



**INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY
CASE STUDY: COBB PUBLISHING AND E-BOOKS**

For use in May and November 2014

INSTRUCTIONS TO CANDIDATES

- Case study booklet required for higher level paper 3 information technology in a global society examinations.

Foreword

The ITGS case study, *Cobb Publishing and e-books*, is the stimulus material for the research investigation required for May and November 2014 higher level paper 3. All of the work related to the case study should reflect the integrated approach explained on pages 15–17 of the ITGS guide.

Candidates should consider *Cobb Publishing and e-books* with respect to:

- relevant IT systems in a social context
- both local and global areas of impact
- social and ethical impacts on individuals and societies
- current challenges and solutions
- future developments.

Candidates are expected to research real-life situations similar to *Cobb Publishing and e-books* and relate their findings to first-hand experiences wherever possible. Information may be collected through a range of activities: secondary and primary research, field trips, guest speakers, personal interviews and email correspondence.

Responses to examination questions **must** reflect the synthesis of knowledge and experiences that the candidates have gained from their investigations. In some instances, additional information may be provided in examination questions to allow candidates to generate new ideas.

Overview

Cobb Publishing, a publishing company with 500 employees, is situated in Vancouver. The company publishes a range of books for the public, provincial and local government, local organizations, as well as schools and universities in British Columbia. It is not a major player in the publishing field but serves the local market, and in areas the major publishers do not see as being profitable. *Cobb Publishing* prides itself on being responsive to the needs of its local community.

Current IT system

The current IT system is based around standard production equipment for publishers: a network with the standard publishing software that is used by the staff to develop and store the texts. When a book is finished it is passed to the printers who print and distribute it. The company uses a variety of printers, their own machines, local printers and sometimes national or overseas companies if there are special requirements.

The changing publishing industry

The publishing industry is going through a significant period of change brought about by the development of mobile devices such as laptops, smartphones, dedicated e-book readers and tablet computers. Consequently there is significant pressure from existing clients and the general public for *Cobb Publishing* to publish for these devices. Readers are also starting to look for the inclusion of interactive/multimedia features in e-books. Writers are beginning to self-publish their e-books, both large and small.

The ability to read the same book across a variety of formats and platforms will be a requirement for the future. A person may want to read their book on their tablet computer at home, on their smartphone while they travel, on their e-book reader on holiday and on their laptop while at work at lunch time. This would require a method to enable efficient synchronization of which page a reader is up to on each device.

In responding to these changes *Cobb Publishing* may need to develop a new digital publishing section of the business. *Cobb Publishing* may also need to outsource and form partnerships with other publishers and distributors, and companies that have skills and knowledge *Cobb Publishing* does not currently have, especially in the multimedia sector.

The senior managers of *Cobb Publishing* are aware that over the next few years there are going to be significant changes in the way it operates.

The changing format of e-books

- 30 *Cobb Publishing* needs to consider the format and features of e-books, and often this will depend on the purpose and the audience:
- There are various **electronic file formats** in which e-books can be published, such as epub, PDF, and others used by mobile devices.
 - The ways of **accessing e-books** are also changing with an increasing variety of platforms, from dedicated e-book readers, to mobile devices with/without dedicated apps/software, 35 and the Internet.
 - Readers are expecting to be able to use the same e-book across various platforms including automatically **synchronizing** the last page read and transferring other data such as highlighting, notes and bookmarks.
 - Educational consumers are asking for e-books to be **customized** for their own students. 40 The customization would not only include the choice of chapters but the selection of multimedia resources and other features (depending on the cost).
 - The range and type of **multimedia** content is increasing and becoming more **interactive**.
 - Readers want to be able to **navigate** their way through the e-book in a less restrictive manner than the current page turning method.
 - 45 • Readers want to be able to **search** and **annotate** the e-book and also **copy, paste** and **export** sections together for study purposes. *Cobb Publishing* is apprehensive as it has commercial and copyright concerns.
 - Readers will want to **update** their **e-books**, especially those used in the educational market.
 - E-books and the Internet allow for **interaction** between the **reader** and the **publisher/author**. 50 One of these interactions is the automatic gathering of data about how the e-book is used. Another is the gathering of feedback such as through blogs, or Facebook links in the e-book.
 - New **technologies** could include flexible paper-like screens that can download and display newspapers, magazines and books.
 - The “**cloud**” could be used to facilitate new services, for example to store e-books and resources 55 connected to the e-book.

Challenges faced

Over the next few years *Cobb Publishing* faces a number of challenges about which its managers need to make decisions.

Marketing / business analytics

Cobb Publishing has always needed to understand the reading habits and preferences of its actual and potential customers. Traditional market research has used the following methods:

- 60
- Interviews
 - Questionnaires
 - Focus group meetings.

65 In order to get a better insight into customers' behaviours, *Cobb Publishing* is considering collecting data from its e-book readers in order to analyse their reading habits. This data-driven approach allows them to track what readers do in a variety of ways. They can collect large quantities of data which can be analysed to give them the basis for making better business decisions.

70 *Cobb Publishing* is also considering developing links with other organizations to share data that will provide them with potential access to more customers. However, *Cobb Publishing* is aware that the collection and sharing of data from readers is affected by privacy laws and has been advised that it should explicitly state in any user acceptance agreement that this data will be shared.

Furthermore, civil liberty groups have expressed concern about the possibility of e-books being censored by the companies that control the publication, ownership and distribution of e-books. They are also concerned with the collecting of data about users' reading habits that can promote a feeling of "Big Brother is watching", especially if shared with governments and other businesses.

Self-publishing

75 In recent years the availability of e-book development software and on/off-line services has increased the ability for authors to self-publish. *Cobb Publishing* caters for some self-publishing at the moment but needs to make a decision whether to develop its own in-house system for self-publishing e-books that would include interactive and additional content such as quizzes, video and audio materials.

Distribution and licensing

80 *Cobb Publishing* will need to consider the following impacts on e-book ownership, licensing and distribution methods:

- Users will want to have the option to borrow or buy e-books. This would mean providing different types of ownership and licensing arrangements.
- 85 • Some users may want to have greater flexibility in the e-books or chapters they can access, for example books on a certain topic or selected chapters only. This would mean providing distribution methods focusing on interest groups and readers of specialist materials.
- Some universities and schools may want to get e-books for their libraries – *Cobb Publishing* would have to consider types of licences available for these organizations.
- Synchronization of e-books across various platforms brings its own distribution and licensing 90 problems with the possibility of multiple copies of an e-book and multiple people accessing the same e-book.
- *Cobb Publishing* will have to decide which mobile devices / e-book readers they will support.
- *Cobb Publishing* will have to decide which distribution outlets they will use. Some large publishers are developing their own distribution technologies and *Cobb Publishing* will need 95 to decide whether to go into partnership with them and/or develop their own. Also, non-book businesses such as supermarkets have investigated setting up e-book sales outlets.
- *Cobb Publishing* is aware that methods of payment will need to be flexible, such as regular subscriptions, or an upfront payment plus extra payments for more features and updates.

Legal rights and copyright

Apart from distribution, ownership and licensing considerations, *Cobb Publishing* needs to:

- 100 • investigate which types of Digital Rights Management (DRM) are most suitable for the types of material they decide to publish in digital form.
- decide on levels of protection that will protect the material from copying but still allow the customer the flexibility to use the product's features fully, without undue interference.
- consider the impact of obsolescence of standards and formats because it may be difficult to 105 transfer DRM-restricted material to the new ones.
- consider what will be included in their “terms and conditions” of use and ownership and how these need to be able to adapt to emerging technologies.
- consider the implications of data sharing with third party organizations.

The current absence of any standard format for DRM makes these choices more difficult.

Specific information technology items, additional to those in the ITGS guide, which are associated with *Cobb Publishing and e-books*

Apps
E-book file formats
E-book readers
Electronic paper
Epub format
Mobi format
Page-orientated file format
Platform
Reflowable file format
Self-publishing
Smartphone
Synchronization
Tablet
Widgets

Any individuals named in this case study are fictitious and any similarities with actual entities are purely coincidental.
