECD, 2007a, 2007b), A$800 million in Australia (RegulationTaskforce, 2006; SBR, 2008b), and £16–20 million in UK (Carter, 2006; KPMG, 2006). These figures were consistently used across the jurisdictions to undermine traditional regulation as part of advocacy work to justify the need for transformation.

¹ The practice of gold-plating has been used in the UK since it joined the European Economic Community (EEC) in 1973 (Katsoulacos et al., 2011). In 2010, the UK Government pledged to end gold-plating by 2011 (BBCNews, 2013; UKGovernment, 2010). Accordingly, new guiding principles were issued ensuring that UK businesses would be facing only the minimum requirements of regulation originating in the EU. However, these principles only affected new regulation while EU regulation that was adapted before 2011 remains ‘gold-plated’ (FBTUK, 2013).

² A notable assessment is that of the Geelhoed Commission on Deregulation of Governmental Institutions (GeelhoedCommittee, 1984).

³ ‘Better Regulation’ agendas in the Netherlands, UK and Australia included regulatory reform targeting many areas: reducing administrative burden on business, making business regulation understandable and easier to comply with, making regulation-setting processes transparent, and impact assessment of regulatory proposals (OECD, 2010d).
5.2. Reconfiguring identities, normative associations, vesting work: Mimicking the Dutch

A key outcome of the Dutch ‘better regulation’ program⁴ which was the establishment in 1998 of the Coalition Committee for Reduction of Administrative Burdens on Enterprises, known as the Slechte Committee (OECD, 1999a, 1999b). The Slechte Committee found that existing government reporting norms whereby the same information was often reported by business to many regulators, was contributing significantly to the administrative burden on Dutch business. It defined the principle of designing regulation according to which information reported to government should be reused by regulators: business would report to government only once and regulators would then share information as needed. The reuse principle created the need for constructing a new government reporting identity and reconfiguring the associations between preparers and regulators and also among the regulators. The Slechte Committee also defined the principle for the independent and ongoing monitoring of administrative burdens which reinforced the need for an independent authority in the business-to-government reporting field (Katsoulacos et al., 2011; OECD, 2010a).

The Slechte Committee principles inspired action in the UK and Australia. Dedicated task forces were established in these jurisdictions carrying out extensive administrative burden assessments. These assessments culminated in detailed reports in the UK in 2005⁵ and Australia in 2006.⁶ These task forces recommended mimicking the Dutch approach for reducing the administrative burdens which was accepted by their governments:

We recommend that the [UK] government adopt the Dutch approach to reducing administrative burdens

(BRTF, 2005, p.5)

The Taskforce sees considerable potential for the Netherlands model to be implemented in Australia… The Australian Government should develop and adopt a business reporting standard within the Australian Government sphere … based on the Netherlands model

(RegulationTaskforce, 2006, p.142)

Vesting work followed across the three jurisdictions whereby the right and authority for the independent and ongoing monitoring of administrative burdens was conferred to dedicated bodies. The Netherlands and UK created national independent advisory bodies to support and monitor work to reduce administrative burden. For example, the Dutch Parliament established the Dutch Advisory Board on Administrative Burdens (ACTAL)⁷ in 2000 (ACTAL, 2006) while the UK established the Better Regulation Executive (BRE) in 2006 (OECD, 2010b). ACTAL and BRE carried out similar monitoring roles including promoting cooperation between regulators (ACTAL, 2006, 2012).

In Australia, these roles were assigned to an existing government body, the Productivity Commission (PC), a standing, independent advisory body with a broad policy mandate (OECD, 2010d).

While other OECD countries have established advocacy bodies on an ad hoc or standing basis to undertake inquiries or support the progress of reform initiatives, … [the] PC is unique in many important respects … in terms of its independence, staffing size, economic expertise, stability and the breadth of policy issues it considers. …. But no other OECD member has established a standing body with as broad a mandate to undertake research and advise the Government on opportunities to make better policies in the long term national community interest

(OECD, 2010d, p.14)

5.3. Australia extends disruption work with benchmarking

The Australian PC carried out additional disruption work to disassociate traditional reporting practice from the rationale of regulatory reporting. This work was necessary in Australia given its unique multi-jurisdiction environment.

Coping with these [excessive regulation] challenges is an enormous task for any country, and Australia is not alone …. Australia faces an additional complexity in tackling these challenges, as most reforms require action by up to nine governments

(Hilmer et al., 1993, p. xv)

The differences among Australian state and territory jurisdictions were often so significant that it was difficult and sometimes not possible to compare administrative burdens (PC, 2008). Furthermore, the multi-jurisdiction environment in Australia had created a regulator-focused rather than business-centred culture of regulation that contributed to increase administrative burden:

In this climate, a ‘regulate first, ask questions later’ culture appears to have developed. Even where regulatory action is clearly justified, options and design principles that could lessen compliance costs or side-effects appear to be given little consideration. Further, agencies responsible for administering and enforcing regulation have tended to adopt strict and often prescriptive or legalistic approaches, to lessen their own risks of exposure to criticism. This, in turn, has contributed in some areas to excessively
defensive and costly actions by business to ensure compliance. (RegulationTaskforce, 2006, p.ii)

In 2006, the Council of Australian Governments (COAG)\(^8\) agreed that all Australian governments should carry out benchmarking work to assess administrative burden across Australian jurisdictions (PC, 2013). Benchmarking helped identify specific inconsistencies, duplication and underlying causes. It provided evidence justifying the need to disassociate the rationale of regulation from existing inconsistent regulation-setting practice and also to identify areas for consistent regulatory reform (COAG, 2007).\(^9\)

5.4. Harmonisation as defining work

Consistent with the Slechte Committee principles, harmonisation work had similar aims in Netherlands, UK and Australia: to identify commonalities and differences in reportable information obligations and reaching agreement among regulators in each jurisdiction to use the same definitions of common information in different reports (SBR, 2012). Harmonisation work focused on defining, and labelling every reportable data element underpinning information obligations. Where the same data elements are duplicated but with different names, they were harmonised with the same name and definition (APRA, 2011a). Where data elements had the same name but different definitions, they were uniquely labelled (APRA, 2011a, 2011b).

Regulators across the three jurisdictions undertook harmonisation work in multi-agency settings in similar ways. Mimicry was useful to facilitate articulating and legitimating harmonisation work and was achieved through the ongoing sharing of experiences at international conferences (e.g., annual XBRL International conferences or Standard Business Reporting conferences) or regular useful to facilitate articulating and legitimating harmonisation work and was achieved through the ongoing sharing of experiences at international conferences (e.g., annual XBRL International conferences or Standard Business Reporting conferences) or regular collaboration between national regulators (e.g., between Netherlands and Australia) (Hameleers and Kuipers, 2011; Madden, 2009).

Nevertheless, there were differences in the ways in which harmonisation work was carried out, including scope and approach. Irrespective of the differences (discussed next), a key outcome of harmonisation work was to produce country-specific taxonomies: the common dictionaries of terms defining information obligations for reporting to government. Each jurisdiction codified their taxonomies in XBRL, which was perceived to be the best technology available for taxonomy implementations (Ramin and Reiman, 2013; Teixeira, 2013).

5.4.1. Netherlands: constructing normative public-private network

Early harmonisation work in the Netherlands culminated in 2004 with the Netherlands Taxonomy Project (NTP) which in 2009 was rebranded as Standard Business Reporting (SBR) and led by Logius,\(^10\) an agency dedicated to establish government-wide data infrastructure.\(^11\) Two key points are unique about harmonisation work in the Netherlands.

First, harmonisation work was framed as a public-private partnership and received strong political support (Kuipers, 2015). This partnership was formalised in June 2006 where key actors including the Ministries of Economic Affairs, Justice and the Interior and Kingdom Relations, representing three government agencies (e.g., Tax and Customs Administration, Chamber of Commerce, and Central Statistics Agency), signed a Covenant of Cooperation aiming to reduce the regulatory burden by using the Netherlands Taxonomy for business reporting. The Covenant of Cooperation was also signed by representatives of business, intermediaries and software developers (Daas and Roos, 2011; Dutchparliament, 2006; XBRLInc, 2007).

The Covenant was significant as it meant that SBR was positioned to have a shared identity and ownership (Deloitte, 2013). Harmonisation work placed a strong emphasis on taxonomy construction as outcome of consensus and cooperation between government agencies and key market players including intermediaries and software suppliers (OECD, 2009).

The agreements between market parties and government are set down in a covenant in which the government pronounces in favour of guaranteeing the maintenance and control of the taxonomy and process infrastructure. Market parties, especially intermediaries and software suppliers, promise that they will use the taxonomy and the process infrastructure and will wherever possible pass on any efficiency benefits to their clients, the businesses. (OECD, 2009, p.37)

Second, from November 2009 three of the largest commercial Dutch banks\(^12\) which together dominate the business loan market, committed to adopt SBR for credit reporting. These banks had found that approximately 50–80% of the information required for business credit reporting was the same as what businesses provide to government in statutory reports (ABR, 2014). By participating in SBR work these banks could re-use this information and contribute to reduce the burden for business seeking business loans and investment. Consequently, major banks conducted parallel harmonisation work concerning business lending processes in conformity with the Dutch SBR harmonisation work (Deloitte, 2013). The parallel approach contributed to harmonisation work that included many different market players but focused on development of a single shared taxonomy (Deloitte,

\(^8\) COAG was established in 1992 as peak inter-governmental forum to manage matters of national significance requiring coordinated action by all Australian governments at federal and state/territory levels (COAG, 2017).

\(^9\) Benchmarking work in Australia was comprehensive. It commenced with a feasibility study in 2007 and extensive work between 2008 and 13 with studies targeting specific regulation areas including business registration, occupational health and safety, payroll tax administration, food safety, financial services, land development assessment, and environmental approvals (PC, 2007, 2013).

\(^10\) Logius was established in 2006 as GBO.Overheid. GBO.Overheid was renamed to Logius in 2010 (EU, 2010).

\(^11\) This is known as Overheidstransactiepoort (OTP) (DataFoundation, 2017).

\(^12\) The banks are ABN Amro, ING and Rabobank.
Harmonisation work in the Netherlands included annual accounts, tax filings, statistics and credit reports (Logius, 2010) with the scope to be broadened into the future to government reporting areas including healthcare, education, agriculture, subsidies, pensions, tax compliance, and local government (Geijtenbeek and Lucassen, 2011). It harmonised approximately 98% of reportable information obligation items from approximately 200,000 to 4500 (DataFoundation, 2017).

5.4.2. Australia: constructing normative inter-regulator network

The business case for harmonisation work was approved by the Australian Government in 2007. It carried strong political support with COAG agreeing in 2008 to support this work as means of reducing the administrative burden in Australia (COAG, 2008; Treasury, 2008).

Harmonisation work in Australia was also branded as Standard Business Reporting and the Australian Government committed to mimic the Dutch approach and to collaborate with Dutch regulators (DataFoundation, 2017):

The Australian SBR Program maintains close and regular contact with the NL SBR Program to share designs, issue resolution and lessons learned. This collaboration fosters the development and introduction of best practices.

(Madden, 2009, p.8)

The Australian SBR program has followed the lead taken by the Netherlands Government in initiating an SBR program to reduce the reporting burden on business.

(ABR, 2014, p.6)

Nevertheless, there are differences between the Dutch and Australian approaches. Led by Australian Federal Government's Treasury, harmonisation work in Australia had a broader scope than in Netherlands. It comprised thirteen regulators operating at federal and state/territory levels (APRA, 2011a, 2011b).

Unlike the Netherlands where the initial focus was on forming a public-private network, the key step for Australia was for the inter-regulator network to carry out harmonisation work. Such agreement was formalised in a Memorandum of Understanding among participating regulators (SBR, 2010).

Furthermore, the Business Advisory Forum (BAF) was established to act as conduit for engaging with business. BAF was comprised of many industry groups including professional accounting bodies, business, intermediaries and software developers (BAF, 2013). Whilst BAF recognised the importance of establishing SBR awareness, they emphasised early engagement in harmonisation work with software developers rather than business:

The key BAF feedback to date suggests software developers and accountants are best placed to ensure SBR messages are understood by the business community. Further, while software developers will need information on SBR early to fit in with their development schedules, businesses should be approached at a later date, closer to when working examples of SBR can be demonstrated and at a time when action is required as implementation is imminent.

(SBR, 2008a, 2008b, p.11, emphasis added)

Harmonisation work in Australia encompassed 87 reports from across participating regulators (Madden, 2009) and harmonised over 80% of existing reportable information obligations items, from 33,523 to 6636 (ABR, 2014; DataFoundation, 2017).

5.4.3. United Kingdom: constructing normative regulator dyad

Early harmonisation work in the UK dates back to 2005. It was initially limited to a single government agency, namely, HM Revenue & Customs (HMRC), and subsequently extended to Companies House (Deloitte, 2013).

... the drivers in the UK have been very much Company’s House and HMRC.

(UK_PAB/IA_3_#1)

It is important to recognise that HMRC itself was formally established as a tax collection authority in 2004 as a result of UK’s ‘better regulation’ program that resulted in the merger of two different regulators, namely, HM Customs and Excise (HMCE) with

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13 The Dutch SBR Programme includes Tax and Customs Administration reports (turnover tax return, corporation tax return, abbreviated corporation tax return, report concerning intracommunity performance, income tax return), Statistics Netherlands reports (production and investment statistics reports), Chamber of Commerce annual reports and bank credit reports (Logius, 2010).

14 Australian regulators participating in harmonisation work are Australian Taxation Office (ATO), Australian Securities and Investments Commission (ASIC), Australian Prudential Regulation Authority (APRA), and Australian Bureau of Statistics (ABS) which operate at the federal level, and eight Australian state and territory revenue offices (ROs) which operate at state/territory level (APRA, 2011).

15 The reports that would be available in SBR format include business activity statements, company income tax returns and fringe benefit tax returns (ATO), financial reports and notification of half yearly reports (ASIC), statements of financial position and performance (APRA), payroll tax returns including periodic returns and annual reconciliations (ROs), profit and loss statements and balance sheets, financial reports and statements and notification of half yearly reports (ASIC), and quarterly business indicators survey (ABS) (AUASB, 2010).
Inland Revenue (IR) (APPTG, 2007). Whilst the scope of harmonisation work in the UK is limited to a regulator dyad, narrower than in Netherlands and Australia, it covered a relatively broad range of information obligations facing UK business as suggested below:

The administrative burden of UK tax regulation is £5.1 billion. ... 86% of the tax burden is created by 85 information obligations (in simple terms, the blocks of information business is required to submit to HMRC or keep on record).

(KPMG, 2006, pp. 4–5)

While representatives from the Federation of Small Businesses, British Chambers of Commerce, Institute of Directors and Institute of Chartered Accountants were invited to provide input, harmonisation work was predominantly carried out by HMRC and Companies House (OECD, 2009).

Ultimately, harmonisation work in the UK resulted in approximately 4500 information obligation items for HMRC and approximately 450 for Companies House (Mousa, 2010) and it included company accounts and tax computations (CT600) at HMRC and full audited accounts at Companies House.

5.5. Enabling work challenges

A key outcome of harmonisation work in the Netherlands, UK and Australia was the creation of XBRL taxonomies. However, whilst a taxonomy is necessary, on its own it cannot enable digital reporting. Software support is critical since it is impractical to use a taxonomy manually. Enabling work that would allow government to present digital reporting as a channel for business reporting therefore relied to a significant extent on availability of XBRL-enabled accounting applications. The applications constitute a medium enabling preparers and regulators to exchange business information in a digital format.

A common approach to enabling work entailed enhancements by software developers to existing accounting applications (i.e., typically used by preparers for creating government reports) to facilitate processing of information in XBRL form. XBRL enhancements provide the means of integrating a specific taxonomy into the application and to automatically produce and file digital reports to regulators via government information gateways. This process meant that preparers could fulfil information obligations efficiently by reporting only once, while regulators could collect required information as needed to carry out regulatory functions.

Wouldn’t you like to have all this [business data] rolled up into one single report [submission]? At the moment there’s slightly different [data] fields, you have to put it in one way for one consumer [regulator], a slightly different way for a different consumer. You have to do it on different dates. Roll it all up together, use XBRL by the way, you don’t need to know that it’s called XBRL but if everything is tagged nicely then one consumer will take the tax [data] that they need and are legally entitled to. Another consumer will take other data they are legally entitled to and things will be so much easier. You will save a lot of bureaucracy, a lot of admin time and you can get on with your core business. So there’s the sales pitch.

(UK_PAB/IA_3_#1)

This method of preparing and filing government reports suggests that preparers would potentially demand XBRL-enabled applications after observing the digital reporting benefits. For example, the quotes below illustrate the expectations of regulators across the three jurisdictions:

... if they see [digital business-to-government reporting applications], they will believe...

(NL_RA_2_#2)

The best thing is to let successful companies tell the story [about using digital business-to-government reporting applications] to other companies. We [regulator] also can tell the story, but a company is much more convincing.

(NL_RA_1_#1)

I am sure they can see the benefits... and that would then create a demand for XBRL[-enabled] systems [applications]...

(UK_RA_3_#1)

Regulators across the three jurisdictions had hoped that such demand would be seen as a business opportunity by developers/vendors of existing accounting applications (e.g., software upgrades and development, consultancy, training).

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16 Other regulators in the UK such as Financial Services Authority, Bank of England, London Stock Exchange, and Office for National Statistics were initially involved but did not become part of harmonisation work at HMRC and Companies House. These regulators wanted to collect a wider range of data (including non-financial data) well beyond the predominantly financial data requirements of HMRC and Companies House. Consequently, these regulators were allowed to adopt their own solutions which were predominantly based on the generic XML technology rather than on XBRL. The desire of these regulators to pursue own XML-based solutions was also influenced by limited expertise in XBRL technology (Troshani et al., 2015).

17 Company tax return reports (UK Companies Act) include balance sheet, profit and loss account and notes to accounts, including Director’s and Auditor’s reports (HMRC, 2011a).

18 Regulators in each jurisdiction also carried out transitional enabling work. They developed tools to facilitate taxonomy use enabling preparers to convert traditional reports into digital format. Digital reports could be subsequently filed once to government via dedicated portals, enabling preparers to fulfill information obligations and regulators to collect information in digital form. This form of reporting was effective in achieving digital reporting outcomes for regulators, but required additional digital conversion processes for preparers. This form of filing was intended to facilitate transition to digital reporting with XBRL-enabled applications.
However, this was not the case, at least initially, across the jurisdictions. The regulators attempted to engage developers to work to develop XBRL-enabled applications. In the Netherlands, regulators invoked the Covenant of Cooperation while in Australia similar efforts were made via the Business Advisory Forum (BAF, 2013; Bharosa et al., 2015). In the UK, software development community was consulted separately through two key industry associations representing software development firms and software professionals. Acting as agents of their constituencies, these associations offered qualified support given limited demand for digital reporting in UK (OECD, 2009).

A small number of innovative software developers responded to regulator efforts by engaging in work to provide XBRL-enabled applications in attempts to gain “foot-in-the-door” (UK_SD/V_1_#1) first-mover advantages (see e.g., Accountant, 2010; ICAEW, 2010; PC, 2012). Nevertheless, the dominant rationale in the broader software developer community across the jurisdictions was that there was lack of demand for XBRL-enabled applications from preparers and intermediaries. Consequently, developers were reluctant to invest in enhancements enabling their accounting applications to process XBRL information. They questioned the business case for these enhancements and expected preparer demand to materialise before committing to development work (ATO, 2008; NICTA, 2015).

Why should we bear the costs of changing our software? XBRL will offer no new functionality for our customers [since they are not really using it for business-to-government reporting].

Well, we usually try and identify the benefits to both parties [preparers and regulators]. Now SBR has identified benefits, honorary benefits of approximately $800 million to the providers [preparers] of information. I don't know how they got those numbers or whether they are valid but that's what has to really happen. There has to be some noticeable benefit and you've got to be able to cost justify it.

[In Australia] The use of SBR for the lodgement of financial reports is currently constrained by the limited number of SBR-enabled software products in the market, particularly for large business… Firms have not yet migrated to SBR and a sufficiently large number of users has not emerged that would act as a catalyst to generate the development of software products for financial reporting more widely usable across industry.

So, we have had problems in selling XBRL to the software companies… XBRL is a cost for them because they have a lot of work introducing it but they can’t really increase the prices their software products. So, they fear out the cost without a great deal of benefit. So, the business case for the software companies isn’t obviously there.

Limited XBRL-enabled applications created challenges for further work by regulators across the three jurisdictions as they attempted to present digital reporting as a viable form of government reporting to replace traditional reporting. This was a key reason why preparers across the jurisdictions struggled to see how digital reporting to government would be beneficial to them specifically.

General perceptions were that regulators would be the key beneficiaries of digital reporting, while preparers remained unclear about how they would benefit and how quickly benefits would materialise. For example, our evidence shows that preparers in the UK were not expecting XBRL benefits to be immediate and not to “come through for two or three years or longer” (UK_PAB/IA_2_#1). This sentiment was also captured in surveys funded by professional accounting bodies in UK (see e.g., Dunne et al., 2009; ICAS, 2010; Singh, 2009).

The same sentiment was shared by preparers in the Netherlands and Australia (Bharosa et al., 2015; Troshani and Lymer, 2010). Honouring the Covenant of Cooperation, Dutch preparers indicated that they would cooperate if that helped the government, but they themselves did not expect benefits from digital reporting (Janssen et al., 2010). Likewise, Australian preparers believed that digital reporting benefits might accumulate overtime rather than be immediate (O’Brien, 2008; PC, 2012).

Accountants or the smaller stakeholders who adopt XBRL they are likely to take a while before they can actually experience XBRL benefits.

I just can’t see people willing to invest, apart from big organisations. They probably will, because they would be able to look at the strategic level of some of this stuff. But at a smaller organization level, I’m not sure that they’re going to be motivated.

The benefits are evident to companies [preparers]. The main issue is if the benefits will become visible and when the benefits will become visible. Why bother about some ‘pennies’ in the future which needs much attention and effort to realise [at present]?! Software developers can make other [non-XBRL] investments. This makes it necessary to make a compelling business case for a broader range of preparers.

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19 Business Application Software Developers Association (BASDA).
20 British Computer Society (BCS).
Another key reason behind lack of demand for XBRL-enabled applications concerned the incentives of intermediaries to use digital reporting for business clients. Digital reporting was perceived by intermediaries as threat diminishing their traditional consulting roles. While advocacy across the three jurisdictions had highlighted savings from digital reporting, much of these savings would come from reduced intermediaries’ fees charged to clients due to simplification of business reporting to government (Bakker, 2012; IGT, 2015). Digital reporting would result in “loss of processing and compliance work for many accounting firms… [with consequential effect that] accountants must adapt their offerings to remain relevant” (AD, 2016). To many intermediaries across the jurisdictions, these savings were in fact lost revenue, a dis-incentive to support digital reporting or demand XBRL-enabled applications.

5.6. Disconnecting sanctions of traditional reporting, embedding and routinizing work

Irrespective of issues discussed previously, regulators across the jurisdictions created digital reporting channels for business. These channels have now been mandated across the jurisdictions, and digital reporting has become embedded and a routine form of government reporting. There are, however, differences in the approaches taken between jurisdictions concerning the manner in which sanctions were disconnected from traditional reporting and reconnected to digital reporting. Dutch and Australian regulators initially introduced digital reporting as a voluntary reporting channel alongside traditional reporting. By contrast, UK regulators mandated digital reporting after presenting it as an exclusive channel. These differences had implications for shaping reactions of preparers but also incentives for software developers to offer XBRL-enabled applications in each jurisdiction.

5.6.1. UK: a soft-landing approach to mandate

In 2009, UK regulators mandated digital reporting for all preparers reporting to HMRC and Companies House, effective from April 2011 (HMRC, 2009, 2011a, 2011b). UK interviewees consistently agreed that HMRC’s “authoritative power” (UK_SD/V.4.#1) “force[d] them [preparers] to do it [use digital reporting]” (UK_LAF.3.#1).

I think we all would agree that really the chicken and egg effect has been broken due to the regulators taking over. (UK_PAB/IA.2.#1)

The digital reporting mandate stimulated significant engagement of preparers with HMRC intensifying work towards creation of digital reporting. Immediately after the mandate was announced, preparers raised concerns about the time required to understand digital reporting and integrate it into existing reporting processes and availability of XBRL-enabled applications (Dunne et al., 2009; ICAS, 2010; Singh, 2009). The concerns were also related to legal implications concerning filing of business information without filers knowing about the specific view of the reports which regulators would see (CH, 2013; ICAS, 2010). The concerns were addressed using Inline XBRL (iXBRL), a mechanism for rendering digital reports that facilitates regulators receiving reports in the form which filers intended (Rowden, 2013).

In response to these concerns, HMRC committed to a ‘soft landing’ approach to the mandate. Accordingly, in the first two years after digital reporting became mandatory, they would look leniently on preparers who made efforts to meet digital reporting requirements and assist them rather than apply penalties (HMRC, 2013a). The aim of this approach was to create opportunities for preparers and software developers to become ready for digital reporting (CoreFiling, 2013).

Greater engagement of preparers generated demand for XBRL-enabled applications to which software developers responded by enhancing their applications (HMRC, 2013a; ICAEW, 2010). HMRC strengthened engagement with developers and introduced processes for approving new and enhanced XBRL-enabled applications (FSN, 2009). With approved applications available, preparers could fulfill digital reporting requirements (ABAB, 2012; BTF, 2013).

But technical solutions are just falling into place. There are two aspects, I think. At least as far as UK is concerned at putting technical solutions in place. One is having finished taxonomies which allow companies or software vendors to put the data in XBRL properly. And the other aspect … concerns the heading of what we call rendering in XBRL [which] basically means… being able to create a human readable version of an XBRL document. (UK_SD/V.2.#1)

Evidence suggests that digital reporting increased significantly in UK after the mandate became effective. In the 2013 Business Tax Forum, HMRC reported that approximately, 85% of returns received from preparers had been made using commercially available XBRL-enabled applications, while the remainder via HMRCs free online XBRL lodgement tool (HMRC, 2013a, 2013b). In 2015, approximately 1.9 million UK preparers had successfully filed to HMRC using digital reporting (XBRLUK, 2015a). Many users, including other regulators are sharing and information that is already filed to HMRC and Companies House suggesting that filers are benefiting from a reduced burden (XBRLUK, 2015b).

\[\text{XBRL} \text{ adoption requires a big fish to show the benefits... if the big fish fails [to show benefits], nobody will follow.} \]

\[\text{NL_PAB/IA.1.#1}\]

\[I \text{ think we all would agree that really the chicken and egg effect has been broken due to the regulators taking over.} \]

\[\text{UK_PAB/IA.2.#1}\]

\[\text{Evidence suggests that digital reporting increased significantly in UK after the mandate became effective.} \]

\[\text{XBRLUK, 2015b}. \]

\[\text{XBRL ensures that digital reports are internally structured using XBRL tags, but their presentation is not different to that of equivalent traditional reports (e.g., in paper or PDF format).} \]

\[\text{21 iXBRL ensures that digital reports are internally structured using XBRL tags, but their presentation is not different to that of equivalent traditional reports (e.g., in paper or PDF format).} \]
5.6.2. Netherlands and Australia: from voluntary adoption to phased-in mandate

Digital reporting became available to preparers in the Netherlands and Australia from 2008 and 2010, respectively. Dutch and Australian preparers could voluntarily use either digital reporting or traditional reporting channels. The voluntary approach in these jurisdictions was underpinned by regulators' expectations that preparers would recognise benefits and voluntarily choose digital reporting channel rather than the lesser efficient traditional reporting alternatives (e.g., web- and paper-based channels) (Cain, 2013; Janssen et al., 2010; NICTA, 2015; Power, 2013). These expectations however remained unfulfilled in both jurisdictions: digital reporting uptake remained low (DataFoundation, 2017).

Most Dutch business were choosing to report via the traditional rather than the digital channel (Bharosa et al., 2015; NICTA, 2015).

State Secretary De Jager stated at that point that he expected it to be possible for all tax declarations by business to be done using XBRL by 2008. Although expectations were high at the time, the uptake of solutions provided by the NTP was disappointing.

We invested in knowledge creation, however, there are only a few experts who are using this. (NL_RA_2_#1)

Similarly the number of Australian preparers using digital reporting reports remained negligible (Power, 2013). For example, in 2013–14 only 1% of 2.1 million registered Australian businesses used digital reporting (ABS, 2016; ATO, 2014) while in 2014–15 that number was 4.6% (ATO, 2015). Whilst Australian preparers could optionally use digital reporting to file tax reports, the vast majority were using traditional channels including the Australian Taxation Office’s (ATO) flagship Electronic Lodgement Service (ELS) or even paper-based forms (IGT, 2015).

Availability of traditional and digital reporting channels had unintended consequences for the enabling work of software developers. There was little incentive for preparers to use digital reporting which affected demand for XBRL-enabled applications, with consequential effects on incentives for software developers in Netherlands and Australia (NICTA, 2015). Traditional channels were identified by regulators and software developers as “key impediment” (IGT, 2015, p. 67) for digital reporting in these jurisdictions (ATO, 2008; DataFoundation, 2017).

[O]ther available online reporting services for lodging government reports have meant that at present there are only modest or uncertain gains from using SBR over the current methods of online reporting. These existing channels successfully compete with SBR… The Commission’s consultations with software developers have highlighted a mixed response to SBR, even though many software developers acknowledge its theoretical benefits ....

(IGT, 2015, p.67)

Although software developers recognise the benefits of SBR, they do not see a market opportunity to develop SBR-enabled software as long as ELS continues to be supported by the ATO...

In response to the low digital reporting uptake, regulators in Netherlands and Australia mandated digital reporting using a phased-in approach. Such an approach was adopted the Netherlands from January 2013. Accordingly, the scope of the XBRL mandate would become progressively wider to include reporting to additional regulators:

We would have preferred not to have any regulation at all, but we needed some kinds of push. Therefore, we negotiated with industry associations to introduce legislation and introduced a system to gradually demand more ....

(NL_RA_3_#3)

From 2013 onwards, companies in the Netherlands will be required to use SBR (Standard Business Reporting) for filing tax declarations, statutory accounts, and credit reports to government agencies...

(Wallagh and Van Den Ende, 2013, p. 53)

The Dutch parliament moved on Thursday this week [November 26th, 2015] to mandate electronic filing of financial accounts to the Chamber of Commerce (the national business registrar). The legislation phases in XBRL reporting as part of the Dutch SBR program, with small companies starting next year. Filing for medium-sized companies will start in 2017 and all private entities will be covered by 2019.

(Nitchman, 2015)

In Australia, the phased-in approach was initially applied by Australian Prudential Regulation Authority which mandated use of digital reporting from July 2013 (ABR, 2015a) while ATO phased out the ELS from March 2017 which it replaced with the Practitioner Lodgement Service (PLS), an XBRL-enabled channel. PLS is an exclusive tax reporting channel and mandatory from April 2017 (ATO, 2016a, 2016b; Nitchman, 2016).

The phased-in mandate in the Netherlands and Australia enhanced interest of software developers in both jurisdictions. Work provisioning XBRL-enabled applications accelerated immediately after the mandate was announced. Developers and vendors came to

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22 ATO, ASIC and State/Territory ROs have provided digital reporting channel since July 2010. APRA provided digital reporting channel on July 2011 (APRA, 2011).
the forefront of market developments in the Netherlands and the XBRL-enabled applications they provide are now being increasingly used by preparers to fulfill their government reporting obligations.

Most users are not interested in XBRL. They buy software that works. We should ensure that these software employs XBRL…

In the period just after the digital reporting mandate was announced in Australia over 220 software developers began developing XBRL-enabled applications for government reporting, a sharp rise relative to period before mandate was announced (ATO, 2015; ICB, 2015).

The mandate and availability of XBRL-enabled applications were associated with a steady rise in digital reporting in both jurisdictions. For example, after the mandate became effective digital reporting increased to 2.7 million XBRL reports filed to Dutch regulators in 2013 (Bharosa et al., 2015; SBRP, 2014) which increased further to 29.8 million in 2016 (Willemsen, 2017). Similarly, in Australia it is expected that the 20 million tax reports that are normally filed via the ELS channel (ABR, 2015a, 2015b) will be filed using the PLS digital reporting channel from 2017 (Jackson, 2014).

6. Concluding discussion

There is paucity of research concerning the institutional work that shapes the transformation of business-to-government reporting. The objective of this paper has been to explain how traditional business-to-government reporting is being disrupted and replaced with digital reporting in attempts to reduce the administrative burden on business. We addressed this objective by investigating how actors in the Netherlands, UK and Australia have carried out institutional work to achieve this transformation. Across these jurisdictions, digital business reporting is powered by XBRL, a radical technology that digitizes reports, facilitating exchange of information between business and regulators and sharing among regulators. Table 2 presents a summary of the forms of institutional work that were observed in the selected jurisdictions and the key differences and challenges.

We contribute to accounting literature by offering an empirically grounded theoretical account of the role of institutional work in the regulatory domain of business-to-government reporting. We have explained how supportive conditions can be brought about and how these conditions can be made to coalesce in multi-regulator settings for a new form of reporting to become established and widely adopted by business. To the best of our knowledge, this study appears to be the first comprehensive empirical analysis focusing on three jurisdictions that are international leaders in broader government reform initiatives and specifically in multi-agency business reporting.

Our simultaneous analyses show the impact of international influences on local digital government reporting. We find that institutional work in the digital reporting space is characterised by mimicry: that is, work that occurs in a jurisdiction is influenced by work that occurs in other jurisdictions. Our evidence shows that regulators across the jurisdictions have been challenging excessive regulation as key cause of administrative burdens in similar ways. Much of the work that occurred in UK and Australia followed the Dutch approach to addressing administrative burdens.

This underscores the need for broadening the conceptual scope of the study of institutional work and government transformation to the broader international context when regulators in one jurisdiction freely elect to follow regulators in another. This is an important contribution since existing institutional research has predominantly examined efforts of actors by focusing on the societal and cultural implications but limited to specific national contexts (see e.g., Chiwamit et al., 2014; Troshani et al., 2015) or to international contexts where choice of national regulators is dictated or constrained by international regulation (e.g., European Union requirements on EU nations) (see e.g., Guerreiro et al., 2014).

We also find that whilst institutional work that was carried out in the Netherlands influenced work in the UK and Australia, local factors contributed to shape the specific nature and scope of this work in these jurisdictions. Both UK and Australian regulators committed to follow the Dutch approach to reduce regulatory burdens but they customised institutional work to suit their local requirements. For example, Australian regulators carried out additional disruption work (benchmarking) to better assess administrative burdens, a choice that was dictated by the unique nature of multiple jurisdictions operating at federal and state/territory levels in Australia. Benchmarking was not necessary in the Netherlands or UK. Similarly, while Netherlands and UK established dedicated structures to support administrative burden reduction (ACTAL and BRE), Australia vested such roles to an existing structure (Australian Productivity Commission).

Whilst some differences in the observed nature of institutional work can be attributable to variation of local conditions, other differences can be explained with the notion of 'work displacement': institutional work that is used to replace originally intended forms of work because of their unintended consequences (Canning and O’Dwyer, 2016; Chiwamit et al., 2014). Work displacement could explain what occurred in the Netherlands and Australia when regulators decided to change the path from voluntary to mandatory adoption of digital reporting after observing that voluntary adoption was producing unintended results, that is, continued use traditional reporting by preparers and general apathy towards digital reporting by preparers and software developers.

Our analyses confirm the effectiveness of regulatory mandate in stimulating disruption of traditional reporting to government and its replacement with digital reporting. This effect however was expected, as widely documented in existing research (see e.g., Guerreiro et al., 2014; Hyvönen et al., 2009). Nevertheless, evidence of institutional work carried out across the selected jurisdictions illuminates three different transformation paths for digital reporting that intersect but that also run different courses. Analysing these paths side-by-side was particularly insightful in illustrating how ineffective voluntary approaches were in institutionalising digital reporting. Whilst the scope of digital reporting was evidently different across the three jurisdictions, weak voluntary uptake led both Dutch and Australian regulators to abort voluntary approaches in favour of mandated approaches, a path which UK regulators
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<td>EU regulation and ‘gold-plating’</td>
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<td>EU regulation, and national regulation-setting culture</td>
<td>Multi-level regulation and need for benchmarking</td>
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<td>Creating work</td>
<td>Advocacy</td>
<td>Choice of different reporting channels including digital reporting</td>
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<td>Reconfiguring identities and normative associations</td>
<td>Digital reporting to participating regulators as exclusive channel</td>
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<td>Businesses report to government once, regulators share reported information</td>
<td>Focus on ‘better, rather than less regulation’</td>
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<td>New independent body to monitor institutional work</td>
<td>Businesses report to government once, regulators share reported information</td>
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<td>Harmonisation work to produce national taxonomies</td>
<td>New independent body to monitor institutional work</td>
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<td>Maintaining work</td>
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<td>Monitoring role delegated to existing federal advisory body</td>
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<td>Similar challenges observed across jurisdictions to engage with software developers/vendors to construct digital business-to-government reporting applications</td>
<td>Via public-private network</td>
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<td>Embedding and routinizing</td>
<td>Voluntary use followed by phased in mandate of digital reporting</td>
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<td>‘Soft-landing’ approach to mandate</td>
<td>Voluntary use followed by phased in mandate of digital reporting</td>
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avoided by immediately applying a mandate and achieving desired digital reporting outcomes early.

Furthermore, harmonisation work was carried out across the jurisdictions to achieve similar outcomes (shared taxonomies). The configurations of networks within which harmonisation work occurred, were different across the jurisdictions: a public-private network was used in the Netherlands, an inter-regulator network in Australia, and a regulator dyad in UK. These configurations had no evident influence on preparer perceptions concerning the benefits of digital reporting being superior to traditional reporting. For example, we expected the voluntary approach taken in the Netherlands to be effective since a public-private network including representatives of preparers, and major banks was used to carry out harmonisation work. However, our evidence did not support this expectation. The Dutch public-private network was not more effective than the UK and Australian regulator-dominated networks in shaping preparer perceptions favourably towards digital reporting. Dutch regulators also had to resort to a mandatory approach to achieve desired digital reporting uptake. Our evidence suggests that preparers across the jurisdictions held similar beliefs that regulators were key beneficiaries of digital reporting.

We also find that actors who did not perceive the digital reporting institution to serve their interests became engaged in institutional work in response to concessions, compromise (see e.g., Chiwamit et al., 2014) and incentives offered by regulators rather than in response to proactive action. The soft landing approach adopted by UK regulators is an example of compromise and concession employed to encourage engagement in creation work before the mandate took effect in the UK.

Voluntary adoption in Netherlands and Australia served regulators' interests, but was not perceived by most preparers and software developers to serve their interests in these jurisdictions. By contrast, the digital reporting mandate across all jurisdictions served both the regulators' interests, and those of the software developers since it created a market for them. Arguably, in all jurisdictions the mandate also incentivised preparers because it presented digital reporting to them as an exclusive reporting channel. The mandate, therefore, transferred the normative associations between rewards (sanctions) and having to fulfill information obligations from traditional reporting to digital reporting. The mandate created an incentive for preparers to perceive digital reporting as something which they had to use irrespective of whether they believed that they would benefit from it or not. This suggests that interests of actors in an institution can be characterised both as benefits that are derived from engaging in institutional work (e.g., for regulators and software developers) but also as obligations: preparers became interested to adopt digital reporting because it is the only alternative offered to them to fulfill information obligations, and not because they necessarily believe they will benefit from it.

We find that various forms of institutional work are carried out in an intertwined manner and produce cumulative effects. We show how various institutional work forms can be combined to support and reinforce each other in the multi-agency domain of government reporting (Canning and O'Dwyer, 2016). This is a direct response to recent calls for further research focusing on the interplay of institutional “work interrelationships” (see e.g., Chiwamit et al., 2014). Accordingly, we find that institutional work forms are mutually dependent. Embedding and routinising work was highly dependent on enabling work. Regulators across the jurisdictions had to ensure that working XBRL-enabled applications were available before they could mandate use of digital reporting as an exclusive reporting channel. Similarly, harmonisation work producing taxonomies constitutes key work to be completed before enabling work could be expected to begin on XBRL-enabled applications.

We also find that institutional work forms can be mutually reinforcing. For example, disruption work was carried out across the jurisdictions where traditional reporting forms were discontinued while at the same time digital reporting was presented to business as an exclusive channel. Removing traditional reporting strengthened the importance of using digital reporting to business as the only available reporting alternative.

These examples also show that the “empirical reality” (Empson et al., 2013, p.837) of our cases is such that specific forms of institutional work do not necessarily occur as distinctly as implied by the analytical categorisation of Lawrence and Suddaby (2006) nor in the simplistic conceptual sequencing of Jepperson (1991). Indeed, disruption of traditional reporting work occurred in the beginning of the process of institutional transformation of government reporting, as suggested by Jepperson (1991), but also towards the end of the process (e.g., when adoption mandate became effective in each jurisdiction by disconnecting rewards (sanctions) from traditional reporting, and reconnecting them to digital reporting (see e.g., Canning and O'Dwyer, 2016; Hayne and Free, 2014). Nevertheless, the analytical differentiation of institutional work comprising disruption, creation, and maintaining work is a useful high level conceptualisation of institutional change (Jepperson, 1991; Lawrence and Suddaby, 2006).

Our findings have important implications for all actors of the business-to-government reporting domain, including regulators, business, intermediaries, software developers, professional accounting and industry associations. Our findings can inform policymaking and practice, while offering evidence of institutional work in jurisdictions where institutional transformation of reporting to government is under consideration.

We generalise our findings to the broader theory while also extending existing institutional work research to the domain of business-to-government reporting in multi-agency settings (Payne and Williams, 2005). We warn, however, that our findings should be considered as provisional. Future research in other settings needs to confirm, correct, and elaborate the extent to which our findings apply to other settings. Nevertheless, given the wide range of participating organisations and the rich nature of data collected, our findings may be transferable into similar settings.

Appendix A. Appendix

Interview guide

Background: name, function, organization, country

1. What is your organization's involvement in XBRL development and your particular role?
2. Which organisations are involved in XBRL development (in the UK/Australia/Netherlands)?
3. What are the drivers of XBRL (in the UK/Australia/Netherlands)? How did the drivers change over time?
4. How and why did your organization decide to join XBRL development and negotiation processes?
5. How and why does your organization re-position itself as new actors, including business partners and competitors, join XBRL development and negotiation processes (or as existing participating organisations change their original positions)?
6. How do negotiation processes unfold, work, succeed, fail, and what problems are encountered and how are they overcome?
7. What are the roles of consortia (e.g. XBRL UK/Australia/Netherlands), relevant industry associations, and government agencies in XBRL development efforts? And how did the roles change over time?
8. What patterns of interactions (alliances, competition, etc.) and dynamics surround XBRL development (in the UK/Australia/Netherlands)?
9. Which events influence the pattern of interactions? Which event was most influential?
10. How does the variety of interests among XBRL stakeholders threaten XBRL development and how is collective participation of representative members of heterogeneous groups ensured in XBRL development processes?
11. How are costs and benefits shared among the actors that participate in XBRL development and negotiation processes? Were there changes in the sharing of costs and benefits over time?
12. What are the drivers and inhibitors affecting XBRL development in the UK/Australia/Netherlands?
13. Which organisations does your organization interact with in its XBRL development efforts (and how)? Who are the individuals in these organisations that you interact with and how do you interact with them? (or that you know are involved in XBRL development in their organisations)?
14. Are there any other issues concerning XBRL development that have not been covered and that you wish to bring to our attention?
15. Who else do you think we should talk to?

References


