Software Company

Advice on how to start, grow and exit a software company

The CDC Story 1994-2003

Software Company – The CDC Story Appendix

Author: David Cornwell

Published by Beaten Metal Books Ltd.

www.softwarecompanybook.com

Cover by Mark Wood.

Edition: 1.0 - PDF Download

First Published: April 2020

ISBN: 978-1-913678-02-9

Disclaimer

The book contains the opinion of the author and is not intended to be an exhaustive examination of the subject matter. It is designed to provide helpful information on the topics considered and is therefore presented solely for educational and entertainment purposes. It is provided 'as is' without warranty either expressed or implied.

In no event will the author or the publisher be held liable to any person or entity for any decision made or action taken based on the information contained in this book. This includes any incidental or consequential loss or other damages caused or alleged to have been caused, directly or indirectly, by the information contained herein.

PLEASE NOTE: The author is not qualified to provide formal legal, accountancy or other professional services advice and this book does not provide such advice. The book explains the author’s layman understanding of such matters in the hope that it will help the reader’s understanding. Any reliance you place on the author’s understanding is entirely at your own risk. You should undertake your own research and due diligence as relevant legislation and the business environment constantly changes.

In summary, you are responsible for your own decisions and actions and therefore results and your use of the information in this book is at your own risk.

Acknowledgements

Thanks to my wife of 37 years who has always supported me in my career and provided a voice of reason during difficult times. Having a supportive spouse is one of the key ingredients of success.

Thanks to the individuals mentioned by name in this book. They have all taken the time to read the sections in which they are mentioned and have confirmed that they are happy with or, at least, do not violently object to my inclusion of them and what I've said about them. A special thanks to Clare Beazley who has been a constant source of rational thought and personifies calm efficiency. In a presentation to aspiring entrepreneurs we once described Clare as my 'pooper scooper' coming behind me cleaning up the mess I'd left behind as I impetuously forged ahead. Everyone needs a Clare!

Thanks to my niece, Jessica Trappe (www.jessicatrappe.com), for providing editorial services for this book. However, I'd stress that while she provided valuable input, I didn't accept all her proposed changes as I like to think that my writing style is unique. Therefore all mistakes, grammatical inconsistencies and peculiarities are mine and mine alone.

Thanks to the beta readers who read an initial copy of this book and provided feedback. Their feedback certainly enhanced the final prose!

Finally, I'd like to thank all the 'business friends' I've made and kept in touch with over the years. Many of them are ex CDC alumni and went out of their way to support me during my time running PleaseTech. Others have been helpful throughout the years I've known them and have been very generous in their entertainment and support.

Trademarks

Table of Contents

Introduction

CDC Solutions Ltd (initially Computerised Document Control Ltd), was my first company. In the foreword to the book I allude to the back story. This appendix documents the CDC story at a high level.

The CDC story is the stereotypical 'game of two halves'. The first half (1994 to mid-1998) covers the early days in which it was a struggle for survival in which the company gradually became a sensible, profitable operation. The second half (mid-1998 onwards) is the post venture capital investment period. This half features a fundamental change in that profit became a bygone objective and it was all about burn rate and growth.

All of this took place in a rapidly changing environment during the height of the dot-com boom. I've tried to make sense of it below covering timelines and pertinent market developments.

Getting Started

Having been working in business development for Kinesis Computing I'd come across a document management system called DCS-PowerNET (DCS) as I'd been pitching a custom solution against it to a prospective client. The prospect was the UK subsidiary of a US multi-national and, eventually, implemented DCS.

Having established that DCS's developer, Mystic Management Systems (MMS) didn't have any UK representation, I then, as any streetwise salesperson would, pitched for the implementation project. I don't recall winning that, but the upshot was that DCS was very clearly on my radar when it became clear that my time with Kinesis had run out.

The day after I officially left Kinesis, I was on my way across the Atlantic to meet with MMS in their home town of Mystic, CT. This was, of course, not as easy to arrange as it would be today. 1994 was before the internet, email, online travel portals, etc. Fax and the telephone were the main communication mechanism! I had to use a travel agent and it was an act of faith!

MMS was run by a retired dentist (Leo Golub[1]) who, for some reason, had got into developing software and had managed to secure a contract to provide the packaging specification management system at Pfizer, Groton. As I recall it, DCS had started out as a custom development and then been productised to make it available to other clients. My understanding of this history broadly concurs with the statement on the DocXellent website that Mystic Management Systems was "born through the development of a data management solution motivated by the Tylenol scares of the 1980s"[2]. It is easy to understand the focus on packaging and their specifications given the background.

Thanks to my visit, CDC secured the UK re-sale rights (and non-exclusive European rights) for DCS. There were a couple of exceptions. Pfizer and Unilever. It turned out that the Unliever Research Centre, based in Port Sunlight, UK had purchased DCS to manage its packaging specifications. This would turn out to be a very good thing for the fledgling CDC.

The basic deal was 50/50. CDC would get 50% margin on license sales and MMS would not take anything on the implementation or associated consultancy services I would sell alongside the

[1] Leo's obituary which mentions MMS: https://tinyurl.com/y7cfwc3m

[2] The Tylenol 'scares' of the 1980s refers to the contamination of Tylenol capsules with potassium cyanide in Chicago, IL in 1982. This led to the deaths of seven people and several more in copycat crimes. It was established that the tampering had taken place after the capsules had left the factory and led to the development of tamper proof packaging.

software license. My basic business plan was to set about selling the software with associated services and see where it went. CDC started trading on 1st September 1994.

Jim Cook Joins

Although I had a good understanding of software, I was not a techie and therefore needed a techie/implementation/consultancy arm. Enter a chap called Jim Cook who was an ex-colleague from Kinesis. Jim was keen to leave Kinesis and join me in CDC. However, there was a snag.

Whereas I'd received a reasonable redundancy cheque and as it was redundancy it was tax free which meant I didn't need immediate income, Jim wasn't in that happy position. He needed the company to pay him so he could pay his mortgage, put food on the table and provide other such basic necessities.

The answer was a loan. I approached the company's bank with a business plan seeking to raise funds under the UK government backed Small Firms Loan Guarantee Scheme (SFLG)[3].

As luck would have it, it transpired that the manager at our local branch was very focused on the sale of insurance. So, whilst nothing was ever explicit, the company ended up with the required loan and emerged one of the better insured small businesses in the UK! The classic case of a win-win deal.

The good news is that the company could now pay Jim and he joined me at CDC starting on the 1st November. We didn't have offices and we worked from home, but we had a company, a product to sell and a loan to make repayments on.

The Initial Role of Adobe Acrobat

DCS supported a new electronic document format from Adobe Systems called the 'Portable Document Format', which had the file suffix '.pdf' - now known universally as the PDF format. In 1994 the concept of PDF was new, as Acrobat, the way PDF files were viewed and created, had only been launched in June 1993. It transpired that Adobe Acrobat was to be pivotal in the development and success of CDC but, at the time, that was part of an unknown future!

As a result of this support for Acrobat, I got in contact with the UK arm of Adobe Systems and was invited to the Acrobat 2.0 launch in circa late October 1994. Attending the launch was a smart move.

Firstly, all attendees had name badges. This was a marketing godsend; I spent the entire launch wandering around making surreptitious notes of the names and their associated companies. After all, these were people interested in documents and technology – prime prospects!

Secondly, I learnt that Acrobat 2.0 included a plug-ins SDK (Software Development Kit) which allowed third parties to create enhancements for the Acrobat Exchange desktop application – a stunningly important development which sparked a whole industry of Acrobat enhancements including, as it would turn out, the products on which CDC's success was built.

The very next day, I hit the phone and set about obtaining the job titles and addresses of the attendees whose names I had scribbled down. Letters introducing the delights of DCS were soon winging their way to these lucky people.

[3] The Small Firms Loan Guarantee Scheme meant that, for eligible companies, 75% of any loan default was met by the UK Government. This greatly reduced the Bank's risk of lending to small businesses which, in turn, meant that no personal guarantee from the company officers (i.e. myself) was required.

A week or so later, I got a call from the head of IT at a UK oil company based in London. They were just about to commit to a custom developed document management system for their QA documents but, having received my letter, it seemed that we could do everything they needed out-of-the-box and therefore for a lot less money. Would we care to visit them and demonstrate the software? We would just love to!

In early 1995 Jim and I walked out of their building with a contract worth over £70,000[4] for the license and implementation services. We were buzzing. There were just two problems:

Firstly, the solution was not 100% out-of-the-box and required a couple of minor enhancements to the underlying DCS software. We'd discussed this at length and in great detail with MMS and obtained back-to-back contracts that, once the Oil company signed the deal and paid the initial license instalment, MMS would implement the enhancements in the base software within an agreed timeframe. This was essential in winning the contract as the Oil company understood that we didn't develop the software itself and wanted to see the commitment directly from MMS.

Secondly, we'd agreed to provide a facility to watermark each document printed with the legend 'uncontrolled copy'. This was to be delivered via an Acrobat Exchange PDF plug-in and therefore was our responsibility and nothing to do with MMS.

Had we any idea how we'd set about developing the plug-in? The answer was, of course, 'no'.

Print Time Watermarking

The development of the print time watermarking plug-in proved highly troublesome. The issue wasn't the actual development technicalities, it was the surrounding business arrangements. We had a false start with an ill-conceived separate joint venture plug-in development company set-up in conjunction with some recently acquired business associates who were also Adobe partners. The relationships went south shortly after its formation and ended in acrimony. It cost us around £5,000[5] in legal fees to extract ourselves. So round one was an expensive lesson in the value of intellectual property, the importance of contracts and company structures, and a very clear lesson on not simply relying on goodwill and personal relationships.

The second attempt was a home run. We were introduced to a two man partnership able to develop the plug-in called Merlin Open Systems (Merlin). Merlin were experts in Adobe Postscript (the page description language on which Acrobat was based) and were at the forefront of digital publishing through their work with the Electronic Publishing Research Group at the University of Nottingham.

We'd learnt our contractual lessons and ensured that (i) there was a contract and (ii) that the contract gave us full intellectual property rights in the software. This was just as well as BannerPrint (the print time watermarking plug-in) eventually became PDF*control* which was the key component in PDF*aqua.*

I'm pleased to say that the relationship with Merlin survived the duration and PleaseTech, my second company, was still subcontracting PDF development to them some 22 years later!

1995 - Scrabbling Around

Whilst this was all happening it would be wrong to say that we were cruising. We were, in fact, scrabbling around trying to make a living whilst not losing focus on the longer-term game plan of selling decent sized DCS-PowerNET based projects. However, the short-term objective was survival.

[4] £70,000 in 1995 is approximately equivalent to £140,000 in 2020
[5] £5,000 in 1995 is approximately equivalent to £10,000 in 2020

It was the early days of document management, so selling DCS was as much about education as selling a product. There were no established vendors and the market was becoming increasingly competitive with several fairly large well-funded Silicon Valley players starting to make their presence felt. Clients were understandably cautious. It therefore took a lot of resource to try and sell a DCS project, and it was not a quick sale.

With no financial reserves we needed an immediate source of income and so we focused on Acrobat which was gaining a considerable amount of traction thanks to a major marketing push from Adobe.

This focus on Acrobat was given an imperative as the relationship with MMS was in a bad way over their failure to make the contracted enhancements to DCS they had promised for the oil company. Despite us and the client having met all our contractual obligations, there was excuse after excuse after excuse. My recollection is that DCS was in and working at the oil company, but we couldn't close the project out and get the final payment whilst the promised enhancements were outstanding.

So, the resale of Acrobat software with associated consultancy and training became our mainstay. It is important to note that this was encouraged by Adobe which concentrated on selling off-the-shelf software licenses and didn't have any consultancy or training capability. They were therefore keen to set-up an ecosystem of companies which could provide such services. For a while, Adobe became our number one source of leads as they knew where the projects were and could make recommendations to their clients.

Within reason, we'd do anything to scrape together a living, for example, I clearly remember selling a very expensive copy of Acrobat to a client. The client actually wanted a PC with a CDR. This was not a cheap tool. Wikipedia suggests that in 1992 the cost of typical recorders were down to US$10,000 – US$12,000 and in September 1995 Hewlett-Packard introduced the first recorder to cost less than US$1,000[6]. I can't recall exactly what we sold but I do remember that the client didn't have a hardware budget but did have a software budget. So we delivered a very expensive copy of Adobe Acrobat which happened to come bundled with a PC with a CDR!

Luckily Acrobat was of great interest to Unliever so Jim & I were frequent visitors to Port Sunlight and the resultant projects we secured enabled us to keep paying Jim's salary and the loan repayments. By this stage we had two loans and we were even better insured!

I still wasn't taking a salary and my family was surviving on my wife's earnings. It was Q1 1996 before I was able to pay myself.

Virtual Document Publishing

The possibilities behind PDF plug-in development excited us, and during 1995 Jim developed a specification for a publishing tool based on compiling and publishing virtual, otherwise known as compound, documents.

The concept of 'virtual' documents had been developed by Documentum and allowed the document management system to store a link to a document (rather than the actual document itself) as part of a document set. Thus, the same document could be used by being referenced in multiple places without there being multiple copies. This meant if the document was revised the link would remain valid and the document would only need to be changed in one place.

This functionality was especially useful for pharmaceutical companies in managing their regulatory submissions. In such submissions to the pharmaceuticals regulators, the same document could be

[6] The article is here: https://tinyurl.com/y74suzwg

used in many submissions, especially because, at the time, there was no unified European submission mechanism. Each country's submission formats were slightly different but required broadly the same documents. Virtual documents could contain virtual documents and so different complex document structures based on the same documents could be replicated in the document management system.

The term 'virtual document' was a Documentum term. Other document management systems developed the same functionality and used terms such as 'compound document', 'logical document', 'document collection' and so on. The good news was that DCS had a virtual document capability called, I think, a project.

So we got Merlin to develop another plug-in, VolumeBuilder*,* which concatenated all the PDF pages in a project into a single document, added sequential page numbers, and complied and inserted a master table of contents. We linked VolumeBuilder to a DCS project.

1996 - The Move to Documentum

The document management industry was expanding rapidly and Documentum was leading the charge, especially in the Pharmaceutical industry which was the industry with both the need and cash to invest[7]. In January 1998, Forbes.com[8] reported that "In 1994 Documentum's revenues were $10 million; in 1995, $25 million; in 1996, $45 million. I expect the company to report revenues near $68 million for 1997. It has been profitable for the past 13 quarters".

Whilst this was happening, we were out there whizzing up and down the motorways of the country (no remote selling in those days) competing against Documentum and several others, with DCS. Despite having the USP[9] of VolumeBuilder we were not making any headway. There is no doubt VolumeBuilder was an advantage. In client demonstrations we were able to compile and actually publish a project ('virtual document') – not just talk about it! This was, of course, the end objective of every virtual document as they were submissions that ultimately needed to be printed and sent to the regulators. We were the only ones who could actually demonstrate the output of a final published document and potential clients were duly impressed! However, it wasn't enough and we were not winning the deals[10].

The good news is that we did start to get calls which went along the lines of 'We are not buying DCS we are buying Documentum but we do like your publishing technology, can we buy that separately and make it work with a virtual document?'.

With the MMS relationship in poor fettle, inherent limitations in the DCS architecture becoming obvious and a ready market for our print time watermarking and publishing technology, it didn't take a business guru to work out that the best way forward was to stop selling DCS and partner with Documentum to provide our technology as integrated enhancements. So that is exactly what we did.

---

[7] At the time a commonly quoted figure was that the benefit to a pharmaceutical company was $1million for every day it brought forward the submission of its FDA application. This figure is also quoted in the Forbes article referenced below.
[8] The Forbes article can be found here: https://tinyurl.com/ybk658h4
[9] Unique Selling Proposition – a standard sales term.
[10] It had also become clear that one of the restrictions was the DCS-PowerNET architecture which, whilst networked, limited the solution to a departmental solution (such as packaging specifications). It simply wouldn't be able to scale to the size required by the volume of documents in a life sciences company's regulatory submission.

In September 1996 we signed up as a Documentum Signature partner and in November 1996 we had a booth ('stand' in British terminology) at the inaugural Documentum User Conference called Momentum, held in Miami, FL.

However, we saw no reason to limit ourselves to a partnership with Documentum and therefore we went to Miami via Boston where we met with Novasoft[11], PC Docs[12] and IBM – all other players in the emerging enterprise document management market.

Meeting these major USA players was possible because our plug-ins were gaining traction. In fact, towards the end of 1996 in conjunction with the Acrobat 3.0 release, Adobe Press published a book entitled 'Internet Publishing with Acrobat'[13]. The book referenced several partner plug-ins. A total of eight companies were listed and we were one of them[14].

By the end of 1996 we were re-focused on delivering our own technology as enhancements to not only Documentum's clients but also those of other document management vendors.

We weren't the only ones trying to sell publishing technology. 1996 started to see the emergence of a Xerox product, Xerox Document Assembler (XDA) and an Adobe ventures backed company called Electronic Submissions Publishing Solutions (ESPS) with their Core Dossier product. These companies, especially ESPS, were trying to solve the really big problems of pharmaceutical regulatory submissions publishing. They were out of our league, well-funded and aggressive.

1996 – Behind the Scenes

It all sounds very grand, but the company was still primarily Jim & myself. We were still scrambling around to get income but, by the summer, things were going sufficiently well that we were able to recruit a couple of others and engage a sub-contractor to develop the Documentum integrations.

It's probably worth noting that neither of us had ever recruited anyone previously. We'd been involved in the interview process but not been responsible for the decision and follow through. It was a rapid learning curve and one very quickly became aware of the enormity of the decision. A wrong decision could, quite literally, kill the company.

In fact we almost did! In the early summer we had recruited a sales lady and it didn't have a happy ending. After six months, a lot of pain, a lot of expense and no sales (to be fair, largely due to a significant change in her personal circumstances), it was blindingly obvious that she wasn't working out and her associated financial overheads were in danger of bleeding the company dry. So, Jim & I had our first experience of letting someone go - not pleasant.

However, in some ways, ironically, we were starting to see reasonable sales of our plug-in technology. BannerPrint was, by now, on version 2.0 and had been renamed PDF*control* and was providing a return, especially in the USA where we had hooked up with a third-party reseller. A typical PDF*control* license sale was, nett to us, US$10,000 (~£6,000). So, we were making progress and starting to become a software company.

So, whilst there was progress it was hard work and with - we felt - insufficient return. We needed a breakthrough. The breakthrough was attending Momentum '96 in Miami; we were inundated with leads.

[11] Novasoft Systems offered NovaManage a document management system. See https://tinyurl.com/ybs3kn99
[12] PC Docs was acquired by Hummingbird in 1999 which itself was acquired by Open Text in 2006.
[13] It is here: https://tinyurl.com/y9r6tvc5
[14] It was slightly out of date as by the time of publication VolumeBuilder had been renamed PDF*fusion* and BannerPrint had become PDF*control*.

Despite the staffing difficulties, 1996 closed on a positive note. Including the Documentum sub-contractor and ourselves, we had five staff, a turnover of around £310K and a modest profit! However, what excited us were the prospects for 1997; this is when the leads from Momentum ’96 would kick in and provide the leap forward we’d been looking for.

1997 - On a Rising Tide All Boats go Up

As previously noted, Documentum’s tide was rising rapidly – as was the whole document management market. 1997 was the year we became a ‘proper’ company. This was largely achieved by clinging tightly to Documentum’s coattails and rising on the tide!

In early January we released the beta of the PDF*fusion* Documentum integration and we were working the leads from Momentum for all they were worth.

However, we were also spreading our bets and were working with other document management vendors. In December 1996 NovaFusion[15] had been announced. This was an integration between the NovaManage and PDF*fusion* provided by IBM's Enterprise Document Management System group and endorsed by Ratiopharm GmbH. It may not have delivered much immediate business but it was validation; we were playing with the big boys.

Having failed to make the revenue target of £500K in 1996, we decided it would be a good target for 1997. However, all was not well. I was flat out personally running all administrative functions of the company, including accounts, invoicing, cash chasing, etc. and busy doing all the marketing and the partnerships. Jim was busy managing development, doing consultancy and hands-on implementation work. No-one was really concentrating on sales – it was very much a part time activity which only dropped onto the radar when the cash forecast suggested we needed an injection.

In recognition of this we took on a part time admin assistant so I could spend more time on sales. We were still operating a virtual office and this itself became an increasing hinderance to performance – especially as a client decided to audit us in June. There was a manic preparation of basic company procedures and we ended up conducting the audit in Jim’s home office – which was a portacabin strategically positioned in his field!

The products were coming on slowly. We’d launched a Documentum PDF*control* integration which we called PDF*aqua* – the ‘aqua’ being a sop to the watermarking functionality it provided. On the publishing side we’d launched v2.0 of our Documentum and PDF*fusion* integration (which we called ‘Topaz’[16]) and so started becoming recognised as an emerging competitor for XDA and ESPS’s Core Dossier.

As previously mentioned, both Xerox and ESPS were in a different league. It was rumoured that the going price for a Core Dossier server was US$1million. We were still pricing our software in the low thousands of pounds. We did, however, start a relationship with Xerox which recognised the need for a lighter weight departmental publishing solution to feed into their heavy weight publishing engine, XDA.

From an administrative perspective, with more bandwidth, in the second half of the year the company started becoming more formalised. We were still operating a virtual office but were recruiting and, in order to attract new members of staff, had implemented an employee benefits

[15] See the announcement here: https://tinyurl.com/yddqqc85

[16] Given we had PDF*aqua* as a product, for some reason we decided that we’d name all our Documentum integrated products after semi-precious stones! I still have the reference book ‘Rocks, Minerals & Gemstones’ on my bookshelf.

package with pensions, life cover, etc. In September Cathy Brode joined us from Kinesis to focus on testing, delivery, customer support, quality and all such other functions which were, if we are honest, being neglected.

We ended the year with a turnover of £405K and 60% of our sales having come from the USA. This below-target revenue was to an extent an indication of how sales was a secondary focus for much of the year. We can, perhaps, be forgiven for not having rushed into another sales recruitment drive as the salesperson who didn't work out was hugely disruptive and costly; we were 'once bitten twice shy'. In retrospect our mistake was not recruiting a senior finance administrator to allow me to concentrate on sales.

There can be little doubt that an increasing USA focus and the resultant sales were largely due to the leads from Momentum '96 being predominantly USA leads and Documentum being a West Coast company. We didn't have a defined USA strategy. We just followed the leads and, if that was to the USA, so be it. Needless to say, we were at Momentum '97 to get a new slug of leads.

From a market perspective, as the year closed it was becoming increasingly clear that we would inevitably have to move upmarket and compete head to head with ESPS's Core Dossier. Xerox appeared to be losing traction and client companies were looking for another competitor to enter the fray. We sat down and white boarded out what additional modules we would need to be competitive. This was the start of moving Topaz to EZ*subs*[17].

The USA was where the action was and where the opportunity lay. This led to long conversations about how we should best take advantage of it. The accepted approach at the time was that one of the founders (or a senior sales director or similar) moved to the USA to set-up an operation there. However, we'd heard some horror stories[18] about companies who had adopted this approach and knew it was an expensive undertaking. Neither Jim nor I wanted to uproot our young families and it was out of the question as we didn't have the cash.

So we started thinking about venture capital. Our initial meeting in late 1997 with a corporate finance executive was not encouraging. We were told that we were too immature as a business and there was no way a VC would ever look at us, let alone fund us.

1998 – Venture Capital Year

We decided to ignore the corporate finance executive's, no doubt, well-meant advice and approach the venture capitalists directly ourselves. We'd obviously prepared a comprehensive business plan, but the basic pitch was 'look how well we are doing in the USA – can you imagine how much better we'd do if we had a team there'.

We still had to address why Jim or I weren't proposing to move to America. So, another part of the pitch was a very clear statement that whilst, traditionally, British companies established themselves in the USA by relocating a senior member of the management team, we were not offering or planning that approach. We believed that the internet had provided a radical step change in the global communications infrastructure and that this could be used to manage a remote team, in much the same way we ran a virtual office. Supporting this was the fact that approximately 50% of

[17] EZ*subs* was pronounced using the American for z (i.e. zeeee). So it sounded like Easy*Subs* – a play on 'Easy Submissions'!

[18] One such story involved a VC backed firm who recruited a sales director who persuaded the Board to fund moving him and his family to New York so he could be at the centre of the sales opportunity. Once the very expensive move had been made, the sales director promptly resigned leaving the company in the lurch. It did not survive. It's not for nothing that America is known as the graveyard of British companies.

CDC's recent US business had been sold virtually – quite revolutionary for 1998. In short, the whole world was moving to a new way of doing business and we were proposing to ride that wave.

Our messages certainly hit the mark and things started to move rapidly. We were soon negotiating with the venture capital investment firm, 3i.

By this time, we were completely product focused and offering: Topaz and PDF*aqua* which were the Documentum integrated versions of PDF*fusion* and PDF*control* – which were now positioned as system integrator tools. We had an end user personal version of PDF*fusion* called Personal*fusion*, and a PDF creation tool called Local Render[19].

One of our masterstrokes was the creation and release of a shareware plug-in called 'DocInfo'. As the CDC website noted: "DocInfo is an Adobe Acrobat plug-in designed to assist in the completion of the Document Information fields within a PDF document and to assist in the creation of bookmarks".[20] This free plug-in was a huge success and was used by a large number of the Acrobat community. It certainly put CDC on the map and provided publicity way beyond what it cost to produce.

The first lesson around raising funding is to never lose focus on the business performance. Investors need to see a continual positive progression to invest and a stumble during the process is a sure way to kill any confidence established. We were very aware of that and kept the pedal to the metal.

Negotiations with 3i were assisted by our increasing international recognition and prospect list. In March 1998, PDF*fusion* was a 'Hot Pick' at the renowned Seybold New York Publishing conference where we had a pod in the Adobe Developer Pavilion. Seybold Hot Picks highlighted what their editors considered to be the 'best of show' new products and technologies – it was a massive accolade.

Our prospect list also made very good reading. Top pharmaceutical firms, banks and aerospace companies were predominant. These were the very companies investing in serious document management technology and we were part of that rising tide! In terms of partnerships, we were advertising links with Documentum, Novasoft (via IBM's integration) and PC Docs. Industries addressed were Pharmaceutical, Engineering and Finance.

Towards the end of Q2 1998 3i made us an offer of a £1million investment on a pre-money company valuation of £3million. It seemed reasonable to us, but we needed a sanity check. Not knowing anyone else, I called the aforementioned corporate finance executive whose well-meant advice we had completely ignored and asked to purchase a day of his time. One thing led to another and, for a very modest fee, Alan Bristow[21] was soon helping us close out the investment.

As part of the deal 3i wanted to see the company's management team beefed up. Jim, Cathy and I were not only the management team but also did everything else apart from development and basic administration. Whilst I was the primary shareholder, in day to day operations we acted as equals and discussed everything.

[19] My thanks to the WayBackMachine for its record on docctrl.com (the CDC website) for the detail. All references to the website come from examining the records from the WayBackMachine.
[20] It should be remembered that at the time there was no way of automatically creating PDF files with this data. It had to be added after the event.
[21] Alan now runs ICON Corporate Finance one of the most respected corporate finance firms in the tech sector in the UK. ICON represented CDC in its further fundraising and PleaseTech in the sale to Ideagen.

I was Business Development Director[22] responsible for all sales, marketing, finance and administration, Jim was Director of Technology responsible for development and pre-sale technical support, and Cathy was Director of Quality & Customer Care responsible for testing, delivery, implementation and support. I had not given myself the title of Managing Director (i.e. CEO) in the early days as I thought having a lesser title would make us look a larger firm. If people were dealing with the Business Development Director (i.e. me) they would assume that there was a separate Managing Director. This omission was to cause some pain later in the year.

The first step in strengthening the management team was the appointment of a Chairman. 3i had introduced us to several candidates, none of whom we felt were right. One of Jim's contacts suggested a chap called Bill Passmore who had an excellent pedigree having been Vice President of Sun Microsystems in Northern Europe and overseen their explosive growth. He was now a professional non-executive Director with good links to the venture capitalists. Bill was appointed Chairman on 1st July 1998.

With Bill appointed and the investment from 3i imminent, a minor complication arose. ESPS, presumably recognising the growing threat which we presented and further realising that the threat would only increase with the forthcoming 3i investment, asked to talk to us about acquisition. Jim and I flew to the USA.

A meeting of the ESPS C-level executives and investors resulted in an unacceptable offer[23] and we flew home (having been in the USA less than 24 hours) and closed the deal with 3i. £1million hit the bank account in August. Little did I know that that this had lit the touch paper which would lead to my exit from the business three years later.

It's worth pausing the story at this stage and taking stock. We'd secured a £1million investment based on:

1. A company of 10 people operating around a virtual office.
2. A half year revenue of circa £250k (with a target for the year of £600k).
3. Our main intellectual property being developed by sub-contractors.

Looking back, it makes me wonder whether we could achieve the same in this day and age. However, we had three key elements going for us: (i) proven technology in which large companies were interested, (ii) a clearly defined market which was growing rapidly, and, (iii) confidence. Never underestimate the power of self-belief.

Ultimately, the truth of the matter is that we were in the right place at the right time. If we had been a year later, I doubt we'd have got the investment. You only have to read about our struggle to get a second round £2million investment to understand that, by 1999, the VCs attention had turned away from pure play software companies.

With the £1million in the bank and no cash flow issues to worry about, the focus for the rest of the year was on two things:

1. We had to deliver on the business plan figures and make the £600k revenue target promised.
2. We had to beef up the senior management team.

---

[22] The UK term 'Director' means a formal legal officer of the company and broadly equates to the 'C-level' in the USA structures.
[23] The unacceptably low offer was mainly in ESPS stock whereas we were only interested in cash!

Every month at the board meeting with the VCs we had to explain how we were getting along. With the pressure on, we were lined up to make some absolute howlers in respect of recruitment and that is precisely what we did.

A worldwide sales VP was recruited at great expense and, about six months later, fired at great expense.

Shortly after the sales VP joined, we recruited a sales individual (working from home) to establish a presence in the USA. However, unfortunately, it wasn't long before our collective naivety became very apparent. Regardless of the quality and experience of the individual, it transpired that there was a location issue. It seems that, if you need someone to be travelling around the USA, you need them to be located near a major hub airport for both convenience and cost. This individual was located near a regional airport and the expense claims started racking up as it took two flights to get anywhere sensible. In fact, for a lot of their visits, it would cost us less to fly directly from the UK. So, another salesperson was let go!

From a company maturity perspective, we were developing rapidly. We opened a physical office in Chepstow, implemented a formal share options scheme and hired a proper Finance Director (CFO).

At least we got that hire right. The new CFO, Clare Beazley, would go on to become a joint founder of PleaseTech. We ended up working together for 20 years despite the initial shock of her CDC experience!

Before she joined us, Clare thought that a small company had less than 1,000 people. She joined as employee number 13 so there was a slight adjustment required. Not helped by me who, allegedly, on only her second day in the job, popped my head around her office door and said: "We need a company in the USA, can you please arrange it"!

We were all on a rapid learning curve and Clare joined in the fun.

Whilst on the subject of the management team, one of the adjustments we had to make towards the end of the year was the appointment of a formal CEO. Having a tripartite set of Directors, each with apparently equal status, in the manner which Jim, Cathy and I operated, was not a viable long term solution nor one the VCs or the Chairman were prepared to tolerate. There was a brief discussion about appointing an external CEO but, by this stage, there was no way I was going to work for someone else and insisted on the CEO role whist Jim and Cathy retained their respective roles formally reporting to me. This did cause some waves in my relationship with them but was undoubtedly the correct decision for me personally and, I believe, the company.

As we will discover later in the story a company can't have two CEOs or even one current and one former CEO and, if an external CEO had been appointed at this stage inevitably this would have precipitated my exit. This would have caused a problem as I was the majority shareholder! In retrospect I should, perhaps, have had the confidence to call myself Managing Director/CEO from the start. However, the basic problem was that I didn't feel like a CEO. I felt like someone totally out of their depth wondering how long it would be before I was found out. These days it's known as 'imposter syndrome'!

The good news was that despite major disagreements over many things, Jim, Cathy and I were all ultimately bound together by our collective realisation that we had created for ourselves a unique situation and a massive opportunity. If it all fell apart now or, indeed, if anyone left, they would be most unlikely to waltz into a senior job with a venture backed, high growth start-up.

So, despite the political distractions we were focused on the business and closed out 1998 15% over target! A great result.

1999 – The Second Round of £2 Million

To say we had a challenge in 1999 would be an understatement. Our revenue target for 1999 had been set at £1.2million[24] – a doubling of the previous year's revenue target[25].

Product development was still a major focus, and we were working flat out on EZ*subs* the Documentum-based regulatory publishing solution we hoped would make us competitive in Core Dossier's stamping ground.

This move upmarket was necessary if we were to hit the ambitious targets being set for us! A PDF*fusion* license (which was by now called 'PDF*fusion* Core Engine' and was entirely API driven with no user interface) cost less than $20,000 per server. EZ*subs* was launched in April '99 with a list price of US$199,000 per server.

One of our challenges was that our resources were split; whilst we could see the potential of EZ*subs*, we couldn't lose focus on PDF*aqua*, the Documentum based print-time watermarking product. As it was the only product of its kind in the space it was attracting the right sort of attention. It had moved on from the simple ability to add a predetermined watermark to a print copy of a document and was now able to deliver different print and view versions of the same document with different database attributes added based on rules against document types. For example, it was possible to automatically add a user's name, the date, and so on to the document.

The truth is that, whilst a lot of attention was being paid to EZ*subs*, PDF*aqua* was quietly delivering significant business. By the close of 1999 it would be responsible for our largest single order to date which was over US$375K[26].

Through the first half of the year we continued to staff up. By mid-year we had a total of 19 staff, two of whom were based in the USA from serviced offices in New Jersey. It's hard to explain how much time recruitment takes especially when you have no infrastructure or support such as a human resources department. The management team was severely stretched.

One of the first things you learn about running a venture backed business is the new terminology. It's no longer about profit and cash flow – it's about 'burn rate', i.e. how much cash you are burning a month. When you know your current and projected burn rates you can easily work out how long your cash balance will last or, as the parlance would have it, your 'cash runway'.

It's also necessary to remember that funding a growing business requires cash. Investment, in terms of people, kit and marketing expenditure, is always upfront in anticipation of sales growth which, in turn, leads eventually to more sales which ultimately leads to cash in. Burn rate takes these things into account and it's surprising how short a runway £1million provides for a growing, ambitious business – even one as small as us.

This is where Bill's experience was invaluable. He ensured that we understood that money takes time to raise and a management team never wants to be in a situation where it is running out and desperate for a cash injection as that places control very firmly in the hands of the cash providers who are not known for their generosity. So, the general rule is always to go to the market early. By August 1999 we were out on the stump again trying to raise a further £2million.

---

[24] Now we had investors the annual target was set by the board and was no longer a vague objective.
[25] I'd like to say this is a 200% growth rate but that wouldn't be correct mathematically. A growth rate of 200% implies three times the original figures (in this case the target would need to be £1.8m to be a 200% growth rate) whereas if I'd said 200% of the 1998 revenue I would be mathematically correct as 200% of something is two times the original. There you are, Clare, I finally get it!
[26] The equivalent of over $585k in 2020.

We had expected this second round of investment to be, if not a breeze, then at least straight forward. We had an existing investor willing to re-invest and we simply needed to find another co-investor[27]. That wasn't going to be hard was it? After all we had hit our targets, we were implementing our business plan and could therefore show positive on-target progress. However, the investor market had moved on.

Enterprise software was considered passé and the flavour *du jour* was the internet and the internet business models. 1999 was the year the internet had arrived. It was becoming mainstream. Usage was exploding both in business and personal use. It was the peak of what we now know as the dot-com bubble. Just one year earlier a start-up called Google had been founded in Menlo Park, CA. Paypal was set-up three months after Google. The internet was the new gold rush and no investors wanted to be left behind.

We found that our pitch which emphasised selling well proven, high value enterprise software to blue-chip companies who actually paid real money, was no longer an attractive investment proposition. As far as the VCs were concerned it was dot-com or dot-nothing.

Jim and I spent days trying to work out how to package the company up as a dot-com play. Despite our best endeavours, we couldn't. Companies such as Boo.com[28] could raise millions of dollars in VC cash with a business plan based on a fantasy, yet we couldn't interest anyone in a £1million investment against a proven business model with a blue-chip customer and prospect list!

We were, if we are honest, getting slightly desperate when Bill Passmore again came up trumps. He was a non-exec on a board of a company backed by Quester Capital Management, a Venture Capital Trust[29]. He'd used his contacts and influence at Quester to promote our cause. We had our co-investor and in November another £2million hit the bank account[30].

By this time we had become very 'Documentum centric'. EZ*subs* and PDF*aqua* (both Documentum based products) were where the money was, and we were putting the wood very firmly behind the arrowhead. Our average deal value was increasing with two deals in 1999 being worth over US$350,000[31]. We were a pure play software company with our main income being derived from software license fees and associated annual support income. We had very little professional services revenue.

Since the launch of EZ*subs* in April we had established it as a recognised competitor to Core Dossier. Whilst we may not have been winning the top tier pharmaceutical clients we were doing well in the mid-tier companies which were much more price sensitive. The good news was that there were a lot more mid-tier than top tier companies.

[27] Venture Capitalists always need co-investors. If another, non-connected VC has invested at the same company valuation it validates that valuation. So, in our case, 3i need a co-investor to invest at the valuation agreed so they could re-value us on their books and in their portfolio.
[28] Wikipedia notes that boo.com, a British dot-com which sold branded fashion clothing, launched in the autumn of 1999 and spent US$135million in venture capital before entering receivership just 18 months later in May 2000. You can read the entry here: https://tinyurl.com/yder8u6l
[29] A Venture Capital Trust is a specific type of UK venture capital company which, by following strict Inland Revenue rules, provide their investors with tax relief on both the investment and any resulting capital gain.
[30] Alan Bristow was our Corporate Finance advisor once again. By this time he had set up ICON Corporate Finance. We were his first customer.
[31] The equivalent of circa $550k in 2020.

In December 1999 Documentum approached us asking to OEM[32] PDF*aqua*. We saw this as a great opportunity to not only build our relationship with Documentum but also to ensure that PDF*aqua* sales continued whilst we concentrated on taking the fight to Core Dossier with EZ*subs*.

We closed out the year having met our revenue target of £1.2million. Of course we didn't make a profit. We had knowingly sacrificed profit for growth – the whole point of the venture finance. The annual accounts showed a loss of £415,775 but a healthy net current assets position of £2.4 million[33].

The nature of the challenge can be seen by considering a comparison with ESPS. During the year ESPS had undertaken an IPO[34] on NASDAQ raising US$26 million. The published data[35] (to 31st March 1999) showed them having a revenue of US$17.95 million and 145 employees. By the end of the year I suspect they were over 200 employees with a significantly higher revenue. We ended the year with around 24 employees and a revenue of less than US$2 million. So, whilst we may have thought we had a healthy position, our competition was around eight to ten times bigger than us and had extremely deep pockets.

Y2K – £8million and Growing Pains

The first thing we did in the year 2000 was change the company's name. In retrospect, given our American focus, it's surprising that the name lasted as long as it did. Computerised Document Control was not only a mouthful, but it broke the cardinal rule of having an 's' in place of a 'z'. In America it would be 'Computerized'. This made it difficult in literature, on the website, etc. As it happened, we were known universally as 'CDC' in the industry and so the new name, 'CDC Solutions' was a no brainer.

One of my favourite sayings is, 'The only constant is change'. Everything in our environment was changing.

In the wider context the dot-com boom continued to set the pace. It is widely recorded that the internet took only four years to reach 50 million users. This was unheard of at the time. It had taken 75 years for the telephone to have 50 million users, 38 years for the radio to reach this target and 13 years for television. Of course, these days the pace of change has accelerated with Twitter taking only nine months to reach 50 million users.

In our little world, the regulatory publishing market was also changing. On 2nd March Xerox and ESPS announced that Xerox's XDA and Core Dossier were to be 'merged' into a single product with ESPS acquiring 'certain Xerox technology assets'[36]. In summary, Xerox had bowed out of the market and it was now a straight fight between us and ESPS. Challenge accepted. Our response was to raise the list price of EZ*subs* to US$250k per server.

However, the simple truth was that while Core Dossier had its own challenges EZ*subs* was some way behind. We were strong on technology and architecture but weak on user interface, process, and domain knowledge. We were a set of tools and Core Dossier was a solution. So, while we'd expect to get the technical recommendation, the end users, i.e. the regulatory publishing professionals who had the responsibility for using the software and delivering submissions, would opt for Core Dossier

[32] OEM = Original Equipment Manufacturer. OEM is a standard industry term when one company incorporates another company's technology in its product and markets it as its own.
[33] The accounts for the company are available from the UK government agency Companies House website.
[34] Initial Public Offering, i.e. floating the company on the NASDAQ stock exchange in the USA.
[35] It can be found here on the NASDAQ website: https://tinyurl.com/rc673hm.
[36] I found the announcement from Business Wire in The Free Library by Farlex. It has since disappeared!

as it 'spoke their language'. This, combined with the relative financial and company strength positions, meant that winning deals was far from straightforward.

This was not ESPS's only move. Shortly after having secured the Xerox deal, they announced a lower end, report level publishing offering called kPublisher. It was, as we understood it, a slimmed down version of Core Dossier and designed specifically to challenge EZ*subs* in the mid-tier companies whilst protecting the high-end Core Dossier revenue. To us it was clear evidence that ESPS recognised that we were the competition and that they had also accepted the challenge!

We had a lot of work to do to catch-up. However, it was easier said than done as, in addition to the market changes, the technology landscape in the regulatory publishing space was in a never-ending state of flux – as it is today.

Strategically, XML was starting to make its presence felt. The FDA[37] Center for Biologics Evaluation and Research (CBER) had issued draft consultative electronic submissions document in May 1998 which proposed an XML backbone leading to PDF documents[38]. This electronic submissions guidance was formalised in Nov 1999[39]. CBER had taken a step back from the previous position with respect to XML and provided for a submission of hyperlinked PDFs. There was no ability to accept electronic signatures and all signed documents needed to be submitted in paper alongside the electronic submission. So, whilst submissions couldn't be fully electronic, it was the first step on the journey. It certainly saved a few forests in reducing the amount of paper required[40].

Despite the lack of XML in the guidance, the writing was on the wall and the industry broadly adopted a position of 'PDF is here and now, and XML is probably the future'. Clearly, they wanted to work with companies who could deliver the here and now but also had a vision of, and path to, the future. This made the need for an XML strategy somewhat pressing. With its far superior resources, ESPS was ahead of us in this challenge as well. We were constantly playing catch-up.

It wasn't only strategic technology that was changing; Documentum was urgently trying to move from being seen as a document management platform to being seen as a web content delivery platform. Their new 'web native' platform, called '4i', was announced and started to appear. This replaced the Documentum client application[41] in which CDC's products were heavily embedded. The need to support 4i had a massive impact on our already stretched engineering team as, not only was there considerable re-engineering involved, but we had to continue to develop and support the client application which was installed and in use by clients. In essence, it was the equivalent of a whole new integration for both EZ*subs* and *PDFaqua*.

At an admin level the pressure was also on. We had opened an office in Conshohocken on the outskirts of Philadelphia to accommodate our growing American team and, in the UK, the small Chepstow office was no longer large enough or even in the right location. We therefore opened another office in the Greenways Business Park in Chippenham on the M4 corridor in July 2000. Her Majesty The Queen was apparently occupied elsewhere that day so it was down to me to dress up as Her Majesty and formally cut the ribbon[42].

[37] The Food and Drug Administration which is responsible for the licensing of pharmaceuticals in the USA.
[38] All submissions to the FDA were at this time on paper.
[39] In a document entitled 'Providing Regulatory Submissions to the Center for Biologics Evaluation and Research (CBER) in Electronic Format'.
[40] A typical Product License Application was around 25,000 pages. A full New Drug Application (NDA) required anywhere from 100,000 to 500,000 pages.
[41] This was the 'thick' client in a client server architecture.
[42] The CDC press release is recorded here on the WayBackMachine: https://tinyurl.com/yar4lwvq . A picture of me appropriately dressed also appeared in the local press.

The usual pressure on recruitment had not relented nor had our seemingly innate ability to make a mess of senior appointments. A west coast based worldwide senior marketing manager joined in February and departed in May. This meant that our marketing fell behind, and we weren't making the necessary impact. At a regulatory DIA[43] conference in the first half of the year, not only did we not have a booth but ESPS had a massive presence and were the undoubted 'belles of the ball'.

If this was not enough, I was busy negotiating the OEM contract with Documentum. Commercial negotiations were tough enough and the practicalities didn't help; eight time zones separated us. My opposite number and I both travelled extensively and had 'day jobs'. I had to liaise with our East Coast US lawyers and involve Adobe as we had sub-licensed part of their technology. It was a nightmare. Negotiations took five months to conclude. As it happened, I was to take these lessons into my next company when we were designing the ultimate document review solution!

Part of our market expansion strategy (outlined in the business plan upon which we had raised the £2 million) was to develop out of the life sciences into what we saw as the generic corporate publishing market. To this end, during the summer, we announced a new packaging of our technology called 'Xtensia', which was billed as 'a modular publishing solution that will handle small, medium and large- scale corporate publishing requirements throughout the enterprise'[44]. There was a lot going on and our ability to deliver was, shall we say, debatable. Xtensia was vapourware.

Slowing down wasn't an option. There was incessant pressure from the VCs to deliver on the strategy we had sold them. Fair enough really!

When you have a VC investment there is no escaping the monthly board meeting agenda item listed as 'exit strategy'. With everyone seemingly making money out of the internet boom, our VCs were naturally keen to capitalise on their investment in CDC. In the middle of the year the Board formally considered various exit options. The option of a trade sale was considered and rejected in favour of an IPO[45] in late 2001 or early 2002.

In retrospect the decision to go for an IPO is not surprising as we were at the height of the dot-com bubble[46] and traditional IPO metrics had disappeared in the new groupthink.

The upshot of all that was we were back on the stump this time trying to raise a £10 million pre-IPO funding round. We spent the summer writing the business plan which envisaged a partial exit for the 'founding Directors', namely Jim, Cathy and me. By the end of October we had secured £8 million from our current investors, a partial exit for Jim and Cathy but no partial exit for me.

Throughout the year I'd been focused on marketing (catching up after the transient senior marketing manager), sales including the Documentum contract and relationship and fundraising. It's not surprising, therefore, that I'd not been paying full attention to the products, their development and, most importantly, their quality.

EZ*subs* 2.0 was released on 19th October 2000[47] and almost immediately it became apparent that there were serious quality issues. To be fair to our technical team, part of the issue was that the Documentum 4i client was, itself, evolving. However, ultimately it was down to us and we bore the

[43] Drugs Information Association – the major trade association in Life Sciences
[44] Courtesy of the WayBackMachine: https://tinyurl.com/ycjsdc3x
[45] We'd be floating the company on AIM a sub-market of the London Stock Exchange, the equivalent of NASDAQ in the USA.
[46] The NASDAQ Nasdaq Composite index peaked on 10th March 2000 at 5,048.62. It took over 15 years for the index to get back above 5,000.
[47] The announcement is here courtesy of the WayBackMachine: https://tinyurl.com/y97qtt6d

brunt of clients' anger. There was a consequential impact on our product support staff who were stretched to the limit and beyond which only increased client dissatisfaction.

Not surprisingly, this did little to enhance relationships between myself and those responsible for development and quality (i.e. Jim and Cathy) which were increasingly 'somewhat strained'. In retrospect it's hard to blame anyone. It was the old story of trying to do too much with too few resources. We simply didn't have the technical strength and depth we needed to compete. Everyone was stressed and working too hard.

The strained relationships were not helped by a genuine grievance regarding our salaries which were controlled by Board's remuneration committee, comprised of the non-exec Directors, and baked into the investment agreement. We were out recruiting senior staff into the business and paying them market rates. Some of their salaries were far in excess of our own fairly modest incomes. It was fairly galling to be offering people who would be reporting to you salaries, in some cases, more than 50% higher than your own. The position was not helped by the perception we were a rich company. After all we had just secured an additional £8 million investment. My struggles with the remuneration committee didn't endear me to anyone.

Against this background, as the year drew to a close, our Chairman Bill Passmore broached the subject of my future. The general thrust was that if we delivered the year and had reasonable expectations of maintaining our growth rate there was a realistic opportunity for an IPO and we would need to start preparing the company and further developing the management team. Was I the man to lead the company into an IPO?

It was clear to me that the VCs didn't think I was, and that Bill had been tasked with getting me to buy into stepping aside. The fact that I had no deep seated desire to lead an IPO led me to conclude that I probably didn't have the appetite for it and it was agreed in principle that we would seek a new CEO to lead the company through the next phase of its growth. A smooth, suit-wearing operator who would wow the city boys was required[48].

In many ways, I think I was quite relieved. The pressure had been getting to me. I was working all the hours possible, had an insane travel schedule, was neglecting my family and drinking far more than was healthy. I'd also developed an unfortunate habit of sending late night emails to the management team even more full of typos than was my norm. After several not so subtle comments I had managed to largely curtail this habit, but it had led to 'whispered discussions' as to whether I was still fit to lead the company. So, getting to a position where it was no longer my problem and I could do the things I enjoyed doing was, on the surface, very attractive.

At the time I genuinely thought that we could successfully introduce a new CEO to lead us into an IPO with me in a supporting role. In fact, me not being the CEO could even be personally advantageous in respect of share lock-in restrictions that would come with the territory. Unfortunately, this was not to be.

CDC had always been a Q4 business. An extremely high percentage of revenue always came in the last quarter of the year when companies were making sure their budgets were spent. This meant that the last quarter was always a frantic race to the finish line. This year was no different and the remainder of the year was spent closing deals and trying to mitigate the quality issues. Having

[48] The company culture was modelled on west coast software companies and was very informal. I only ever wore a suit when fundraising. Polo shirts and chinos was very much the norm.

agreed in principle to step aside, it was important that we met the sales target and stabilised the company.

We closed out the year 2000 having met our revenue target of £3 million and grown from around 24 staff to about 70 staff. The accounts showed a loss of £1.2million with £8.8m in cash and net current assets of £9 million.

2001 – A New CEO

In early January, once it was clear that we had delivered the year and growth was continuing, Bill initiated the search for the new CEO. However, by this time I'd taken independent legal advice and was in self-preservation mode. The lessons of the 1995 plug-in development debacle were at the forefront of my mind and there was no way I was going to rely solely on goodwill and personal relationships. I wanted it all in writing!

The negotiations about my future role and my remuneration opened. I demanded a partial exit as part of the deal. This was proving a stumbling block as neither of the main investors were prepared to increase their investment or permit the company to use some of its cash pile to buy back some of my shares. It was eventually sorted by NIF, a Japanese investment partner of Quester, agreeing to increase their investment by purchasing a small number of my shares at a discount.

Meanwhile, company life continued at its frenetic pace. The constant of change, if anything, accelerated.

CDC held its first annual user group meeting at the end of January in Philadelphia[49]. My presentation claimed revenue growth of over 250% in 2000. Headcount growth of over 275% and over 40 new client wins. It also apologised for the 'growing pains' with respect to product quality.

We were bullish on announcements:

1. A new product, Fusion 2000 – an 'XML aggregation & PDF delivery' product which was part of our go forward strategy of 'Multi-channel content delivery' and 'Enterprise Scale Complex Publishing'.
2. Xtensia had morphed into an open enterprise publishing architecture incorporating 'out-of-the-box' applications which would incorporate a range of content manipulation, aggregation, customisation and delivery services. A sort of business layer which did everything our imagination wanted.
3. A Publishing Information eXchange (PIX) specification for exchanging information with our products.

All grand and great ideas which far exceeded our capacity to deliver.

Meanwhile, in the outside world, the market was crashing. From the high in March 2000, despite a brief mid-year rally, the NASDAQ had closed out December at 2,470 – less than 50% of its peak[50]. Early in 2001, again despite a brief opening rally, the trend was downward[51].

The economic outlook and stock market mood had significantly worsened. Adverse economic winds were blowing in our main market; and as the saying goes 'when America sneezes Britain catches a

[49] The subsequent press release covering the key highlights is here: https://tinyurl.com/y7fjapvc
[50] The UK AIM slightly lagged NASDAQ and its index dropped from 2,745 at the end of March 2000 to 1,461 at the end of December 2000.
[51] NASDAQ bottomed out at 1,210 in October 2002.

cold'. There was talk of the '90% club'; companies whose stock had fallen by 90% and it was generally acknowledged that the IPO market had gone away, would be suppressed for at least 18 months and that when it came back it would be extremely cautious.

One 3i seminar I attended noted that in 1994 the average time for a company to get to IPO was seven years. By 1999 the average time to IPO was two to three years. The analyst presenting this data further pointed out that the historical reason for an IPO was to raise money for investment in a specific strategy on a proven business model. It was not to facilitate an exit for investors. The logical conclusion was when the IPO market did return it would favour later-stage businesses and the key would be business fundamentals rather than a liberal sprinkling of 'pixie dust'.

Towards the end of Q1, when the British software company eLateral dropped its IPO plans[52], I put it to the Board that our own IPO plans (which were to go to the markets within a year) were clearly no longer feasible and that we should revaluate our strategy. Given the cost and disruption a new CEO and CFO[53] would entail, I proposed that we delay the recruitment and spend the rest of the year concentrating on business fundamentals whilst the mist cleared.

Other than support from Clare, my proposals were rejected unanimously by the Board.

At about the same time I raised another strategic issue. It was clear that the Life Sciences Regulatory Submissions market was undergoing rapid evolution. A new electronic submissions initiative that re-introduced the hybrid XML/PDF structure was released and this, combined with the anticipated FDA clarifications with respect to the 21 CFR 11[54] guidance, made it clear that there would be a step change in the market. This new electronic submissions approach would make it very much easier to put together an electronic submission and would also minimise the manipulation of PDF files in the process. This had two implications. The technology market entry barrier which we enjoyed was substantially reduced[55] and our existing PDF manipulation technology would become increasingly irrelevant[56].

These changes meant that CDC needed to commit substantial resources to remain competitive in its core revenue generating market and focus on delivering XML publishing technology. The basic problem was that we had ambitions and needs far in excess of our capabilities. I was not convinced we had the necessary skills within development and we were finding that recruiting developers was hard. We had budgeted headcount we were unable to fill. In short, to believe that we had any chance of delivering the current product strategy was to inhabit an alternative realm, i.e. fantasy. I believed that we needed to take a step back, revaluate our product strategy and try to work out what was realistic.

[52] eLateral was also backed by Quester. It's plans for an IPO were widely publicised in mid-February 2001. See these news items: https://tinyurl.com/tmjhg6h and https://tinyurl.com/ya4hwsk8. The pulling of eLateral's IPO plans were also widely reported although now, some 17 years later, I can only find it mentioned in a Wall Street Journal article dated 29th March 2001. The article is behind a paywall: https://tinyurl.com/ya83hoeb
[53] It should be noted that Clare Beazley our CFO had also decided she didn't have the appetite to be the CFO during the IPO and then of the public listed company so, in addition to the CEO, there would be a new CFO.
[54] FDA Title 21 CFR Part 11 Electronic Records; Electronic Signatures; Final Rule had been out since 1997 but the FDA were consulting on how the Final Rule should be implemented in the new electronic submissions. Draft guidance was finally issued in August 2001 and finalised in August 2003.
[55] The analysis was spot on. When I attended a DIA regulatory submissions conference in the USA a few years later there were 18 exhibiting vendors offering electronic submissions solutions.
[56] Competition to our base PDF manipulation technology was emerging and significantly undercutting us. One client had changed out PDF*fusion* for a competitor which cost less than our annual maintenance fee.

My concerns were dismissed, and I was informed that the correct time for a strategic revaluation would be after the new CEO joined. To misquote Norman Lamont, in the first half of 2001, I was in charge but not in power[57].

By June, in an attempt to jump-start the XML strategy, I was keen to make an offer to acquire a small software company with some interesting XML management and publishing technology. The company, KnowHow Systems Group Ltd, had a product called Kcentrix[58] which had found some success in the legal market. We felt it would provide a basis on which to build an XML capability and, potentially, could open up a new market for us – thus delivering on our stated strategy to expand out of pharmaceuticals. We undertook the appropriate due diligence and were keen to proceed when we hit a roadblock - having agreed to the acquisition in principle, the Board wouldn't let us make a sensible offer.

By now I'd run out of time and the new CEO started on 2nd July 2001. At this stage we were behind our mid-year sales target (not uncommon as the majority of sales were, as previously mentioned, always in Q4), had approximately 80 staff and were two weeks away from closing our largest ever single deal worth over US$1 million[59].

My handover agreement with the Board had detailed my position going forward as a 'broad ranging role at the forefront of the business' responsible for business development, strategic relationships and non-technical product management. I was to remain a senior Board member (a 'Senior Vice President' in American terminology) and I fully expected to have significant influence in the company in this role.

It didn't quite turn out like that.

By October I was discussing my future in the company with our Chairman, Bill Passmore. My grievance was that the company had not delivered on the agreed 'broad ranging role at the forefront of the business' and the new CEO, supported by Board, had clearly no intention of doing so. In fact, I was being shut out and all responsibility for product management was taken away from me. As far as I was concerned, I wasn't being treated with the respect that I felt I had earned. I suspect, as far as the Board were concerned, I was yesterday's man and they wished I'd just disappear quietly.

Disappearing quietly wasn't really an option for me. The limited exit they had provided as part of the handover didn't permit me to retire and, with a growing family to support, I needed to work. The atmosphere quickly soured, legal advice was sought and, once again, Bill Passmore showed his worth by acting as the mediator in the negotiations between myself and the company.

It turned out, more by luck than judgement, that I was in a fairly strong position. Putting aside employment law which was certainly beneficial, as a shareholder I could actually control the Board if I wished to be difficult.

The VCs investment was in convertible preference shares[60]. This investment mechanism gave the VCs a stop loss as:

[57] Norman Lamont was Chancellor of the Exchequer in the UK government from 1990 to 1993. In his resignation speech to the House of Commons on 9th June 1993 stated that the Government gave 'the impression of being in office but not in power'. The Hansard record is here: https://tinyurl.com/ybg5mcwl
[58] This apparently stood for Knowledge Centric XML.
[59] Just to be clear, we did close the deal worth the equivalent of circa $1,475,000 in 2020.
[60] This is all documented in the companies house historical records available via their website.

1. The preference shares were essentially a loan which would have to be repaid before any other shareholders received anything in the event the company didn't perform and the VCs investment was underwater on an exit.
2. The preference shares would start receiving a dividend (essentially interest) of 9% per year if not redeemed or converted within five years of the investment.
3. There was a definite exit as the company had to buy back the preferences shares if not redeemed or converted a couple of years after the dividend became payable.

In the event of an exit where the VCs shares were not underwater, they would simply convert their preference shares into ordinary shares and receive their percentage of the sale. The key point was that the preference shares were non-voting.

Even with my dilution due to the handover, my wife and I owned over 50% of the ordinary voting shares - the company couldn't ignore me. A deal was completed and I left the business at the end of 2001. A close examination of the companies house filings will reveal that this involved a further partial exit so that I no longer controlled the Board. I was no longer a Director of the company or on the Board but would have quarterly meetings with the Chairman to receive updates.

From a company perspective, 2001 had delivered a revenue of £4.6 million with a loss of £2.55 million. The balance sheet showed £6.3 million in cash with net current assets of £6.9 million.

2002 – Complete Disengagement

Despite having left the business events conspired to keep me involved in the first three months of 2002.

As part of my business development activities I'd be working on establishing CDC in the Japanese market and there was a major visit with important partners and prospects lined up for January. It was decided that I should complete this trip and therefore I was officially continuing to 'act in an advisory capacity' in respect of establishing CDC in the Japanese market. Once the visit was over and the follow-ups complete, I disengaged completely.

The next involvement was a surprise contact from the CEO of Liquent (previously ESPS)[61] offering to purchase my shares in CDC. This would not have been possible under my exit agreement but it did provide a bit of entertainment for a week or so.

Other than my quarterly meetings with Bill Passmore I had no further involvement in the business in 2002 and, in fact, by July had started a new business called Kcentrix Software. If you have been paying attention you'll recognise the name 'Kcentrix'! For more, you'll need to read The PleaseTech Story.

For most of the year NASDAQ continued to fall finally bottoming out in October 2002. In fact, in 2002 IPOs hit a 22 year low with only nine tech firms going public. By contrast, in 1999, just under 300 technology companies had IPOs[62].

The tech world was in a serious recession. It was CDC's good fortune to have its major market in Life Sciences which is generally recognised as a 'recession proof' industry. The firms in the industry are accustomed to long term investment cycles as it can take ten years or more to get a drug from initial research to approval. Furthermore, CDC's technology addressed part of the drugs approval cycle over which pharma companies had control. It typically took up to two years to prepare and submit a

[61] ESPS rebranded itself as Liquent in mid 2001.
[62] Information from CNN: https://tinyurl.com/yd7uhxkw

New Drug Application (NDA). If by investing in the new publishing technology, they could shave a few months off this timescale and therefore get the product licensed sooner, the rewards were huge. Thankfully the industry kept investing in regulatory publishing technology and CDC continued to grow.

The company closed out the year with a revenue £7.4 million with a £2.7m loss with the balance sheet showing £4.5 million in cash.

2003 – Liquent Acquires CDC Solutions

In early 2003, there was talk of a new round of funding.

The economic environment was still extremely fragile and valuations were down by as much as 95%. The talk in the VC world was of 'down rounds' in which the valuation of the company was significantly lower than previous rounds and in which the founders were typically disproportionately diluted as the investors had protection. It didn't sound attractive to me.

I made it clear that I would not support such a move and that the company had to trim its cloth to the new reality. In other words, the company had to go back to business fundamentals and make a profit. From my perspective, the good news was that any additional round couldn't go ahead without a change in the articles[63] which needed my agreement. So I had an effective veto.

This talk soon evaporated when IHI[64], Liquent's parent, approached CDC with a view to acquisition. It appeared to be a classic case of taking out a competitor that had been causing them pain. The post-acquisition press release[65] even mentions that the acquisition will "allow for a global introduction of Liquent's new enterprise software, Insight" which was expected to be released in Q1 2004.

The five month acquisition cycle, during which there had been several highs and lows, finally closed on the 1st December 2003.

The IHI press release details that IHI paid US$19.3 million (approximately £11.77 million) plus an earnout projected to be between US$4 million and US$14 million (£2.5 million and £8.5 million) valuing CDC at between £14 million and £20 Million.

The same press release noted that CDC's 2003 revenues were expected to be between US$12 million to US$13 million (£7.3 million to £7.9 million). Essentially a flat year of zero growth.

I can find no evidence of it now, but my recollection is that the deal was a good one for IHI shareholders as IHI's market valuation jumped by more than the purchase price on the announcement.

Postscript

The CDC story is ultimately a success story. The company not only delivered returns to its investors but also delivered, on the whole, a decent software product to its clients. It is true that it didn't grow at anywhere near the crazy rate of the silicon valley companies of the era or even its main competitor but, in European terms, it was up there at the top of the growth rankings for private technology companies.

[63] The company's Articles of Association.
[64] Information Holdings Inc. had acquired Liquent in late 2001.
[65] The releases is on the old IHI website here: https://tinyurl.com/y75h9746; and reported by Business Wire here: https://tinyurl.com/ya8c57yc.

In 2001, CDC was ranked 26th in the Sunday Times "Tech Track" league of the top 100 unquoted UK technology companies as measured by revenue growth over preceding three years, 1998 - 2000. In fact, CDC was one of only eight companies featured in Tech Track for three years in a row; 2001, 2002, 2003.

In 2002, CDC was ranked 120th in the Deloitte Touche Tohmatsu European Technology Fast 500 programme. This determined the top 500 European technology companies based on revenue growth over the three year period 1998 to 2000.

CDC was one of the few companies to retain its value and deliver a return to the VCs in the post dot-com bubble period. It achieved this for the very reason it almost didn't get second round funding in 1999, namely because it was selling high value enterprise software to blue-chip companies who actually paid real money as they achieved a good return on investment.

There is no doubt that the acquisition came at a very good time for CDC and for the original shareholders and the staff option holders. The regulatory publishing world was dramatically changing with the new electronic submission era reducing entry barriers. New competitors flooded into the market. Would CDC have been able to compete? Would it have been able to move its clients to the new XML paradigm and retain them? If so, how much would the clients be prepared to pay? These are questions to which we will never know the answer, but it is unlikely that growth would have been continued at anything like the previous pace, if at all.

It is clear to me that, having decided to go the venture capital route, the returns to the original shareholders were close to being maximised by the timing of the acquisition. A year earlier would have probably been optimal as the revenue would have been the same but the company would have had more cash and therefore be worth more. However, if it had been left much later it is likely revenue would have started to dry up as the market changed. Additionally, the dividend on the £1 million 3i tranche would start being payable and would then step up to include the £2 million tranche a year later and then up again for the subsequent £8 million tranche. Shortly after that the initial preferences shares would need to start being redeemed. There would therefore be an extremely onerous financial burden on the company and, with the increased competition, it's hard to see how it would have survived. If it had survived the original shareholders would have almost certainly been completely diluted out of any meaningful return.

As regards the organic growth vs venture capital decision, there is no doubt that the venture capital route was the best route to take at the time. The investment enabled us to grow the business, compete and get a decent return on exit.

We have some idea of the valuation placed on us pre venture capital due to the discussions with ESPS before we closed our first round. It simply wasn't sufficient to make it worth considering. At the time we had tried to talk up their offer by putting it to ESPS that it wasn't about our business, but theirs. They needed to put a value on us not competing. How much would their business be boosted, and therefore how much more would it be worth, if we ceased to exist? However, led by their investors, they stuck to the standard multipliers. These multipliers, based on our revenue and profitability, simply didn't provide a decent valuation[66]. One can argue that this was a mistake on their part as they'd have been a much more successful company if we weren't there constantly challenging them.

[66] It was not near the £3 million which 3i had valued the business at for investment purposes!

Conversely, we were of huge benefit to the pharmaceutical companies as the competition drove prices down, product functionality up and delivered much better customer service. It's possible someone else would have emerged as the competitor but it's hard to see who.

CDC was a massive learning curve for everyone involved. There is no doubt that having an experienced, independent Chairman who understood the ways of the venture capital world was of tremendous benefit. Whilst Bill and I didn't always agree[67], his advice was always sound and he was able to act as a neutral third party to facilitate negotiations.

There was constant struggle between ambition and reality. In order to raise venture capital we had to be ambitious and promise the earth. The reality was always a long way behind the business plan. It was my job, and that of the senior management team, to manage that disparity and keep the investors onside whilst trying to grapple with the reality of recruitment, sales and delivery.

On the whole, I'm a great fan of the strategy of 'shooting for the stars in the hope you'll hit the moon'. In other words, set ambitious targets in the sure knowledge that they won't be met but that, ultimately, falling short of them will deliver more than would be achieved by a less ambitious target. It is arguable that in January 2001 flush with the success of closing the £8 million funding round and meeting the previous year's targets, we doubled up on the business plan promises and developed a fantasy strategy which was so divorced from reality it simply caused confusion and no one knew where to start. To be clear, there was nothing wrong with the strategy per se, the issue was our ability to deliver it. If CDC had been a similar size to Liquent then we may have had a chance.

In the end, after I left, the company revised its strategy and focused on the pharmaceutical market which was the company's key revenue generator. This allowed continued growth and ultimately caused Liquent sufficient pain to ensure that IHI was forced to buy the company[68]. This radical departure from the promises in the pre-IPO business plan, which had been made less than a year earlier, could only have been made by a new management team. The reality is that, after replacing me, the investors had little choice but to run with the new management team's chosen strategy - which was essentially the back to basics retrenchment I'd previously proposed.

CDC wasn't so much a 'first step' in my entrepreneurial career as a massive leap onto a seemingly innocuous roller coaster on which the ride just got wilder and wilder and eventually threw me off.

One of my key takeaways was the working environment and the team we built. The environment was strictly non-hierarchical, fast, lively and fun. We strived to be a company which was a pleasure to do business with and had some very supportive clients as a result. We employed some great people many of whom look back on their time with CDC with a great degree of fondness. I'm proud to have initiated the ride and to have hung on for so long.

[67] One example I can think of immediately is my remuneration package!

[68] In retrospect, it is fairly obvious that, with the new electronic submissions era and the flood of new market entrants, there would only ever be room for Liquent or CDC. Market consolidation was inevitable.

Reference Links

I've given references throughout this book and the links mostly use TinyURL.com. I've used TinyURL.com for many years without an issue. For those who want the full URLs, they are available on the website. Simply go to the reference links page and use your browser's find function to locate the TinyURL (or part thereof – just the seven digit code will be fine) and you'll find the full link. If a reference link is broken or completely removed (as one or two have been over the last two years) please let me know and I'll update the site to note this and provide a replacement if possible.

Discussion and Feedback

If you'd like to argue with me/agree with me/ask a question, please feel free to come on over and join the LinkedIn Software Company Book Group where I will happily enter into dialogue, respond to points of order and encourage others to weigh in with their tuppence ha'penny worth.