

## Acknowledgements

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## Disclaimer

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## Executive Summary

This reports looks at the UK market for accounting software targeting small and medium enterprises (SMEs). There are two major types of deployment of the software: traditional on-premise solutions and software as a service (SaaS), available from anywhere with via the internet.

We investigate the competitive landscape, players in both segments of the market and provide an estimate of the current sizes for both on-premise and online accounting software. The size of the online accounting software market was estimated to be around 200,000 paying users currently generating £40 million of revenue per annum. The size of the on-premise accounting software market was estimated to be over 1.14 million small businesses generating over £213 million.

In addition, we examine on a case by case basis how some companies have financed their operation and expansion to date. We also compare the usability of our client, Clear Books, in comparison with its competitors with a variety of user surveys.

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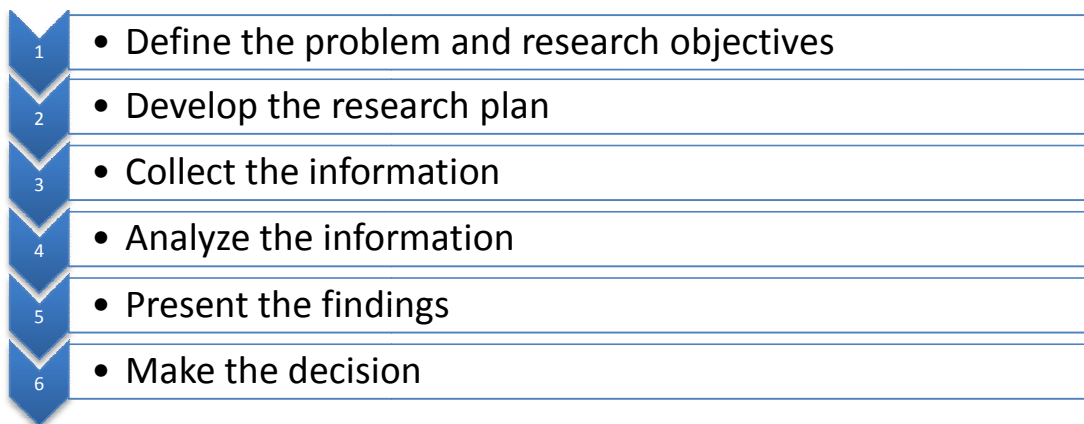
## 1. Introduction to the project

### 1.1. Background to Clear Books

Clear Books is a start up company - 'new kid on the block' - in the UK online accounting software market. Created in July 2008 with an aim 'to free your time', Clear Books now has around 500 dedicated paying users. Over the last decade, the number of companies in the industry has grown substantially, with one new entrant forming in almost every month in the last year. The number of UK companies providing online accounting software is currently estimated at 40-50.

### 1.2. Planning the Research

In our research we adhered to the following steps in marketing research (Kotler & Keller, 2009):



**Figure 1 - The Marketing Research Process**

## 2. Marketing Research Process

### 2.1. Define the Problem and Research Objectives

We were asked to fulfil the following objectives:

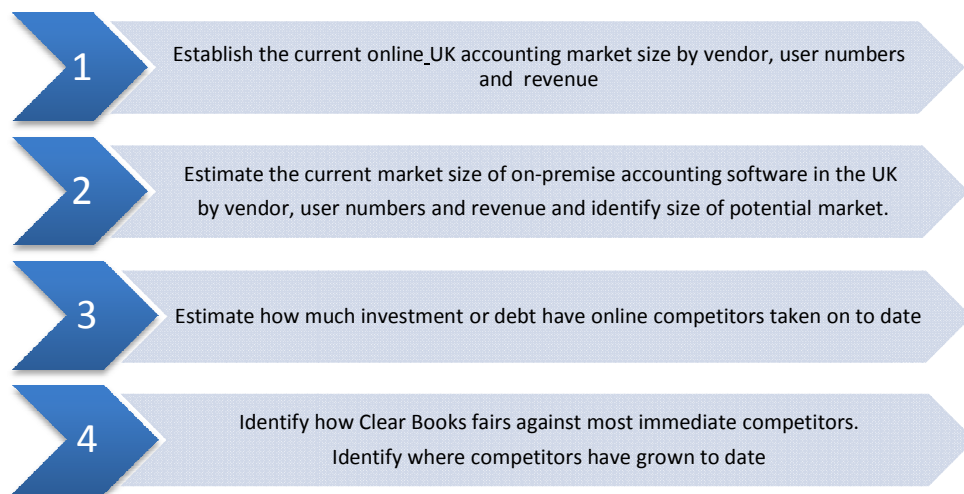


Figure 2 - List of project objectives

### 2.2. Developing the Research Plan

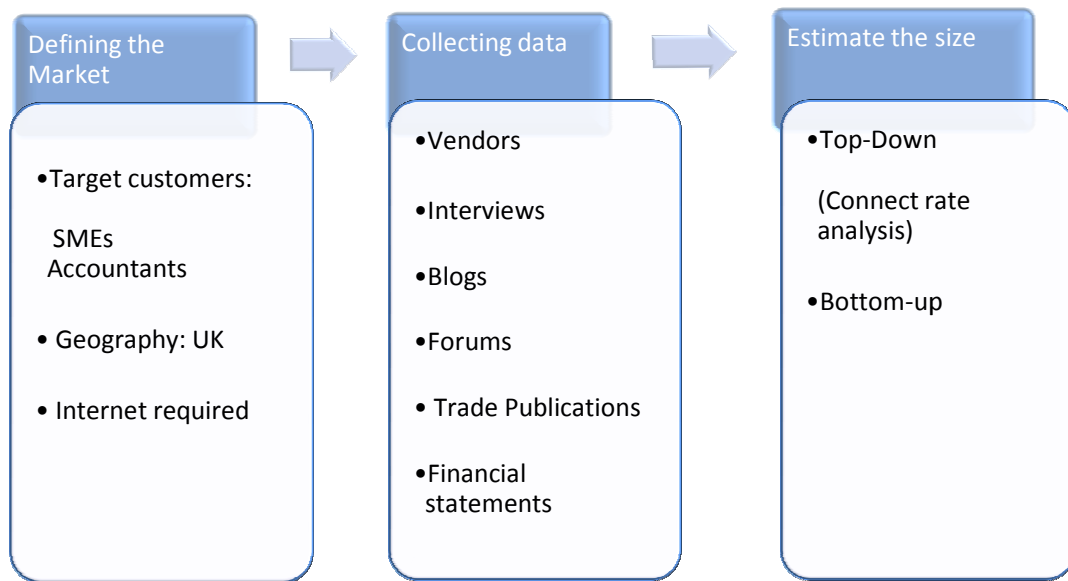
#### *Methodology*

The task falls into the category of marketing research; both exploratory and descriptive research (Blankenship, Breen, Dutka, 1998). Thus a mixture of desk research, personal interviews, various questionnaires and usability studies has been used.

During the preliminary research stage on the industry, we brainstormed collectively with an aim to develop the most suitable design for the research. During the implementation stage we each took

responsibility for one of the objectives, and agreed to meet, brainstorm and support each other on a regular basis. The surveys were designed collectively but usability study information gathering process was also split.

In terms of market sizing, we attempted to split the process into several identifiable steps:



**Figure 3 Market sizing methodology**

The scope of the adopted market definition ultimately determines the magnitude of the final estimate. The quality of the data collected impacts heavily on the quality, i.e. accuracy of the estimate. And employing several estimation techniques reduces the margin of error.



## 2.3. Collecting the Information

### *Data Sources*

The client's expectations with regards to the information requirement were very specific. We discussed our concerns with the client at the preliminary meeting and the concerns were confirmed as we were initially unable to get detailed internal information from vendors, most of whom deemed the information as 'commercially sensitive'. In the light of this we discussed and agreed a shift of emphasis towards survey research, interviews and usability study. Additionally we used:

- Public company reports
- Industry analysts
- Competitors websites
- Client interviews
- Cloud computing professionals
- Google analytical tools
- Search engines
- Web (blogs, industry forums, industry specialists)

## 2.4. Analyze information by objective and report the results

### 2.4.1. Objective 1 - Online Accounting Software market size

#### *Background*

The recent trend in the IT industry has been a move from on-premise towards online provision of software. In the online or 'Software-as-a-Service' model software is deployed over the internet rather than being installed on a computer. This move has affected several areas of business application software including accounting software. SaaS solutions appeal to small-and-medium businesses which benefit from the absence of upfront licensing fees and the unnecessary complexity of traditional desktop software. The Cloud accounting solutions compete with established on-premise vendors, which still hold a dominant position in the market with an estimated share exceeding 90%.

SaaS accounting solutions are available on-demand, are accessible anywhere, provide easy integration with other business applications and enable collaboration. In addition, most of them are encrypted, providing the security of online banking. Yet some businesses have reservations about security, information sharing and other aspects of SaaS. More importantly, many businesses are unaware of the benefits of Cloud computing and are satisfied with traditional desktop solution.

For on-premise solutions revenue is earned from licensing and yearly upgrade charges. In contrast, SaaS applications have a 'one-to-many' user design, based on a subscription revenue model. Users are charged on a 'per month' basis without the need for a large initial capital expenditure. Low marginal cost and bootstrapped approaches allow online providers to keep prices low at an average of £10-25 per month. However this also means that in order for companies to break even, they need to attract and maintain many users - it's a numbers game.

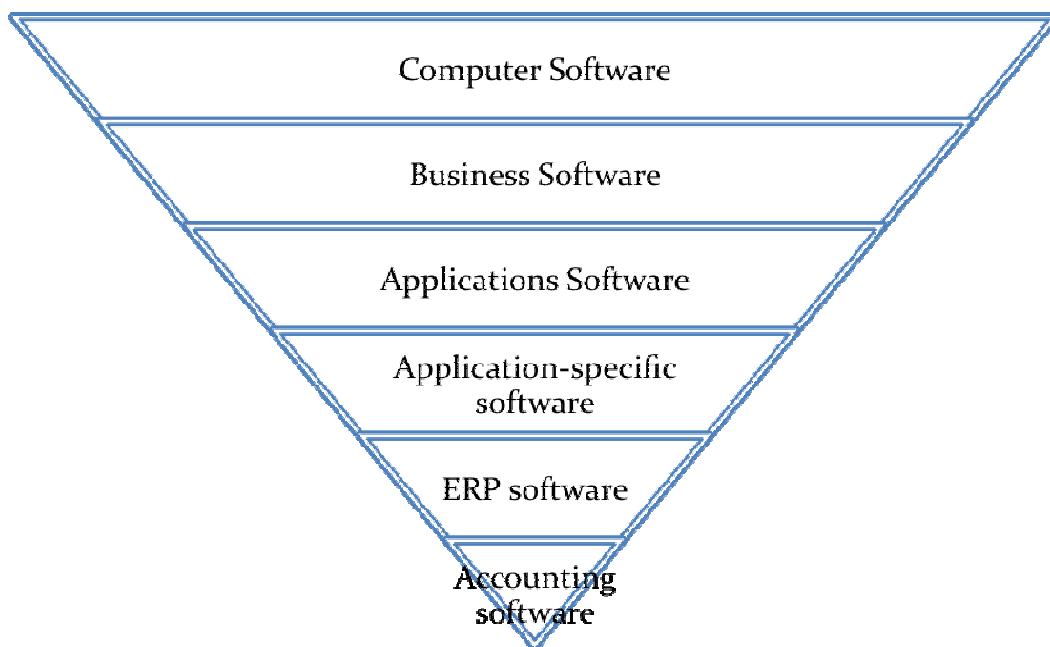
### *Defining the market*

The target market is comprised of small and medium businesses and self-employed individuals and accounting practices, based predominantly in the UK, requiring bookkeeping or general accounting software. The number of employees in such firms ranges from 1-50. The focus is on technology companies, professional services firms (including accounting practices) and not-for-profit organisations.

The market we are sizing consists of vendors providing online accounting software (invoicing, billing, tax etc) catering for small and medium businesses. With some companies offering suites of business software, whilst others were offering simple invoicing, deciding which companies to include and exclude was no straightforward task. General classification is as follows:

There is no UK Standard Industrial Classification of Economic Activities for this industry.

#### **By Vendor:**



The online accounting software industry is a very competitive, with a significant number of players. The nature of the online offering means that the barriers to entry are low, keeping the competition tight and the market contestable.

We currently estimate the UK online accounting market to consist of 40-50 [see Appendix] vendors, providing various services from invoicing and billing, to more functional accounting and even integrated ERP suites and CRM and other business software. The most relevant to our market sizing exercise are the accounting applications, aimed at small and medium enterprises.

### **By User Numbers and Revenues**

According to the Department for Business Innovation and skills there were an estimated 4.8 million private sector enterprises in the UK at the start of 2008. We looked at statistics for the last three years, the mean growth of which was 3.0% p.a. and extrapolated the growth to arrive at the estimates of 4.9m and 5.1m for the start of 2009 and 2010 respectively. Of them, 99.3% are small (0-49 employees) and 0.6% are medium (50-249 employees), together accounting for around 5m SMBs.

Of these figures we estimated around 2 million of the enterprises to be addressable (Intuit estimates that 60% of the small businesses are not using online accounting software (Intuit, 2008<sup>1</sup>). Alternatives to online accounting and bookkeeping software include pen and paper, spreadsheets (e.g. Excel) and desktop accounting software.

**Table 1 - Online User Numbers, UK**

<i>2009</i>	<i>Number of paying customers</i>		<i>Avg Price, £</i>	<i>Monthly Revenue, £</i>	<i>Annual Revenue, £</i>
	<i>Lower bound</i>	<i>Upper bound</i>			
<b>Xero</b>	3,000	4,000	18.3	64,166.7	770,000
<b>Winweb</b>	100,000	120,000	33.3	3,665,567	43,986,804
<b>Kashflow</b>	5,000	6,000	16.0	87,945	1,055,340
<b>Freshbooks</b>	65,000	70,000	33.1	2,234,250	26,811,000
<b>FreeAgent Central</b>	1,500	2,000	20	35,000	420,000
<b>Others</b>	100*20	500*30	15	97,500	1,170,000
<b>Total</b>	176,500	221,000			<b>74,213,140</b>
<i>Avg number online users</i>	<b>198,750</b>				

Having worked out the addressable market in the UK is 2 million SMEs, the online accounting software vendors were covering only 10% of the market with nearly 200,000 paying customers. Therefore the market potential for future growth is enormous.

These figures were compared against the Xero's published revenue figures and the figures provided by vendors, e.g. Kashflow. The margin of error appears significant, however this is expected as we are looking for estimates of nearest order of magnitude.

The monthly price plans for online vendors averaged around £20. The weighted sum of online vendors' revenues gave a total annual revenue stream of over £74 million.

### By Unique Visitors

The number of unique visitors per annum was estimated to be around 1,804,800, or 8-10 times larger than the market size by number of users. This indicates that there may be a considerable number of potential customers who visit the website but nevertheless choose to subscribe to a different accounting software provider. Interestingly, Clear Books fared very well in the UK, coming top of the list by unique visitors in the UK against its direct competitors, whereas globally Xero performed much better. This may be thanks to the ability of Clear Books to come top of Google Search results when “online accounting software” or other commonly used terms are typed. In contrast, Xero already has some level of brand awareness globally thanks to its aggressive marketing expenditure, so this may directly lead to high number of visitors specifically looking for Xero.

**Table 2 - Unique Visitor Numbers, April 2010**

<b>Website</b>	<b>UK Unique Visitors (000s)</b>	<b>UK Avg time on site</b>	<b>Global Unique Visitors (000s)</b>	<b>Global Avg time on site</b>
Clear Books	39	9.1	43	10.0
Kashflow	22	7.2	24	6.5
Xero	10		93	18.2
Free Agent	7.7	16.4	8.5	16.4
<b>Total</b>	<b>150.4</b>		<b>2,047</b>	

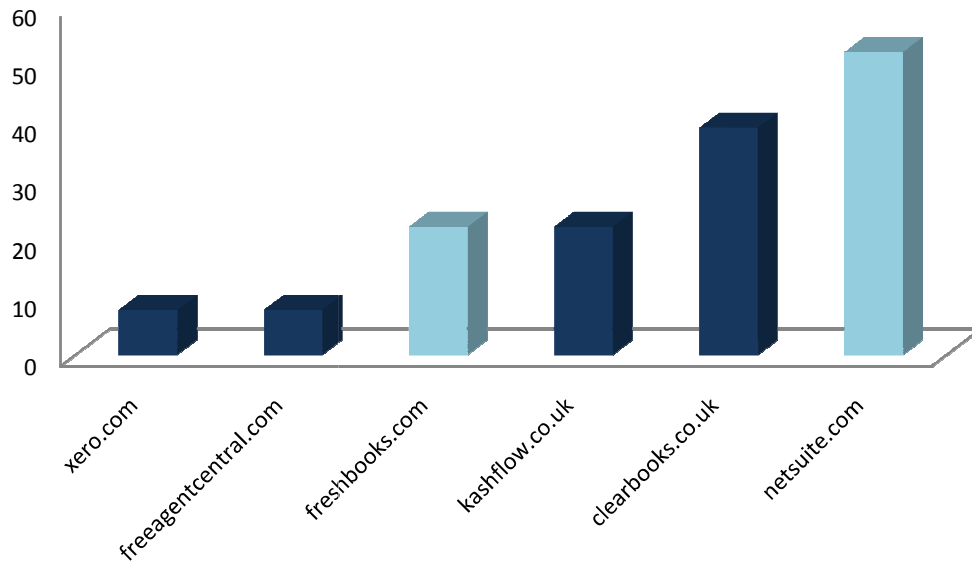


Figure 5 - UK Unique Visitors (000's)

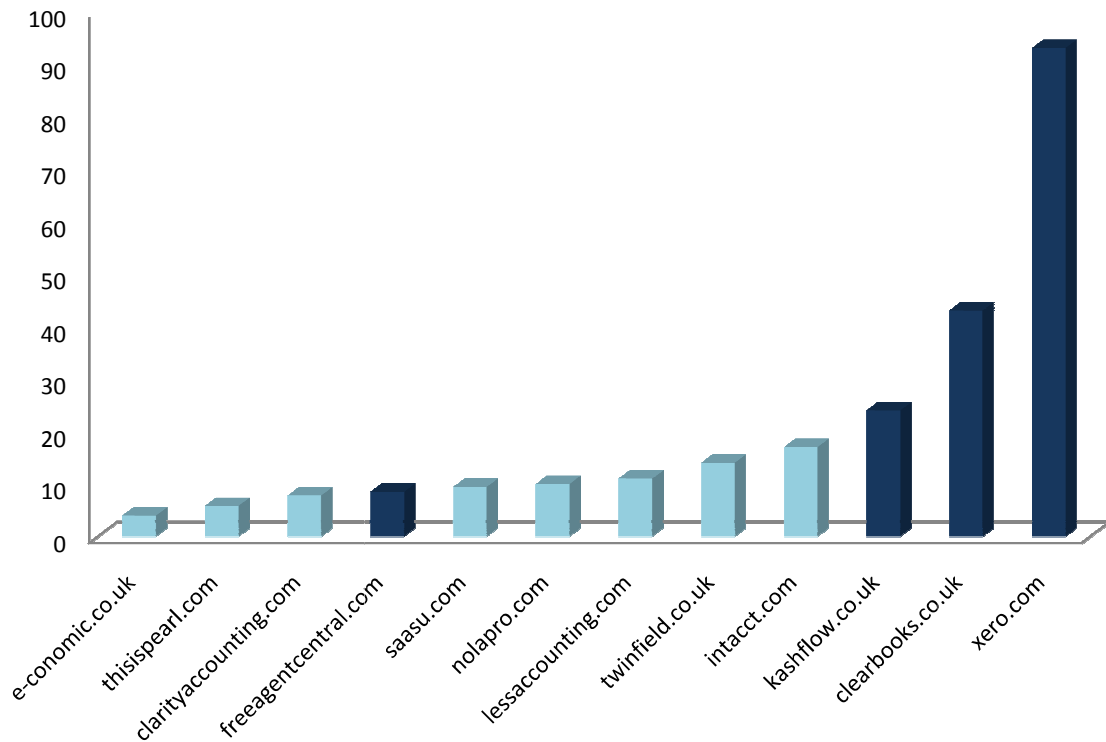


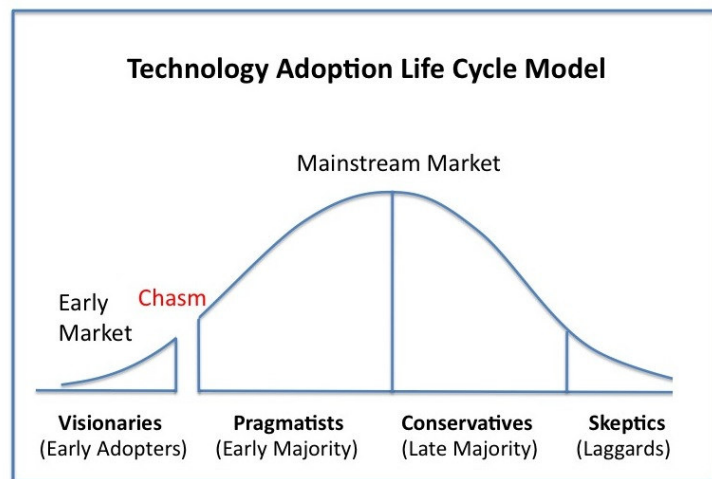
Figure 6 - Global Unique Visitors (000's)

*The Lessons of Strategy: The Theory of Crossing the Chasm*

To investigate the growth of SaaS deployment, we have applied the theory of the innovator's dilemma of disruptive technology (Christensen, 1997). The online accounting business model is disruptive for incumbent software leaders because it cannibalises their revenue streams (licensing fees and upgrades). Incumbents therefore need to respond to these new challenges and it is crucial for online vendors to watch the actions of the giants.

While the on-premise vendors are complacent, it is important for the new online businesses to accelerate the diffusion of

technology. The technology adoption life cycle model (Rogers, 1995) helps us understand how different types of customers have different propensities to adopt a particular technology throughout its life cycle. For disruptive



technologies the difference **Figure 7 Technology Adoption Life Cycle for Disruptive innovations** in psychographic characteristics and preferences between visionaries and pragmatists is so significant that it resembles a chasm (Moore, 1999). The chasm needs to be crossed to unleash the market potential. Industries that fail to do so are constrained to 15% of the potential customer base.

In terms of SaaS accounting the chasm appears to be caused by several factors. Firstly there is a lack of awareness of the Cloud and its benefits. Secondly there is an inertia preventing users from shifting their existing accounts to a new accounting system. Finally there are security concerns which prevent some businesses from adopting online solutions, as mentioned above.



**Table 3 Importance of Attributes When Evaluating Computers, Computer Boards and Peripherals Vendors and Products, Cahners Electronics Group (2000)**

<i>Attribute</i>	<i>5 (Very Important)</i>	<i>4</i>	<i>3</i>	<i>2</i>	<i>1 (Not Important)</i>	<i>Mean</i>
Quality/reliability of product	79%	19%	2%	0%	0%	4.8
Ease of use	43%	45%	10%	1%	0%	4.3
Price/performance	48%	37%	13%	1%	0%	4.3
Service/support	43%	44%	11%	1%	1%	4.3
Ease of maintenance	42%	41%	16%	2%	0%	4.2
Purchase price	37%	45%	14%	4%	1%	4.1

The above table indicates that quality of the product is crucial in evaluating IT products, where by quality we understand functionality and security of the product.

It has been argued that the vendors have not communicated the benefits of the Cloud in jargon-free language intelligible to the non-technically minded majority. This is a joint task for online vendors, which might help to bridge the chasm for the adoption of SaaS accounting.

Further strategies to bridge the chasm and reach out to the early majority are identified in “Crossing the Chasm” and need to be applied to the online accounting field. The following may be of particular relevance to Clear Books:

### **Focus marketing efforts on a niche**

- Narrow the scope to identify the opportunities
- Small and medium businesses are a good focus, but may want to target the niche within the sector
- Facilitates the referrals by word of mouth within a vertical industry
- Helps you differentiate the offerings

### **Provide a whole product solution**

- Client support is essential to retain customers
- Upgrades are included in the offering
- Integration with other business solutions

### **Capture market share early**

- Focus on growth at the early stage
- Cost of customer acquisition is higher than the cost of retaining the customer
- Obtain customers early and maintain their loyalty
- Existing customers may help you win over the majority after the tipping point

### **Alliances**

- Striking partnerships with suppliers, resellers, service providers
- e.g. FreeAgent Central deal with IRIS
- Xero deal with BT
- Partnerships with accountants as referrals and recommendations are an important channel of customer acquisition
- Improve sales agreement

### **Marketing support**

- Marketing effort to increase awareness to public
- Innovative marketing experiences, emphasis on effectiveness, not budget
- Innovative ideas, grass-roots marketing, viral marketing
- Investing time in search engine optimisation

**Figure 8 - Strategies for Crossing the Chasm**

## 2.4.2. Objective 2 – UK on-premise accounting software market size

The UK accounting software market for SMEs is dominated by four on-premise application software providers namely Sage, Iris, Mamut (former MYOB) and Intuit (provider of Quickbooks). These have been found to generate an estimated revenue of £213 million from a user base of around 1.14 million. The biggest player is Sage which controls over half of user base. We should bear in mind that in the above analysis we haven't included vendors such as SAP, Epicor, Infor, Coda and others which may have some market share despite it not being their direct target. A comprehensive list of vendors can be found in the Appendix).

Combining the above findings with the online software user base of 200,000 and an actable market of around 2 million users, the overall picture for UK SMEs is as below.



Figure 9 - Largest On-premise Vendors (main product, online options, main geography)

The on-premise accounting software provides 90% of the existing market, so it comes as no surprise that start-ups are struggling to win market share from long-established incumbents. This is especially true given that most businesses renew their accounting software once every 7-10 years (Howlett, 2009), so the opportunity to gain new customers occurs infrequently. Furthermore, large revenues imply generous budgets for marketing and advertising. Such robust sources of finance give these incumbents the ability to dwarf small online vendors advertising budgets if they wished.

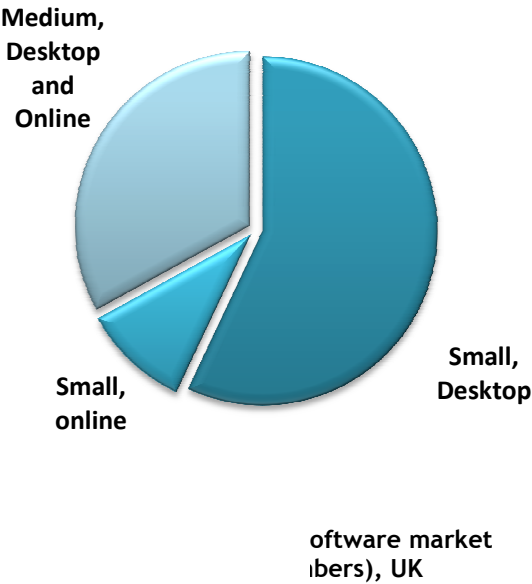


Furthermore, only a small fraction of the generated revenues are actually re-invested in R&D, with Sage favouring the acquisition driven strategy. This may be good for shareholder returns but it also implies low-return policy for customers (Dennis Howlett, 2009).

**Table 4 - On Premise User Numbers and Revenues, UK**

<i>Vendor Name</i>	<i>Estimated UK Revenues, m£</i>	<i>Estimated UK Accounting Revenues, m£</i>	<i>Estimated # UK Users</i>	<i>Estimated # UK Accountant Users</i>
<b>SAGE</b>	228	125	800,000	14,000
<b>IRIS</b>	119	77	60,000	14,000
<b>INTUIT</b>	5	5	160,000	na
<b>MAMUT</b>	6	6	120,000	na
<b>Total of "the BIG4"</b>	358	213	1,140,000	28,000

Two challenges in extracting *relevant* data were encountered upon examination of the companies' annual reports and financial statements. Firstly, it often proved difficult to find the UK data as most of the companies have operations and sales revenues elsewhere. Secondly, extracting revenue from the accounting arm of the software products from the range of products available (other ERP, CRM functions and inventory control software) was subject to estimation errors.



### 2.4.3. Objective 3 – Investment

The third objective of our report is to look into how competitors have funded themselves. In particular, we wanted to look at:

- the amount of funding
- where it came from
- when in the company's history it was taken on
- the split between equity and debt
- why funding was needed/ what they intend to use the money for

The market we have investigated is a new one, full of small start-ups experiencing rapid growth. These firms are all adopting different strategies for expansion. Aggregating all these strategies to find industry wide trends would be misleading, as there are important differences between individual firms. Instead, our approach has been to look at a number of key examples to show various investment strategies employed by firms and to look at how these strategies position the firms for future expansion. Our methodology involved a combination of phone interviews with representatives from the organisations themselves as well as looking over published accounts, blogs and online commentary.

After briefly summarizing each case study, we present our conclusions below.



Having been founded in 2006, Xero listed on the New Zealand Stock Exchange on the 5th of June, 2007. Its IPO raised NZ\$15 million. In May 2009, they closed a second round of funding of NZ\$29 million for international growth. The bulk of this new funding (NZ\$18 million) came from Craig Winkler - the founder and former Director of MYOB, Xero's biggest competitor in the Australasian region. These are very large sums in what is a nascent industry.

Xero has not yet reached break even but the recent \$29 million capital raising ensures that they can continue to grow and execute their growth strategy over the next 2-3 years. According to their Full Year Results, published 14/05/2010, "Xero remains on track to achieve monthly break even during Calendar 2011."<sup>1</sup> There has been some scepticism of this; according to analysis by Sam Stewart, "Based on the current average revenue per user and estimated annual expenses of \$11 million Xero would need around 28,000 customers to break even." Nonetheless, Xero have demonstrated strong growth in user numbers, growing from around 6,000 in 2009 to over 17,000 by the start of 2010.

Xero is a particularly interesting example as it is one of the only online accounting start-ups to have gone public. Its market valuation can give competitors a (rough) indication of what their business might be worth. As of 18/05/2010, their market capitalization was NZ\$128,968,000. Some commentators have questioned if this valuation is appropriate; in the past web based companies have often had notoriously inflated values.

One area of potential concern for investors is the decline in the ARPU. In their IPO prospectus Xero estimated an ARPU of \$75 per month. Shortly after listing Xero reduced the price of their NZ offering to \$50 per month. Xero have further reduced their average price as they have entered new markets

and announced an ARPU of \$33 per month in their latest financial result. This reduced ARPU has facilitated Xero's growth but has also significantly increased the number of customers required to break even and deliver the required rate of return to investors.

### *Liquid Accounts*



The software for Liquid came out of work that accountant John Wright had been doing for various large firms, writing desktop accounting software. Together with Lisa Kendrick and Matt Holmes in 2005 they formed Liquid. After a few years of getting established, they decided to raise funds in late 2009 and through Connect Yorkshire, a local business development organisation, they found a syndicate of nine private venture capitalists who wanted to invest. Their investment was matched by The Aspire Fund, which supports women-led businesses. In total this raised £770,000. In exchange they gave an 18% stake to the syndicate of business angels and a further 12% to The Aspire Fund. They also benefited from having three of the business angels on their board. Matt Holmes, Managing Director of Liquid Accounts, claims that having the experience of these businessmen has improved Liquid's reputation, "de-risked" the brand and aiding in business development. The hope is that these funds will allow Liquid to focus on long term growth for a number of years rather than short term profits. Liquid hopes to be profitable by 2011, but this depends entirely on building a sufficiently larger user base. Further fund raising would be considered, but is not thought to be essential right now.

Mr Holmes is aware that the investors will be looking for an exit at some point, probably in around five years time. He acknowledges that there are likely to be acquisitions and consolidation in the industry in a few years and admits he would happily sell Liquid eventually if the price was right.



## *FreeAgent*



Set up in 2007 by three co-founders who originally self-funded the business, by 2008 they were in discussions with Christof Janz, an angel investor specialising in internet businesses. This resulted in FreeAgent raising £100,000 of funds at the start of 2009, swiftly followed by another round of fundraising in mid 2009 for a similar amount. Robert Klein of the Accelerator Group, another incubator of start-ups, also got involved at around this time.

In addition to this, FreeAgent received an equity investment from Iris, a desktop software company with a long history in the accounting market. Phil Robinson, managing director of IRIS Accountancy Practice Solutions, joined the board of directors at FreeAgent. This deal has already resulted in the release of OpenBooks, powered by FreeAgent and leveraging the brand strength of Iris. The shared proceeds of OpenBooks provide a new revenue stream for FreeAgent.

According to Ed Molyneux of FreeAgent, they have received approximately £1,000,000 of funding to date. He points out that this allows them to continue operations and to build their user base without worrying about generating a profit immediately. With their current 2,600 users, profitability cannot be expected, but Mr Molyneux hopes that FreeAgent's strategy of targeting accounting practices (some with as many as 300 clients) and keeping churn rates low, sufficient users can be signed up to generate a profit.

### *Twinfield*



Twinfield is rare in that it is making a profit; 1m Euros back in 2007 and more since [NEED MORE DATA]5. David Terrar of Twinfield UK stressed that this has been achieved simply through having large numbers of users; achieving a critical mass is necessary for profitability. Because of this profitability, they have been able to fund their expansion from their native Netherlands into the UK and Scandinavia without taking on any debt. In addition, Twinfield has only one outside investor, ITS (Edinburgh based software company). The start-up capital came from the Dutch founders, André Kwakernaat and Maurice Tijhuis with backing from a couple of their original clients.

### *Kashflow*



Kashflow grew out of a previous web development business Duane Jackson had set up in 2002 with £5,000 of funding from the Prince's Trust. Finding a lack of online accounting services, Mr Jackson set up his own in 2003. A meeting with Lord Young, as chairman of the London Youth Support Trust, resulted in him investing around £100,000 in January 2006 and becoming chairman of the company in January 2008.

According to Mr Jackson, this is the only investment Kashflow has received to date. Because Kashflow has been profitable for a number of years, they are able to reinvest their proceeds into growth rather than rely on external funding. Thus they have not yet paid out any dividends nor is Mr Jackson currently looking for investors. An offer from Michael Jackson, former chairman of Sage, in July 2008 which valued Kashflow at £2,300,000 was rejected. Duane Jackson says that it was a good valuation at the time, but felt there were too many conditions attached and preferred to remain independent. Due to their rapid growth rate (they have grown fourfold since the rejected bid) Duane Jackson has no intentions of selling the company anytime soon, preferring to continue their growth as a major player in the industry.

Arithmo is an example of a small internet start-up that has grown as an off-shoot of a traditional accountancy practice, TWD Accountants, which has 3,000 clients. According to Mike Parkes, their director, they have taken on no debt or external funding. Instead, profits from the pre-existing business funded the growth of their online venture.

### *Conclusions*

A recurrent theme was that the barriers to entry for an online business are low, in terms of the costs of physical assets and infrastructure required. Instead the bulk of the costs are related to hiring developers and marketing. Both of these areas are required for growth. As companies grow their accounting offering typically becomes more sophisticated and advanced, requiring more staff to develop and support it. Marketing and attempts to build brand awareness can also become very expensive, particularly if not well controlled. Xero is a good example of a company that has taken on a lot of investment in order to gain market share via extensive marketing campaigns.

Few of the organisations look at are profitable at present. This is not a pressing concern, as the industry is in a period of rapid growth. As more consumers become comfortable with Cloud Computing, the market for online accounting will continue to grow. Instead the emphasis is on building market share. In the absence of profits, this expansion requires external funding.

Contrary to the classical financial theory of Modigliani and Miller, debt has been almost entirely avoided in favour of equity. One might be tempted to argue this is caused by current economic circumstances, whereby credit is difficult to obtain for small businesses and start-ups. But the truth

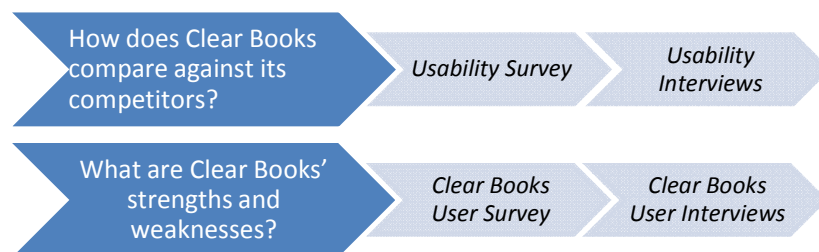
is probably that finding suitable investors can reap rewards beyond simply the cash they bring; Kashflow and Liquid have benefitted from their business experience and FreeAgent have expanded into new revenue streams thanks to their link with Iris. Because this is such a new, rapidly expanding market, there seems to be plenty of willingness from investors to sink money into it.

When talking about investment, one should look at the eventual exit strategy. For a company like Xero, having floated on the stock exchange it will be awkward for them to be acquired by another firm. However, everyone we spoke to agreed that in a couple of years time there will be a round of consolidation in the industry, as the bigger, more successful players buy up the smaller ones. Another possibility is that a desktop software giant, such as Sage, who has been slow to enter the Cloud Computing market, will look to make acquisitions as they enter the market. Selling out to a large, established firm seems like the most obvious way for investors to recoup their money. The aim in the meantime is to develop a large enough user base to interest one of the big players. For this growth to be achieved, investment is required.

#### 2.4.4. Objective 4 – Competition

Further discussion with Tim led us to consider a series of customer survey and usability studies. The inspiration for these stemmed from Table 1, which points at the importance of software's ease of use. This observation was also supported by the opinions of existing customers of Clear Books and other vendors.

The usability studies were done on top of the initially agreed market sizing in order to complement our understanding of the industry from a user's point of view. Although not originally part of our requirement, we nonetheless decided to take an integrated approach to the problem to investigate in a qualitative manner Clear Books' competitive landscape.



**Figure 12 - Competitor Analysis Framework**

##### *User Survey*

The user survey was conducted in the form of an online questionnaire sent to Clear Books customers (see Appendix E). Where customers agreed to be contacted, we carried out telephone interviews to discuss further the issues outlined in the survey response.

Feedback from Clear Books customers was generally very positive. This could in part be due to the self-

*Clear Books was exactly the sort of accounting system that I was looking for. I wanted a modern well architected piece of software, preferably running as an online service, which ideally should cater for the Flat Rate VAT scheme.*

selection bias. Nonetheless, survey provides some valuable insights. The results showed that many

*...chose Clear Books because I can sense the flexibility and ability within the software to change I hope this happen soon so we do business for long time together*

customers had specifically chosen an online solution, and within the online vendors their preference of Clear Books was due to simplicity of the software. This indicated that simplicity was the greatest unique selling point for a target market consisting of small businesses. Indeed

one customer claims that “...for once it looks like the software has been designed (with the customer in mind) whereas Sage appears to have 'evolved' without anyone ever considering the user...” Another one stated that Clear Books seemed “designed for very small businesses”, indicating that the adoption of a niche-tailored strategy had provided a positive point of difference compared to other vendors.

The graphs below show the perceived importance of particular attributes and features of the product (0 – not important, 10 – most important) from the customers’ viewpoint.

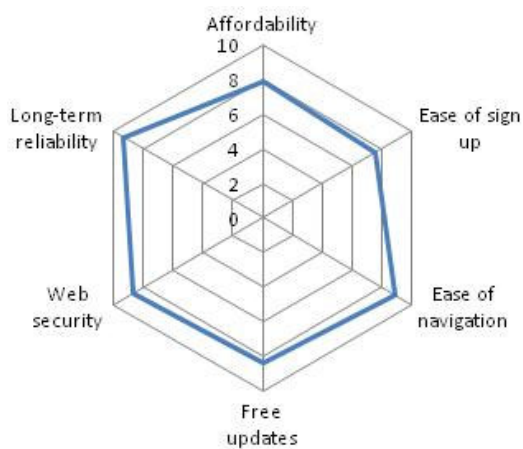


Figure 13 - Radar Graph to Show Preferred Attributes of Accounting Software (Left)

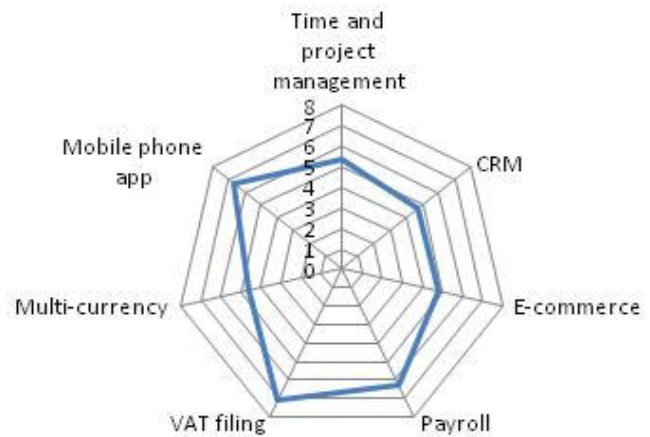


Figure 14 - Radar Graph to Show Desired Accounting Software Features (Right)

## Usability Studies

The goal of the exercise was to have an in-depth comparison of the usability (Michael O. Leavitt, 2003) of the accounting solutions of the client and its immediate competitors, as named by the client.

Moreover, an extended version of

8 potential students with various levels of accounting background were briefed and asked to perform a set of representative tasks using all four accounting

solutions (total time taken to complete all tasks for all software solutions averaged just under 30 minutes). They were voicing their comments about the ease and confidence in performing each task, whilst the completion rate and time were recorded by the facilitator in the Data Logger (Zazelenchuk, 2003)

### Accounting solutions examined:

- [www.clearbooks.co.uk](http://www.clearbooks.co.uk)
- [www.kashflow.co.uk](http://www.kashflow.co.uk)
- [www.freeagentcentral.com](http://www.freeagentcentral.com)
- [www.xero.co.uk](http://www.xero.co.uk)

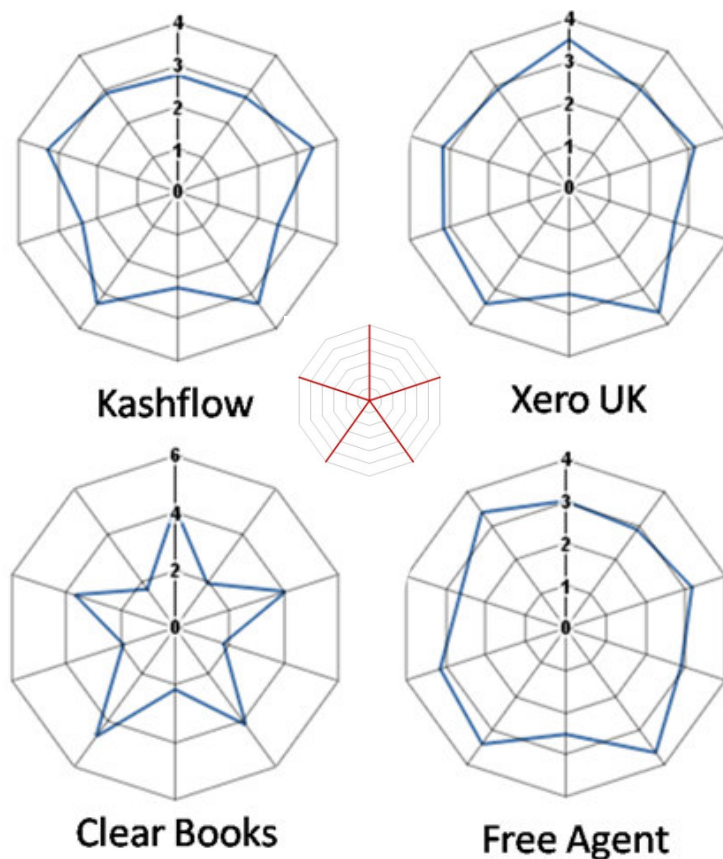
**Table 5 - List of Tasks for Usability Study (agreed with the Client)**

	Task	Details
1	Create a customer	Your choice of the name
2	Create a sales invoice	Current date, payment due within 15 days VAT Reduced rate 5% 2 units, price per unit = £500 Export invoice into PDF
3	Create a credit note	£50 against the invoice created
4	Mark as paid	Send and mark the invoice as paid
5	Make an inquiry to the support team	Ask if software supports multi-currency / Find a help page on multi-currency

On average, respondents learn to perform tasks faster as they get familiarised with the tasks and type of actions required. It is important to note that the order in which the websites were presented to the respondent was randomised across respondents to eliminate the learning bias time. Moreover, we made sure that the respondents were not aware which company we are working for, to eliminate potential Hawthorne effects and positivity biases.

After each section, respondents were asked to complete the standard System Usability Scale (SUS) questionnaire (see Appendix F) developed by Digital Equipment Corporation in 1986 (Stetson, 2004).

For ease of interpretation the main results (mean scores) are presented in the following format (the



situation shown in the middle in red is ideal: maximum positive comments, no negative points). From the following charts we can see that Clear Books' performance approximates most closely to the ideal.

Figure 15 - Comparative Usability of Competitors to Clear Books



The verbal feedback for Clear Books website fared well against competitors. Clear Books was more often ranked first or second. Due to the small number of respondents and high variation between people, aggregating the rankings should be avoided. Instead, we relied more on the verbal comments and SUS results. Clear Books site was often described as intuitive and easy to use, although some issues were identified (see comment on the right).

*CB: When a compulsory field is not completed, the cue names are different from the field names. This inconsistency is confusing*

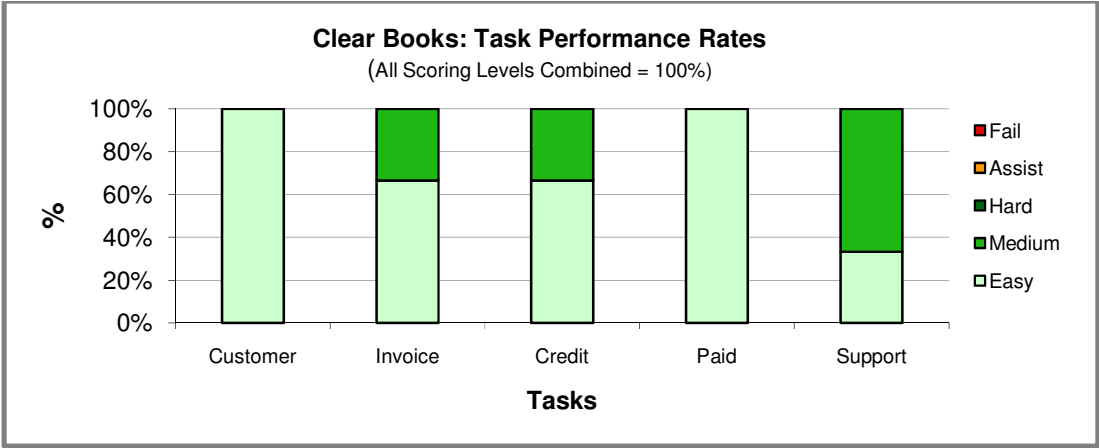


Figure 16 - Clear Books Task Performance Rates

### 3. Conclusions and Recommendations

While making explicit recommendations to Clear Books with regard to future growth is not in the scope of our project, our research does point to some fundamental conclusions. The following four paragraphs summarise the findings with regards to each of our objectives:

1. Our market research revealed that the online accounting industry is full of small start-ups, with new players entering the market each month. The barriers to entry are low and it is difficult to differentiate the service each company offers. Within this market, even the larger firms (Xero, Kashflow, FreeAgent) are not particularly large, with users numbering in the low thousands.
2. The low user numbers will increase rapidly as more users switch from desktop based system to Cloud based systems. Right now small companies are leading the way, with accountants often being reluctant to change their systems. As accountants begin to see the advantages of the Cloud, they will bring their clients in increasing numbers to the leading online services. In the terminology of Moore, the chasm is yet to be crossed, but it will happen soon, opening up Cloud computing to the mainstream.
3. All companies are pursuing growth over profitability, recognising that profits can occur only when user numbers reach a break-even threshold. To achieve this, outside investment has often been taken on, with the dual benefits of cash for ongoing operations and the experience and expertise of external investors. This is certainly an avenue Clear Books should explore.
4. Our research shows that Clear Books scores highly in terms of visual appeal, usability and ease of finding it (via Google searches and the like). While having a strong product is not a sufficient condition for success, it is necessary and Clear Books have achieved this thus far.

## 4. Evaluation

Overall our project was a success and we can be pleased with the results. We made significant findings with regards to each of our three original objectives as laid out in the Project Initiation Document (PID). In addition we provided a wealth of data to satisfy the fourth objective, the usability surveys, which we agreed on with our client after the project had started. Following our presentation, our client was very pleased with our findings, particularly the flexibility we had shown in being able to tackle the fourth objective part way through the project. Email contact we have had since then presentation confirms this; "I was really impressed with your presentation yesterday and thought you all did an excellent job." (Tim Fouracre). The feedback from our supervisor, Dr Ansari was also positive.

In carrying out our market sizing research, we ran into initial difficulties, as the nature of the market (small, start-up businesses) meant that little information was in the public domain. Thus we had to use a wide range of sources of information. In particular we talked to the business owners themselves, many of whom were initially reluctant to share commercially sensitive information for a study commissioned by one of their competitors. Nonetheless, our persistence and our change of approach, from emails to phone calls, resulted in us collecting some invaluable data that was not previously in the public domain.

Our strategy of dividing the objectives between the team members was a successful one, as it gave a high level of autonomy to each team member. It also allowed each of us to gain a level of expertise in our areas. Frequent contact between team members, both face to face and on Skype, allowed us to co-ordinate our efforts. This became particularly important in the later stages of the project as we wrote up our findings.

There is no doubt that each of us has learnt a great deal from the process of completing this report. We are confident that the client too has benefitted from our findings.

## 5. Appendices

### Appendix A.

#### Major desktop accounting vendors for small (top) and mid-sized businesses (bottom)

	<i>ERP</i>	<i>Distribution</i>	<i>Company</i>	<i>Geography</i>	<i>UK Revenue</i>
<b>Sage</b>	O	Desktop	Plc	Global	228
<b>Intuit</b>	O	Desktop	Plc	Global	5
<b>Mamut</b>	O	Desktop	Ltd	UK, Nordic	7
<b>Iris</b>	O	Desktop, Cloud	Ltd	UK	119
<b>Infor</b>	O	Desktop	Ltd	Global	47
<b>Coda</b>	O	Desktop, Cloud	Ltd	Global	68
<b>Epicor</b>	O	Desktop	Ltd	Global	17
<b>SAP</b>	O	Desktop	Plc	Global	370
<b>Oracle</b>	O	Desktop	Plc	Global	952
<b>Microsoft</b>	O	Desktop	Plc	Global	384
<b>Smooth Accounting</b>	X	Desktop	Ltd	UK	na
<b>Diamond Discovery</b>	O	Desktop, Cloud	Ltd	UK	na

### Appendix B.

#### “Big four” desktop accounting vendors: Detailed breakdown

<i>Vendor</i>	<i>Estimated UK Accounting Revenues, m£</i>		<i>Estimated # UK Users</i>	
	<i>Upper bound</i>	<i>Lower bound</i>	<i>Upper bound</i>	<i>Lower bound</i>
<b>SAGE</b>	125	125	780,000	820,000
<b>IRIS</b>	75	79	30,000	60,000
<b>INTUIT</b>	5	5	140,000	180,000
<b>MAMUT</b>	2	10	20,000	220,000
<b>total</b>	207	219	970	1280

Sources: Annual Reports, [www.accmanpro.com](http://www.accmanpro.com), Capital IQ database

## Appendix C.

### Summary Sheet: Telephone interviews

#### **David Terrar**

- We might see some consolidation. This is an industry with low barriers of entry and it all depends on how incumbent (large desktop providers) decide to react to the threat of online vendors
- We are currently in the adoption stage going mainstream in 1-2 years. Many businesses are still unaware of the SaaS option
- Many players may well be looking for eventual buyers. Twinfield itself is not currently planning to be acquired however this may be an option depending on the price offered

*Gratitude is extended to D. Terrar for providing additional market size estimates*

#### **Ben Kepes**

- Online vendors not so much of a threat to desktop provider because they are targeting the small businesses currently not using any type of accounting-specific software
- Not even the biggest player in the SaaS accounting market, Xero, can challenge the bigger desktop vendors in terms of revenues and marketing budgets
- The industry for online accounting software has great potential and likely to grow rapidly over the next couple of years

#### **Dennis Howlett**

- Online vendors facing strategic dilemmas. Need to keep prices down because lower end of the market particularly price-sensitive, not feature sensitive. Is this the correct approach?
- The partner/accountant model is clearly superior in revenue to the SME/individuals model; however the challenge is to get the accountants interested
- It is not in the interest of online vendors to sell their businesses to large software providers wanting to acquire them given the current high rates of growth; their value would be underestimated

#### **Richard Messik**

- Difficulty experienced in selling to accountants as these are harder to persuade
- The UK is still a small market however the market potential is enormous; New Zealand and US markets more mature
- Consolidation may seem the logical way to go; Sage is not necessarily an immediate threat as it cannot monetise the potential of the online market at the moment
- Much of the funding has come from private investment; most of the available finance used in operational expenditure and development with little in marketing

*A final thank you to the following people who devoted their time and shared their views with us over the phone:*

**Ed Molyneux** (founder of FreeAgent Central)

**Duane Jackson** (founder of Kashflow)

**Hugh Scantlebury** (founder of Aqilla)

**Lisa Kendrick** (founder of Liquid Accounts)

**Julian Shaw** (founder of Arithmo)

*A thank you note also to customers of Clear Books and its competitors for taking time in participating in our in-depth user interviews over the phone.*

## Appendix D.

### Online Accounting Providers - Website Analytics

Website	UK Unique Visitors (users) (000s)	UK Avg time on site	Global Unique Visitors (users) (000s)	Global Avg time on site	Traffic Rank - Global	Traffic Rank - UK
freeagentcentral.com	7.7	16.4	8.5	16.4	58917	5087
xero.com	10	16.4	93	18.2	15553	2180
freshbooks.com	22	9.5	380	9.5	4819	2506
kashflow.co.uk	22	7.2	24	6.5	49377	1734
clearbooks.co.uk	39	9.1	0	9.1	140544	4229
netsuite.com	52	25	1100	23.2	3242	1494
accountsanywhere.co.uk	NA	NA	NA	NA	NA	NA
acumatica.com	NA	NA	NA	NA	1134977	NA
aqilla.com	NA	NA	NA	NA	3566488	260863
arithmo.co.uk	NA	NA	NA	NA	1394939	194293
clarityaccounting.com	NA	NA	7.8	12	351109	NA
e-conomic.co.uk	NA	NA	4	4.2	681122	109434
financialforce.com	NA	NA	NA	NA	441848	109308
fusionaccounts.com	NA	NA	NA	NA	1189662	328161
imbercal.com	NA	NA	NA	NA	3379549	NA
inrax.com	NA	NA	NA	NA	10497182	NA
intacct.com	NA	NA	17	18.2	241660	NA
lessaccounting.com	NA	NA	11	9.1	111375	NA
libertyaccounts.com	NA	NA	NA	NA	785742	39065
liquidaccounts.net	NA	NA	NA	NA	215339	63936
net-numbers.net	NA	NA	NA	NA	4973062	NA
nolapro.com	NA	NA	10	8.1	263525	NA
online50.net	NA	NA	NA	NA	3202356	203056
thisispearl.com	NA	NA	5.8	13.1	156356	8469
quickbooksonline.intuit.com/	NA	NA	320	3.2	594	3217
saasu.com	NA	NA	9.4	21.4	151637	166813
surebooks.co.uk	NA	NA	NA	NA	NA	NA
twinfield.co.uk	NA	NA	14	18.2	4018678	NA

Sources of data : Google DoubleClick AdPlanner, Alexa.com

## Appendix E.

### Clear Books Customer Survey

#### About the customer

How did you first discover Clear Books?	%
Word of mouth	10%
Google	71%
Media	29%
Advertising	0%
Other	5%

How do you rate your accounting knowledge?	%
Good	57%
Average	33%
Poor	10%

Which price plan applies to you?	%
Free Trial	14%
Growth	14%
Established	29%
Premium	29%
Partner	14%

#### Competitors

Have you tried other online accounting systems?	%
Yes, paid subscription	23%
Yes, trial version	50%
No	27%

Online – Tried	%
Xero	27%
Kashflow	36%
FreeAgent Central	18%
Crunch	18%

Online – Paid	%
Xero	0%
Kashflow	20%
FreeAgent Central	20%
Saasu, Liberty, Arithmo	60%

Desktop software	%
Sage	62%
MYOB	8%
QuickBooks	15%
Microsoft, Money-Dance	15%

#### Clear Books

Why did you choose Clear Books over its competitors?
Clarity and appealing looks
Easy to use
Excellent and quick customer support
Excellent bank statement imports
Excellent upgrades
Online VAT Filing
UK specific
Good price
Better payroll system than competitors
Mac friendly

How satisfied are you with Clear Book's customer service ? (1-10)	Avg
Customer service	7.89

How satisfied are you with Clear Books? (1-10)	Avg
Overall experience	8.05

Suggestions for improvements:
Better VAT support for non-EU countries (eg VAT reverse charging for services)
Back buttons when attaching images to invoices/expenses
Better printable reports Down time is a concern
Flexibility in editing invoice layout (logos, watermarks)



### Clear Books Customer Survey

#### Features

Please rank the following (10 = most important)	Avg
Affordability	7.95
Ease of sign up	7.55
Ease of navigation of software	8.85
Free software updates	8.35
Web security and encryption	8.75
Long-term reliability of company	9.35

Please rank the following (10 = most important)	Avg
Time and project management	5.39
CRM	4.74
E-commerce	4.84
Payroll	6.29
VAT filing with HMRC	7.11
Multi-currency	4.61
Mobile phone app	6.68

Appendix F.

Online Accounting Usability Study (Adapted from SUS)

#	Question	Strongly Disagree	[ Clear Books ]				Strongly Agree	Mean	Strongly Disagree	[ Free Agent Central ]				Strongly Agree	Mean
1	I think I would like to use this website frequently	0	0	0	7	1	4.13		3	0	0	4	1	3	
2	I found the website unnecessarily complex	2	5	1	0	0	1.88		1	2	2	3	0	2.88	
3	I thought the website was easy to use	0	1	0	5	2	4		0	3	0	4	0	3.14	
4	I think I would need Tech Support to be able to use this website	3	4	1	0	0	1.75		0	3	3	2	0	2.88	
5	I found the various functions in this website were well integrated	0	0	1	5	2	4.13		1	0	2	0	2	3.63	
6	I thought there was too much inconsistency in this website	3	2	2	1	0	2.13		0	6	1	0	1	2.5	
7	I would imagine that most people would learn to use this website very quickly	0	0	0	3	5	4.63		0	0	0	4	1	3.38	
8	I found this website very cumbersome to use	3	3	2	0	0	1.88		1	2	1	3	1	3.13	
9	I felt very confident using the website	0	0	1	3	1	3.63		3	1	1	2	1	2.63	
10	I need to learn a lot about this website before I could effectively use it	4	3	1	0	0	1.63		0	2	3	1	2	3.38	
#	Question	Strongly Disagree	[ Xero UK ]				Strongly Agree	Mean	Strongly Disagree	[ Kashflow ]				Strongly Agree	Mean
1	I think I would like to use this website frequently	0	2	2	2	2	3.5		0	4	2	2	0	2.75	
2	I found the website unnecessarily complex	1	3	0	4	0	2.88		0	5	0	3	0	2.75	
3	I thought the website was easy to use	0	3	2	2	1	3.13		0	2	2	3	1	3.38	
4	I think I would need Tech Support to be able to use this website	0	5	1	2	0	2.63		1	4	1	2	0	2.5	
5	I found the various functions in this website were well integrated	0	1	2	4	1	3.63		0	2	3	2	1	3.25	
6	I thought there was too much inconsistency in this website	0	4	4	0	0	2.5		1	5	1	1	0	2.25	
7	I would imagine that most people would learn to use this website very quickly	0	1	3	4	0	3.38		1	2	0	4	1	3.25	
8	I found this website very cumbersome to use	0	2	4	1	1	3.13		2	3	1	2	0	2.38	
9	I felt very confident using the website	0	2	2	3	0	3.14		0	1	4	3	0	3.25	
10	I need to learn a lot about this website before I could effectively use it	1	3	1	2	1	2.88		0	0	3	2	0	2.88	



## Appendix G.

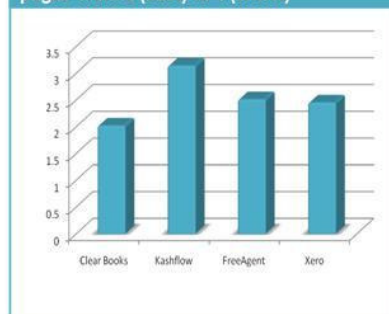
### Usability Survey

Are you considering of starting your own business in the foreseeable future?	
Yes. Considering	19%
Have one already	7%
No	75%

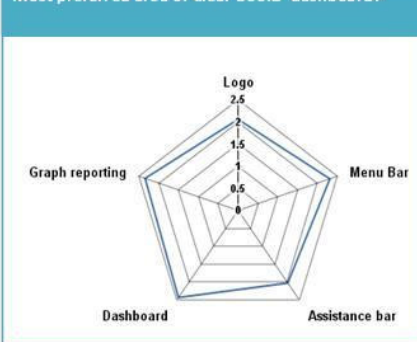
Would you consider online software for accounting purposes?	
Yes	47%
Maybe	37%
No	16%

Which would you choose on the basis of	Functional	Informative	Visuals
Clear Books	20	19	21
Kashflow	23	21	22
FreeAgent	21	26	14
Xero	23	27	6

Please rank the following front pages from 1 (best) to 4 (worst)



Most preferred area of Clear Books' dashboard?



Results for Kashflow, FreeAgent, Xero show equal preferences for all areas

Visit <a href="http://www.clearbooks.co.uk">www.clearbooks.co.uk</a> and answer the following	Mean
This website is visually appealing	3.82
It was easy to move from one page to another	4.06
The overall organization of the site is easy to understand	3.76
Individual pages are well designed	3.62
Terminology used in this website is clear	3.48
The content of the website met my expectations	3.50
I would be likely to use this website in the future	2.86
Overall, the website is easy to use	3.76
The purpose of the website is clear	3.94



### JBS Usability Survey

Please choose words that best describe your interactions with the website		Please choose words that best describe your interactions with the website	
Convenient	48%	Cutting edge	2%
Incomprehensible	2%	Distracting	2%
Not secure	2%	Enthusiastic	13%
Efficient	30%	Effortless	13%
Too Technical	2%	Time-consuming	4%
Ineffective	0%	Usable	46%
Unconventional	9%	Time saving	7%
Personal	9%	Straightforward	43%
Unreliable	0%	Dull	13%
Simplistic	22%	Intimidating	0%
Old	2%	Trustworthy	9%
Ordinary	26%	Ordinary	11%
Secure	2%	Comprehensive	20%
Fresh	17%	Helpful	26%
Rigid	2%	Complex	4%
Confusing	2%	Professional	37%
Impersonal	13%	Clear	41%
High quality	15%	Other	7%

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