

Business OER

Environmental Scan:

Summary Report

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Introduction

About the Project

As part of eCampusOntario's 'Open at Scale' initiative, Kyle Mackie Consulting Ltd. was recently contracted to conduct an environmental scan of business-related open educational resources (OER). This environmental scan is meant to identify existing or soon-to-be released business OER that can be used in college and university level business courses by post-secondary institutions based in Ontario, Canada.

eCampusOntario, with input from Heads of Business departments from Ontario Colleges are exploring opportunities to grow OERs, tools, and practices in business programs across Ontario colleges. This environmental scan aims to support the following:

- Modular development to support maximum flexibility and reuse
- Integration of leading technology to support learning
- Development of additional resources to support teaching

A key goal of this initiative is to identify and recommend openly-licensed textbooks and ancillary resources for use by college-level business programs. Additionally, this scan aims to highlight gaps and opportunities for future development of resources. The stakeholders for this scan have identified 9 priority course development areas:

- Business Fundamentals / Introduction to Business
- Business Mathematics
- Business Communication / Professional Writing
- Introduction to Marketing
- Introduction to Human Resources
- Financial Accounting / Introduction to Accounting
- Introduction to Business Computing
- Organizational Behaviour
- Economics

This report consists of a description of the methodology for the environmental scan project, a summary and analysis of findings, and recommendations for next steps.

Timeline

This project commenced February 11, 2019 and was completed March 19, 2019.

Research Team

- **Kyle Mackie.** BA (Guelph), MA (Guelph). Director, [Kyle Mackie Consulting Ltd.](#)
- **Stephanie Quail.** Hons BA (Toronto), MI (Toronto). Business Librarian, York University Libraries. SPARC Open Education Leadership Fellow, 2018.
- **Madeline Donnelly.** BSc (McMaster), MLIS (Western). Learning and Curriculum Support Librarian, McLaughlin Library, University of Guelph.
- **Morgan Lavell.** BA (Guelph), Post-Graduate Certificate in Adult Education (Seneca), MEd, Distance Education (Athabasca) - in progress. Independent Educational Consultant

Contact Information

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License of this document

- All original materials related to this project (including this *Summary Report*, the ‘*Open at Scale*’ *Business OER Environmental Scan Tracking Spreadsheet*, the *Manual for Completing the OER Tracking Chart*, and any other materials), are licensed under a [Creative Commons Attribution International 4.0 license \(CC-BY 4.0\)](#).

Methodology

Development of Approach

Before conducting the environmental scan of business OER, the research team generated a list of topics under the larger terms of *business* and *economics*. Documentation provided by eCampusOntario helped to narrow the focus of the scan, as eCampusOntario had identified a list of core topics with the Heads of Business group at Ontario colleges.

Survey

The research team decided it would be valuable to survey librarians, instructional designers, faculty, and OER advocates to identify: (a) whether other business OER environmental scans had been conducted; (b) the core repositories practitioners use to find and locate post-secondary business OER; and (c) any new business OER in development. Consequently, a short survey was developed and distributed to the following channels on February 19th and 20th, 2019.

- SPARC's [LibOER listserv](#)
- BCcampus' [Canada OER listserv](#)
- [Ontario's LIBOER listserv](#)
- eCampusOntario's Extend mOOC (Slack channel)
- Ontario Open Rangers (Slack channel)
- IDIG Ontario (Slack channel)
- [BusLib-L](#)
- [ABEL](#)
- [OCUL](#)
- Social media (Twitter and LinkedIn)

The survey received 54 responses, along with a small number of email responses and comments via social media.

Part 1 of the survey asked respondents if they knew of pre-existing business-related OER scans. Two respondents indicated they knew of pre-existing business OER scans; however, upon further discussion, the work that had been done in the past was not comprehensive.

Part 2 of the survey asked respondents to identify repositories/sources they used to locate OERs. The responses helped the research team determine a list of target repositories to search for business-related OER:

Target Repositories for Business-related OERs

[BCCampus Open Textbooks](#)

[Community of Online Research Assignments \(CORA\)](#)

[Directory of Open Access Books \(DOAB\)](#)

[eCampusOntario \(Open Resource Catalogue\)](#)

[Knowledge to Work](#)

[Libre Texts](#)

[Mason OER Metafinder](#)

[MERLOT](#)

[MIT OpenCourseWare](#)

[OASIS](#)

[OER Commons](#)

[Open Course Library](#)

[Open Oregon Educational Resources](#)

[Open NYS \(SUNY & CUNY\)](#)

[Open Textbook Library](#)

[OpenStax](#)

[Saylor Academy Open Textbooks](#)

[Skills Commons](#)

[Shareable Online Learning Resources \(SOL*R\)](#)

[SUNY OER](#)

[SUNY Open Textbooks](#)

[Teaching Commons](#)

[University of West Florida](#)

[Virginia Tech Open Textbooks](#)

Part 3 of the survey asked respondents to identify if they knew of any soon-to-be published business OER that the research team could add to their environmental scan documentation. Nine respondents indicated that they knew of new business OER that would be released shortly, which the research team subsequently captured in their [‘Open at Scale’ Business OER Environmental Scan Tracking Spreadsheet](#). They also reached out to respondents that provided their contact details to gather more information about the soon-to-be published business OER.

Scan

Phase 1: Mining key repositories

Based on the responses to the survey and the research team’s subject expertise, 22 repositories were searched in Phase 1 of the environmental scan. A full list of these repositories is available in the [Target Repositories](#) list (except for Mason OER Metafinder and OASIS, which were searched in Phase 2). A two-pronged approach was used to search the repositories due to inconsistent indexing and search capabilities of the selected repositories. First, the research team used the pre-defined subject categories often available on the main page of the repository. This approach allowed the research team to capture all the resources that were indexed in the repository under the subject of *business* and *economics*. Next, the researchers conducted keyword searches using the topic list generated from the materials provided by eCampusOntario. This second approach allowed the researchers to capture information that may have been insufficiently indexed and/or categorized and therefore missed by the first approach.

Phase 2: Using federated search tools

Mason OER Metafinder and OASIS were used in Phase 2 in an attempt to capture OERs that are housed outside of the 22 repositories searched in Phase 1. A similar two-pronged approach was used by first searching the subject list provided by these discovery tools (where provided), then performing keyword searches using a refined set of topics and concepts. To

reduce overlap with Phase 1, repositories that were searched in Phase 1 were removed from the result list by using the filtering options available under “source”.

Findings

Tracking

Using the methodology detailed above, the research team identified 245 unique business-related resources, including:

- 169 openly-licensed textbooks, licensed under [Creative Commons licenses](#).
- 76 other resources (websites, videos, books, simulations, assignments, courses, modules, lecture notes, as well as resources for general skills)¹

Using protocols detailed in [Appendix A](#), the research team tracked their findings in the [Open at Scale Business OER Environmental Scan Tracking Spreadsheet](#).

Key points:

- The research team performed a surface-level review of the resources found. A detailed content review was outside of scope for this project.
- Given the various methods for cataloguing and describing OERs, some information around these resources is at times difficult to find, and challenging to verify.

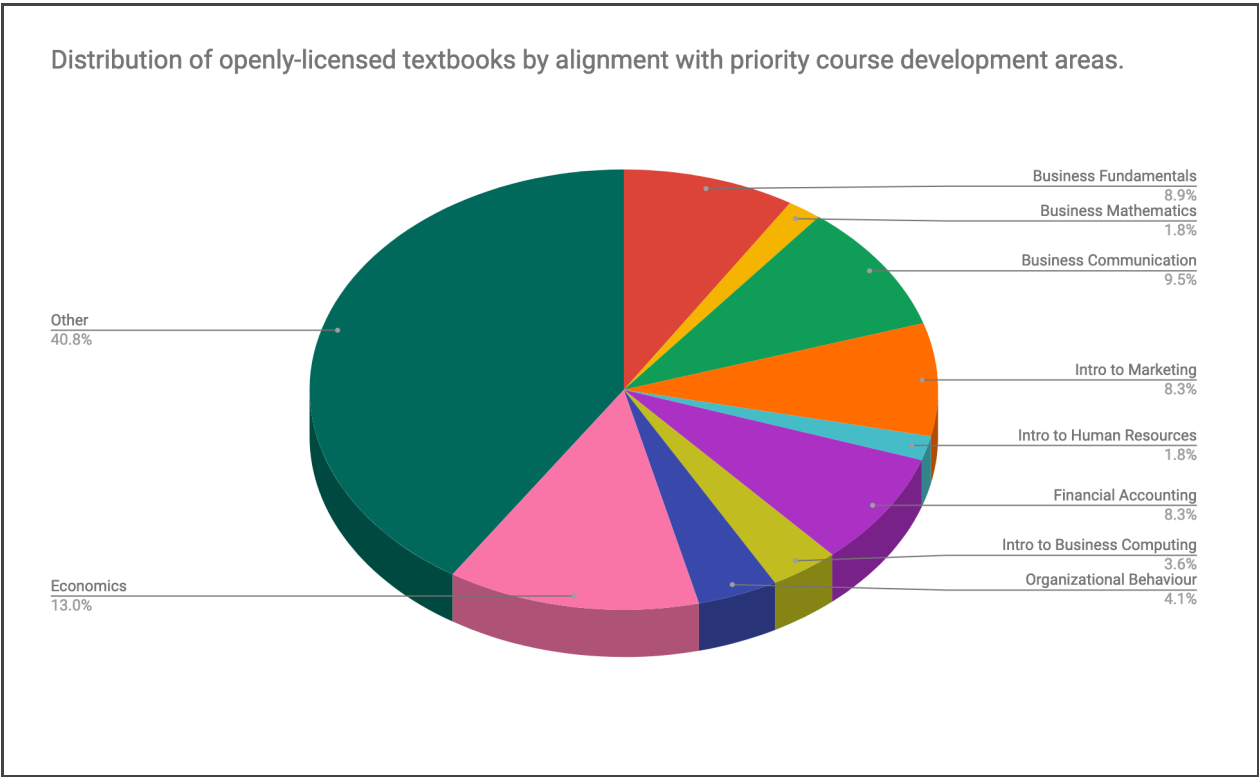
General Patterns

Subject Areas

The graph below details the percentage of OERs found by alignment with the identified nine priority course development areas. There are significantly more open texts available in Economics, Business Communication / Professional Writing, Business Fundamentals / Introduction to Business, Introduction to Marketing, and Financial Accounting / Introduction to

¹ Licenses vary for these resources.

Accounting. Finding texts specific to Business Mathematics, Introduction to Human Resources, Introduction to Business Computing, and Organizational Behaviour is more challenging.



Other subjects that were covered that were more indirectly tied to the main topics included business law, presentation software, strategic management, business strategy, entrepreneurship, project management, social responsibility, health and safety, leadership, corporate governance, and ethics.

Audiences

The majority of open texts are intended for an introductory-level audience. Only 19 openly-licensed textbooks found in the scan were identified as being intended for an advanced audience.

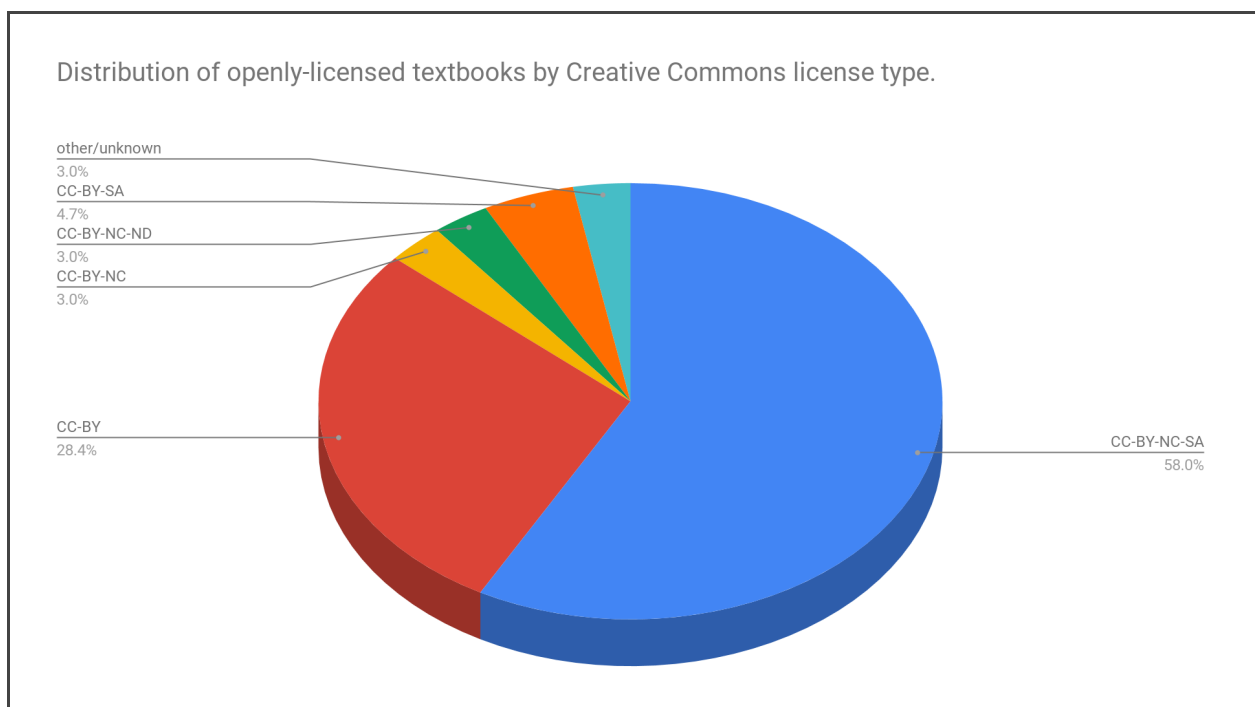
Formats

The majority of the findings were in textbook format. Some of these texts include faculty resources such as case studies, video, presentation slides, test banks, sample assessments,

sample syllabi, student handbooks with solutions, and activities. Note that some of these resources were ‘available by request.’

Licensing

The graph below details the breakdown of the types of licenses attached to openly-licensed textbooks found in the [‘Open at Scale’ Business OER Environmental Scan Tracking Spreadsheet](#). CC-BY-NC-SA is the most commonly-found license, followed by CC-BY. Of note: a small percentage of resources found in the scan are licensed as “No-Derivatives”, while others do not have a clear statement about licensing. Using these resources will present challenges.



Analysis

Adaptability Criteria

In an attempt to analyze the entries on the tracking spreadsheet, and identify resources that are worth closer examination, the research team developed an ‘Adaptability Scorecard’. Note

that the criteria below are specific to the goals of eCampusOntario’s ‘Open at Scale Business OER’ initiative.

Currency

5 points if published between 2016-2019

3 points if published between 2012-2015

Editability

5 points for Pressbooks²

3 points for docs/html

2 points for pdf

Relevancy

3 points for Canadian

2 points for North America/USA

Accessibility

5 points if there is information about accessibility included³

Peer-Reviewed

3 points if there peer reviews available

License

5 points for BY, or CC0

3 points for BY-NC, BY-SA, or BY-NC-SA

1 point for BY-ND, or BY-NC-ND

Sorting and Ranking

The values in the *adaptability score* column are the result of a formula based on cell values, data validation, and conditional formatting. Note that to facilitate this, some columns have been set to ‘hidden’.

Both spreadsheets have been sorted by: ‘*alignment with HoB priority course developments: A->Z*,’⁴ and then ‘*adaptability score: Z->A*.’

² eCampusOntario’s platform of choice for textbook publishing

³ Accessibility validation is outside of the scope of this project, and is a recommended priority moving forward.

⁴ HoB is an acronym for Heads of Business departments from Ontario Colleges

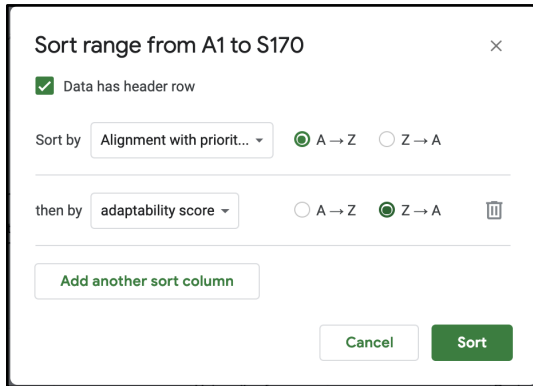


Image 1: Default sort criteria for OER Tracking Spreadsheet

The result is that OERs are grouped by ‘HoB priority course development area,’ and then ranked within the grouping by ‘adaptability score.’ For ease of recognition, OERs with an adaptability score of 18 and above are shaded with green, those with a score between 14 and 17 are shaded yellow, and 13 and below are shaded red. The goal is to provide a structured spreadsheet of findings; easily searchable and sortable to allow users to quickly identify relevant resources.

1	A	B	C	D	E	F	G	H	I	J	K	L
1	OER Title	Link to OER	Availability of OER	Author(s)	Authoring Language	Publisher / Repository	Business Subject Area(s)	Alignment with priority course development area	Alignment with other course development area	Audience level	adaptability score	Publication Year / Latest Revision Year
5	Understanding Media and Culture: An Introduction to Mass Communication	https://open.umn.edu/open textbooks/textbooks/143	Published	Author removed at request of original publisher	English	University of Minnesota Libraries Publishing	Media, Communication	Business Communication / Professional Writing	N/A	Introductory	18	2016
6	Introduction to Professional Communications	https://open.bccampus.ca/ind-o-pen-textbooks?uiid=fc7693a-69e1-49c-a00d-700a0b2ae64&contributor=&keyword=&subject=Communication	Published	Ashman, Melissa	English	BCcampus	Business Communications	Business Communication / Professional Writing	N/A	Introductory	16	2018
7	Business Communication for Success	https://open.umn.edu/open textbooks/textbooks/8	Published	McLean, Scott	English	University of Minnesota Libraries Publishing	Business Communications	Business Communication / Professional Writing	N/A	Introductory	16	2015
8	Business Communications	https://oer.suny.edu/courses/business-communication-skills-for-managers/	Published	Lumen Learning	English	SUNY OER, Lumen Learning	Business Communications	Business Communication / Professional Writing	N/A	Introductory	15	unknown
9	Writing for Strategic Communication Industries	https://www.oercommons.org/courses/writing-for-strategic-communication-industries/view	Published	Roberts, Jasmine	English	The Ohio State University	Business Communications	Business Communication / Professional Writing	N/A	Introductory	15	2016
10	Management Communication	https://mcom320.net/	Published	Thomas, Lisa (lead author); Haupt, Julie; Spackman, Andy; Newell, Karmel; Sandholtz, Kurt; Wallentine, Melissa; Dixon, Liz; Willardson, Crickett; Bergin, Sue; Richardson, Mariana	English	Marriott School of Business, Brigham Young University	Business writing, business research, business presentations	Business Communication / Professional Writing	N/A	Introductory	15	2017
11	A Guide to Technical Communications: Strategies and Applications	https://www.oercommons.org/courses/a-guide-to-technical-communications-strategies-applications/view	Published	Wahlin, Leah; Hall, Lynn	English	The Ohio State University	Business communications	Business Communication / Professional Writing	N/A	Introductory	15	2016
		https://open.bccampus.ca/ind-o-pen-textbooks?uiid=3a7299ec-										

Image 2: Snapshot of OER Tracking Spreadsheet structure

Recommendations

Within the framework of the goals of the larger 'Open at Scale' project, and the specific needs related to business programs across Ontario, the research team makes the following recommendations:

Encourage use of open textbooks

Considering the priority course developments from the Heads of Business group, the research team recommends the following openly-licensed textbooks be considered as a starting point for development. These recommendations are meant to be used alongside the ['Open at Scale' Business OER Environmental Scan Tracking Spreadsheet](#).

Business Fundamentals / Introduction to Business

- [Fundamentals of Business: Canadian Edition](#) (eCampusOntario)
- [Fundamentals of Business, Second Edition](#) (Virginia Tech Open Textbooks)

Business Mathematics

- [Introductory Business Statistics](#) (OpenStax)
- [Introductory Business Statistics with Interactive Spreadsheets – 1st Canadian Edition](#) (BCCampus)

Business Communication / Professional Writing

- [Communication for Business Professionals: Canadian Edition](#) (eCampusOntario)

Introduction to Marketing

- [Principles of Marketing](#) (BCCampus)

Introduction to Human Resources

- [Human Resource Management](#) (University of Minnesota Libraries Publishing)

Financial Accounting / Introduction Accounting

- [Introduction to Financial Accounting: Third Edition](#) (BCCampus)
- [Financial Accounting](#) (University of Minnesota Libraries Publishing)

Introduction to Business Computing

- [Computer Applications](#) (SUNY OER, Lumen Learning)
- [Beginning Excel](#) (Open Oregon Educational Resources)
- [Information Systems: A Manager's Guide to Harness Technology](#) (University of Minnesota Libraries Publishing)

Organizational Behaviour

- [Organizational Behaviour](#) (BCCampus)

Economics

- [Principles of Economics](#) (OpenStax)
- [Principles of Economics](#) (University of Minnesota Libraries Publishing)
- [Principles of Microeconomics: UVic](#) (BCCampus)

Support use and development of ancillary resources

Based on the analysis of the findings from this scan (types and number of resources available, course alignment, adaptability score, etc), a key finding of this environmental scan project is the need for access to high-quality ancillary learning materials, and an appreciation that creating and adapting resources demands significant effort. The research team recommends that institutional/organizational resources be dedicated to making accessible, appropriately-licensed resources and tools available to augment and localize openly-licensed textbooks.

Responses to our survey speak to this need:

Two of the things which are desperately needed are: open cases to replace things like the Harvard Business Review cases, and videos which profile business concepts and business practices. We have utilized a number of 'free online' videos for this purpose, but there is no guarantee that links won't break, etc. and we cannot legally host/distribute them as they are not openly licensed.

Anonymous survey respondent

Similar comments are available in online reviews of open texts:

My guess is that, except at some rather rarified and/or old-fashioned

institutions, virtually everyone teaching introductory statistics now insists on a reliable automated homework/quiz course platform, like MyStatLab. The difficulty/impossibility of doing that is why I don't write and provide my own free text. We use a Pearson e-book that provides that service to our two-semester sequence for \$104.95.

*William M. Easley, Instructor (Business Statistics),
University of New Orleans*

Foster open practices

The final recommendation from the research team is to use the findings of this environmental scan as a launchpad to foster the development of enhanced OER for introductory business courses at the post-secondary level. We hope that the next steps of the 'Open at Scale' project will include a close review of the located materials listed in the [Open at Scale' Business OER Environmental Scan Tracking Spreadsheet](#) and the creation of a plan to enhance selected open textbooks by either developing more Canadian/Ontario-specific content or creating a suite of comprehensive ancillaries to rival proprietary products on the market. It is our hope that this environmental scan will serve as a useful foundational tool for further enhancing and growing the available business OERs.

Appendix A:

Manual for Completing “Open at Scale Business OER Environmental Scan Tracking Spreadsheet”

Data Entry Protocols

1. OER Title

- Title as it appears on the publisher’s website.

2. Link to OER

- Link to the landing page for the OER.

3. Availability of OER

- Use drop-down list options: ‘Published,’ ‘Not yet published.’

4. OER author(s)

- Enter this field as: Last name, First name. Example: Welch, Florence.
- If there are multiple authors, separate with a semicolon. Example: Welch, Florence; Haines, Emily.
- If first name is unavailable, use first initial. Example, Welch, F.

5. Authoring Language

- Write full language (English not Eng).

6. Publisher / Repository

- Provide any available information on the publisher and/or repository for the OER.

7. Business Subject Area

- Subject areas identified by the publisher and/or repository.

8. Alignment with HoB priority course development area

- Based on 9 priority courses identified by Heads of Business at meeting on February 26, 2019

- Data validation: Business Fundamentals / Intro to Business, Business Mathematics, Business Communication / Professional Writing, Intro to Marketing, Intro to Human Resources, Financial Accounting / Intro to Accounting, Intro to Business Computing, Organizational Behaviour, Economics.

9. Alignment with other HoB course development area

- Based on additional courses from the list of Common Courses across Business Programs developed by eCampusOntario on January 22, 2019.
- Data validation: Management Accounting, Business Administration, Operations Management / Supply Chain / Manufacturing and Services, Data Analysis for Business, Innovation and Entrepreneurship, Project Management, Canadian Business Law

10. Audience Level

- Data validation: Introductory, Advanced, Unknown.
- Judgement can be used to determine the audience level for the OER
 - Indicators that the OER may be introductory: Use of words such as ‘beginner’ or ‘introduction’ in the title of the OER. Tables of Contents that provides overviews of broad subjects.
 - Indicators that the OER may be advanced: Narrow focus and scope of the OER. Applying seemingly advanced theoretical models to analyze/interpret business phenomenon. Presence of the word ‘advanced’ in the title.
 - Unknown: Try to make an educated guess between introductory and advanced. This category can be used in situations that are too difficult to make an educated guess.

11. Adaptability Score

- Formula based on cell values, data validation, and conditional formatting. Note that to facilitate this, some columns have been set to ‘hidden.’ Adaptability Score Criteria are detailed in the main Summary document.

12. Publication Year

- Write the year of publication and, if applicable, the year of last revision.

13. Platform/ Format

- List the various formats the OER is available in. For example: html, pdf.
- If the OER is published using PressBooks, writing the term ‘PressBooks’ is sufficient.

14. Geographic focus of OER

- Write full name of country, if available. Names of continents (such as North America) can also be used.
- If international, write 'international.'
- If no country specified, write 'unknown.'

15. Type of OER

- Google sheet tab #1 is used to track openly-licensed textbooks.
- Google sheet tab #2 is used to track other forms of OER and free resources.

16. Accessibility

- Include any accessibility notes that are included with the resource (e.g., whether it claims to be WCAG 2.0, or closed captioned, or transcripts available, etc.

17. Faculty Peer Reviews

- Provide links to page that provides faculty peer reviews. If no reviews are available, write 'none.'

18. License

- Data validation: BY, BY-SA, BY-ND, BY-NC, BY-NC-SA, BY-NC-ND.

19. Other Notes

- This field can be used to capture any information that may be of use to other members of the environmental scan team or to eCampusOntario.