

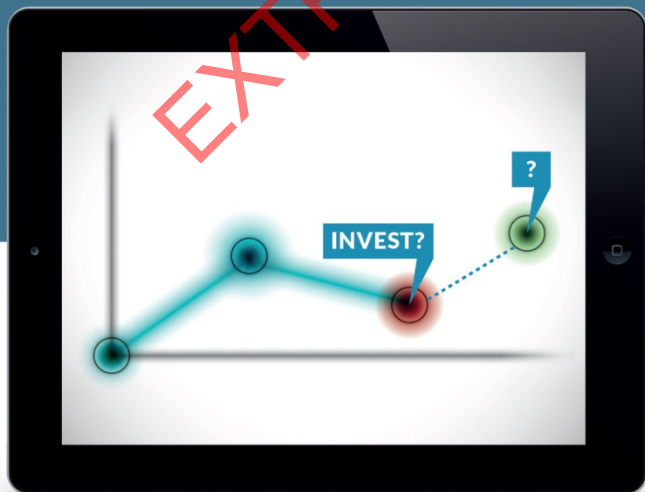
REVIEWING

IT IN DUE

DILIGENCE

Are you buying an IT asset or liability?

Christopher Wright and Bryan Altimas



Reviewing IT in Due Diligence

Are you buying an IT asset or liability?

**CHRISTOPHER WRIGHT & BRYAN
ALTIMAS**



IT Governance Publishing

Every possible effort has been made to ensure that the information contained in this book is accurate at the time of going to press, and the publisher and the author cannot accept responsibility for any errors or omissions, however caused. Any opinions expressed in this book are those of the author, not the publisher. Websites identified are for reference only, not endorsement, and any website visits are at the reader's own risk. No responsibility for loss or damage occasioned to any person acting, or refraining from action, as a result of the material in this publication can be accepted by the publisher or the author.

Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act 1988, this publication may only be reproduced, stored or transmitted, in any form, or by any means, with the prior permission in writing of the publisher or, in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the publisher at the following address:

IT Governance Publishing
IT Governance Limited
Unit 3, Clive Court
Bartholomew's Walk
Cambridgeshire Business Park
Ely
Cambridgeshire
CB7 4EA
United Kingdom
www.itgovernance.co.uk

© Christopher Wright and Bryan Altimas 2015

The author has asserted the rights of the author under the Copyright, Designs and Patents Act, 1988, to be identified as the author of this work.

First published in the United Kingdom in 2015
by IT Governance Publishing.

ISBN 978-1-84928-721-0

FOREWORD

Over the past few years there has been a re-emergence of merger and acquisition activity, both on a mega scale, with very large mergers, and on a smaller small and medium enterprise (SME) level. The increasing dependency on IT and online commerce/channels, increase of cyber security attacks and changes in development processes for new systems have increased the significance of IT within these deals. For larger organisations/deals, IT consultants are now asked to advise and assist more during due diligence reviews. At last, IT is recognised as a key component of any deal as it can be a very costly expense post-acquisition to sort out IT issues, which should have been identified during due diligence. In some instances the deal should not have gone ahead, as the cost of resolving the IT issues could make the deal too expensive.

For some this is a new area and so we have written this book to introduce some of the key IT issues. For others, with more experience, the book hopefully provides a challenging fresh insight, and maybe generates new ideas. It is important, not only for companies in the high tech industry but also for any company with an IT-based management information system, or relying on data from computer systems for information to operate and manage the business. These same systems also produce much of the information used to make decisions about the deal, including models and forecasts of future sales and costs.

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

Foreword

There is also increasing scope for IT due diligence specialists to become involved in mergers for small and medium-sized enterprises. These organisations increasingly rely on data and IT systems, but the need for IT due diligence is often overlooked. In these cases IT professionals may be asked to provide advice, having not undertaken such reviews previously, or unlikely to do so again in the future.

When we first got involved in IT due diligence assignments we were usually asked, just before the report was due for release, to go out and ‘do our stuff’. We had no clear indication of what the deal was about or the nature of the business. The result was that we would perform a standard general IT controls review asking such questions as “Is there a backup and recovery plan?”, or “Does the computer room have a fire extinguisher?”, or technical IT questions. As a result our findings were of little significance or benefit to the due diligence review. The report was often unintelligible containing technical details but having no relevance to the non-technical reader. For example, “the system master passwords have not been changed for more than 150 days” – to which a reasonable reader would reply “So what?” The key consideration for IT due diligence should be the same as for any other form of financial due diligence – i.e. the impact of findings on the proposed deal, either its overall viability or value. If IT security is significant to the nature of the business or the deal, the observation about passwords could be significant, otherwise it is irrelevant.

A wider approach makes the due diligence review work far more interesting for the IT consultant and provides an opportunity to have a real impact. Fortunately over recent years due diligence reviews have become more strategic

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

Foreword

and less operational. As a result there has been an increased focus on the benefits of IT to the purchaser. The due diligence team are now likely to be more interested in whether the IT is fit for purpose, and fits with their overall plan for the business.

This book aims to provide an introduction to Information Risk Management (IRM) in due diligence – looking at types of due diligence assignments, assessing whether the target's IT is fit for purpose, project risk, assessing value and Return on Investment (ROI) for IT, and solutions to assist the deal (e.g. service-sharing arrangements). It provides an overview for each area and some of the issues to consider.

Due diligence reviews present specific challenges for the IRM specialist – there are often higher levels of assignment risks and cultural issues (especially if IT is outsourced), which are often as significant as technical issues. The quality of opinion provided by IRM can impact the price and whether the deal goes ahead. There have been specific cases where IT issues have impacted the transition post-deal. Despite this the IRM specialist is often seen as a second-class member of the due diligence team – this book will help IRM professionals to make a business case for IRM involvement and help to structure the assignment and reporting.

Generally this work is new for the current generation of IRM professionals and they seek guidance as to how it should be conducted. The tools and techniques are broadly similar to those for other assignments. The main differences are how they are applied, and the style of reporting.

Chris Wright

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

PREFACE

This book provides an overview of IT due diligence for auditors, anyone involved in financial due diligence and other risk professionals who may not have encountered such projects before. It also provides a perspective for organisations on what auditors and risk professionals need as key stakeholders in a due diligence exercise and the sort of questions they are likely to ask. An awareness of the issues will also help those undertaking year end financial or other audits to understand the potential IT issues that may face an entity in the future, for example if stakeholders are seeking to exit, so that preparations can commence.

In due diligence projects in the FTSE 250 market it is highly probable that there will be some focus on IT and technology. The SME market due diligence projects have a high probability that IT and technology will not be looked at in much depth. This book should change the view that IT does not need to be looked at in SME Mergers and Acquisitions (M&A) and disposal projects.

It is based on our own opinions and experience. Some will read this book and disagree with some of these ideas as every due diligence project is different. If we generate some thought and discussion then our objective is achieved.

Each chapter includes tips and hints for auditors so they can adapt their style of auditing to suit each situation. We consider detailed audit requirements for each stage in the

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

Preface

following chapters. For each main part of the process we consider:

- what are the due diligence objectives?
- what is the impact on the value of the business covered by this objective?
- what should be included and how do you go about a review?

The auditor should focus on both the key business processes and the core systems and objectives to be included in the final deliverable.

We have also included case studies to help you understand the practicalities of the issues raised.

In my experience IT due diligence assignments can be frustrating, frightening and hard work. They are never dull and are often topical and may even be the subject of national or international media speculation. The outcome is very rewarding and with hindsight the assignments are usually fun!

Bryan Altimas

ABOUT THE AUTHORS

Bryan Altimas and Chris Wright have known each other for more than 15 years. They have worked together on IT due diligence assignments in the UK and throughout Europe, often under tight deadlines and in difficult situations. At one of the Big 4 accounting firms they helped to develop a standard approach for IT due diligence, including writing manuals and running training courses.

Bryan is a Technology Risk Management professional with more than 32 years' experience. He specialises in major programme reviews including runaway projects and governance of the technology provision in both the public and private sector, providing independent views on the project to the steering committee and programme board. Where systems are not working as expected or designed, including following mergers and acquisitions, he manages investigation teams to discover what the issues are and implement effective and efficient solutions.

He has also advised organisations on the effectiveness of their technology strategy in delivering the business strategy. Increasingly strategy is influenced by compliance of organisations systems with legal and the relevant industry regulations. As businesses develop, mergers, acquisitions and divestment occur. He has also led teams performing technology due diligence in different business sectors, geographies and circumstances.

Chris is a qualified accountant and Certified Information Systems Auditor with more than 30 years' experience

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

About the Authors

providing financial and IT advisory and risk management services. He worked for 16 years at KPMG where he managed a number of major Information Systems (IS) audit and risk assignments, including some very large and famous mergers and acquisitions. These included a number of IT due diligence reviews. He was head of information risk training in the UK and also ran training courses overseas including India and Iceland. He has worked in a wide range of industry sectors including oil and gas, small and medium enterprises, public sector, aviation & travel. He has recently published *Agile Audit and Governance* also available from ITGP.

EXTRACT

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

CONTENTS

Chapter 1: Introduction to Due Diligence.....	16
Overview	16
History and definition	16
How do you do a due diligence review?	22
What could possibly go wrong?.....	30
Summary and key take-aways.....	31
Chapter 2: Why is IT Important in Due Diligence?	34
Overview	34
Case studies.....	35
Summary of IT considerations in due diligence.....	42
Chapter 3: Systems Reviews.....	45
Overview	45
Risk analysis.....	46
Identify key systems.....	47
Reliability of the key systems	50
Upgrade and patching strategy	52
Systems resilience strategy	53
IT security	54
Regulatory requirements	54
Summary and key take-aways.....	55
Chapter 4: IT Security	56
Overview	56
Assessing the ISMS.....	59
Summary and key take-aways.....	65
Chapter 5: Data Reviews	67
Overview	67
Considering data during due diligence preparation....	68

Contents

Reviewing data issues	70
Reviewing the forecast and other due diligence models.....	73
Data privacy considerations	75
Summary and key take-aways.....	77
Chapter 6: Reviewing Projects and Changes in Progress	78
Overview	78
Risk analysis.....	80
Governance	81
Business alignment.....	82
Planning and budgeting.....	82
How to audit projects in progress.....	84
Summary and key take-aways.....	85
Chapter 7: IT Service Provision and Value for Money	86
Overview	86
Investment in IT	88
The capability and cost of the IT team.....	90
Transfer of assets and licensing	93
Key third-party service providers.....	95
Auditing IT service provision value for money.....	96
Audit risks	96
Audit approach.....	96
Summary and key take-aways.....	98
Chapter 8: Reporting It Due Diligence Assignments.....	99
Overview	99
Specific IT due diligence reporting.....	99
Target audience	100
Objectives of the report.....	101

Contents

Report structure	101
Chapter 9: Post-Due-Diligence	103
Overview and introduction to post-merger integration	103
Further information	105
ITG Resources	106

EXTRACT

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

CHAPTER 1: INTRODUCTION TO DUE DILIGENCE

Overview

Due diligence is the care a reasonable person should take before entering into a transaction or agreement with someone they don't know. However, when that transaction is for large amounts of money, and could lead to the failure of an acquiring company, special care needs to be taken. Due diligence has hence come to relate to a more formal audit or investigation process for potential transactions, to confirm all material facts for the deal. These facts may relate to legal, business, financial or even information and IT issues and may impact the deal value/price or willingness to do the deal at all. In this chapter the aim is to provide sufficient background information for a full consideration of the importance of IT in due diligence. We consider:

- history and definition.
- what is it? how do you do a review?
- what could possibly go wrong?
- summary and key take-aways.

History and definition

Some say that accountancy is the second-oldest profession (no prizes for guessing the first). This may not be true, but whenever there is trade or bargaining there is always a

1: Introduction to Due Diligence

concern by both parties to get the best deal that they can. Cavemen may have asked the question “Is a wheel worth one deer hide or two?” Certainly we know that by the Roman era the Latin phrase ‘Caveat Emptor’ or buyer beware was in common use. During the Middle Ages there was a need for trust among merchants, and the ability to check out whether the guy you were trusting with your valuable shipments of silk or tea was a ‘good chap’. Anyone who has travelled to the Middle East will also be aware of the bartering and bargaining and the need for vigilance. We find it somewhat ironic that so much due diligence is now performed in Wall Street, deals of \$bns, when the whole of Manhattan Island is thought to have been bought from the Canarsie Indians for a few dollars. Maybe the Indians should have had better advisors, although maybe so should the settlers as some historians believe the island did not belong to the Indians to sell!

We all perform ‘due diligence’ whenever we buy anything. It might be just checking the best before date on a box of eggs, considering whether we can buy them cheaper somewhere else or looking at their size and whether they are free range or organic. The buying decision is based on our value judgements. For bigger, higher-risk purchases we may seek advice from a knowledgeable friend – if we wanted to buy a second-hand car, for example. For even larger purchases such as a new house, purchases most of us make only irregularly, we might seek professional advice – to ensure we are not being ripped off and that the seller has the correct title for the transaction. Big businesses and other potential investors such as private equity houses, making significant investment purchases by buying other businesses are no different. The process they go through is known as

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

1: Introduction to Due Diligence

due diligence. This is an audit of the potential investment, to confirm all significant facts and assumptions, conducted before entering into a contractual agreement with the other party. The process followed is usually formal as it forms the basis of any subsequent contracts or agreements.

With an increasing litigious society the process of due diligence has become more formal and legal/financial based. Some trace this growth to the American securities laws, and certainly the issuing of shares and other securities, coupled with a loss of faith and trust in securities markets, has increased the need for due diligence reviews.

Due diligence could hence be described as healthy cynicism when considering a deal, helping to understand the evidence to support the assertions behind the deal and to understand the people you are doing the deal with. It involves getting an independent third-party opinion – but this can only be an opinion and there may be other factors that the deal parties consider when deciding how to proceed. A cynical view of due diligence could be:

“Due diligence is an expensive, secretive process, to tell you what you already know, but in a virtually unintelligible way, by someone who does not know your business and who will try to wriggle out of any liability for their advice, but could probably still be sued for large amount of money if it all goes horribly wrong.”

Yes, this view is cynical, but it does give an insight into some key elements of due diligence:

Cost – Investigations can involve large teams of specialist lawyers, auditors, managers, and capital and other

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

1: Introduction to Due Diligence

professionals, working long hours under very tight deadlines (all at extremely high hourly rates!). Add in the risk elements and costs go up rapidly. The cost of the investigation needs to be considered alongside the cost of the deal, the likelihood of it going ahead and the potential loss if the identified benefits are not achieved.

Confidentiality – If any of the information about the deal, in some cases even that the deal is being considered, were to be published, the share price of the companies involved could be impacted. Due diligence assignments are therefore often given project names, non-disclosure agreements and have specific rules around data rooms and use of data.

Clarity of reporting – With clear recommendations and advice, both on the deal itself and post-deal issue(s).

Facts versus opinions – Yes, the information may be known, but also it could be hidden, or misinterpreted. Experienced due diligence specialists know the right questions to ask, including requesting specific information. This can then be presented by setting out the facts and their sources in a clear format.

Business knowledge – Due diligence investigators are employed for their independence, business knowledge of the sector and specific specialisms, including IT, required by the investigation. Some of these skills are rarely available in businesses other than those routinely undertaking merger and acquisition activities. Although most clients or the acquirer may understand the business environment in which the entity operates, they may not have the context of wider risks likely to impact the entity. What is required is good

1: Introduction to Due Diligence

communication between the client and advisors to ensure the review is focused on agreed business, including IT, risks.

Liability of investigators – Investigators’ contracts for due diligence assignments do contain many of their own caveats, but the review can be high risk (see “What could possibly go wrong?” later).

Due diligence is hence a process to ensure decisions regarding a transaction are made on the basis of sound information and advice. By being aware of risks and issues before the deal is made, the parties can ensure contracts are based on a realistic understanding of the deal, e.g. to negotiate best terms based upon the true value of the deal to all parties. In some cases, for strategic reasons, the deal may go ahead regardless of the due diligence review. In these cases the review is more focused on gathering information and making plans for integration post-deal. Good due diligence is more than risk and compliance; it’s about basing decisions, and post-deal predictions, on sound information and judgement over:

Commercial risks such as cyber security, business continuity and compliance.

Finances – Understanding the underlying financial health and performance of the business (income and expenditure, profitability, assets, tax/other liabilities and cash flows). This is to understand past performance and assess whether this is sustainable post-deal.

Business/commercial issues – Considering the market positioning of the business and its products and services, strategic and business plan assumptions and predictions.

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

1: Introduction to Due Diligence

Legality – Understanding the legal basis of the deal and what is being transacted, including assets and intellectual property, contracts, loans and pending litigation, all of which could impact the future success of the entity. Legislation may also impact the nature of the deal itself, e.g. special anti-money laundering or anti-trust considerations.

IT systems and information can be a key element of each of these. For example:

- Finances depends on accurate, complete and reliable financial data often held in IT systems.
- IT has legal, compliance and business implications.

The two most common types of due diligence review are for:

1. M&A
2. IPO (Initial Public Offering).

M&A is a wide term used to cover the strategic changes to an organisation, not just registered companies, and its ownership. It covers buying, selling, dividing and combining of different entities. It can be confusing as to whether a change is a merger or an acquisition, especially in some cases where the brand or name of the company acquired is used as the name for the new organisation.

An IPO is the process by which a company sells its shares, on a securities or stock exchange, to the public for the first time. These have become famous in recent years with some of the large ‘.com’ companies listing and immediately making large gains (or in some cases losses). Their purpose is to raise capital, and/or to release funds for previous investors. After the IPO the shares of the company are traded on the relevant stock exchange in the usual way. The

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

1: Introduction to Due Diligence

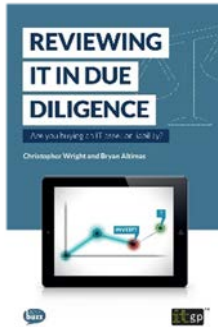
choice of stock exchange impacts the style and content of the due diligence review. For example, a US -listed company needs to comply with specific U.S. Securities and Exchange Commission (SEC) requirements including the Sarbanes-Oxley Act. This requires additional preparation and auditing of the company. The key output for an IPO due diligence is usually a prospectus, and accompanying documents such as long-form and short-form reports, which are used to sell the shares. These are highly structured and the specific information depends on the specific stock exchange where the listing is to take place.

For all markets, it is likely that the company has greater compliance requirements, and has to publish more financial and other commercial information openly.

<<< END OF EXTRACT >>>

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.

Reviewing IT in Due Diligence



"I found this book very interesting. Due diligence is one of those functions that happens way before us 'IT'ers' get involved and so this is a useful insight into the work that happens up front and the evidence we can obtain for our work even if we were not involved in the initial due diligence."

Chris Evans, ITSM Specialist

Buy your copy today

www.itgovernance.co.uk/shop/p-1689-reviewing-it-in-due-diligence-are-you-buying-an-it-asset-or-liability.aspx

www.itgovernanceusa.com/shop/p-1465-reviewing-it-in-due-diligence-are-you-buying-an-it-asset-or-liability.aspx

www.itgovernance.eu/p-1115-reviewing-it-in-due-diligence-are-you-buying-an-it-asset-or-liability.aspx

This extract and the original text it is taken from are both subject to ITG copyright and may not be reproduced, in any form, without prior written consent from the publisher.