

Costs and benefits to small companies of digital reporting

Dr Jill Collis Brunel University London, UK

Dr Esra'a Alkhatib Al-Zaytoonah University of Jordan, Amman

Dr Sergio de Cesare Brunel University London, UK

January 2018

Acknowledgements

We are indebted to the Association of Certified Chartered Accountants for their support in distributing the questionnaire to members in the UK and disseminating the results. We would also like to thank all the respondents who kindly gave up their valuable time to participate in the survey.

Biographies of the authors

Jill Collis, BA (Hons), PhD, is Reader in Accounting and Director of the Accounting and Auditing Research Group at Brunel University London. Her research focuses on national and international developments in financial reporting requirements for micro, small and medium-sized private companies. She has undertaken applied research for the major accountancy bodies in the UK, the Financial Reporting Council and government departments. The Collis Report for the DTI (Collis 2003) contributed to the 'think small first' approach taken in UK company law and has been used as the basis for research in other jurisdictions. Her subsequent report for BERR (Collis 2008) contributed to the UK government's strategy for better regulation and reducing administrative burdens on smaller entities. In addition to her research publications, Jill has published text books on accounting and on business research methods.

Esra'a Alkhatib, BSc, MSc, PhD, is Assistant Professor in Accounting at the Al-Zaytoonah University of Jordan Amman and has several years' experience of teaching accounting to undergraduate students. She has a PhD from Brunel University London. Her main research interest focuses on developments in e-government initiatives, and digital reporting by small private companies for tax and other statutory purposes.

Sergio de Cesare, PhD, is Professor of Digital Business and heads the Digital Business Research Group at the University of Westminster. His research investigates foundational ontology as a means to theoretically model the digital enterprise, methods for the engineering and integration of information systems, and ways in which emerging digital technologies can create new business opportunities. His research has been funded by the EPSRC. He was managing editor of the European Journal of Information Systems from 2009 to 2014 and is currently associate editor of Organizational Design and Enterprise Engineering.

Contents

1. Background to the study	6
1.1 Introduction	6
1.2 Digital filing and reporting	6
1.2.1 Digital filing at HMRC	7
1.2.2 Digital filing at Companies House	7
1.2.3 Joint filing	8
1.3 Digital services from Companies House	8
1.3.1 Company search services	8
1.3.2 Data services	
1.4 Rationale for the study and objectives	
1.5 Structure of the report	
2. Methodology	
2.1 Introduction	
2.2 Data collection	
2.3 Data analysis	
3. Take-up of digital filing	
3.1 Introduction	
3.2 The filing process	
3.3 Filing format	
4. Influence of organisational factors	
4.1 Introduction	
4.2 Management support	
4.3 Technological readiness	
4.4 Technical expertise and training needs	
5. Influence of the business environment	
5.1 Introduction	
5.2 Statutory requirements	
5.3 Network effects	
6. Costs and benefits of digital filing	21
6.1 Introduction	21
6.2 Costs of digital filing	21
6.3 Benefits of digital filing	22
7. Companies House digital services	24
7.1 Introduction	24
7.2 Use of Companies House digital services	24

7.3 Benefits of Companies House digital services	24
8. Conclusions	26
8.1 Introduction	26
8.2 Take-up of digital filing	26
8.3 Costs and benefits of digital filing	27
8.4 Benefits of Companies House digital services	28
8.5 Recommendations for practice	28
References	
Appendix: Questionnaire	

1. Background to the study

1.1 Introduction

In 2005, the Hampton Report on reducing administrative burdens on business created by regulatory systems commented that 'there are too many, often overlapping forms and data requirements with no scheme to reduce their number' (Hampton, 2005, para. 7). The following year, the Carter Report (2006) recommended that the UK's tax authority (HMRC) and companies' registry (Companies House) should work together to develop services for the digital filing of accounts and returns. This study focuses on two government initiatives resulting from this recommendation that affect small private companies:¹

- The introduction of digital filing of company tax returns at HMRC, statutory accounts and returns at Companies House, and joint filing of statutory accounts with HMRC and Companies House
- The provision of digital services by Companies House, which include company filing, company searches and data services that offer free open data to users via the Internet.

The Government's rationale was that digital filing would improve the performance of the administrative and data processing tasks of these government agencies, and reduce costs and administrative burdens on small private companies (KPMG, 2006; HMRC, 2009a). At the same time, the digital services provided by Companies House would improve the accessibility of the data (Companies House, 2013).

Small private companies play an important role in the UK economy. In 2015, there were 1.63m companies and corporations in the private sector and more than 99% were private limited companies. Among those private limited companies, 98% were small (fewer than 50 employees), and yet they accounted for 33% of jobs and 22% of turnover in the private sector (BIS, 2015, Table 3).

1.2 Digital filing and reporting

In this report, digital filing refers to the online filing of accounts and returns at HMRC and Companies House. Digital reporting refers to 'the use of electronic communications technology to disseminate financial reports and other business information, particularly where common technical standards are used to facilitate this activity' (ICAEW, 2004, p. 48). It is underpinned by eXtensible Business Reporting Language technology (XBRL), which allows companies to file one set of information instead of filing it repeatedly in different forms to different government agencies (Sinnett and Willis, 2009). A digital filing and financial reporting initiative requires the creation of a taxonomy, which is a kind of data dictionary that allows the data to be tagged or labelled in a standard way (Eierle, Ojala and Penttinen, 2014; Lim and Perrin, 2014). This drives out duplicated data and unnecessary descriptions, thus reducing the burden of reporting (BIS, 2009).

From April 2010, companies have been required to use inline XBRL (iXBRL) for filing digital company tax returns to HMRC. This maintains the presentation of the statutory accounts so that they do not

¹ A reporting entity normally qualifies as small under the Companies Act 2006 if it is non-publicly accountable and does not exceed two of three size tests in the financial year concerned and the preceding year: annual turnover £6.5m; balance sheet total £3.26m; average number of employees 50 (Companies House, 2015). The financial thresholds shown here are those in force at the time of the study.

look any different from a traditional paper copy (HMRC, 2011). The difference between XBRL and iXBRL is that while XBRL can present financial information in machine-readable format, iXBRL presents it in both machine-readable and human-readable format. Thus, the company's information is presented in what looks like a normal document, but with embedded XBRL tags (Eierle, Ojala and Penttinen, 2014).

1.2.1 Digital filing at HMRC

In 2006, XBRL was granted full approval for digital filing of company tax returns at HMRC (Troshani, Parker and Lymer, 2015), including company tax forms (CT 600), corporation tax computations and the statutory accounts. A study commissioned by HMRC (KPMG, 2006), estimated that moving from paper filing to digital filing in XBRL format would save UK businesses between £16m and £20m (in 2005 values), as well as improving the accuracy and reliability of the information supplied. In 2006-07, the first year digital filing was permitted for small private companies, 1.3m online company tax returns were received, representing a take-up of 64% (HMRC, 2009b, p. 29). Digital filing of company tax returns in XBRL has been mandatory for most companies for accounting periods ending after 31 March 2010, regardless of size, and tax payments must be made electronically (HMRC, 2010). In 2011-12 (the first year), more than 3.5m online company tax returns were received (HMRC, 2013a) and recent statistics show that 98% of company tax returns are now submitted online (HMRC, 2015).

Previously, the filing process had been complex and time-consuming. A small company was required to complete a paper tax return and post it to HMRC, and payment was made by cheque (KPMG, 2006). By contrast, digital filing at HMRC offers a 'one-touch e-enabled solution' (ACCA, 2004, p. 5) that allows companies to file their tax returns and payments automatically. HMRC provides free filing software, which can be used by most small companies with relatively straightforward financial affairs, or they can use their own commercial filing software (HMRC, 2011 and 2013b).

1.2.2 Digital filing at Companies House

All companies must file their statutory accounts and a separate annual return at Companies House (Companies House, 2015). Companies House moved to digital filing in XBRL format in 2006 (Mousa, 2013a). At present, only small companies can submit their statutory accounts and/or annual returns in digital format either in iXBRL or XBRL with Companies House (Troshani, Parker and Lymer, 2015).² Initially, digital filing was aided by commercial software approved by Companies House, but in 2008, Companies House introduced its WebFiling service (Mousa, 2013a). WebFiling is an online facility that allows companies to manage and change their company details online, file accounts and returns electronically and sign up for eReminders about filing deadlines. It is free to register and use this service, although some company changes do incur a filing fee. WebFiling provides simple, downloadable forms that allow small companies to submit audit exempt abbreviated accounts, full accounts or dormant accounts as appropriate (Companies House, 2015). Companies House introduced their iXBRL service for unaudited full accounts during 2010 and by 2015, received information digitally for more than 85% of the accounts and returns filed by companies online (Companies House, 2015).

² The new European Single Electronic Format (ESEF) legislation will drive the use of XBRL for the production and consumption of the annual reports for thousands of European listed companies by 2020 (FRC, 2017). 'If implemented effectively, it will facilitate the use of corporate communication and data across Europe, truly digitally, for the first time' (FRC, 2017, p. 4).

1.2.3 Joint filing

In the traditional paper-based system, small companies had to file the same information twice to fulfil their statutory obligations to HMRC and Companies House. The main reason for this was that the submission deadlines did not coincide. For example, the Taxes Act required companies to file their statutory accounts (one of the elements of a company tax return) with HMRC within 12 months of the accounting year-end, while the Companies Act required private companies to submit their statutory accounts to Companies House within 9 months of the accounting year-end (Companies House, 2013b).

In 2011, joint filing in iXBRL format was introduced. This provide a 'one-stop shop' for small companies that allows them to submit audit exempt full accounts simultaneously to HMRC and Companies House, or to submit audit exempt full accounts to HMRC and simultaneously extract abbreviated accounts for Companies House (Companies House, 2015). It was estimated that joint filing will result in cost savings of £60m for HMRC and Companies House (BIS, 2009) in addition to addressing the problem of different submission deadlines, duplicated information and the time-consuming, error-prone manual processes associated with paper filing.

1.3 Digital services from Companies House

During 2015 Companies House received information digitally for more than 85% of the accounts and returns filed by companies online (Companies House, 2015). In addition to its digital filing services (see section 1.2.1), by 2016 Companies House offered two digital services:

- Company search services
- Data services.

1.3.1 Company search services

Companies House currently offers five company search services:

- The public beta service makes the public digital data held on the UK Register of Companies available free of charge. This includes company overviews and officers, document images, disqualified directors, previous and dissolved names search, UK establishments, and changes in the registered office address.
- The free WebCHeck service offers a searchable index of more than 2 million companies' names and addresses. It can be used to view a company's filing history online and purchase copies of document images and a selection of company reports. Users can also monitor a company and receive email alerts when new documents are filed at Companies House.
- The Companies House Direct (CHD) service offers free access to more than 130m documents held by Companies House that span almost two decades. Documents can be downloaded for as little as £1 each in portable document format (PDF) or as a tagged image file (TIF). There is a subscription fee of £4 per month.
- The extractives filing service is designed to help meet companies' obligations to deliver reports to the Registrar. The reports can only be delivered to the registrar electronically, under regulation 14(3) of the 2014 Regulations.
- The DVD directory provides basic company details on 3m live companies registered in the UK, as well as companies that have been dissolved during the previous month.

1.3.2 Data services

There are two data services:

- The Company Data Product is a free downloadable ZIP file that contains basic company data as comma-separated values (CSV) for live companies on the Register. Up-to-date company information can be obtained by the uniform resource identifier (URI) links in the data.³
- The Accounts Data Product is also a free downloadable ZIP file. It contains the individual data files of the company accounts in iXBRL or XBRL. The most recent accounts can be downloaded from the daily files provided on the Companies House website, whilst historical accounts are available from the previous year's monthly files. Only digitally filed accounts are available (approximately 60% of the 2.2 million accounts filed each year).

1.4 Rationale for the study and objectives

Considerable attention has been paid to extending our knowledge of digital filing and financial reporting in XBRL format. However, most previous studies have focused on large listed companies or government agencies in Australia (e.g. Lim and Perrin, 2014), the Netherlands (Bharosa, van Wijk, Janssen, de Winne and Hulstijn, 2011) and little or no research has focused on small private companies. Some studies have examined the development of XBRL technology in the Netherlands (Bharosa et al., 2011), and Finland (Eierle, Ojala and Penttinen, 2014). However, their findings are limited since the factors that drive XBRL adoption often differ across countries. For example, different national taxonomies have been developed based on different regulatory reporting regimes and accounting standards (Deshmukh, 2004).

Previous studies in the UK provide some evidence of the costs and benefits of XBRL-based filing (Dunne, Helliar, Lymer and Mousa, 2009 and 2013; Mousa, 2013a and 2013b; Troshani, Parker and Lymer, 2015). However, they are too small to permit generalisation or were conducted before the use of XBRL for filing company tax with HMRC became mandatory in April 2011. There have also been a number of academic and practitioner-based studies that have examined the potential benefits rather than the actual benefits of digital filing and reporting. Therefore, the objectives of this UK study are:

- To investigate the factors that affect the take-up of digital filing of accounts and returns at HMRC and Companies House by small private companies
- To investigate the costs and benefits of digital filing to small private companies
- To investigate the benefits of the digital services provided by Companies House to small private companies and their accountants.

1.5 Structure of the report

Chapter 2 describes the methodology used to address the research objectives. It explains how the sample was selected and the methods used to collect and analyse the research data. The unit of analysis is the small company where the accountant works (for those working in business), or a particular small company client the accountant has in mind (for those working in practice). This

³ The URI is a unique web address for each company that takes the user to a webpage showing the company data in HyperText Markup Language (HTML). HTML is the standard mark-up language for creating web pages and web applications.

permits a descriptive analysis of the survey results. Chapter 3 presents the results relating to the take-up of digital filing and opinions on the filing process, the filing choice and the filing format. Chapter 4 focuses on the organisational factors relating to the take-up of digital filing, while Chapter 5 examines the influence of the business environment on digital filing. Chapter 6 analyses the overall costs and benefits of digital filing and Chapter 7 moves on to discuss the digital services provided by Companies House. The final chapter draws conclusions from the main survey results and offers recommendations for practice.

2. Methodology

2.1 Introduction

The study was designed as an online survey of ACCA members in the UK. The criteria for selection were that the ACCA member was working in a small private company or was working in a practice and had at least one small private company client. The accountants in practice were asked to think of one particular small company client when answering the questionnaire as this would allow the common unit of analysis to be a small private company.

2.2 Data collection

The questionnaire (see Appendix A) was developed from the theories and models in the literature and interviews with 11 accountants. Before it was used, it received approval from Brunel's Ethics Committee. It was then tested online with a further five accountants. An invitation email containing a hyperlink to the online *SmartSurvey* was then sent to the 19,972 UK members on the ACCA database in November 2015. The first question served as a screen to ensure that only those members working in small private companies or with small company clients answered the questionnaire. The invitation included information about the purpose of the research, voluntary participation, the right to confidentiality and anonymity, and other ethical matters. A reminder was sent a few weeks later.

Table 2.1 shows the responses to the first and second requests to participate in the survey after 75 questionnaires that were out of scope had been eliminated. As can be seen, a total of 343 useable questionnaires were received.

Category	First request 13 -20 Nov 2015	Second request 21 Nov-6 Dec 2015	Total
Completed questionnaires	186	223	346
Invalid responses	(2)	<u>(1)</u>	<u>(3)</u>
Useable questionnaires	184	159	343

Table 2.1 Responses to the survey

Tests looking for differences between the first and second responders showed that non-response bias was not a problem and the size of the sample gives confidence that results obtained can be generalised to other accountants in the UK working in small private companies or in accountancy practices with small private company clients. Another test found that there was no difference between the responses from the accountants in business and accountants in practice, with two exceptions: cost and complexity. A plausible explanation for this may be that an accountant in business perceives the cost of the technology to be higher because the company must bear the entire cost of any commercial filing software bought, whereas an accountant in practice can spread the cost across a number of clients. Furthermore, the accountant in business only files the company's accounts once a year, whereas an accountant in practice becomes very practised as he or she files the accounts and returns for several clients each year. This may also explain the difference between these two groups in terms of complexity

2.3 Data analysis

The survey data from the 343 useable questionnaires is analysed in this report using descriptive statistics. The respondents were asked whether their current role included filing statutory accounts and returns for small private limited companies. The questionnaire provided a note showing the size tests for a 'small' private company in force at the time of the study under the Companies Act 2006.

Table 2.2 shows that the majority of the respondents (70%) answering 'yes' to this question were accountants in practice with small company clients, and the remainder were accountants working in small private companies. This confirms a long history of evidence from UK research that the majority of smaller companies rely on an external accountant for help with financial reporting (Carsberg, Page, Sindall and Waring, 1985, Collis and Jarvis, 2000; Collis, 2003, 2008 and 2012).

Table 2.2 The respondents

Category	Frequency	Percentage
Accountant in practice with at least one small company client	241	70.3
Accountant in a small private limited company	<u>102</u>	29.7
Total	343	100.0

As can be seen from Table 2.3, the age of the respondents was well distributed, giving confidence that the survey captured the views of a wide range of ages, with no bias towards the younger generations who may be more familiar with online applications.

Table 2.3 Age of the respondent

Category	Frequency	Percentage
Up to 30 years	28	8.2
31-40	72	21.1
41-50	92	27.0
51-60	100	29.3
Over 60	49	14.4
(

(n = 341)

Table 2.4 provides a breakdown of the respondents' experience of filing small company tax returns at HMRC and statutory accounts at Companies House. It shows that the vast majority (90%) filed both the company's tax return to HMRC and the statutory accounts and annual return at Companies House. This suggests that they had the appropriate experience to respond to the survey questions.

Table 2.4 Respondents' filing experience

Category	Frequency	Percentage
Both HMRC and Companies House	309	90.1
Companies House only	22	6.4
HMRC only	<u></u>	3.5
Total	343	100.0

3. Take-up of digital filing

3.1 Introduction

This chapter analyses the factors relating to the take-up of digital filing at Companies House and HMRC. It focuses on the filing process and the choice of filing format and software used. We start by examining the respondents' views on the filing process.

3.2 The filing process

The respondents were asked how small companies normally manage the process of filing their company tax returns (CT 600, computations and statutory accounts) to HMRC and their statutory accounts to Companies House. Table 3.1 shows that in most companies (71%) the filing process is entirely managed in-house, while a small minority outsource the whole process (18%) or use a combination in internal and external help.

Table 3.1 Management of the filing process

Category	Frequency	Percentage
Internal staff are entirely responsible for the filing process (in-house)	244	71.1
A third party is entirely responsible for the filing process (outsourced)	63	18.4
A combination of in-house and outsourced	36	10.5

Note: More than one answer was allowed (n = 343)

The respondents were also asked who, apart from themselves, is normally involved in the process of filing the small company's tax return and statutory accounts to Companies House. Table 3.2 shows that in 55% of companies the directors are involved and in 19% of companies, bookkeepers, auditors and IT personnel also play a role. The main elements of the 'other' category are other accounting personnel and the company secretary. This fairly wide ranging team of persons involved in the filing process reflects the legal responsibilities companies have for filing tax returns at HMRC and their statutory accounts at Companies House. It also highlights the involvement of IT personnel in a process that traditionally has been the domain of accountants.

Table 3.2 Personnel involved in the filing process

Category	Frequency	Percentage
Director	156	54.9
Bookkeeper	54	19.0
Auditor	40	14.1
IT personnel	5	1.8
Other	106	37.2

Note: More than one answer was allowed (n = 343)

3.3 Filing format

The respondents were asked which format the company uses when filing the annual returns and statutory accounts at Companies House. As can be seen from Table 3.4, although digital filing at Companies House was voluntary for small companies at the time of the study, 94% used online methods for their annual returns and 87% used online methods for their statutory accounts. This

provides abundant evidence that the respondents had appropriate experience to answer the questionnaire.

Category	Frequency	Percentage
Online annual returns	322	93.9
Online statutory accounts	299	87.2
Paper statutory accounts	66	19.2
Paper annual returns	9	2.6

Table 3.4 Format for filing accounts and returns at Companies House

Note: More than one answer was allowed (n = 343)

Digital filing at HMRC is compulsory for small companies and, as might be expected, Table 3.5 shows that vast majority of small companies (92%) use online methods when filing their company tax returns at HMRC. However, there are some exceptions to the rule and this explains why we did not find 100% doing so. However, HMRC plans to move to a fully digital tax system by 2020 (HMRC, 2015).

Table 3.5 Format for filing company tax returns at HMRC

Category	Frequency	Percentage
Online company tax returns	315	91.8
Paper company tax returns	15	4.4
No response	13	3.8
Total	343	100.0

With regard to the digital media used to file the company tax returns at HMRC and statutory accounts at Companies House, Table 3.6 reveals that the majority of small companies (69%) use commercial filing software, which is widely available, and 38% use WebFiling service provided by Companies House. A small minority use the free HMRC filing software (22%) or make use of the joint filing facility (13%).

Table 3.6 Software used for online filing at Companies House and HMRC

Category	Frequency	Percentage
Commercial filing software	236	68.8
Companies House WebFiling	130	37.9
HMRC filing software	77	22.4
Joint filing (HMRC and Companies House simultaneously)	46	13.4
Note: More than one answer was allowed $(n - 242)$		

Note: More than one answer was allowed (n = 343)

4. Influence of organisational factors

4.1 Introduction

This chapter examines the survey evidence on the organisational factors that influence the take-up of digital filing. The main factors discussed are support from top management, technological readiness and expertise and training needs to use digital filing and financial reporting. We start by looking at the importance of support from top management.

4.2 Management support

Previous studies on Internet-related technologies including e-commerce (Grandon and Pearson, 2004), EDI (Huang, Janz and Frolick, 2008) and ERP. Pang and Jang, 2008 suggest that top management support is a critical factor in the context of technological innovation. In small businesses this is particularly important for ensuring adequate resources and an organisational champion to implement the innovation (Premkumar *et al.*, 1997). The results of this study (see Table 4.1) show that the majority of respondents (70%) agree that there is enthusiastic support from the principal director of the small company for digital filing and a similar percentage agree that the company has allocated adequate financial resources to support the move from paper to online filing.

Table 4.1 Management support

Statement	Disagree 1	2	Neutral 3	4	Agree 5
The principal director enthusiastically supports the use of online filing for the accounts and returns rather than paper	4.1%	4.4%	21.3%	23.6%	46.6%
	(14)	(15)	(73)	(81)	(160)
The organisation has allocated adequate financial resources to support the use of online filing	2.3%	4.4%	23.6%	35.0%	34.7%
	(8)	(15)	(81)	(120)	(119)

(n = 343)

4.3 Technological readiness

To examine the use of e-applications as an indicator of the technological readiness of small companies for digital filing, the respondents were asked whether the company uses any of the online applications listed in Table 4.2. The majority (74%) of the small companies use e-banking (74%) and there is widespread use of e-invoicing with customers and/or suppliers (58%). Just over one-third (36%) use the e-Billing service available on the Companies House website and a small minority (11%) used the mobile app provided by Companies House at the time of the survey.

Table 4.2 Company's use of e-applications

Frequency	Percentage
254	74.1
198	57.7
123	35.9
38	11.1
	254 198 123

Note: More than one answer was allowed (n = 343)

The respondents were also asked about the extent to which familiarity with e-applications had supported the company's decision to use online filing. Table 4.3 shows that 50% agreed that this had a positive influence.

Table 4.3 Influence of e-applications

Statement	No influence	2	Neutral	High influence	
	1	2	3	4	5
Familiarity with e- applications has encouraged the company to use online filing	7.7% (23)	12.1% (36)	29.9% (89)	26.5% (79)	23.8% (71)

(n = 298)

There is some evidence from information systems studies that the decision to adopt new technology is positively associated with its compatibility with the company's current systems (e.g. Wang, Wang and Yang, 2010). Lack of compatibility could result in organisational resistance, which might delay e-business adoption (Zhu, Dong, Xu and Kraemer, 2006a). However, other research (Huang, Janz and Frolick, 2008; Picoto, Bélanger and Palma-Dos-Reis, 2014) suggests that this is not a significant problem since most Internet-based systems are already compatible with modern information systems.

Table 4.4 shows the extent of agreement with two statements that relate to the company's IT infrastructure. This reveals that a total of 64% respondents agree or strongly agree that digital filing makes data transfer between different information systems easier than with paper filing; only 23% agree or strongly agree that online filing requires substantial modification to the company's IT infrastructure.

Statement	Disagree 1	2	Neutral 3	4	Agree 5
Online filing makes transferring data easier between different information systems than paper filing	2.9%	8.7%	24.8%	28.3%	35.3%
	(10)	(30)	(85)	(97)	(121)
Online filing requires substantial modification in existing IT infrastructure	22.2%	25.7%	29.4%	17.2%	5.5%
	(76)	(88)	(101)	(59)	(19)

Table 4.4 Compatibility with the company's information systems

(n = 343)

4.4 Technical expertise and training needs

Table 4.5 shows that digital filing does not require technical training or expertise in iXBRL, the technology that underpins the filing software is not visible to the filer. Only 38% of respondents agree that digital filing requires technical expertise in-house and 35% agree that digital filing requires more specialist training for accountants.

Table 4.5 Technical expertise and training needs

Statement	Disagree 1	2	Neutral 3	4	Agree 5
Online filing requires special technical expertise in-house	16.3%	23.3%	22.4%	28.9%	9.0%
	(56)	(80)	(77)	(99)	(31)
Online filing requires more specialist training for accountants	16.3%	22.7%	26.2%	26.5%	8.2%
	(56)	(78)	(90)	(91)	(28)

(n = 343)

Looking at these results more closely, Table 4.6 shows that the majority of respondents (79%) had received some kind of training in connection with digital filing. Online tutorials were the most widely used (41%), followed by in-house training (23%) and software vendor training (13%). Less than 1% of respondents used training from HMRC or Companies House and just over one-fifth (21%) received no training.

Table 4.6 Respondents' training in digital filing

Category	Frequency	Percentage
Self-training use online tutorials	142	41.4
In-house training	80	23.3
Software vendor training	46	13.4
Training at HMRC	2	0.60
Training at Companies House	1	0.30
None	<u></u>	<u>20.9</u>
Total	343	100.0

5. Influence of the business environment

5.1 Introduction

This chapter analyses the factors in the business environment that affect the take-up of digital filing. The main factors discussed are the influence of statutory requirements and the company's business network. We start by examining views on the influence of the statutory requirements on the take-up of digital filing.

5.2 Statutory requirements

Not surprisingly, statutory requirements are likely to have a significant influence on a company's decision to use technological innovations (Henderson, Sheetz and Trinkle, 2012; Dunne *et al.*, 2013). This is confirmed by the present study (see Table 5.1), which finds that compliance with statutory requirement influenced the decision in 80% of companies.

Table 5.1 Compliance with statutory requirements

Category	No influence 1	2	Neutral 2 3 4		High influence 5
Statutory requirement from Government	5.0%	5.2%	9.6%	21.6%	58.6%
	(17)	(18)	(33)	(74)	(201)

(n = 343)

The respondents were also asked about the extent to which various sources of information influenced the company's decision to use online filing. Table 5.2 shows the results. Interestingly, 58% were influenced by the information available on the Companies House website, where digital filing is voluntary, and 53% were influenced by the information on the HMRC website, where digital filing of corporation tax returns at HMRC is mandatory for small companies. The other sources of information listed did not have significant influence.

Table 5.2 Sources of information on digital filing

Category	No influence	ce Neutral			High influence
	1	2	3	4	5
Online information on Companies House website	11.7%	11.7%	21.3%	26.8%	28.6%
	(40)	(40)	(73)	(92)	(98)
Online information on HMRC website	13.7%	11.1%	21.9%	25.1%	28.3%
	(47)	(38)	(75)	(86)	(97)
Information available from ACCA	33.5%	16.0%	33.2%	10.2%	7.0%
	(115)	(55)	(114)	(35)	(24)
Workshops/conferences by XBRL UK	52.2%	17.2%	22.4%	4.4%	3.8%
	(179)	(59)	(77)	(15)	(13)

(n = 343)

5.3 Network effects

Network effects are considered to be an important influence on the adoption of new technology. A network effect is the positive effect on the value of a product or service to users when another user joins and enlarges the network (Katz and Shapiro, 1994). Once the number of users reaches a critical mass, the external benefit of technology adoption emerges and attracts more users to join (Zhu, Kraemer and Xu, 2006b; Lin and Bhattacherjee, 2008). Thus, the extent of diffusion of the technology among a company's business contacts and others in the industry can influence the company's adoption of the technological innovation (Wang *et al.*, 2010).

In contrast to the results shown in Table 5.2 regarding the influence of statutory requirements and information on the websites of government agencies, the results in Table 5.3 show that the influence of suppliers, customers and other business contacts was very small.

Category	No influence Neutr 1 2 3			4	High influence 5
Requests from suppliers	40.2%	17.5%	25.7%	12.5%	4.1%
	(138)	(60)	(88)	(43)	(14)
Requests from customers/clients	40.8%	19.5%	25.7%	8.5%	5.5%
	(140)	(67)	(88)	(29)	(19)
Recommendation from a colleague in another company	41.4%	19.5%	26.5%	9.0%	3.5%
	(142)	(67)	(91)	(31)	(12)
(n = 343)					

Table 5.3 Influence of business contacts

6. Costs and benefits of digital filing

6.1 Introduction

This chapter focuses on the views of the accountants working in small companies and practitioners with small company clients on the costs and benefits of digital filing. Their views are important as they are the main filers of small company accounts and returns at Companies House and company tax returns at HMRC in digital format. We start by examining the respondents' views on the costs associated with digital filing.

6.2 Costs of digital filing

The cost of digital filing can be measured by a number of indicators: training costs, set-up costs, the cost of commercial filing software, and costs in terms of time and effort. Studies in Australia suggest that the cost of purchasing of XBRL filing software and the cost of training could offset the benefits for early adopters (Evan, Tran-Nam and Zakowska, 2012; Lim and Perrin, 2014). This is supports earlier research in the UK (Dunne *et al.*, 2009) which concluded that the cost of commercial filing software is one of the major obstacles to the use of XBRL. In addition, this study found that businesses do not have time in their schedules or the internal resources to undertake the training necessary to implement digital filing in XBRL format.

Table 6.1 reveals that 53% of respondents agree that the cost of commercial software to produce online documents is high, but there seems to be confusion over whether the set-up and/or running costs on digital filing are free, with only 33% agreeing with this statement. Perhaps this is because 69% use commercial software; only 38% use WebFiling (the free service provided by Companies House) and only 22% use the free HMRC filing software (see Table 3.6). The majority of respondents (79%) had received some kind of training in connection with digital filing (see Table 4.6) and Table 6.1 shows that the 62% of those surveyed disagree that training costs are high.

Statement	Disagree	2	Neutral 3		Agree
	1	2	3	4	5
Cost of the commercial software to produce online documents is high	3.8%	11.4%	31.8%	31.2%	21.9%
	(13)	(39)	(109)	(107)	(75)
Set-up/running cost of using online filing is free	19.2%	23.0%	24.5%	17.2%	16.0%
	(66)	(79)	(84)	(59)	(55)
Training cost to use online filing is high	30.3%	31.8%	24.5%	9.9%	3.5%
	(104)	(109)	(84)	(34)	(12)

Table 6.1 Software and training costs

(n = 343)

Previous studies suggest that complexity has a negative influence on the technology adoption decision (Zhu and Kraemer, 2005; Zhu *et al.*, 2006b). A survey in the USA (Henderson, Sheetz and Trinkle, 2012) found that companies that purchase commercial filing software to convert their financial reports into XBRL format are less likely to find the filing process a complex task. However, companies that manage the XBRL filing process in-house may need to change their existing processes to accommodate the software. In the context of the UK, Dunne *et al.* (2009) report that

the major obstacle to early adopters of XBRL is the time and effort needed to understand the technology.

The evidence shown in Table 6.2 suggests that this is not the case today, with 64% of respondents holding the view that it is paper filing rather than digital filing that requires extra effort. In addition, 48% of those surveyed agree that separate online filing at Companies House and HMRC is cumbersome. Both these results are supported by the unexpected finding that 34% of respondents agree that digital filing is less complex to understand than paper filing.

Table 6.2 Time and effort

Statement	Disagree 1	2	Neutral 3	4	Agree 5
Paper filing requires extra effort to use compared to online filing	5.0%	11.4%	19.5%	29.4%	34.7%
	(17)	(39)	(67)	(101)	(119)
Having to submit separate online filings with Companies	14.6%	12.5%	25.4%	24.2%	23.3%
House and HMRC (instead of one) is cumbersome	(50)	(43)	(87)	(83)	(80)
Online filing is less complex to understand than paper filing	13.4%	16.6%	36.4%	14.0%	19.5%
	(46)	(57)	(125)	(48)	(67)

(n = 343)

6.3 Benefits of digital filing

Not surprisingly, statutory requirements are a significant influence on a company's decision to use technological innovations (Troshani and Rao, 2007; Dunne *et al.*, 2013). Doolin and Troshani (2007) argue that mandating XBRL adoption would be an intensive and complex process because it would require companies to follow specific procedures. However, the results of this study suggest that just over half of those surveyed (53%) consider that online filing ensure better compliance with statutory requirements than paper filing and only 14% agree that paper filing is more consistent with accounting standards. Table 6.3 gives further details.

Table 6.3 Compliance with requirements

Statement	Disagree		Disagree			Disagree Neutra				Agree	
	1	2	3	4	5						
Online filing ensures better compliance with statutory requirements than paper filing	6.4%	9.9%	30.6%	22.2%	30.9%						
	(22)	(34)	(105)	(76)	(106)						
Paper filing is more consistent with existing accounting standards compared with online filing	30.6%	27.7%	27.7%	11.1%	2.9%						
	(105)	(95)	(95)	(38)	(10)						

(n = 343)

Table 6.4 shows the respondents' extent of agreement with a number of statements about the benefits of digital paper filing. At the top of the list is the convenience of the round-the-clock facility (89% agreed), followed by the speed of online filing (86%). Just over 50% had no concerns about data security in connection with digital filing. Almost half were neutral about whether paper filing speeds up decisions by credit rating agencies.

Table 6.4 Convenience, speed and security

Statement	Disagree 1	2	Neutral 3	4	Agree 5
Online filing is more convenient because it is available 24/7	1.5%	2.0%	7.0%	14.6%	74.9%
	(5)	(7)	(24)	(50)	(257)
Online filing is faster than paper filing	3.8%	1.2%	8.7%	13.1%	73.2%
	(13)	(4)	(30)	(45)	(251)
I have concerns about data security when using online filing	19.2%	32.4%	25.1%	15.7%	7.6%
	(66)	(111)	(86)	(54)	(26)
Paper filing speeds up decisions by credit rating agencies	18.4%	21.0%	47.8%	8.2%	4.7%
	(63)	(72)	(164)	(28)	(16)

(n = 343)

Table 6.5 shows the respondents' extent of agreement with a number of statements about the accuracy and security of digital filing. The majority (62%) agree that digital filing is more accurate than paper filing and 50% are neutral about whether there is any difference in the rejection rate with digital filing.

Table 6.5 Accuracy

.5%	5.5%	20 40/		
12)	(19)	29.4% (101)	26.8% (92)	34.7% (119)
2.9% 1 27)	10.8% (37)	49.9% (171)	14.9% (51)	16.6% (57)
	.9%	.9% 10.8%	.9% 10.8% 49.9%	.9% 10.8% 49.9% 14.9%

7. Companies House digital services

7.1 Introduction

This chapter analyses views on the digital services provided by Companies House. The main factors discussed are the use of digital services that provide access other companies' data, the accessibility of the digital data and the usefulness of digital data. We start by examining the use of Companies House digital services.

7.2 Use of Companies House digital services

The analysis in Table 7.1 shows the use of the digital services provided by Companies House that provide access other companies' data. The majority of companies (72%) use WebCHeck and a significant proportion use Companies House Direct (43%) and beta service (31%).

Category	Frequency	Percentage
WebCHeck	248	72.3
Companies House Direct (CHD)	148	43.1
Companies House beta service	106	30.9
Free data services	90	26.2
DVD directory	4	1.2
None of these	73	21.2

Note: More than one answer was allowed (n = 343)

7.3 Benefits of Companies House digital services

Table 7.2 shows the respondents' extent of agreement with a number of statements about the accessibility of the digital services provided by Companies House. At the top of the list is faster access to information (89% agreed), followed by the low cost of acquiring the information (85%). In addition, 68% agree that the digital services provided by Companies House provide access to financial information on a continuous basis and 62% agree that the data formats are easy to use.

Statement	Disagree 1	2	Neutral 3	4	Agree 5
Speeds up the accessibility of information	0.7%	2.0%	8.5%	26.7%	62.2%
	(2)	(6)	(26)	(82)	(191)
Cost of acquiring information is low	0.7%	2.9%	11.7%	28.0%	56.7%
	(2)	(9)	(36)	(86)	(174)
Access to financial information on a continuous basis	3.9%	5.9%	22.1%	35.8%	32.2%
	(12)	(18)	(68)	(110)	(99)
Data provided in formats that are easy to use	2.6%	7.2%	28.0%	32.9%	29.3%
	(8)	(22)	(86)	(101)	(90)

Table 7.3 shows the respondents' extent of agreement with a number of statements about the usefulness of the digital data provided by Companies House. At the top of the list is that the digital data provided by Companies House provides reliable information due to fewer filing errors (52% agreed), followed by the benefit of a clear definition of each component of the accounts (46%) and improved comparability (40%). The evidence on whether the digital data provided by Companies House enhances the efficiency of business decision-making or helps users understand the different elements of the accounts is weaker, with only 33% and 26% agreeing with these statements respectively. The identification of these benefits confirms previous research in Finland (Eierle, Ojala and Penttinen, 2014).

Statement	Disagree 1	2	Neutral 3	4	Agree 5
Provides reliable information due to fewer filing errors	4.6%	9.1%	34.2%	25.1%	27.0%
	(14)	(28)	(105)	(77)	(83)
Provides a clear definition of each component of the accounts	4.9%	10.4%	39.1%	22.5%	23.1%
	(15)	(32)	(120)	(69)	(71)
Enhances the ability to compare data	6.5%	14.3%	38.8%	21.8%	18.6%
	(20)	(44)	(119)	(67)	(57)
Improves analysis opportunities	6.2%	16.3%	38.1%	22.8%	16.6%
	(19)	(50)	(117)	(70)	(51)
Enhances the efficiency of business decision making	8.9%	18.7%	38.7%	20.0%	13.8%
	(27)	(57)	(118)	(61)	(42)
Helps users understand the different elements of the accounts	10.7%	23.1%	40.1%	13.0%	13.0%
	(33)	(71)	(123)	(40)	(40)

(n = 307)

8. Conclusions

8.1 Introduction

This study has investigated the factors that affect the take-up of digital filing of accounts and returns at HMRC and Companies House by small private companies. It has also examined the costs and benefits of digital filing to small private companies and the benefits of the digital services provided by Companies House. The evidence is taken from an online survey of ACCA members in the UK. The majority of respondents (70%) were accountants in practice with at least one small company client, and the remaining 30% were accountants working in small private companies. The accountants in practice were asked to focus on one particular small company client when answering the questionnaire as this allows the small private company to be the common unit of analysis.

This chapter discusses the main survey results in the context of the research objectives and the implications for practice.

8.2 Take-up of digital filing

The main findings relating to the take-up of digital filing of accounts and returns at HMRC and Companies House by small private companies are as follows:

- The filing process: In the majority of small companies, the process is entirely managed inhouse. In addition to the accountant, the directors are also involved in the process of filing the company's tax return at HMRC and the statutory accounts to Companies House.
- Filing choice: Although the majority of small companies file abbreviated accounts at Companies House, a significant proportion consider the benefits of filing full audited accounts outweigh the cost, as more than one-fifth file full audited accounts.
- Filing format: The majority of small companies voluntarily use online methods to file the annual return and statutory accounts at Companies House. As expected, since digital filing at HMRC is compulsory for most small companies, the vast majority use online methods to file the company's tax return (mainly commercial filing software)

The survey reveals four organisational factors that have a positive influence the take-up of digital filing of accounts and returns at HMRC and Companies House by small private companies:

- Management support: In the majority of cases, enthusiastic support from the principal director for digital filing and the allocation of adequate financial resources have a positive influence on the move from paper to digital filing.
- Technological readiness: The majority of small companies use e-applications such as ebanking and e-invoicing with customers and/or suppliers. About half the respondents agreed that familiarity with e-applications had a positive influence on the company's decision to use online filing.
- Compatibility: There was widespread agreement that online filing makes data transfer between different information systems easier than with paper filing and less than a quarter thought that digital filing requires substantial modifications to the company's IT infrastructure.

• Technical expertise and training: The majority of respondents (the accountants) had received some kind of training in connection with digital filing and just over one-third think that it requires technical expertise in-house or more specialist training for accountants.

The survey identifies two factors in the business environment that have a positive influence the take-up of digital filing of accounts and returns at HMRC and Companies House by small private companies:

- Statutory requirements: Not surprisingly, compliance with statutory requirements had a positive influence on the decision to take-up digital filing in the majority of small companies.
- Information on digital filing: The most widely used sources of information used were online information on the HMRC and Companies House websites.
- Network effects: Peer influence from suppliers, customers/clients or recommendations from colleagues in other companies has little or no influence on the move to digital filing.

8.3 Costs and benefits of digital filing

The cost of digital filing can be measured by a number of indicators: software and training costs, setup and running costs, and costs in terms of time and effort:

- Software and training costs: Although free HMRC filing software is available, the majority of small companies use commercial filing software and approximately half consider this cost is high. In contrast, the majority of small companies do not consider training costs for digital filing are high.
- Set-up/running costs: There are mixed views on whether the set-up and running costs are free, with most respondents taking a neutral stance.
- Time and effort: The majority of respondents agree that paper filing requires more effort than digital filing and having to submit separate online filings to HMRC and Companies House is cumbersome.
- Complexity: Perhaps not surprisingly since digital filing is a relatively new phenomenon, there are mixed views on whether digital filing is less complex to understand than paper filing.

The study identifies the benefits of digital filing as compliance with requirements, convenience speed and security, and accuracy:

- Compliance: More than half the respondents consider that digital fling ensures better compliance with statutory requirements and a similar proportion disagree that paper filing is more consistent is accounting standards.
- Convenience, speed and security: The majority of respondents find digital filing more convenient as it is available 24/7 and find it faster than paper filing. Just over half had no concerns about data security in connection with digital filing and very few consider that paper filing speeds up decisions by credit rating agencies.
- Accuracy: More than half the respondents consider digital filing is more accurate than paper filing because there are fewer filing errors. However, a similar proportion are neutral about whether more documents are rejected with paper filing, presumably because they have little information on the statistics.

8.4 Benefits of Companies House digital services

The survey results show that the most widely used digital service offered by Companies House is the free WebCHeck service (used by more than 70% of respondents). This is a searchable index of more than 2 million companies' names and addresses. In addition, a significant proportion use the Companies House Direct (CHD) service (43%) which offers free access to more than 130m documents held by Companies House, and the public beta service (31%) which makes the public digital data held on the UK Register of Companies available free of charge. The study identifies the following major benefits of these digital services:

- Faster access: Companies House digital services provide faster access to the information.
- Low cost: The cost of acquiring information from Companies House digital services is low.
- Continuous access: Companies House digital services provide access to financial information 24/7.
- Easy to use formats: The digital data are provided in formats that are easy to use.
- Reliability: Companies House digital services provide reliable data due to fewer filing errors.

8.5 Recommendations for practice

The results of this study have a number of implications for practice:

- Accountants working in small companies and those in practice with small company clients are the main filers of the companies' accounts and returns at HMRC and Companies House. For this reason, they are in the best position to advise on the adoption of digital filing and financial reporting. In doing so, they increase awareness of the joint filing facility and the free HMRC corporation tax filing software.
- Principal directors of small companies should weigh up the costs and benefits of digital filing and financial reporting. They should be aware that technical knowledge and skills are not needed and that costs can be very low if they use the free filing software provided by HMRC and the WebFiling service from Companies House. Support from top management is important for overcoming any obstacles to digital filing, since digital filing makes data transfer between different information systems easier than with paper filing.
- HMRC and Companies House should take steps to increase awareness of the benefits of the joint filing facility by publishing a business case for joint filing by small companies. The benefits of using the digital data services provided by Companies House should also receive increased publicity. The accountancy profession in conjunction with the XBRL UK Consortium and software suppliers should organise seminars, webinars and other training workshops on digital filing in XBRL/iXBRL format.
- Policy makers seeking to reduce the regulatory burdens on smaller entities should find ways of extending the scope to medium-sized companies and releasing the data obtained from joint filing to other government agencies.

This is the first survey to be conducted in the UK since digital reporting to HMRC became mandatory for small companies and joint filing for small private companies was introduced. The results should be of interest to the directors of small private companies and their accountants. They will also be of

interest to policy makers seeking to reduce the administrative burdens on smaller entities in the UK and to regulators in other jurisdictions planning similar digital reporting initiatives.

References

- ACCA (2004) Using information and communication technologies to reduce the compliance burdens faced by small businesses. London: The Association of Chartered Certified Accountants. Available at: https://www.oasis-open.org/committees/download.php/9410/ACCA%20ecompliance%20proposal.pdf (Accessed 12 September 2016).
- Bharosa, N., van Wijk, R., Janssen, M., de Winne, N. and Hulstijn, J. (2011) 'Managing the transformation to standard business reporting: principles and lessons learned from the Netherlands', In Proceedings of the 12th Annual International Digital Government Research Conference: Digital Government Innovation in Challenging Times, New York, USA, June, pp. 151-156. doi>10.1145/2037556.2037578.
- BIS (2009) Better regulation simplification plan 2009: Delivering a better business environment. London: Department for Business Innovation & Skills. Available at: http://webarchive.nationalarchives.gov.uk/20090609003228/http://www.berr.gov.uk/files/f ile53978.pdf (Accessed 29 July 2016).
- BIS (2015) Business Population Estimates for the UK and regions. London: Department for Business Innovation & Skills. Available at: https://www.gov.uk/government/statistics/businesspopulation-estimates-2015 (Accessed: 22 August 2016).
- Carsberg, B.V., Page, M.J., Sindall, A.J. and Waring, I.D. (1985) *Small Company Financial Reporting*. London: Prentice Hall International.
- Carter, P. (2006) *Review of HMRC online services* (Lord Carter of Coles). London: HMRC, March. Available at: http://www.xbrl.org.uk/projects/carterreport.html (Accessed: 29 July 2016)
- Collis, J. (2003) *Directors' Views on Exemption from Statutory Audit*. London: DTI, URN 03/1342. Available from: http://www.berr.gov.uk/files/file25971.pdf [Accessed 1 December 2011].
- Collis, J. (2008) *Directors' Views on Accounting and Auditing Requirements for SMEs*. Available from: http://www.berr.gov.uk/whatwedo/businesslaw/corp-gov-research/current-researchproj/page18121.html [Accessed 1 December 2011].
- Collis, J. (2012) 'Determinants of voluntary audit and voluntary full accounts in micro- and non-micro small companies in the UK', Accounting and Business Research, 42(4), pp. 1-28.
- Collis, J. and Jarvis, R. (2000) *How owner-managers use accounts*. London: ICAEW. Available from: http://www.icaew.com/en/technical/research-and-academics/publications-andprojects/~/media/Files/Technical/Research-and-academics/publications-andprojects/financial-reporting-publications/how-owner-managers-use-accounts.ashx [Accessed 1 December 2011].
- Companies House (2013) XBRL company accounts. London: Companies House. Available at: https://ewf.companieshouse.gov.uk/xbrl (Accessed: 29 July 2016).
- Companies House (2015) Companies House business plan 2015-2016. Available at: <u>https://www.gov.uk/government/publications/companies-house-business-plan-2015-to-</u> <u>2016</u> (Accessed 7 November 2016)

- Deshmukh, A. (2004) 'Xbrl', *Communications of the Association for Information Systems*, 13(1), pp. 196-219.
- Doolin, B. and Troshani, I. (2007) 'Organisational adoption of XBRL', *Electronic Markets*, 17(3), pp. 199-209.
- Dunne, T., Helliar, C., Lymer, A. and Mousa, R. (2009) 'XBRL: the views of stakeholders', A Research Report. London: The Association of Chartered Certified Accountants. ISBN: 978-1-85908-454-0. Available at: http://www.accaglobal.com/content/dam/acca/global/PDFtechnical/technology-publications/rr-111-002.pdf (Accessed: 29 July 2016).
- Dunne, T., Helliar, C., Lymer, A., and Mousa, R. (2013) 'Stakeholder engagement in internet financial reporting: the diffusion of XBRL in the UK', *The British Accounting Review*, 45(3), pp. 167-182.
- Eierle, B., Ojala, H. and Penttinen, E. (2014) 'XBRL to enhance external financial reporting: Should we implement or not? Case Company X', *Journal of Accounting Education*, 32(2), pp. 160-170.
- Evan, C., Tran-Nam, B. and Zakowska, H. (2012) Standard Business Reporting: Short term pain for long term gain, The University of New South Wales. Prepared for CPA Australia. Available at: http://www.treasury.gov.au/~/media/Treasury/Consultations%20and%20Reviews/Consultat ions/2012/SBR%20Options%20Paper/Submissions/PDF/Evans%20Tran-Nam%20%20Zakowska.ashx (Accessed: 13 September 2016).
- FRC (2017) XBRL: Deep-dive Digital future of corporate reporting, Financial Reporting Lab. Available at: <u>https://frc.org.uk/news/december-2017/frc-lab-calls-for-collective-action-to-promotedig</u> (Accessed: 13 December 2017)
- Grandon, E. E. and Pearson, J. M. (2004) 'Electronic commerce adoption: an empirical study of small and medium US businesses', *Information & Management*, 42(1), pp. 197-216.
- Hampton, P. (2005) *Reducing administrative burdens: effective inspection and enforcement*, HM Treasury, March.
- Henderson, D., Sheetz, S. D. and Trinkle, B. S., (2012) 'The determinants of inter-organisational and internal in-house adoption of XBRL: A structural equation model', International Journal of Accounting Information Systems, 13(2), pp. 109-140.
- HMRC (2009a) Corporation tax 2009 No. 3218: The income and corporation taxes (electronic communications) (amendment) regulations 2009. Statutory Instruments. London: HM Revenue & Customs. Available at: http://www.legislation.gov.uk/uksi/2009/3218/pdfs/uksi_20093218_en.pdf (Accessed: 29 July 2016).
- HMRC, (2009b) Update to Impact Assessment of HMRC Online Services: Increasing Use of Online Filing and Electronic Payment. London: HM Revenue & Customs. Available at: http://webarchive.nationalarchives.gov.uk/20140109143644/http://www.hmrc.gov.uk/ria/c arter-ia-final1.pdf(Accessed: 12 December 2016).
- HMRC (2010) *Duties of senior accounting officers of qualifying companies.* London: HM Revenue & Customs. Available at: http://webarchive.nationalarchives.gov.uk/20140109143644/http://www.hmrc.gov.uk/larg ecompanies/sao-qualifying-companies.pdf (Accessed: 3 July 2011).

- HMRC (2011) XBRL guide for UK businesses. London: HM Revenue & Customs. Available at: http:// www.hmrc.gov.uk/ct/ct-online/file-return/xbrl-guide.pdf (Accessed: 29 July 2016).
- HMRC (2013a) *Business tax forum minutes*. London: HM Revenue & Customs. Available at: http://www.hmrc.gov.uk/businesses/minutes-300413.pdf (Accessed 29 July 2016).
- HMRC (2013b) Corporation tax: commercial software suppliers. London: HM Revenue & Customs. Available at: http://www.hmrc.gov.uk/efiling/ctsoft_dev.htm (Accessed: 29 July 2016).
- HMRC (2015) Making tax digital. London: HM Revenue & Customs. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/484668/m aking-tax-digital.pdf (Accessed: 29 July 2016).
- Huang, Z., Janz, B. D. and Frolick, M. N. (2008) 'A comprehensive examination of Internet-EDI adoption', *Information Systems Management*, 25(3), pp. 273-286.
- ICAEW (2004) Digital reporting: A progress report (information for better markets). London: Institute of Chartered Accountants in England & Wales. Available at: http://www.icaew.com/~/media/corporate/files/technical/financial%20reporting/informati on%20for%20better%20markets/ifbm/digital%20reporting%20a%20progress%20report.ash x (Accessed: 31 July 2016).
- Katz, M. L. and Shapiro, C. (1994) 'Systems competition and network effects', *The Journal of Economic Perspectives*, 8(2), pp. 93-115.
- KPMG (2006) Administrative Burdens: HMRC Measurement Project, London: KPMG. Available at: http://webarchive.nationalarchives.gov.uk/20140109143644/http://www.hmrc.gov.uk/bett er-regulation/kpmg1.pdf (Accessed 7 November 2016).
- Lim, N. and Perrin, B. (2014) 'Standard business reporting in Australia: Past, present, and future', Australasian Journal of Information Systems, 18(3), pp. 29-51.
- Lin, C. P. and Bhattacherjee, A. (2008) 'Elucidating individual intention to use interactive information technologies: The role of network externalities', *International Journal of Electronic Commerce*, 13(1), pp. 85-108.
- Mousa, R. (2013a) 'E-Government adoption in the UK: XBRL project', *International Journal of Electronic Government Research*, 9(2), pp. 101-119.
- Mousa, R. (2013b) 'E–government challenges at the UK's customs and tax department', *Electronic Government, an International Journal*, 10(1), pp. 86-103.
- Pang, M. J. and Jang, W. Y. (2008) 'Determinants of the adoption of enterprise resource planning within the technology-organisation-environment framework: Taiwan's communications industry', Journal of Computer information systems, 48(3), pp. 94-102.
- Picoto, W.N., Bélanger, F. and Palma-Dos-Reis, A. (2014) 'An organisational perspective on mbusiness: usage factors and value determination', European Journal of Information Systems, 23(5), pp. 571-592.
- Premkumar, G., Ramamurthy, K. and Crum, M. (1997) 'Determinants of EDI adoption in the transportation industry', European Journal of Information Systems, 6(2), pp. 107-121.

- Sinnett, W. M. and Willis, M. (2009) 'The time is right for Standard Business Reporting: the concept of common compliance requirements for all regulatory reporting and legislation is gaining steam. Who's on board? What steps are being taken? What's expected?', *Financial Executive*, 25(9), pp. 23-28.
- Troshani, I. and Rao, S. (2007) 'Drivers and inhibitors to XBRL adoption: A qualitative approach to build a theory in under-researched areas', *International Journal of E-Business Research*, 3(4), pp. 98-111.
- Troshani, I., Parker, L.D. and Lymer, A. (2015) 'Institutionalising XBRL for financial reporting: resorting to regulation', *Accounting and Business Research*, 45(2), pp. 196-228.
- Wang, Y. M., Wang, Y. S. and Yang, Y. F. (2010) 'Understanding the determinants of RFID adoption in the manufacturing industry', *Technological Forecasting and Social Change*, 77(5), pp. 803-815.
- XBRL UK (2015) Inline XBRL Saving cost and effort for company reporting. White paper. Available at: file://acfs2/cbpg/cbpgesa/Downloads/xbrl-uk-annex-2-inline-xbrl-benefits.pdf
- Zhu, K. and Kraemer, K. L. (2005) 'Post-adoption variations in usage and value of e-business by organisations: cross-country evidence from the retail industry', *Information Systems Research*, 16(1), pp. 61-84.
- Zhu, K., Dong, S., Xu, S. X. and Kraemer, K. L. (2006a) 'Innovation diffusion in global contexts: determinants of post-adoption digital transformation of European companies', *European Journal of Information Systems*, 15(6), pp. 601-616.
- Zhu, K., Kraemer, K. L. and Xu, S. (2006b) 'The process of innovation assimilation by firms in different countries: a technology diffusion perspective on e-business', *Management Science*, 52(10), pp. 1557-1576.

Appendix: Questionnaire

- 1. In your current role do you file statutory accounts and returns for small private limited companies? (By 'small' we mean at least two of the following conditions are met: The company has an annual turnover below £6.5m, a balance sheet total up to £3.26 million, and/or under 50 employees.) *
 - (a) Yes, I am working in a small private limited company
 - (b) Yes, I am working in an accounting practice and I have at least one client that is a small private limited company. *If you have ticked this box, please think of one particular small client and answer the remaining questions in the context of that small company.*
 - (c) None of the above = end of survey

2. Where do you file the statutory accounts and/or returns?

- (a) To HMRC
 - (b) To Companies House
- (c) To both HMRC and Companies House

3. Which of the following types of returns do you file at HMRC? (Click as many as apply)

	Online filing	Paper filing
(a) Corporation tax returns (CT600, computation, statutory accounts)		
(b) Self-assessment tax returns (as an individual, partnership or trustee)		
(c) PAYE		
(d) VAT		

4. Which of the following documents do you file at Companies House? (Click as many as apply)

	Online filing	Paper filing
(a) Statutory accounts		
(b) Annual returns		
(c) Other documents		

- 5. How did your/the company submit the statutory accounts and returns online? (*Click as many as apply*)
 - (a) The free HMRC online filing software
 -) (b) WebFiling
 - (c) Commercial software filing

(d) Joint filing with HMRC and Companies House simultaneously

(e) Other (please specify)

6.	How is the process of filing the statutory accounts and returns online normally managed in the company?
	(a) Completely in-house (internal staff are responsible for the filing process)
	(b) Completely outsourced (a third party is responsible for the filing process)
	(c) A combination of in-house and outsourced
7.	Who is normally involved in the process of filing the statutory accounts and returns online for the company apart from you? (<i>Click as many as apply</i>)
	(a) Director of company
	(b) Bookkeeper
	(c) Auditor
	(d) IT personnel
	(e) Other (please specify):

8. To what extent do you agree or disagree with the following statements about filing accounts and returns? (*Please answer on a scale of 1 to 5 where 1 = strongly disagree and 5= strongly agree*)

		Strongly disagree				Strongly agree
		1	2	3	4	5
(a)	Online filing is faster than paper filing					
(b)	Online filing is more convenient because it is available 24/7					
(c)	More documents are rejected with paper filing than with online filing					
(d)	Online filing is more accurate because there are fewer filing errors					
(e)	Paper filing speeds up decisions by credit rating agencies	5				
	Online filing ensures better compliance with statutory requirements than paper filing					
(g)	Paper filing requires extra effort to use compared to online filing					

	Strongly disagree				Strongly agree
	1	2	3	4	5
(h) Online filing is less complex to understand than paper filing					
 (i) Having to submit separate online filings with Companies House and HMRC (instead of one) is cumbersome 					
(j) Online filing makes transferring data easier between different information systems than paper filing					
(k) Online filing requires substantial modification in existing IT infrastructure					
(I) Paper filing is more consistent with existing accounting standards compared with online filing					
(m) Training cost to use online filing is high					
(n) Set-up/ running cost of using online filing is free					
(o) Cost of the commercial software to produce online documents is high					
(p) I have concerns about data security when using online filing					
(q) The organisation has allocated adequate financial resources to support the use of online filing					
(r) Online filing requires special technical expertise in-house	e 🗌				
(s) Online filing requires more specialist training for accountants					
(t) The principal director enthusiastically supports the use of online filing for the accounts and returns rather than paper	of				

9. To what extent do you feel that your/the company's decision to use online filing is influenced by each of the following? (*Please answer on a scale of 1 to 5 where 1 = Not at all influenced by and 5 = Highly influenced*)

	Not at all influenced 1	2	3	4	Highly influenced 5
(a) Statutory requirement from Government					
(b) Online information on the Companies House website					
(c) Online information on the HMRC website					
(d) Information available from ACCA					
(e) Recommendation from a colleague in another company					
(f) Requests from customers/clients					
(g) Workshops/conferences by XBRL UK					
(h) Requests from suppliers					

10. Does your/the company use any of the following online services provided by Companies House to access other companies' accounts? (*Click as many as apply*)

(a) Free Accounts Data Product
(b) WebCheck
(c) Companies House Direct (CHD)
(d) DVD directory
(e) Companies House beta service
(f) None of these
(g) Other (please specify):

12. To what extent do you agree or disagree with the following statements when considering the use of online services provided by Companies House? (*Please answer on a scale of 1 to 5 where 1= strongly disagree and 5= strongly agree*)

	Strongly disagree				Strongly agree
	1	2	3	4	5
(a) Speeds up the accessibility of information					
(b) The cost of acquiring information is low					
(c) Provides a clear definition of each component of the accounts					

	Strongly disagree				Strongly agree
	1	2	3	4	5
(d) Data is provided in formats that are easy to use					
(e) Provides reliable information due to there being fewer filing errors	3				
(f) Helps the users to understand the different elements of the accounts					
(g) Enhances the ability to compare data					
(h) Improves analysis opportunities					
(i) Enhances the efficiency of business decision making					
(j) Access to financial information on a continuous basis					

11. Does the company use any of the following e-applications? (Click as many as apply)

\square	(a) E-invoicing with customers
	(b) E-invoicing from suppliers
	(c) E-banking
	(d) E-billing service from Companies House website
	(e) Mobile applications from Companies House website

- (f) None of these
- 12. To what extent do you agree or disagree with the following statement? (*Please answer on a scale of 1 to 5 where 1= strongly disagree and 5= strongly agree*)

	Strongl disagre	•			Strongly agree
	1	2	3	4	5
Familiarity with e- applications has encouraged the company decision to use online filing					

13. How soon do you feel the company will make use of e-applications such as those mentioned in previous question?

(a) Within 1-2 years

) (b) Within in 3-4 years

(c) In 5 or more years

(d) Unlikely

14. Please indicate sector of the company's main activities?

	(a) Manufacturing
	(b) Construction
	(c) Retail/wholesale distribution
	(d) Hotels, restaurants
	(e) Transport, communication
	(f) Business services
	(g) Public sector
	(h) Financial services
	(i) public practice (accounting firm)
	(j) Not-for-profit /charity
Othe	er (please specify)

15. Which of the following best matches your age?

	(a)	Up	to	30	years
_	(~)	٩v		00	, cars

- (b) 31-40
- 📃 (c) 41-50
- (d) 51-60
- ____ (e) Over 60
- 16. Have you received any of the following training in online filing supplied by HMRC or Companies House? (*Click as many as apply*)

	HMRC	Companies House		
(a) Statutory accounts				
(b) Annual returns				

17. What type of training have you received? (Click as many as apply)

(a) In-house training (at my company)
(b) At HMRC
(c) At Companies House
(d) Software vendor training
(e) Self-training use online tutorials.
(f) Other training (please specify):

- 18. Would you be willing to participate in a short telephone interview with Brunel University London to discuss further your views on the subject of this survey?
- a) Yes
- 19. Would you like to receive a summary report of the findings?
- (a) Yes(b) No
- 20. If you have said 'yes' to a potential telephone interview or to receive a copy of the findings, please provide the following contact details:

Name	
Email	
Telephone	