# Interdisciplinary Approaches in Business Studies: Applications and Challenges

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#### **Abstract**

Monodisciplinary research confines itself to expanding the literature, knowledge, and methodologies of a single discipline. In contrast, interdisciplinary studies adopt a holistic approach to solve current problems and create new knowledge informed by different disciplinary perspectives.

While there are some debates and challenges regarding the position of interdisciplinary research within academia, interdisciplinary approaches have potential for creating new integrative research domains by combining various skill sets and expertise from various fields or disciplines to tackle critical problems across several areas, including in business studies. A particular application of interdisciplinary approaches will be discussed in connection with a larger research study. This research involves theories, literature, and methodologies from these practical and rapidly-changing fields: business studies, information systems, and consumer psychology.

Keywords: interdisciplinary research, monodisciplinary research, business studies, synergy

#### 1. Introduction

While monodisciplinary research relies on the knowledge and methodologies of one particular field to address a problem or open up avenues for further research, interdisciplinary studies embrace a multifaceted approach that draws from two or more areas or disciplines (Albert & Laberge, 2017; Frodeman, 2017; Moran, 2010).

In monodisciplinary research, the focus is on filling gaps in the existing scholarship of each individual discipline through knowledge of the methodologies and literature of that particular field. However, interdisciplinary research concentrates on collaboration and teamwork by connecting expertise from different disciplines or fields to create new knowledge and address real-world issues from a variety of perspectives (Frodeman, 2017; Jacobs, 2017; Jacobs, 2013; Turner, 2017).

Both disciplinary and interdisciplinary research have their own potential contributions and challenges in academia and industry. Some scholars draw attention to the potential pitfalls of interdisciplinary research within contexts dominated by monodisciplinary perspectives. Nonetheless, others have emphasized the possible connections between disciplinary and interdisciplinary research, and the potential to work in tandem in academic and non-academic contexts (Jacobs, 2017).

The current business world is very unpredictable and competitive, and the interdisciplinary approaches are needed to respond to real-world challenges. Interdisciplinary projects employ insights from multiple fields and disciplines to respond to present-day contexts. This paper discusses an example of an interdisciplinary study in progress that aims to expand existing disciplinary perspectives through the combination of different approaches and areas from business studies, information systems, data analysis, and consumer psychology to gain new insights into innovative business strategies for the social media era.

#### 2. Interdisciplinary and Monodisciplinary Research

Interdisciplinary research embraces employing knowledge and approaches from two or more academic disciplines into a research project. It draws knowledge from multiple areas or disciplines such as sociology, psychology, history, music, business, etc. It is about generating something by thinking across boundaries. In this respect, researchers apply different methods and techniques from two or more disciplines to resolve a real-world problem or create an innovative way to address some issues by conducting interdisciplinary research. These

types of research involve different stakeholders in the project and cooperation among various parts is an essential factor to conduct successful interdisciplinary research (Chettiparamb, 2007; Graff, 2015; Huutoniemi & Rafols, 2017; Moran, 2010).

On the other hand, monodisciplinary research concentrates on utilizing knowledge and methods from one particular field to address a problem or open up avenues for further research in the same area (Jacobs, 2017; Jacobs, 2013). Monodisciplinary research includes literatures and methodologies from one particular discipline, such as science, history, literature, music, business, and so on. Scholars need to have a certain level of expertise and knowledge in their particular field to fill the gap in the current existing scholarship in their discipline. For example, researchers in one particular specialty of business administration need to have adequate knowledge and skills in that field to conduct meaningful research. Many disciplines are established in similar ways around the world, and scholars share their research and contribute to the existing scholarship in their particular fields. Monodisciplinary studies prepare students and scholars for obtaining sufficient training and skills in a particular field to enable them to translate their learning in the real world by implementing different types of research, including descriptive, experimental, causal, and correlational studies. As an illustration, researchers in the marketing area conduct studies in different subfields of this discipline, such as consumer behaviour and digital marketing, and need to gain a certain degree of expertise in any of these specialties to conduct research by employing knowledge and methodologies in these areas. Also, disciplines have various levels of specialties and branches that can create more outcomes and knowledge in that field (Jacobs, 2017; Turner, 2017).

Furthermore, higher-education institutions are mainly structured based on various established fields in different faculties, like science, fine arts, social sciences and humanities, etc. The focus on separate disciplines is reflected in many different ways, including recruiting staff and faculty based on each discipline and accessing funds and grants for different disciplines (Jacobs, 2017; Wernli & Darbellay, 2017).

However, interdisciplinary research is newer to academia and in recent decades has received more attention globally. Since many unprecedented real-world problems cannot be solved only through a lens of one particular field, these types of studies and research projects add more value and practical outcomes to academia and industry. Interdisciplinary research is increasingly viewed as a path towards making academic research more socially relevant (Holbrook, 2017). Interdisciplinary research can be very beneficial and useful to understand and resolve a problem by combining different fields or disciplines and adding more dimensions and nuances to the research questions and methodologies. This can be done by accessing a greater diversity of studies in literature reviews from various fields, and employing different research methodologies to have a more robust and holistic approach to solve current problems. Also, there is potential to develop innovative approaches or methods to longstanding debates and issues. Moreover, interdisciplinary research has high potential for creating new integrative research domains by combining various skill sets and expertise from different fields or disciplines to tackle critical problems across areas. In addition, outside of academia, interdisciplinary approaches can assist in creating new products, services, or future markets. Scholars are required to have strong capabilities in their main discipline in addition to a good grasp of other pertinent fields and methodologies, and then apply this knowledge to a broader context for conducting interdisciplinary projects. In many examples, researchers conduct interdisciplinary research by connecting different skills and methodologies, and implement an integrative approach to research that could not be done through the lens of one particular field (Chettiparamb, 2007; Dooling et al., 2017; Graff, 2015; Huutoniemi & Rafols, 2017; Weingart & Stehr, 2000).

Interdisciplinary studies (IDS) is a controversial and emerging domain in many ways, including in its title, definition, implementation, status in academia, and the assessment of interdisciplinary research (Graff, 2015; Huutoniemi et al., 2010; Huutoniemi & Rafols, 2017; Klein, 2018; Mansilla, 2017). There are many definitions of interdisciplinary studies. The following one is by Repko & Szostak, 2021: "IDS is a process of solving a problem that is too broad or sophisticated to be addressed appropriately through the framework of a single discipline and combines the perspectives of different fields in a thorough and constructive way."

Another definition is proposed by the National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine:

"Interdisciplinary research is a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or field of research practice" (Institute of Medicine, 2005).

The key part of the process of interdisciplinary research is the integration of different disciplinary approaches and perspectives. Integration is the part of the interdisciplinary research process that seeks to produce a more

comprehensive understanding in relation to existing problems and/or the advancement of knowledge frameworks (Mansilla, 2017).

Knowledge production in interdisciplinary research requires confronting differences in various fields and disciplines through an inquiry-based approach. On the other hand, transdisciplinary approaches aim to unify knowledge and appreciate how different disciplines can contribute to an overarching theme (Klein, 2017; Moran, 2010; Repko & Szostak, 2021; Turner, 2017).

The following definitions of interdisciplinarity are based on Cook et al., 2020:

"Interdisciplinarity necessarily invokes thoughts of collaboration and teamwork, a coming together of people from different disciplines to bring their expertise to bear on a common problem or set of problems. It summons the adage that the 'whole is greater than the sum of its parts (Cooke et al., 2020)."

"Interdisciplinarity involves more than just crossing boundaries. It involves taking on new lens and new perspective for seeing a topic, and importantly, going outside of your comfort zone. It involves questioning one's own 'ways of knowing,' challenging the ways in which one has been trained and opening new possibilities for creating, conceptualizing, and building knowledge (Cooke et al., 2020)."

The two above definitions of interdisciplinarity highlight the unique aspects and potential contributions of interdisciplinary research. Synergy is the interaction of elements that, when combined, produce a total effect that is greater than the sum of the individual elements, contributions, etc. Interdisciplinary approaches provide opportunities for adding substantial values to the individual disciplines or areas by incorporating multiple fields, skill sets, and expertise to generate more meaningful outcomes and address present-day problems through integrative and innovative methods. Also, interdisciplinary projects assist in examining research questions through different dimensions and facilitate the issues that can be addressed and the research objectives that can be achieved.

Within the Canadian academic context, interdisciplinarity is an emerging trend that is garnering attention and demand (Cooke et al., 2020; Wernli & Darbellay, 2017). While there are benefits to be derived from working across disciplinary boundaries, the way that universities are structured creates barriers that limit the ways in which benefits can be easily and successfully achieved. Cook et al. summarize several risks and drawbacks, including superficiality, limited career options, insufficient funding, difficulties in implementation, and appropriate measures of success. The above-mentioned risks and drawbacks are valid, and the following section will elaborate on two of these risks.

## 3. What the Job Market in IDS Looks Like

Career risk is one of the main challenges for students and scholars working in interdisciplinary areas. According to Cooke et al. training students in interdisciplinary areas could lead to graduates with less depth of knowledge and thereby make them seem less competitive in the academic job market. Since many universities are designed on the model of specific programs and disciplines, there is a lower chance for graduates in interdisciplinary programs to find a relevant long-term academic position. Cooke et al. highlight the career risk for early-career researchers and scholars through reference to "imposter syndrome." This syndrome could occur for many early-career individuals in academia and industry. Particularly, it impedes researchers in interdisciplinary programs from promoting themselves in workplaces, and they feel a lack of competency in comparison with other colleagues who have a high level of expertise in one particular discipline. In the 2019 book, *Being an interdisciplinary academic*, Catherine Lyall elaborates on the career challenges in academia for graduates of interdisciplinary programs and discusses how they struggle to promote themselves and their proficiencies. In addition, the book elaborates on how the structure of universities can negatively impact interdisciplinary careers.

I understand the above point that many graduates in interdisciplinary fields may encounter major impediments to obtain suitable jobs, especially permanent academic positions. However, from my standpoint, scholars in interdisciplinary fields can mitigate this challenge and risk by improving their skill sets and knowledge in their preceding disciplines along with establishing strong links to the other disciplines in which they are working. For instance, learning practical and effective use of state-of-the-art software applicable in different disciplines could be a considerable advantage to researchers. Moreover, graduates in interdisciplinary areas have the opportunity to promote and bolster innovations in the disciplines that they have previously studied, as well as in the new disciplines they adopt, by solving a problem or creating a new approach to their current and future research. Furthermore, the soft and hard skills that researchers acquire from their studies play a pivotal role in the job market as they compete with other applicants that have knowledge and expertise in only one field. Graduates from interdisciplinary programs should strive to promote the knowledge and expertise that they have acquired in

various areas. Likewise, they can distinguish themselves with their abilities to develop interdisciplinary courses and/or research plans for their future positions.

Of note, finding enough funding for interdisciplinary programs is a big challenge, especially when initiating work on blended research areas. According to Cooke et al., all major funding agencies in Canada support research in specific domains and disciplines and there is a noticeable funding shortage for interdisciplinary work. However, there are some funding opportunities that buttress interdisciplinary research, and it seems there is growth regarding support for these research approaches across the globe and in Canada. I believe that research teams have a critical role in developing a practical research plan, and based on the target, scope, and importance of their research can apply for specific local and international grants across the world. Furthermore, researchers could convince funding agencies, including governmental and private parties, how their research could benefit them in various financial and non-financial ways (such as improving a company's products and services and offering better services for citizens) through supporting a specific interdisciplinary project.

An interdisciplinary approach is essential for investigating the most critical challenges and issues facing the world today, including business studies, socio-technological issues, societal problems, healthcare, and the advancing of innovation and knowledge (Razmak & Bélanger, 2016). There is an abundant of literature in the field of interdisciplinary studies in the humanities and social sciences (Frodeman, 2017; Klein, 2005; Repko & Szostak, 2021), that aims to glean information on such interdisciplinary academic activities, including courses, programs, conferences, and research publications. According to a systematic literature review on interdisciplinary research, the results released that there is a significant role for creativity in the educational, organizational, and research fields (Moirano et al., 2020). Interdisciplinary research aims to resolve problems by employing a multifaceted approach from two or more areas or disciplines. Interdisciplinarity is a way of constructing and developing new and versatile knowledge and it inevitably invokes thoughts of collaboration and teamwork by bringing together expertise from different disciplines to set up and solve a problem. In this case, interdisciplinary research could lead to synergy through the cooperation of different parts. Engaging in interdisciplinary projects can generate several benefits, including creating new knowledge, more robust and relevant results, new approaches and techniques, and personal and intrinsic benefits (Cooke et al., 2020; Frodeman et al., 2017; Lotrecchiano & Hess, 2019).

Beyond academia, interdisciplinary expertise has many potential contributions to the business world. Nowadays, companies strive to sustain and improve their market share and profits by employing different strategies. Successful businesses adjust and tailor their strategies to align with current developments, and they are agile to respond properly to different market shifts, including technological, economical, and political changes. The recruitment process plays a major role in business success and advancement. Human resources is a vital part of any businesses and can assist companies towards success and growth or impede them from developing in comparison with other competitors. Generally, businesses seek opportunities to increase their value, and the concept of synergy plays a key role in expanding their markets.

Regarding the future expansion and job market for interdisciplinary studies, there are indicators that show that such programs would be attractive for companies across various industries. Many companies are looking to create more value for their stakeholders through synergy (such as corporate synergy) and integrating diverse skills and resources. Moreover, many businesses prefer to recruit employees with different skill sets that can enable companies to be more flexible in response to potential projects, opportunities, and challenges like the pandemic. Also, interdisciplinary programs add valuable and practical real business world skills to their students in that they empower them to utilize integrative approaches and collaboration in their professional lives. Furthermore, during the pandemic, the job market has shifted and the number of openings in some fields has shrunk considerably. There are emerging positions that start at the intersection between two fields, such as statistical and data analytics in the healthcare and financial sectors.

To summarize, understanding and implementing the concept of synergy is essential for businesses. Corporations are seeking ways to lead the market, and to achieve that they need to be prepared to improve all their resources, particularly human resources.

## 4. Opportunities and Challenges on the Horizon

Since interdisciplinary research has emerged across the globe, knowledge production has shifted to utilize more collaboration among disciplines in order to respond to societal challenges such as climate change, poverty, pandemics, and so on. There are still some issues, however, regarding what real and bona fide interdisciplinarity is, and how it can be integrated towards an association among disciplines in order to conduct practical and original research. Frickel and colleagues emphasize that knowledge creation could be enriched through

interdisciplinary research rather than in silos, and also that disciplines circumscribe interdisciplinary knowledge production (Frickel et al., 2016).

Bammer, in his article entitled "Should we discipline interdisciplinarity?", argues that despite the promising outcomes of interdisciplinary research, it is still difficult for interdisciplinary studies to gain entry into the academic mainstream and to receive similar attention as traditional disciplines. Then, the author elaborates why it is hard for interdisciplinary scholars to be recognized based on their contributions. Finally, Bammer introduces how the discipline called "integration and implementation sciences" (I2S) can, in theory and methods, assist scholars to overcome challenges in interdisciplinary research and to promote a cohesive disciplinary identity (Bammer, 2017).

Interdisciplinary research is an integrative approach that combines two or more fields or literatures towards conducting research that cannot run properly without joining different fields or disciplines. Collaboration is very important in conducting interdisciplinary research, and various fields and methods need to be unified in order to properly perform the research. I2S can be generated by combining different disciplines and translating them in the real world to resolve an issue or achieve innovation. The outcomes of the I2S approach can lead to create a synergy that outweighs the outcomes of single-discipline research.

There are many discussions around the importance and practical applications of interdisciplinary research among scholars. Generally, it is difficult for interdisciplinary studies to be accepted by other disciplines and for interdisciplinary scholars to obtain similar advantages in areas such as recruiting, grants, promotion, and so on. Interdisciplinary studies deal with a degree of vagueness regarding its definition and its connection and correlation with traditional disciplines. Pertaining to the significance of interdisciplinary research in comparison with traditional disciplines, some scholars have proposed the concept of disciplining interdisciplinary studies.

There are some uncertainties in the field of interdisciplinary studies. Madsen examines where the ambiguities come from, and how these can impede unification of interdisciplinarity (Madsen, 2018). According to Madsen, there are two central fault lines in the interdisciplinary literature: the relationship between interdisciplinarity and disciplinarity, and the question of whether integration is an essential requirement for interdisciplinarity. By investigating these fault lines, scholars can determine the sources of ambiguities in the field of interdisciplinarity.

An article by Madsen reviews literature on the relationship between interdisciplinarity and disciplines, and introduces different definitions of interdisciplinarity that concentrate on its ambiguities. The article also underscores the need to discern between the term and concept of interdisciplinarity. Madsen employs a thorough analytical approach in reviewing two papers (Bruun et al., 205; Frickel et al., 2016) to examine the ambiguities in interdisciplinary literature, and how the articles utilized different meanings of interdisciplinary research. These chosen papers employ different approaches to define interdisciplinary studies, generic and specific, and whether integration is presumed or not. Madsen summarizes these important discrepancies to propose two meaning systems, that is, different discourses. In this paper, Madsen refers to them as the integration-premised-discourse and the discipline-inclusive-discourse, respectively (Madsen, 2018). Madsen unravels the selected papers' definitions and approaches to come up with two major fault lines. The opposition between disciplinarity and interdisciplinarity is highlighted as the main source of ambiguity in interdisciplinary studies because it revolves around empty terms like "silo." Also, points out how the word "integration" is problematic as a basic assumption in studies Madsen because it can perpetuate the opposition between disciplinarity and interdisciplinarity. Madsen proposes that a more careful examination of the terminology used in the above-mentioned studies may lead to more transparency regarding their political dimension. Moreover, this article suggests that employing alternative terminology may help to dispel some of the misunderstandings that foster oppositions in interdisciplinary studies (Madsen, 2018).

In brief, interdisciplinary research faces many challenges. Some of them are related to different strategies that policy makers apply and how they buttress disciplines and/or interdisciplinarity. At the same time, there is no strong unanimity among interdisciplinary scholars regarding the definition and structure of interdisciplinary research, and how and to what degree it should collaborate and integrate with disciplines. Madsen's standpoint regarding the two key fault lines in interdisciplinary literature highlights important concepts: the relationship between interdisciplinarity and disciplinarity and the question of integration. According to many articles and discussions, interdisciplinary studies and individual disciplines are related and possibly complete each other in many ways. In several cases, however, we encounter a considerable gap between these two areas (interdisciplinarity and traditional fields), and they do not share the same degree of attention. To establish a solid position for interdisciplinary studies in the academic and research environment, interdisciplinary scholars need to establish clear definitions, and foster relationships and interaction between interdisciplinary and "siloed"

disciplines. In addition, these connections could lead to understandable changes and outcomes within both disciplinarity and interdisciplinarity. Furthermore, interdisciplinary experts should examine why they need integration and how they can create their own position in the academy and produce new knowledge for other disciplines and fields (Jacobs, 2013; Madsen, 2018).

## 5. Interdisciplinary Approaches in a Research Project on Social Media Monitoring

The approach of my current research study, "Applications of social media monitoring to improve customer satisfaction" employs various interdisciplinary theories, particularly, the approaches and definitions offered by Repko & Szostak, 2021, Cooke, et al., 2020, and Bammer, 2017, regarding interdisciplinary research.

The current business world is very complex and competitive, and the interdisciplinary nature of this research applies insights from different fields and disciplines to respond to present day challenges.

According to Morin, complex situations are defined by difficulty in describing observed phenomenon and uncertainties about present and future situations. From Morin's perspective, the word "complex" is associated with a situation in which we experience difficulty in trying to articulate observed results and trends (Morin, 2008). This interdisciplinary study plans to expand existing disciplinary perspectives through the combination of different approaches and fields from business studies (including marketing and strategy), information systems (including machine learning and data analysis), and consumer psychology to gain new insights into updated business strategies for the social media era. Due to the interdisciplinary approach of this research, it has potential to bring to light previously unexplored factors that should be considered for specific businesses to navigate their path in the present context. The study aims to open up avenues to conduct further research on social media monitoring and its potential impact on overarching corporate and business strategies.

This interdisciplinary study employs literatures and methodologies from different fields and integrates them towards adding value to current scholarship in relation to the topic. One of the major disciplines that will be included in this research is business studies with its different specialties and branches.

Many real-world problems like the pandemic cannot be fully addressed by employing one single discipline. Such challenges require scholars and experts to investigate and resolve problems by creating innovative approaches that utilize different fields or disciplines, and involve various stakeholders. Interdisciplinary approaches in business studies have great potential in applied and innovative research by their capacity to connect different fields of business with other disciplines or fields to confront real-world problems. This research project focuses on social media monitoring, and it aims to examine the ways that businesses can increase customer satisfaction, create unique value propositions, and gain competitive advantage through better understanding the currently trending views and discussions about them disseminated on different social media platforms.

The approach of this interdisciplinary research is mainly drawn from theories of interdisciplinarity that bolster knowledge creation by collaboration among different areas and connect several fields. This research encompasses theories and methods from the following fields: business studies, information systems, and consumer psychology.

## 5.1 Business Studies, Including Marketing and Strategy

The marketing field plays a vital role in this research and contributes the main part of this interdisciplinary research. The literature in marketing subjects pertinent for conducting this research include: social media monitoring, customer satisfaction, online reviews, influencer marketing, consumer engagement, value co-creation, and others. Consumer engagement will be investigated in this research in relation to its impact on the value co-creation and its capacity to generate different products and services, and lead to enhanced customer satisfaction. Also, the marketing field has connections with another business field, strategy, that will be involved in this research.

Business strategy is an essential area for completing this research through the focus on value proposition and the impact of social media monitoring on corporate, competitive, and operational strategies. Value creation and value proposition are important aspects of the strategy field that are considered for this research. There are some correlations and overlap between some concepts in the strategy and marketing fields.

#### 5.2 Information Systems, Including Machine Learning and Data Analysis

This area potentially plays a key role in many interdisciplinary research projects. This research will employ techniques and research methodologies from data analytics in order to analyse relevant social media data. This field assists in having an innovative and comprehensive approach to data analytics in order to investigate how marketers can respond appropriately to consumer demands and predict consumer purchasing decisions. The

research methodology will also apply text mining and sentiment analysis methods to process pertinent data from a selection of social media platforms, particularly Twitter.

#### 5.3 Consumer Psychology

This field is related to the consumer behaviour area and serves as one of the main areas of this research. The consumer behaviour area embraces subfields that are pertinent to consumer purchasing decisions. By applying data analytics techniques, including machine learning, this research can capture pertinent data relevant to predicting consumer purchasing decisions. The concepts from this field will be applied in proposed case studies in this research from the Canadian financial and healthcare sectors.

## 6. Steps in Conducting Interdisciplinary Research

There are different ways to conduct interdisciplinary research and still there are some debates surrounding which process is best. Szostak lists twelve stages to follow for performing effective interdisciplinary research. However, this incremental approach has been criticized by Mackey due to its lack of flexibility. Mackey discusses each of Szostak's steps and emphasizes how some steps are not applicable in the context of successful interdisciplinary research. Mackey underscores that interdisciplinary research should be more intuitive and flexible in its approach. Moreover, each interdisciplinary project should employ a unique research process that distinguishes it from traditional disciplines (Szostak, 2002; Mackey, 2002).

Regardless of criticism by other scholars, I found some of Szostak's steps applicable and helpful in this current research project. Because the research incorporates two main fields, business studies and information systems, I noticed that some of Szostak's steps already applied in my research within these areas. Nevertheless, I concur with Mackey regarding the importance of intuition and flexibility to create knowledge in interdisciplinary research.

Repko and Szostak propose another approach to the interdisciplinary research process that contains ten thorough steps (Repko & Szostak, 2021). The interdisciplinary research process for this research study will primarily draw on Repko and Szostak's approach with some amendments informed by Szostak's preceding recommended stages in order to address practical and real-world issues in business research.

## 6.1 Define the Main Problem or State the Interdisciplinary Research Questions

This interdisciplinary research project will investigate, through case studies, how selected businesses in the Canadian financial and healthcare sectors can glean, analyze, and utilize targeted information from various websites and social media platforms to improve customer satisfaction, and create and enhance their unique value propositions. In addition, this research examines the impact of value co-creation and how consumer engagement plays a vital role in developing products and services.

## 6.2 Justify Using an Interdisciplinary Approach

This interdisciplinary research study utilizes an integrative approach and employs different fields with particular methodologies to respond to the research questions and reach the main research objectives. The complexity and importance of the subject area requires connections between different areas and disciplines to conduct this research. The main research question hovers around three fields, namely business studies, information systems, and consumer psychology.

## 6.3 Identify Relevant Disciplines and Conduct a Literature Search

Three pertinent fields to the research area are already selected. A comprehensive literature review has been undertaken to better understand the related findings and how this integrative interdisciplinary research can produce knowledge through connecting theories and methodologies from multiple disciplines and areas.

## 6.4 Develop Adequacy in Relevant Disciplines, Analyze the Problem and Evaluate each Insight into it

Previous background in business studies and information system will facilitate and enable this research in the subject area. The crossover between marketing, information systems, and consumer psychology provides particular advantages in examining the central research questions and issues in this research project. Knowledge of each discipline's methodologies and theoretical frameworks will assist in determining how best to approach the research questions from different dimensions.

## 6.5 Identify Conflicts Between Insights and Their Sources

There is generally no conflict within the same discipline. However, possible conflicts exist between disciplinary perspectives, such as the fundamentals of assumptions, concepts, and theories that are expressed as a disciplinary

insight (Repko & Szostak, 2021).

For this research project, more complementary and overlapping perspectives are foreseen in applying the insights, theories and methodologies from different fields and disciplines. As an illustration, consumer engagement and value co-creation are both considered as main parts of this study and include intersections between marketing and strategy.

6.6 Create or Discover Common Ground and Integrate Insights

As previously mentioned, much common ground exists between the selected fields for this research study. This research aims to integrate various fields and their theoretical frameworks to achieve an insightful analysis of the applications of social media monitoring for businesses in the financial and healthcare sectors.

6.7 Produce an Interdisciplinary Understanding of the Problem and Test it

Based on the proposed research methodologies, the study will encompass a comprehensive understanding of the research questions based on a combination of the approaches and insights from the three chosen fields. The usage of different research methodologies, including Natural Language Processing (NLP) and statistical analyses to collect and assess the data gleaned from various social media platforms, will enable different levels of comparisons, vantage points, and insights that will demonstrate the potential benefits and applicability of social media monitoring for businesses in the selected sectors.

#### 6.8 Communicate the Results

Communicating the outcomes of the research in a way that is understandable to researchers from various disciplines could lead to a broader exposure and relevance for the research project. This will be achieved by publications and conference presentations in interdisciplinary contexts and across different relevant fields and disciplines within business studies and beyond.

#### 7. Conclusion

Interdisciplinary research concentrates on connecting two or more fields or disciplines to conduct practical research and create synergy by this integration. There are some similarities and discrepancies regarding these types of research and monodisciplinary research. To conduct a successful interdisciplinary project, it is indispensable that researchers have a solid background in literature, theories, and methodologies in one or more main disciplines. However, monodisciplinary research projects concentrate on employing one single field to perform research without involving other disciples and fields. The researcher should have a strong understanding of the literature and methodologies in that particular field to conduct research.

This interdisciplinary research project employs concepts, theories, and methodologies from different fields to analyse social media monitoring for proposed case studies. Hopefully, the findings of this research will be helpful to marketers and pertinent academic business and interdisciplinary fields.

#### References

- Albert, M., & Laberge, S. (2017). Confined to tokenistic status: social scientists in leadership roles in a national health research funding agency. *Social Science and Medicine*, *185*, 137-146.
- Bammer, G. (2017). Should we discipline interdisciplinarity? *Palgrave Communications*, 3(30), 1-4. https://doi.org/10.1057/s41599-017-0039-7
- Boix Mansilla, V. (2017). Interdisciplinary learning: A cognitive-epistemological foundation. In: The oxford handbook of interdisciplinarity. *Oxford University Press*. https://doi.org/10.1093/oxfordhb/9780198733522.013.22
- Chettiparamb, A. (2007). Interdisciplinarity: A literature review. Southampton (UK), The Higher Education Academy, Interdisciplinary Teaching and Learning Group. Retrieved from http://www.llas.ac.uk/resourcedownloads.aspx?resourceid=2892&filename=interdisciplinarity\_literature\_review.pdf
- Cooke, S. J., Nguyen, V. M., Anastakis, D., Scott, S. D., Turetsky, M. R., Amirfazli, A., ... & Norris, D. R. (2020). Diverse perspectives on interdisciplinarity from Members of the College of the Royal Society of Canada. *FACETS*, 5(1), 138-165.
- Dooling, S., Graybill, J. K., & Shandas, V., (2017). Doctoral student and early career academic perspectives on interdisciplinarity. In: The oxford handbook of interdisciplinarity. *Oxford University Press*. https://doi.org/10.1093/oxfordhb/9780198733522.013.46

- Frickel, S., Albert, M., Prainsack, B., Nowotny, H., McBee, D., Leahey, E., Downey, G. J., Feinstein, N. W., Kleinman, D. L., & Peterson, S. (2016). *Investigating Interdisciplinary Collaboration: Theory and Practice Across Disciplines*. Rutgers University Press. Retrieved from https://books.google.ca/books?id=ZAy0DQAAQBAJ
- Frodeman, R. (2017). The Future of Interdisciplinarity: An introduction to the 2nd edition. In: The oxford handbook of interdisciplinarity. *Oxford University Press*.
- Graff, H. J. (2015). *Undisciplining knowledge: Interdisciplinarity in the twenty-first century.* Baltimore, Johns Hopkins University Press.
- Holbrook, J. B. (2017). Peer review, interdisciplinarity, and serendipity. In The oxford handbook of interdisciplinarity. *Oxford University Press*. https://doi.org/10.1093/oxfordhb/9780198733522.013.39
- Huutoniemi, K., & Rafols, I. (2017). Interdisciplinarity in research evaluation. In The oxford handbook of interdisciplinarity. *Oxford University Press*. https://doi.org/10.1093/oxfordhb/9780198733522.013.40
- Huutoniemi, K., Klein, J. Th., Bruun, H., & Hukkinen, J. (2010). Analyzing interdisciplinarity: Typology and indicators. *Research policy*, 39(1), 79-88.
- Institute of Medicine. (2005). *Institute of Medicine, Facilitating Interdisciplinary Research*. Washington (DC), The National Academies Press. https://doi.org/10.17226/11153
- Jacobs, J. A. (2013). In defense of disciplines: Interdisciplinarity and the research university. Chicago, University of Chicago Press.
- Jacobs, J. A. (2017). Sidebar: The need for disciplines in the modern research university. In: The oxford handbook of interdisciplinarity. *Oxford University Press*. https://doi.org/10.1093/oxfordhb/9780198733522.013.4
- Klein, J. T. (2005). *Humanities, culture, and interdisciplinarity: The changing American academy.* Albany (NY), State University of New York Press.
- Klein, J. T. (2017). *Typologies of interdisciplinarity: The boundary work of definition. In: The oxford handbook of interdisciplinarity*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198733522.013.3
- Klein, J. T. (2018). Advancing' interdisciplinary studies: The boundary work of integrating, complexifying, and professionalizing. *Issues in Interdisciplinary Studies*, *36*(2), 45-67.
- Lotrecchiano, G. R., & Hess, A. (2019). The impact of Julie Thompson Klein's interdisciplinarity: An ethnographic journey. *Issues in Interdisciplinary Studies*, 37(2),169-192.
- Lyall, C. (2019). Being an interdisciplinary academic. How institutions shape university careers. In Palgrave Pivot (Ed.), *Ch. 2, What am I? The path to becoming an interdisciplinary academic* (p. 19-38).
- Mackey, J. L. (2002). Rules are not the way to do interdisciplinarity: A response to Szostak. *Issues in Integrative Studies*, 20, 123-129.
- Madsen, D. (2018). Epistemological or political? Unpacking ambiguities in the field of interdisciplinarity studies. *Minerva*, *56*, 453-477.
- Moirano, R., Sánchez, M. A., & Štěpánek, L. (2020). Creative interdisciplinary collaboration: A systematic literature review. *Thinking Skills and Creativity*, *35*, 100626. https://doi.org/10.1016/j.tsc.2019.100626
- Moran, J. (2010). Interdisciplinarity (2nd ed.). London, Routledge.
- Morin, E. (2008). On complexity. Cresskill (NJ), Hampton Press.
- Razmak, J., & Bélanger, C. H. (2016). Interdisciplinary approach: a lever to business innovation. *International Journal of Higher Education*, 5(2), 173-182. https://doi.org/10.5430/ijhe.v5n2p173
- Repko, A., & Szostak, R. (2021). Interdisciplinary research: Process and theory (4th ed.). Thousand Oaks, Sage.
- Szostak, R. (2002). How to do interdisciplinarity: Integrating the debate. *Issues in Integrative Studies*, 20, 103-122.
- Turner, S. (2017). *Knowledge formations: An analytic framework. In: The oxford handbook of interdisciplinarity.* Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198733522.013.2
- Weingart, P., & Stehr, N. (2000). Practising interdisciplinarity. University of Toronto Press.
- Wernli, D., & Darbellay, F. (2017). Interdisciplinarity and the 21st century research- Intensive university. League

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