

Increasing Awareness of the Property Management Minor at MacEwan University Using Social Media, Pop-Up Booths and Student Testimonials

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Abstract

The following research report responds to the need for market research expressed by the community partner in understanding why enrollment in the Property Management minor is low at MacEwan University, and how the numbers can be increased.

Introduction

The following research report responds to the need for market research expressed by the community partner in understanding why enrollment in the Property Management minor is low at MacEwan University, and how the numbers can be increased.

The research project included three phases:

- Phase 1- Secondary Research: searching for scholarly sources via the MacEwan Library website
- Phase 2- Qualitative Research: conducting five in-depth interviews with 1st and 2nd-year business students at MacEwan University
- Phase 3- Quantitative Research: questionnaire created and distributed to 1st and 2nd-year business students at MacEwan University

The first two phases of research indicated that low awareness of the minor was the primary issue preventing students from selecting it. Therefore, the focus of the third phase was to understand the best channels to advertise the minor. In order to provide the community partner with recommendations based on statistical evidence, a questionnaire was designed in order to provide insight into the effectiveness of currently used advertising techniques and areas to focus on in the future.

The questionnaire was designed in an attempt to provide answers to the following research questions:

- What are the most effective methods to advertise the Property Management Minor to University students?
 - What types of messaging will be effective in catching the attention of students?
 - How do students currently get their information regarding majors and minors?
 - Which social media channels should be utilized to inform students about the minor?
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The questionnaire received a total of 96 responses, however, the target population of 1st and 2nd-year business students at MacEwan University made up 56 of the total number used for analysis.

Major findings that the questionnaire provided insight into:

- 57.1% of students believe social media is the most effective channel to advertise minors compared to other methods.
- 66.1% of students prefer short, concise and to-the-point advertisements.
- 62.5% of students stated that testimonials from students about minors are favoured over professor testimonials.
- 89.3% of students believe Instagram to be the most favourable social media platform to advertise minors.

Recommendations derived from the major findings include:

- Using social media and pop-up booths as leverage for advertising
- Focusing on Instagram and Facebook as the main social media platforms to be used
- Using students to convey short and concise messaging about the minor
- Making the MacEwan website easier to navigate for students

Problem Definition

The community partner, Dr. Mike Annett, works at MacEwan University as an Associate Professor and Chair for the Department of Organizational Behavior, Human Resources Management, and Management. The community partner initially expressed the need for market research to understand student decisions/buying choices for selecting into or out of a minor in Property Management. The community partner ultimately wanted to know what possible actions could be taken in order to increase interest and awareness regarding the minor. In selecting Property Management as a minor, students will learn about the history of property, how to manage property effectively, the relationships between property managers, property owners and tenants, ethical dealings, legal requirements, and the intricacies of operating a property.

As multiple research teams are also working with the community partner to differentiate our project, we decided with the community partner in the early phases of working together that our team's specific point of focus would be 1st and 2nd-year students who have not yet declared a minor. Our qualitative research objective was to understand student decision/buying choices for selecting into, or not into, a minor in Property Management minor amongst students who still have time to make a buying decision on their focal programs of study. Through our qualitative research, we determined that the most relevant issue causing the low enrollment numbers was a lack of awareness of the minor. Moving on to the next phase of research, the questionnaire, we decided to shift our focus to finding out the best ways to advertise to 1st and 2nd-year business students at MacEwan University.

The Management Problem:

The management problem expressed by our community partner is centred around improving the enrollment numbers of the Property Management minor at MacEwan University. The community partner would like to know which advertising techniques should be implemented and utilized to reach maximum effectiveness and student engagement. The community partner would like us to focus on 1st and 2nd-year business students at MacEwan who have not yet declared their minor and thus still have time to make a decision.

The Marketing Research Problem:

The marketing research problem, in this case, ultimately requires conducting market research to gather information about students' preferences in terms of advertising. Therefore, we must discover how we can change the low awareness with the use of advertising. In order to acquire the necessary information, we have designed a questionnaire for students to complete that will provide insight into the effectiveness of currently used advertising techniques and areas to focus on in the future.

Analytical Framework of the Marketing Research Problem

During the exploratory stage of our research, our main focus was to understand possible reasons that could explain why certain minors have low enrolment numbers when compared with others. Although we were not able to find any direct articles as to why students are not selecting Property Management as their minor, we were able to find multiple studies examining common reasons why students may not be interested in any specific minor (see Appendix 1 for the full literature review for this study). Many of these studies included areas of similarity and overarching themes. A 2014 research study conducted by Anderson-Rowland et al. examined student beliefs about engineering and why certain students may not be interested in it. The findings suggested that a lack of information about engineering was the most common reason that students did not want to take it. Similarly enough, Montmarquette et al. (2002) also conducted a research study producing similar results, supporting the findings stating that a lack of knowledge was a key factor deterring students from selecting certain majors or minors. These two articles served as a basis for our research during the exploratory research stage, as they both suggested that a lack of knowledge or misconceptions about areas of study play a role in deterring students away. Therefore, our team decided to conduct primary research to determine if these reasons could also explain the low enrollment numbers of the Property Management minor at MacEwan.

During our in-depth interviews, we spoke with five Bachelor of Commerce students at MacEwan who were in their first or second years of study (see Appendix 2 for additional information about participant profiles). Our interviews provided rich insights into the low awareness of the Property Management minor. (See Appendix 3 for the full discussion guide used as the basis for asking participants questions.) After reading participants a description of the Introduction to Property Management course, four out of five participants said that the course sounded interesting. The fifth participant said that the description sounded interesting,

except for learning about the history of properties. The five participants also provided insight into methods they believe to be effective in advertising the minor. Their suggestions include:

- Talking about the minor more on-campus.
- Having a Property Management booth where students can ask questions and find out information.
- Making it a core business requirement for a Bachelor of Commerce degree.
- Talking about Property Management in other courses such as ORGA 201 or BUSN 201 to inform students of opportunities.
- Making the MacEwan website easier to navigate.
- Display pop-up ads on the website with information about the minor.
- Sending out mass emails targeting 1st-year students

(See Appendix 4 for further detailed findings from our qualitative research)

Our findings during the qualitative research phase enabled our team to confirm that a lack of awareness was indeed a key factor deterring students from selecting Property Management as a minor. Therefore, moving into the quantitative research phase, we decided to focus on finding the best ways to advertise the minor to students. Although during the in-depth interviews, the participants provided a brief insight into possible ways to advertise the minor, we wanted to further investigate the issue. These responses were only based on the opinions of five students. Therefore, we decided to create a questionnaire with the purpose of determining detailed information about student-preferred advertising methods. The questionnaire will aim to answer the following outlined questions:

Research Question #1 What are the most effective methods to advertise the Property Management Minor to University students?

With the massive growth of social media over the last decade, we predict that many students will prefer this advertising method. Individuals who are part of Generation Z get almost all of their information regarding a wide variety of topics through social media. Where do they get their news? Where do they find information about products and services? What type of advertising is highly effective for this generation? Social media. Social media has immense impacts on individuals' decision-making processes. Therefore, we believe that social media will be a common theme we see throughout the questionnaire.

Research Question #2 Which social media channels should be utilized to inform students about the minor?

We believe that social media platforms such as LinkedIn and Instagram will be the most effective platforms to reach students. Almost all students, especially business students, have a LinkedIn account and are actively using the platform, whether it be for searching for jobs or finding out course information. Instagram is also another popular social media platform with students, and in addition, many MacEwan clubs and departments have a presence on this

platform with large numbers of student followers. Both these methods have a large target market audience; therefore, we believe they will be the most effective.

Research Question #3 What types of messaging will be effective in catching the attention of students?

We predict that shorter, to-the-point messages will most effectively engage with university students. Many students do not want to spend time reading long advertisements; Therefore, creating short, catchy phrases that they can read in a matter of seconds will be the most beneficial. We also believe that incorporating student testimonials about Property Management will be effective, as students trust their fellow classmates and their opinions regarding which classes to take.

Research Question #4: How do students currently get their information regarding majors and minors?

We predict that most students will state that they currently get their information regarding majors and minors through the MacEwan website or through information provided on campus. The MacEwan website provides detailed information about each major and minor. Therefore, we predict that it would be students' first point of contact when contemplating which major/minor to take. The MacEwan campus also contributes to students' existing knowledge as there are often posters around campus, guest speakers and booths promoting different majors and minors.

Research Design: Survey and Sampling Design

The target population to focus on for the research given by the MacEwan community partner was 1st and 2nd year business students attending MacEwan University, the element. Therefore, the sampling units in the research study were 1st and 2nd year business class sections provided by the professor at MacEwan University. The extent of the research is inclusive of buildings five, six and seven at MacEwan University. Finally, the timeline for data collection was between March 15 to March 24, 2023. The sample size obtained from the survey was a total of 96 respondents; of that total, 56 respondents fit into the category of 1st and 2nd year students. Many of the respondents were aged 18-20, and over 70% of respondents who had an undeclared minor also had an undeclared major. For our analysis, we will be focusing on the 56 1st and 2nd year students. Their characteristics can be depicted in the table below.

Table 1. Characteristics of the Sample.

Characteristics of Sample		
Characteristic	# of Respondents	% of Respondents
Year of University		
1st	39	69.6%
2nd	17	30.4%
Age		
17-18	9	16.1%
19-20	26	46.4%
21-22	11	19.6%
23-25	6	10.7%
26+	4	7.1%
Gender		
Female	25	44.6%
Male	28	50.0%
Other	2	3.6%
Prefer not to say	1	1.8%
Major		
Have not declared my major yet	40	71.4%
Accounting	8	14.3%
Human Resources	2	3.6%
Legal Studies in Business	2	3.6%
International Business	1	1.8%
Management	1	1.8%
Marketing	1	1.8%
Supply Chain Management	1	1.8%
Total:	56	

The respondents from the target sample were obtained from the MacEwan University campus. Through utilizing a random sampling technique with a systematic approach, we visited random 1st and 2nd-year business class sections as provided by the instructor to inform students about our marketing research questionnaire. The survey was administered through Google Forms and distributed through a QR Code on a printed advertisement. The advertisement was then distributed through talking to numerous class sections at the beginning or end of the period at MacEwan University, varying in location from buildings five, six and seven from a provided list. We also randomly approached students in the MacEwan library in hopes of getting them to participate in the survey. We stopped at every 3rd table to ensure the sample was randomized. The data was then tabulated and interpreted using Excel.

Initially, in-depth interviews were utilized to find out the main reasons for the current low enrollment for the Property Management minor. Then, an online survey was used to identify the most effective advertising channels and methods for the Property Management minor at MacEwan University. The questionnaire was distributed to 5 respondents outside of the

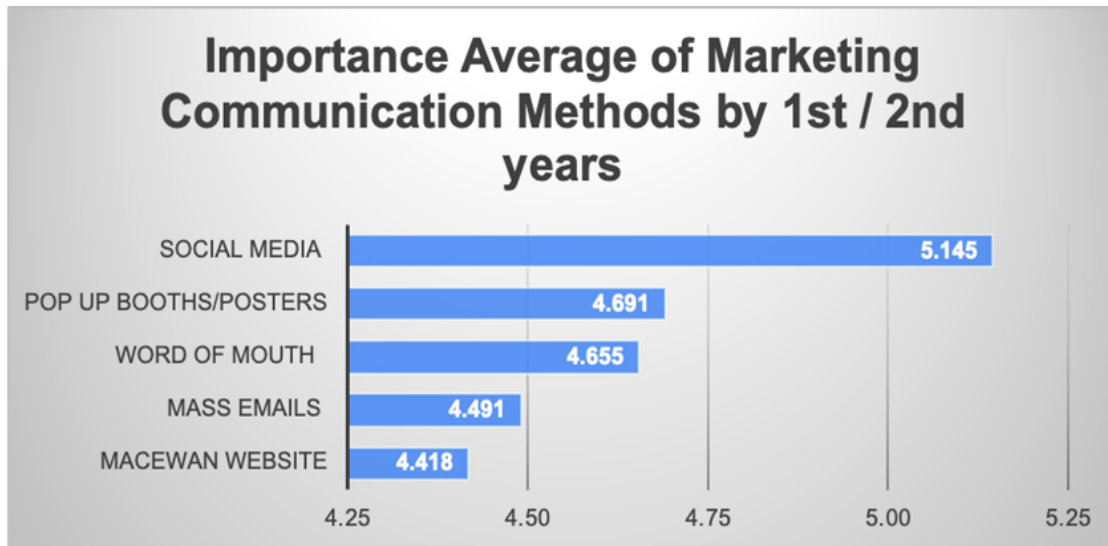
research study in the pre-testing period before it was released and distributed to the target sample, in which they were asked to go through the survey and provide any suggestions. The pre-test indicated that additional questions had to be added, and some of the wording had to be altered to improve the overall clarity of the questionnaire. Additionally, repetitive questions were identified and eliminated to avoid redundancy.

Over the course of the research, we did not encounter any major ethical issues. The purpose of the research, potential risks, and confidentiality were all communicated and clearly stated to participants prior to having them participate in any research. Consent forms were signed for both the questionnaire and in-depth interviews. In addition, for the initial stages of the marketing research in conducting in-depth interviews, consent to record the conversation was clearly stated.

Statistical Data Analysis and Results

Research Question #1 What are the most effective methods to advertise the Property Management Minor to University students?

Table 2. Importance Average of Marketing Communication Methods by 1st and 2nd Year Business Students at MacEwan



In this table, we asked students to rank different advertising methods from 1-7. We then took the average of all the responses to determine which advertising methods ranked highest. We initially predicted that pop-up booths/posters around campus as well as the MacEwan website, would be the high ranking. To our surprise, students said that social media would be the best way to advertise, followed by pop-up booths and posters on campus.

Table 3. Rank Order of Different Advertising Methods by 1st and 2nd Year Business Students at MacEwan University

Rank Order of Different Advertising Methods (Used in the past)							
Advertising Method	1st	2nd	3rd	4th	5th	# of respondents for 1st and 2nd	% of respondents for 1st and 2nd
Social Media	23	9	9	6	9	32	57.1%
Word of Mouth	5	18	10	8	15	23	41.1%
Mass Email	6	16	18	10	6	22	39.3%
MacEwan Website	17	5	10	8	16	22	39.3%
Pop-up Booths/Posters on Campus	5	8	9	24	10	13	23.2%

This table shows us how students have been advertised to in the past. However, these are not necessarily what students think is best for advertising a minor. The percentage is based on students' first and second choice for different advertising methods, indicating that social media and word of mouth have been the main form of advertisement used for current students.

Research Question #2 Which social media channels should be utilized to inform students about the minor?

Table 4. Rank Order of Different Social Media Platforms by 1st and 2nd Year Business Students at MacEwan University

Rank Order of Different Social Media (Used in the past)							
Social Media	1st	2nd	3rd	4th	# of respondents for 1st and 2nd	% of respondents for 1st and 2nd	
Instagram	47	3	3	3	50	89.3%	
Facebook	3	24	22	7	27	48.2%	
Twitter	4	21	18	13	25	44.6%	
LinkedIn	2	8	13	33	10	17.9%	

Initially, we assumed that LinkedIn and Instagram would be the most used social media platforms for advertising to students. After administering our survey, we were surprised to see that LinkedIn was hardly used in the past. On the other hand, Instagram was by far the most preferred social media platform used in terms of advertising. Based on these statistics, we can see that Instagram and Facebook would be the best social media platforms to advertise the Property Management minor to 1st and 2nd-year students.

Research Question #3 What types of messaging will be effective in catching the attention of students?

Table 5. Most Effective Types of Messaging By 1st and 2nd Year Business Students at MacEwan University

Preferred Messaging Methods		
Testimonials from:	# of Respondents	% of Respondents
Professors about the Property Management minor	21	37.5%
Students about the Property Management minor	35	62.5%
Type of Message:		
Long, detailed descriptions of each minor	19	33.9%
Short, concise and to the point descriptions	37	66.1%

Shown in Table 5, we asked students what their preferred method of receiving information was. They were asked two separate questions that each had two different answers available. We discovered that students are more likely to listen to other students when discussing information regarding majors/minors, specifically the Property Management minor. We also discovered that students prefer short and concise material rather than detailed descriptions. Although this information is helpful, it does not mean that testimonials from professors and long detailed descriptions are not helpful. For this, we had predicted that students would rather hear testimonials from other students and prefer short, concise information when choosing a minor. Knowing the percentage of students that prefer student testimonials and short, concise information provides useful insight into how to achieve a good balance when advertising in the future.

Research Question #4 How do students currently get their information regarding majors and minors?

Table 6. Where 1st and 2nd Year Business Students at MacEwan Currently Get Their Program Information

Where Students Currently Get Their Program Information			
Information Sources	# of Responses	% of Responses	% of Respondents (heads)
MacEwan Website	40	31.0%	71.4%
Mass Emails	29	22.5%	51.8%
Pop-up Booths on Campus	11	8.5%	19.6%
Social Media	23	17.8%	41.1%
Word of Mouth	26	20.2%	46.4%
Total	129	100.0%	230.4%

For this question, we asked students to select all the options that apply to them when they are getting information regarding their program. Since students could select multiple options, we ended up with a total percentage of 230.4%, meaning that, on average, students selected 2.3 options. We predicted that students were most likely to get their current information regarding programs from the MacEwan website. This hypothesis ended up being correct as the MacEwan website was selected 40 times, the most out of all options. We also predicted that pop-up booths and other information on campus would increase students' knowledge of different programs. We were surprised when 29 students selected mass emails as an area where they gathered information. We had previously discussed with our community partner mass emails as an option for advertising; however, the community partner disclosed that mass emails have not been very successful in the past. However, it is helpful to know the exact number and percentages of answers so that going forward, we can focus advertising efforts where they will be most efficient.

Recommendations

The results gathered from our survey provide a new perspective on what advertising techniques are most effective. After analyzing the survey results, we have suggested changes on the ways we believed the Property Management minor should be advertised and what platforms should be utilized.

Using Social Media and Pop-Up Booths as Leverage for Advertising

Based on the survey results, we found that social media and pop-up booths are the most effective methods to advertise the Property Management minor, as they received the highest importance averages shown in Table 2. Although this is so, pop-up booths received a low mark of 24% for the question of where students currently get their program information from. Therefore, this indicates that it would be extremely beneficial to have more pop-up booths around campus speaking about the Property Management minor. In addition, the pop-up booths should showcase the Property Management course description. This would be beneficial

because 69.5% of students stated that they were interested in the course after reading the description. Also, social media should be taken advantage of, as the majority of students are on social media for many hours of the day. We recommend having more posts about the minor on MacEwan's social media accounts, as well as having ads on social media.

Focusing on Instagram and Facebook as the Main Social Media Platforms to be Used

The social media channels that should be utilized to inform students about the minor are Instagram and Facebook. 47 respondents voted for Instagram as the number one way of advertising, and Facebook came in 2nd place. This is most likely because the respondents are on Instagram the most and, therefore, more likely to see the post or ad. MacEwan should post more content about the Property Management minor on Facebook and Instagram as opposed to other social media platforms. Students should also be encouraged to follow MacEwan's Instagram and Facebook accounts so that they can see this content. This can be done by word of mouth and at pop-up booths.

Using Students to Convey Short and Concise Messaging About the Property Management Minor

Students are more likely to trust other students' words than professors, as shown in Table 5. In addition, students prefer receiving information in a short, concise and to-the-point manner. Therefore, we should have students who are in the Property Management minor or graduates who have taken the minor speak at the pop-up booths or testimonials from them included in advertisements. We could also have videos of students speaking about the minor posted on MacEwan's social media platforms. That way, we can get the most engagement from students.

Making the MacEwan Website Easier to Navigate for Students that are Choosing Minors

31% of respondents stated that they currently get their program information from the MacEwan website. In our in-depth interviews, the respondents mentioned that the website was difficult to navigate. Therefore, MacEwan should focus on making the website easier to navigate for students. MacEwan could also look at changing the format of the website and having a more attractive-looking section that showcases the Property Management minor and what it is about. The Property Management minor can also be promoted by having a pop-up section for it on the website recommending it to students. Although 22.5% of students mentioned that they get their program information from email, we decided not to put too much emphasis on this, as we discussed that email was not the most effective way of promoting the Property Management minor previously with our community partner.

Limitations

As with any research project, we endured a few limitations throughout the process. One of the limitations we faced was the timeline of the project. If the project duration was longer, our group could have collected data from a larger portion of our target market which could have improved the accuracy of the results. Another limitation we encountered was the authenticity and

accuracy of our surveys and questionnaires, as we were unable to determine if respondents were 100% truthful. As we had an incentive to get a \$5 Tim Hortons gift card for our in-depth interviews and a chance to win a \$20 Amazon gift card for the questionnaire, it is possible that students may have been dishonest in an attempt to receive the incentive. Our goal was to get over 100 surveys, but we fell short as some classes we visited were cancelled or only a few students showed up. If given more time, we would have gone to more classes or been able to approach more students in the library. For our in-depth interviews, we interviewed five business students. If we had done focus groups as well, this would have allowed us to gather more feedback as there are more students in a conducted focus group, and students could feed off one another to give ideas. Overall, the limitations we faced over the duration of the research project were small and still allowed us to achieve a substantial outcome.

References

- Anderson-Rowland, M. R., Rodriguez, A. A., & Grierson, A. E. (2014). Determining student beliefs about engineering. *2014 IEEE Frontiers in Education Conference (FIE) Proceedings*, 1–7. <https://doi.org/10.1109/FIE.2014.7044108>
- Baker, L. M., Irani, T., & Katie Abrams. (2011). Communicating Strategically with Generation Me: Aligning Students' Career Needs With Communication about Academic Programs and Available Careers. *NACTA Journal*, 55(2), 32–39.
- Boswell, S. S. (2020, September 1). *Effects of Ratemyprofessors.Com and University Student Evaluations of Teaching on Students' Course Decision-Making and Self-Efficacy*. Higher Learning Research Communications. Retrieved February 1, 2023, from <https://doi.org/10.18870/hlrc.v10i2.1194>
- Carpenter, C. J., & McEwan, B. (2013). Who Are We Educating? Why Undergraduate Students Choose to Major in Communication. *Journal of the Association for Communication Administration*, 32(1/2), 2–13.
- Van Deuren, R., & C Santema, S. (2012). *How to choose your minor? Decision-making variables used in the selection of a minor by undergraduate students from a Dutch university of applied sciences* [Working Paper]. Maastricht School of Management. <https://www.researchgate.net/publication/254431654>
- Edmonds, J. (2012). *Factors influencing choice of college major: What really makes a difference?* [Thesis]. Rowan University. <https://rdw.rowan.edu/etd/147/>
- Jaschik, S. (2013, August 12). *Majoring in a professor*. Inside Higher Ed. Retrieved February 1, 2023, from <https://www.insidehighered.com/news/2013/08/12/study-finds-choice-major-most-influenced-quality-intro-professor>
- Jett, E. (2012, September 10). *Why study property management?* American Public University EDGE. Retrieved February 1, 2023, from <https://apuedge.com/why-study-property-management/>
- Khazam, K. (2021, June). Mass communication minor selection gap: Why are students choosing public relations over advertising or journalism? *Turkish Online Journal of Qualitative Inquiry*, 12(4), 1122–1130. <https://www.tojqi.net/index.php/journal/article/view/1483/770>
- Kokemuller, N. (n.d.). *Factors that influence a student's success in college*. Seattle PI. Retrieved February 1, 2023, from <https://education.seattlepi.com/factors-influence-students-success-college-2010.html>

- Koulizos, P. (2006.). Property education: How should it be taught? [Non-Refereed Paper]. In *Pacific Rim Real Estate Society*. Twelfth Annual Pacific Rim Real Estate Society Conference, Auckland, New Zealand.
- LaCosse, J., Murphy, M. C., García, J. A., & Zirkel, S. (2021). The role of STEM professors' mindset beliefs on students' anticipated psychological experiences and course interest.[Supplemental material]. *Journal of Educational Psychology*, 113(5), 949–971. <https://doi.org/10.1037/edu0000620>
- Malhotra, M. K. (2020). *Marketing research: An applied orientation* (7th ed.) [eBook]. Pearson Higher Ed.
- Montmarquette, C., Cannings, K., & Mahseredjian, S. (2002). How do young people choose college majors? *Economics of Education Review*, 21(6), 543–556. [https://doi.org/10.1016/S0272-7757\(01\)00054-1](https://doi.org/10.1016/S0272-7757(01)00054-1)
- Naz, F., Kumar, A., Upadhyay, A., Chokshi, H., Trinkūnas, V., & Magda, R. (2022). Property management enabled by artificial intelligence post-COVID-19: An exploratory review and future propositions. *International Journal of Strategic Property Management*, 26(2), 156–171. <https://doi.org/10.3846/ijspm.2022.16923>
- Quadlin, N. (2020). From major preferences to major choices: Gender and logics of major choice. *Sociology of Education*, 93(2), 91–109. <https://doi.org/10.1177/0038040719887971>
- Shreya, M., Yughan, N. V., Katyal, V., Matthew, J. P.J., Nandita, R., Niranijan, H., Bhavani, J., (2021). A Complete Study of Career Choices and Employment Intricacies. *CLEAR International Journal of Research in Commerce & Management*, 12(8), 6–18. <https://library.macewan.ca/full-record/bth/152933474> -
- Spackman, J. S., & Larsen, R. (2017). Evaluating the impact of social media marketing on online course registration. *The Journal of Continuing Higher Education*, 65(3), 151–165. <https://doi.org/10.1080/07377363.2017.1368774>
- Stock, P., & Stock, E. (2018). What factors affect a college student's decision on an academic major or minor? *Journal of Scholastic Inquiry: Fall 2018*, 9(1), 56–78. <https://doi.org/10.17613/0VVE-T089>
- Yusran, N. A., Puad, M. H. M., & Omar, M. K. (2021). Role of career exploration in influencing career choice among pre-university students. *Pertanika Journal of Science and Technology*, 29(S1). <https://doi.org/10.47836/pjssh.29.s1.05>

Damron-Martinez, D., Presley, A., & Zhang, L. (2013). A study of undergraduate student intent to minor in business: A test of the theory of planned behavior. *Journal of Education for Business*, 88(2), 109–116. <https://doi.org/10.1080/08832323.2012.657262>

Appendix 1: Full Literature Review for the Study

Author (Year)	Country of Study	Research Objective	Method and Sample Size	Techniques of Analysis of Data	Key Variables and Measurement	Main Findings and Results
Anderson-Rowland, Mary R., Rodriguez, Armando A., & Grierson, Anita E. (2014)	United States of America	To determine student beliefs about engineering and why they may not be interested in it.	Survey, 63 students	Students who were uninterested in engineering were ones who had many misconceptions about it.	Interest in engineering and conceptions about it (difficulty, how well they understand what it entails)	Lack of information about the topic was a common theme among students who were not interested.
LaCrosse, Jennifer, Murphy, Mary C., Garcia, Julie A., & Zirkel, Sabrina (2021)	United States of America	To determine how professors impact student interest on courses.	Online study, 157 students	Students were more likely to select a career path, in courses where the professor was likable and enthusiastic.	Impact of a fixed vs. growth mindset professor. Measured through professor reviews.	Professors have a major impact on whether students will pursue a career in a certain topic or not.

<p><u>Montmarquette, C.</u>, <u>Cannings, K.</u>, & Mahseredjian, S. (2002)</p>	<p>Canada</p>	<p>To determine if students' perceived probability of success impacts their decision of choosing a major.</p>	<p>Statistical analysis, 562 students</p>	<p>Students are more likely to select majors that they know more primary information about, have a high success rate, and sufficient earning after graduation.</p>	<p>Knowledge and perceived probability of success were measured</p>	<p>Knowledge on major and perceived probability of success are key factors that impact student decisions when selecting a major.</p>
<p>Quadlin, N. (2021)</p>	<p>United States of America</p>	<p>To understand what factors play a role in the determination of which major to select.</p>	<p>Survey, 2486 students</p>	<p>Students' perception of majors play a key role in the consideration of selecting them or not—even though some of these perceptions may not be correct.</p>		<p>Four major factors—money earned, career options, engaging classes, and helping others are factors considered when selecting a major</p>

<p>Khazim Khazam (2021)</p>	<p>Turkey</p>	<p>To determine the factors that affect student decision in selecting a minor.</p>	<p>Questionnaire, 176 students</p>	<p>Performed chi-square analyses to determine if statistically significant differences emerged between minors associated with the demographics.</p>	<p>Age, citizenship, culture, religion, future prospects (readiness for employability after graduation) and influence of external factors (family or university staff) affect minor selection.</p> <p>Measured with strategic questions to 176 students and analysis.</p>	<p>Gender and citizenship affect the choice of minor in the sample.</p> <p>Citizens/non-citizens choose different minors based on the career they are going into after school/ if going back to home town.</p> <p>University directs students to minor by properly guiding them.</p>
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Peter Koulizos (2006)	New Zealand	To gather views of the stakeholders in property education to improve the standard of property education.	Survey on quality of property management from shareholders 65 council members, 280 undergraduate students 25 property lecturers.	What are the views of students, academic staff and industry on property education in terms of curriculum design, delivery, and assessment? Little evidence of research including views of students and industry.	The variables are grouped into three categories: Curriculum Design, Delivery and Assessment. Each category has numerous variables.	Work experience and its incorporation into the curriculum was most important and all 3 stakeholders were strongest in favour for this.
Farheen Naz, Anil Kumar, Arvind Upadhyay, Hemakshi Chokshi, Vaidotas Trinkūnas &	Europe	To examine the role of AI in the real estate and property management sectors.	175 articles on AI and PM research from 1980 to 2021. Identified research trends, structural topic modelling, and compreh	The future market is likely to be affected by the housing requirements that emerged during the Covid-19 pandemic	Timely proprietary data and applied regression analysis	The AI based models must be developed to identify and solve other issues of the real estate sector as well and not just price forecasting.

<p>Robert Magda (2022)</p>			<p>ensive framework</p>			
<p>Jonathan S. Spackman & Ross Larsen (2017)</p>	<p>United States of America</p>	<p>To evaluate the effectiveness of Facebook marketing activities on increasing enrollment in continuing higher education online courses</p>	<p>Online survey, 168 participants</p>	<p>Campaigns and ads have an impact on people enrolling in courses</p>	<p>Questions asked on a Likert scale, treat the indicators of the latent variables and the outcomes as categorical variables</p>	<p>A strong case can be made for continuing higher educators to rely on marketing efforts to increase enrollments much like a business.</p>

<p>Stock, Paul & Stock, Eileen M. (2017)</p>	<p>United States of America</p>	<p>To determine the factors that affect a college student's decision on an Academic Major or Minor</p>	<p>Survey, 386 students</p>	<p>Descriptive analysis included frequencies, standard deviations, and ranges of demographic and academic-related data. Chi-square analyses were also used to assess the relationships between categorical variables</p>	<p>The 24 variables of decision making were divided into four categories, including career values, career field, life values, and influential factors. The 'career values' category included variables like job security, challenging career, family/work balance, and a successful career.</p>	<p>79.5% of participants had business majors, with marketing being the most popular at 84%. 60.4% of participants had no declared minors.</p> <p>The influence of a student's class greatly influenced their choice of major.</p> <p>This displays an opportunity for professors of introductory courses to attract non-major students into their program of study.</p>
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Edmonds Jill (2012)	United States of America	To study the factors influencing the choice of a college major and identify factors that make the most difference	Online survey, 60 students	Two mixed analyses of variance (ANOVA) were used. The first compared the category of influence and college, while the second compared the categories of influence and gender of participants	For the first ANOVA, the independent variables were the categories of influence and colleges the participants belonged to. For the second ANOVA, the independent variables were categories of influence and participant gender. The dependent variables were the subject's correlation score.	The research hypothesis stating that students currently enrolled in college choose their major based more on practical influences than personal influences was rejected. The main findings showed that all subcategori es of independent variables played a significant and almost equivalent role in the participant's decision factors. Although the results are not statistically significant, breaking down the categories
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						further can allow future researchers to identify the specific influence of student decisions.
Rita Van Dueren & S.C. Santema	Netherlands	To study the factors influencing Undergraduate selection of a minor.	Online Questionnaire, 1567 students	Principal component analysis was used to identify clusters of major decision factors variables for students in selecting a minor. A correlation coefficient was used when two underlying variables affected the decision. The relative importance of the factors was determined using the average score per factor.	Independent variables of decision making factors were grouped into 2 categories: the characteristics of the university and educational program and the sources of information students use in the decision making process.	Decision making factors in choosing a minor are narrowed down to 9 characteristics of the minor program. Results suggest that 5 main factors influence students' decision-making process.

Damron-Martinez, D, Presley, A, Zhang, L. (2013)		To study the behaviour and motivation for the pursuit of a business minor	Survey, 617 students			
Jaschik, Scott. (2013)	New York, USA.	To determine if students choose their major or minor based on their first professor's teaching style.	Interview 100 students	Undergraduate students were likely to major/minor in a field with a caring faculty member.		Faculty members influence a student's choice of major or minor choice. Graduates remember the teachers who inspired them and didn't.
Carpenter, C.J., McEwan, B. (2013)	United States of America	Discover why students major in Communications.	Surveyed 476 students	Different communication factors were measured using McCroskey's PRCA-24.	Attitudes, the subjective norm, and perceived behavioural control were considered throughout the study.	Students in introductory communications courses make healthy decisions about choosing Communication

						tions as a major.
Baker, L.M., Irani, T., & Katie Abrams. (2011)	United States of America	To determine why students aren't applying to agricultural studies.	3 focus groups with a total of 28 people.	Exploratory data was gathered and analyzed	A protocol was developed to guide three focus groups using Krueger's (1998) book, <i>Developing Questions for Focus Groups</i> . The protocol ensured that the focus groups had a similar line of questioning and proceeded in the same manner.	Students need more information on academic programs and career paths before choosing majors and minors. There needs to be an increased level of awareness regarding academic programs.
Shreya, M., Yughan, N. V., Katyal, V., Matthew, J. P.J., Nandita, R., Niranijan, H., Bhavani, J., (2021).	India	Discover and explore factors that majorly influence student choices on career paths.	Questionnaire. 188 students	Tables and charts are used to analyze data and compare different qualities in people. ANOVA was also used to compare correlations and test hypotheses.	Socio-economic factors, personality traits, gender disparity, job security, and the impact of Covid-19 were all variables. Measured through the questionnaire and compared	The economic background of the family had the largest impact on student's career choices.

					from student to student.	
Kokemuller, N. (2016)	United States of America	Determine the factors influencing a student's college success.	Interview /survey. Over 200 graduates	Exploratory data was given and then analyzed	Measuring analyzed decision making in determining the factors that influence their college career	It's often impacted by the decisions the student makes before and in the first year of school
Boswell, Stefanie S.(2020)	San Antonio, Texas.	The effects of ratemyprofessor.com and evaluations on teachers that determine how a student chooses their courses	Experimental design with 73 undergraduates.	Students are more likely to choose a professor who has a high rating on ratemyprofessor.com.	T-tests were used to explore the research evaluation	Seeing ratings on a professor impacts a student's decision to take the class. Some students would completely avoid it for many semesters and prolong their schooling just to not get a certain professor.

Yusran, N. A., Puad, M. H. M., & Omar, M. K. (2021).	Malaysia	Determine the role that career exploration plays in students.	Simple Random Survey 249 Students		The researchers used the Career Exploration Survey (CES), Multidimensional Scale of Perceived Social Support, Career Decision-Making Self-Efficacy Scale-Short, and career choice instrument surveys to measure the variables in this study.	Career exploration acts as a partial mediator in the relationship between social support and career self-efficacy on career choice.
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Appendix 2: Focus Group/In-Depth Interview Participant Profiles

	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5
Year of Study	1	2	1	1	Business Major, 2nd yr.
Age	19	20	18	22	22
Gender	Female	Male	Female	Female	Female
Awareness of Minor	No	No	No	Yes	No
Duration	20 minutes	18 minutes	14 minutes	15 minutes	15 minutes

Appendix 3: Discussion Guide Used in Qualitative Research

Introduction

Purpose: The purpose of this study is to identify student decisions regarding deciding to declare or not declare Property Management as a minor. Student enrollment in this minor is currently low, and therefore, we are conducting market research to determine what factors play into these numbers.

Rules

I would like you to know the following as being part of the marketing research study:

- You are entitled not to participate.
- You can choose not to participate by leaving, not turning in a questionnaire, or turning in a blank questionnaire as you consider it appropriate.
- Your participation is voluntary, and you can answer only those questions that you are comfortable with.
- You may withdraw from the research project for any reason, at any time, without explanation or penalty of any sort.
- Whether you choose to participate or not will have no effect on your class standing or how you will be treated.
- Should you wish to withdraw, there will be no penalties associated with it.

Participant Introduction: Please tell me about yourself, what year of study you are in, and if you have declared your major or minor yet.

Warm-up

General broad question relating to the topic:

- What do you currently know about the topic of property management?

Core Discussion

- What are your plans at MacEwan University? Do you have an idea of what major/minor you would like to do?
- Are you aware that there is a property management minor? (If yes) Have you considered declaring it as your minor? (If no) How do you find out/decide on your courses at MacEwan University?
- Would the current availability of the property management courses prerequisites stop you from enrolling in the course, as it is only offered in the Fall/Winter Semester?
- What is preventing you from considering property management as a minor?
- How would you feel about having a property management course as a required business course in your first few years of study?

- Would you feel more confident declaring property management as your minor if it was more normalized
- The following is a description of the introduction to property management course (PMGT 301):
 - “Students are introduced to the field of property management and will learn the scope and responsibilities of commercial and residential property managers. The course will discuss the different classifications of properties and ownership structures. Students review a brief history of property management and are introduced to the structure of managing a property management company as well as the agency role the manager plays with property owners”
 - Does this course description sound interesting to you? Why or why not?
- Which of the following topics sounds the most interesting to you: revenue property management, legal issues for property management or commercial property management?
- What majors are you currently considering, and how do you know information about them? (ex. Other people you know are taking them, you’ve had other classes about them, etc.)
- Would you be more likely to take the property management minor if you knew more people taking it?
- What would be a good way to advertise the property management minor?

Wrap-Up

- After hearing more about the property management minor, would you now be interested in taking it, or does this increase the chances of you taking it?
- Thank participants

Appendix 4: Analysis of Findings from Qualitative Research

Initially, we had four main research questions that we wanted to answer and gather more information on. These questions were created shortly after having a discussion with our community partner and identifying the managerial problem at hand. The research questions our group determined during the qualitative research phase are listed as follows:

- Research Question #1: Are Bachelor of Commerce Students at MacEwan University aware that a Property Management minor exists?
- Research Question #2: What factors play a role in students' decision-making processes when selecting a minor?
- Research Question #3: What is the best way to communicate information about minors to students?
- Research Question #4: If students are aware that a Property Management minor exists, and are still not selecting it, what factors are preventing them from doing so?

With these four questions in mind, we performed in-depth interviews and desk research to better understand why people were not enrolling in the Property Management minor. Our key findings are listed below:

- There is a lack of awareness surrounding the Property Management minor. The majority of respondents did not know that a Property Management minor existed
- 4/5 participants stated that they would be interested in taking a Property Management course with the potential of choosing it as a minor after reading a course description.

Participants gave us their thoughts on how we could increase student knowledge regarding the property management minor. Their ideas include

- Virtual techniques, including mass email, social media, and pop-up ads on the website.
- Making it a core business requirement in order to create student awareness in their first year.
- Pop-up booths on campus
- Factors such as family, friends, interests, job opportunities, and enrollment numbers are all key factors playing a role in the minor selection process.