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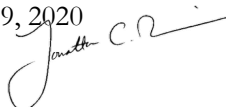
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MEMORANDUM

ATTENTION Senate
FROM Jon Driver, Vice-President, Academic and Provost *pro tem*, and Chair, SCUP
RE: Full Program Proposal for a Master of Science in Accounting with Cognitive Analytics (SCUP 20-51)

DATE November 19, 2020
PAGES 1 of 1



At its October 7th, 2020 meeting, SCUP reviewed and approved the Full Program Proposal for a Master of Science in Accounting with Cognitive Analytics within the Beedie School of Business.

Motion

That Senate approve and recommend to the Board of Governors the Full Program Proposal for a Master of Science in Accounting with Cognitive Analytics within the Beedie School of Business, effective Spring 2022 or later.


C: C. A. Gemino

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MEMORANDUM

ATTENTION Senate Committee on University Priorities (SCUP) DATE November 6, 2020
FROM Jeff Derksen,
Chair of Senate Graduate Studies
Committee (SGSC) 
RE: Full program proposal: Master of Science in Accounting with Cognitive Analytics

For approval:

At its meeting of November 3, 2020, SGSC approved the full program proposal for a Master of Science in Accounting with Cognitive Analytics from the Beedie School of Business and is recommending it to SCUP for approval, effective **Spring 2022 or later**.

Motion:

That SCUP approve and recommend to Senate the full program proposal for a Master of Science in Accounting with Cognitive Analytics within the Beedie School of Business, effective Spring 2022 or later.

For Information:

Included with the full program proposal and approved by SGSC subject to approval by Senate:

- 1) Program Change (calendar revision): Master of Science in Accounting with Cognitive Analytics



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Memo to SGSC

To: Senate Graduate Studies Committee
From: Andrew Gemino, Dean pro tem (previously Associate Dean, Graduate Programs)
Re: New Program Proposal
Date: October 6, 2020

The following curriculum revisions have been approved by the Beedie School of Business and are forwarded to the Senate Graduate Studies Committee for approval. This program should be effective for program continuation in late Spring 2022 or later.

Please include them on the next SGSC agenda.

- **NEW PROGRAM proposal: Master of Science in Accounting with Cognitive Analytics**
- **NEW PROGRAM proposal: ~~Graduate Certificate in Accounting with Digital Analytics~~**

Thank you for your attention herein. Should you have any questions or concerns, please do not hesitate to contact me.

Dr. Andrew Gemino
Professor, Management Information Systems
Dean pro tem (previously Associate Dean, Graduate Programs), Beedie School of Business



SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

**Master of Science
in Accounting with Cognitive Analytics**

Full Program Proposal

October 20, 2020
Beedie School of Business

SUMMARY

Previously submitted under Cohort Special Arrangement, the Master of Science in Accounting with Cognitive Analytics develops accounting professionals with data analytics capabilities to empower the next generation of accountants for embracing change, innovation, and critical thinking. As a collaboratively created program between industry and academia, this innovative program educates accounting and auditing professionals in the use of advanced data and analytics techniques.

Disruptive digital technologies are rapidly transforming how businesses work across almost every sector. Companies like Amazon, Uber and Airbnb have created new business models and upturned the dynamics of centuries-old industries. Competitors who cannot adapt to this new digital world order face the reality of being left behind. Specifically in the accounting sector, CPA Canada (2019) notes that “As accounting enters the digital age, an era of exponential change, the profession in Canada and globally is experiencing unique and unprecedented challenges and opportunities. The digitization of transactions is quickly transforming the landscape and nature of work, and accountants are recognizing the need to shift their focus from hindsight to foresight. This means embracing new technologies and methods that will enable them to harness the power of information in a data-driven world” (CPA Canada Foresight: The Way Forward, p. 7).

Across the globe, accounting standard setters are increasingly recognizing the crucial importance of data analytics in today’s accounting and audit practice. In July 2020, The American Institute of Certified Public Accountants (AICPA) issued a new standard on audit evidence (Statement on Auditing Standards (SAS) No. 142) to keep pace with the changes in business environment that requires accountants and auditors to apply automated tools and techniques such as audit data analytics, AI. Similarly, the International Federation of Accountants (IFAC) suggested that an accounting and finance background alone is insufficient to add value at the workplace. As per IFAC, technological advancements have made it a lot easier to benefit from data; hence many companies and accounting firms have made considerable investments in people, tools, and technologies to receive more benefit from data analytics¹.

Accounting firms, large and small, have recognized the importance of digital innovation in accounting practice. In a recent KPMG “Audit Point of View”², data and analytics (D&A) were noted as being on the cusp of practical application. With institutions and their accounting communities increasingly concerned with technology and data and analytics, the need for this type of programming is increasing; particularly within Canada, where embracing technological changes in accounting has been slow. In survey of 3,298 professional accountants in 2020³, 60% of the respondents believed Canadian companies have been slow to adapt the technological advancements in the industry. Despite the need, no other university in Canada has partnered with a major accounting firm to educate accountants and auditors on how recent tools and techniques could facilitate data-driven decision making.

1) Proposed credential to be awarded

Master of Science in Accounting with Cognitive Analytics

¹ <https://www.ifac.org/knowledge-gateway/preparing-future-ready-professionals/discussion/building-data-science-and-analytics-capabilities-finance-and-accounting> accessed September 6, 2020.

²Information summarized from the KPMG.ca “Audit Point of View”, from Jim Newton and Doug King, <https://assets.kpmg.com/content/dam/kpmg/ca/pdf/2017/08/technology-continues-to-transform-the-audit.pdf> accessed January 15, 2018.

³ <https://www.sage.com/en-ca/accountants/practice-of-now/>, accessed September 7, 2020

2) Location of program

Primarily online, with some face-to-face sessions (Vancouver: Segal campus, and offsite)

3) Academic unit(s) offering proposed program

The Beedie School of Business (SFU Beedie).

4) Anticipated program start date

Spring 2022 (or later)

5) Anticipated completion time

Five terms

6) Contact information

Andrew Gemino, Dean pro tem, Graduate Programs, Beedie School of Business,
gemino@sfu.ca, 778-782-3653.

PROGRAM DETAILS

7) Aims, goals and/or objectives of the proposed program

The aim of the program is to develop accounting professionals with analytic capabilities to create “next generation” accountants through innovative programming. By creating an educational program to support the advancement of analytical skills, Beedie will be preparing accounting business professionals to embrace the changes coming to the industry and provide the skills they need to play a vital role in helping client organizations create value. The “next generation” accountant will be:

- knowledgeable about how the profession has evolved and will evolve technologically
- accomplished in best practices in accounting, auditing, tax, and financial reporting
- empowered with data and able to use advanced data and analytic technologies
- prepared to collaborate and innovate with teams of business professionals

The purpose of the Master of Science in Accounting with Cognitive Analytics is to further develop accounting with data analytics capabilities. With analytical capabilities at the heart of the program, the practical and interactive courses empower the next generation of accountants and auditors for excellence, embracing change, innovation, and critical thinking. To accomplish this objective, four data and analytic curricular dimensions are integrated into the program: 1) advanced accounting/auditing techniques, 2) data and visualization skills, 3) statistical and analytical capabilities, and 4) advanced leadership/teaming skills.

Each of these four program learning objectives are developed through a corresponding series of courses. The students then participate in a capstone project experience. The capstone course serves as an integrative experience that challenges students to demonstrate their abilities in analytics within an accounting context. Moreover, as the program is targeted at accounting industry professionals, students are encouraged to select topics that are directly related to their organization, profession, or industry. While there is no mandatory work experience required in this program, the capstone applied project can bring considerations of the student’s work environment directly into the program. Techniques learned in earlier courses should be able to be applied directly in the capstone. In doing this, students will be demonstrating mastery in the curricular topics and achieving the goal of developing analytic capabilities.

8) How does the proposed program fit within the mandate of the institution?

The program aligns with SFU's mission as well as the Beedie School of Business (SFU Beedie) calling through a focus on innovation and collaborative capabilities. With attention on data and analytical skills, the program educates business professionals by developing these skills and grounding them in everyday business practice. SFU's support showcases its commitment to offer innovative education that features applied projects that engage the community.

SFU Mission: *"To be the leading engaged university, defined by its dynamic integration of innovative education, cutting edge research, and far-reaching community engagement. Equipping students with the knowledge, skills, and experiences that prepare them for life in an ever-changing and challenging world."*

SFU Beedie Calling: *"We develop innovative and socially responsible business leaders with a global perspective through education, inspired by research and grounded in practice."*

The MSc program also stands on the entrepreneurial education pillar of the SFU Innovates strategy, and challenges business professionals to innovate their practice with data and analytic capabilities. Finally, the program aligns with SFU's Big Data strategic initiative and the "Engaging Students" goal noted in the Presidents Goals and Objectives 2019-20, which suggest SFU helps "To equip students with the knowledge, skills, and experiences that prepare them for life in an ever-changing and challenging world."

9) How does the proposed program support the current academic and strategic plan of the institution?

The MSc program aligns with SFU's Academic Plan 2019-24 by addressing the challenges identified within the plan in the following ways:

- Student life, learning and success: program participants and graduates are provided with licenses for data and analytics software and tools such as Alteryx, PowerBI, and Tableau. Graduates are also invited to share experiences and drive innovation and implementation of data and analytics techniques with undergrads as well as within their professional communities and local networks.
- Academic Quality/Curriculum: Innovative program delivery including blended online and face-to-face programming and real-world organization-based projects to create a return on investment.
- Engagement: with the skills they have learned in the program, students add value to their organization and accounting practice through their final projects or by initiating change at a local level.
- Bridging Divides: the program integrates data and analytics across the accounting profession to address the need for this application to innovate and advance professionally.
- Faculty Renewal: the program provides opportunities for faculty to further develop graduate program/course design and instructional skills as well as increasing the tuition revenue to support the faculty complement.

10) Target Audience

The MSc program is geared towards students already working within an accounting profession or firms (e.g., the accounting services, tax, or auditing departments) primarily at the Junior Accountant or mid-level managers. However, the program is also a good fit for senior managers and leaders who want to upskill in data and analytics. Therefore, accountants will be the targeted recruitment group. Students who are admitted into the Graduate Certificate in Accounting with Digital

Analytics program will make up the main target audience to further their studies from the certificate to the master's level.

The program launched with a special cohort from KPMG, which included a Western Canada educational hub based out of Vancouver as well as an Eastern Canada educational hub based out of Toronto. Based on survey data, 93% of students in the initial Western Canada cohort said that they would recommend the program to a colleague.. There is significant potential for program expansion to serve more accounting firms and their valued clients moving forward. While targeted expansion will be for Vancouver-based firms, the program can also be offered to national accounting firms and bodies, such as CPA Canada, due to the online program content. The program can also easily shift into cover tax, risk and assessment, and advisory components.

11) Related programs in the institution or other British Columbia post-secondary institutions and outside of British Columbia

There are several big data and analytic academic programs in post-secondary institutions within BC. Most of these programs are focused on developing computing science and technical skills for data scientists under the Classification of Instructional Programs (CIP) code 30.16. As the MSc program is intended to teach data and analytic skills and innovation and change within a business context (CIP codes 30.71 and 52.03), so it will not duplicate programs with a more technical, statistical focus. Such technical programs include: SFU's Master of Science in Computer Science with a specialization in Big Data; UBC's Master of Data Science; and UBC's Master of Business Analytics.

There are a number of Canadian universities offering Master of Accounting degrees. These programs are not focused on data and analytics but rather serve to develop accounting professional in traditional areas of tax, audit and risk management. These programs normally require a previous undergraduate degree (BBA) in accounting. Examples include: York University, Schulich School of Business, Master of Accounting; University of Alberta School of Business, Master of Accounting; University of Saskatchewan, Edwards School of Business, Master of Professional Accounting Program.

There are also a growing number of business schools offering a Masters of Business Analytics in Canada. These programs are not focused in the area of accounting and instead are intended to serve all areas of business. These programs do not require significant experience in a particular area of business. Many of the programs are directed at undergraduate students who are looking for a one-year program that provides business analytic training. Examples include: McGill University, Desautels School of Business, Master of Management in Analytics; Queens University, Smith School of Business, Master of Management Analytics; HEC Montreal, Master of Data Science and Business Analytics.

From the research to date, there are no business schools in Canada offering a Master's program in accounting with data and analytics. There are a larger number of business schools in the US that are running Masters programs in accounting, data and analytics. These include: Arizona State University's W. P. Carey School of Business, Master of Accounting Data Analytics track; The University of Georgia's Terry College of Business, Master of Accountancy; The University of Mississippi's Patterson School of Accountancy, Master of Accountancy and Data Analytics; The University of Missouri's Robert J. Trulaske, Sr. College of Business, KPMG Master of Accounting with Data Analytics; The University of Southern California's Leventhal School of Accounting, Master of Accounting with Emphasis in Data and Analytics; Virginia Tech's Pamplin College of Business, KPMG Master of Accounting with Data and Analytics; and Villanova University, School of Business, Master of Accounting with Data Analytics.

12) What differentiates the proposed program from all other related programs in the province?

As previously stated, the demand for data and analytic skills is high, and the need for new programs is clear. The MSc program focuses on bringing basic data and analytic skills to business professionals in accounting. Business professionals in accounting see the value of adding data and analytical skills, but do not intend to become data scientists nor data management professionals which other programs aim to teach.

American programs feature skills in data management and information technology along with descriptive and predictive statistics. They seek to transition accounting professionals into data and analytic roles through course structures focusing on tax, auditing, risk management and other areas of accounting. The MSc program instead aims to develop accounting professionals with the analytic capabilities to drive innovation within their own organizations and with clients. The coursework features not only business courses, but topics from education and neuroscience in order to challenge the participants to change their mindset.

As Ali Dastmalchian, former Dean of Beedie School of Business stated:

“No one else is doing this in Canada. A number of universities in Canada have developed data analytics courses but they are more generic. This is designed to meet a specific need and will be delivered within the company as opposed to on-campus in a full-time program. KPMG wanted a much more interactive program for their people that could be taught on their premises and built on their challenges.”

Chartered Professional Accountants of British Columbia published a cover story in 2019 to acknowledge the contribution of the SFU program in advancing data analytics in accounting practice in the province and across Canada⁴. The program also features innovative program design elements such as a blended learning model to allow participants to maintain full-time employment and a no coursework allowance for audit season. Projects and teaming skills are incorporated into the program to provide an opportunity for participants to explore real world opportunities in their place of work, develop effective collaboration skills and drive innovation and change within accounting.

13) An overview of the level of support and recognition from other post-secondary institutions, and relevant regulatory or professional bodies

The Beedie School of Business consulted with professionals in Accounting (Audit, Tax, Strategy and Information Systems Consulting) including presidents and senior leaders of KPMG, Deloitte, PwC and Ernst & Young to assess the demands for analytic training for professionals with a Certified Professional Accountant (CPA) designation. Data and analytics were clearly changing the way that the public accounting profession is providing services. An opportunity was identified to provide specific education to advance the education of accounting with digital analytics.

The program was born out of the need for an innovative accounting program leading to a University designation in which the audit team at KPMG developed a request for proposals (RFP). The RFP detailed the challenge and invited business schools and other organizations across Canada to propose educational solutions. Through this competitive process, other Canadian post-secondary institutions participated and consulted with KPMG on the needs of their program with SFU Beedie winning the contract in the end and setting up a Cohort Under Special Arrangements program.

⁴ <https://www.bccpa.ca/news-events-publications/publications/cpabc-in-focus/2019-issues/july-august/cpabc-in-focus/cover-story/> accessed September 8, 2020.

Outside of Canada, consultations with other post-secondary schools, such as Villanova and Ohio State universities in the United States, suggest a high student demand and strong industry support for the program. Further evidence from the General Management Admissions Council (GMAC) highlighted that the percentage of candidates considering applying to Master of Data Analytics programs grew from 7% in 2009 to 16% as of May 2017. We expect this increase exemplifies recognition of the continued importance of data and analytics skills. Our program was launched in 2019 and the number of students in the Certificate program and MSc program was at full capacity.

14) What added value will the proposed program offer graduates in terms of employment opportunities?

Business professionals in the accounting area who are prepared with analytical skills, and advanced skills in business project leadership, will open pathways to the new roles and careers. Technological advancements have brought about radical changes to the accounting profession. Cryptocurrencies, artificial intelligence, blockchain, and other notable innovations have not only changed how accounting works but also an increase in demand for the services they can provide to their employers and clients⁵. The MSc program will help upskill this labourforce with graduates being able to innovate and lead their firms through the changes that technological advancements bring.

Graduates can add value to their firm and advance their careers through the skills they learn in the MSc program. Evidence of this is provided by student testimonials including the following:

“It is a great program with topics that are very relevant to the future of our profession and provides a great personal development opportunity. It’s a busy period during the program, but I would happily recommend it as it will be worth it at the end of it.”

“I really like what I have learned so far in the Certificate program and the skills I have learned are really applicable to different clients within the company.”

As a direct result of the initial KPMG program cohort, the firm has been able to successfully attract new talent, increase engagement, enhance employee retention, and support students as they grow their careers by participating in the MSc program. A new role of Digital Transformation Leaders has also been rolled out across the firm to provide graduates with the opportunity to advance their careers to the next level within the firm itself.

In addition, MSc students participated as facilitators for a national non-credit summer internship program that engaged 250 students across the country in an online program that leveraged knowledge and skills from the program. A non-credit program for SFU’s undergrad population is also being offered on various data and analytic tools that MSc students have helped to design.

15) Do potential employers require a degree for graduates to gain employment in the field?

Major accounting firms recognize that in order to retain their leadership position, they need to adapt to the current business environment. For a professional services firm, this means ensuring its workforce has the skills needed to leverage emerging digital technologies and deliver the best possible service to its clients. The challenge is not only to survive in the changing world, but to innovate and shape the profession’s future.

The national association of the Chartered Professional Accountants of Canada’s (CPA Canada) publication, *The Way Forward*, defines the challenge for the profession’s future:

⁵ <https://www.journalofaccountancy.com/newsletters/extra-credit/new-accounting-careers-emerging-technologies.html> accessed September 8, 2020.

As accounting enters the digital age, an era of exponential change, the profession in Canada and globally is experiencing unique and unprecedented challenges and opportunities. The digitization of transactions is quickly transforming the landscape and nature of work, and accountants are recognizing the need to shift their focus from hindsight to foresight. This means embracing new technologies and methods that will enable them to harness the power of information in a data-driven world.

KPMG Canada’s audit division, comprising over 2,600 audit professionals, is leading the way in partnering with academia to develop a specialized professional development program for its workforce. The skills gained through the program will allow for accounting professionals to innovate, work more effectively and provide a higher value to their clients. In addition to enhancing analytic skills, the opportunity to participate in this unique program is intended to attract and retain top talent in the workforce, which is highly competitive. This program is well positioned to engage with other CPA’s who are also looking to upskill in data and analytics.

16) Potential areas/sectors of employment for graduates and/or opportunities for further study in the field

As the MSc program is geared towards students with high levels of familiarity with accounting, promotion within company and/or industry is a key target area for graduates. Student will obtain career development through a focus on collaborative teaming; as analytic projects continue to grow in complexity, the need for agile, team-based approaches to analytic projects will grow significantly. This will lead to new role definitions in the accounting profession including analytic translators, workflow integrators, delivery managers and analytic business leaders.

MSc graduates will be well prepared to take on leadership positions within their organizations and gain valuable management experience as a result. Established opportunities for further studies with management experience requirements such as Executive Master of Business Administration programs are then available to these students. Furthermore, data analytics tools and techniques learned in the program will enable students to add value to their clients while they are employed at an accounting firm or when they leave to establish their own independent consulting business.

17) Does the proposal lead to a specific occupation?

The MSc learning and development program brings high-value to students while allowing them to earn a university credential while working full time. Students can retain a full-time position throughout the program and learn how to integrate digital analytics into their practice. Through the program’s project courses, students can add value to their firm and clients by integrating innovative change projects into their everyday work.

As upskilling and reskilling is an evident need in the accounting profession, the MSc program aims to build up the workforce to meet existing needs within firms. Moreso, firms can benefit from employing graduates from this program as they are able to innovate, lead in the latest analytics technologies, and process large amounts of data to serve and provide value to their firm and its clients. Additionally, offering the program can help firms attract top talent, retain employees, and increase recruitment.

For example, within the initial KPMG cohort, the program has created an informal internal network among classmates who meet periodically to share ideas, to drive innovation, and implement data and analytics techniques. This group is the “Lighthouse D&A Community”; a broader group across the firm of D&A “gurus”.

18) What labour market needs would the proposed program meet for the province?

There is a significant unmet need for further education in the areas of data analytics, specifically in the area of accounting, audit and tax.

In recent papers, the Graduate Management Admissions Council (GMAC), who owns and administers the Graduate Management Admission Test[®] (GMAT[®]) exam, has noted a significant demand for Masters of Analytics programs.⁶ In addition, a 2011 report from McKinsey Consulting⁷ has suggested that “by 2018, the United States alone could face a shortage of between 140,000 and 190,000 of works with analytical skills”. Also, the Certified Public Accountants (CPAs) has recognized the changes data and analytical skills are bringing to the profession⁸ providing evidence of demand for data analytics education.

The type of jobs that candidates are likely to access after graduation include analytic team leads, lead business analysts, and managers of business analytics teams. These appear under the NOC codes of 1111 – Financial auditor and accountants, 1112 – Financial and investment analysts, 2171 – Information systems analysts and consultants, and 2172 – Database analysts and data administrators.

Emerging roles in organizations include:

- Delivery managers: Deliver data/analytic insights and work with end users
- Analytics translators: Ensure analytics solve critical business problems
- Workflow integrators: Build interactive decision tools and implement changes
- Visualization analysts: Visualize data and validate reports and dashboards

19) Plans for admissions and transfer within the British Columbia post-secondary education system

The MSc program is open to accounting professionals who are qualified CPAs, have undergraduate degrees and have two or more years of experience. For the initial program with KPMG, applicants received support and approval by their regional Business Unit Leader before being put forward to the program’s Steering Committee. The Committee then reviewed the applications before the names were sent to SFU Beedie. SFU Beedie followed existing policies of the Beedie Graduate Programs to then invite applicants to formally apply to SFU to ensure they meet the university’s admission requirements.

Students within the British Columbia post-secondary education system will not be able to directly transfer into the program, due to the cohort model and required courses list. However, several non-credit program options are being built to leverage the knowledge and skills in the program and these will be made available for CPA’s and others who want to learn about data and analytics. Advanced credit is currently granted to students who complete, but are not awarded, the Graduate Certificate in Accounting with Digital Analytics. Additional pathways are being planned from the non-credit program options into the Masters.

⁶ For example, the following GMAC report released Jun 16, 2016 and accessed Jun 20, 2018: <https://www.gmac.com/market-intelligence-and-research/research-insights/curriculum-and-delivery/dataanalytics.asDx> The trend has continued as noted in a follow-up article published July 13, 2-17 and accessed June 20, 2018: <https://vmw.gmac.com/market-intelligence-and-research/research-insights/curriculum-anddelivery/demand-for-analytics-goes-beyond-master-of-data-analytics-programs.aspx>

⁷ Report accessed June 20, 2018. <https://www.mckinsev.com/business-finctions/digital-mckinsev/ourinsights/big-data-the-next-frontier-for-innovation>

⁸ See for instance the following article accessed June 20, 2018: <https://wvm.cpaionmal.com/2017/06/26/big-data-business-analytics-implications-audit-profession>

20) Enrolment Plan

We expect to run a Certificate program in parallel with the MSc so that students who take the Certificate will move immediately into the MSc after completing the certificate coursework.

In its first cohort of the Certificate program in December 2019, enrolment consisted of 75 students and 68% or 51 students opted to continue onto the Master's program in 2020. This was higher than anticipated enrolment with a further 24% or 18 students of the Certificate cohort expressing interest in taking the Master's program in 2021.

Our modest expectations of the future program enrolments include that approximately 50% of students who take the Certificate will move immediately into the MSc after completing the certificate coursework and that Certificate cohorts would consist of approximately 80-100 students. This would suggest a total of 40-50 MSc students annually. Advancement from the Graduate Certificate in Accounting with Digital Analytics is expected to be a major factor for MSc admission numbers.

21) Delivery methods

A blended education delivery approach that includes face-to-face sessions integrated with an online learning management system (LMS) form the basis of the program. This blended model helps to engage students and increase learning retention as they complete the asynchronous portion on the LMS system, Canvas, on their own schedule and are further supported by the face-to-face sessions. Immersive, collaborative, team-based approaches to learning will be utilized throughout the program delivery.

The collaborative model established by the creation of this program creates an opportunity for SFU Beedie to explore new markets and delivery models for business education. In an environment of challenging graduate business education enrolments across many markets, partnerships with organizations may offer schools a creative solution to helping solve pressing issues while accessing highly qualified candidates. SFU Beedie's 20-year experience in online education coupled with offering corporate credit programs to leading organizations, including its 20-years of involvement collaborating with Teck Resources and Alcan, enable the school to be well positioned for this corporation-based offering.

22) Eligibility for scholarships, awards, and financial aid

MSc students will not be eligible for internal scholarships, awards, or financial aid. However, students may be eligible for external and donor funded scholarships, awards, and financial aid, so long as they meet the eligibility criteria.

23) Does the proposed program offer an alternative exit, if appropriate?

As not all students will proceed to the MSc, students can exit the program at 18 credits and receive a Graduate Certificate in Accounting with Digital Analytics credential.

The credential names differ to reflect the different levels of knowledge associated with the graduate certificate and MSc degree. The graduate certificate program is intended to solidify the foundation for digital analytics, and the MSc builds upon this foundation with applications of predictive analytics and machine learning techniques that are signature to cognitive analytics approaches.

24) Resources required and/or available to implement the program

Existing resources will be utilized. Canvas will be the online course delivery tool. Face-to-face sessions are minimal, meaning limited physical resources are needed. Face-to-face sessions will be held at the Segal Graduate School or offsite utilizing corporate space with an industry partner

organization, with no requirement for additional lab space, library space, or other on-campus facilities. Students will not utilize in-house Beedie resources such as the Career Management Centre or student engagement opportunities. Administrative resources will come from existing Beedie Graduate Program staff at the Segal Graduate School. Existing faculty will be utilized, with no new hires planned.

25) Program evaluation and academic/administrative oversight

Program and teaching evaluations are gathered on an annual basis. The information gathered from evaluations of the first cohort has already been incorporated into the program. This includes providing graduates of the Certificate program with licenses for D&A software and tools such as PowerBI and Tableau to continue to innovate and develop procedures.

Program oversight is provided by Dr. Jamal Nazari who is the appointed Academic Director and member of the Graduate Program Committee (GPC). The GPC is an operational committee made up of the Associate Dean, Academic Directors and senior staff that establishes and manages graduate program guidelines and procedures. The Graduate Curriculum Committee (GCC) is another oversight committee that acts as a decision-making body concerning graduate curriculum.

As the Beedie School is double accredited by EQUIS and AACSB, all graduate programs in the are subject to evaluation during peer review cycles to ensure quality standards. The Graduate Assurance of Learning Committee (GALC) at SFU Beedie ensures that all graduate programs specify and adopt learning goals, objectives and rubrics that directly support accreditation and program quality.

26) Faculty member's teaching/supervision

SFU Beedie has exceptional, world class faculty with skills and expertise in data and analytics with a history of innovative programming. During the cohort special arrangement, our faculty have successfully taught in this graduate business program using an executive education-model of instructional delivery.

In both the MSc and the Certificate programs, participants must complete a work-related project to earn their credential. During the initial cohort project presentations, Kristen Carscallen, Canadian Managing Partner for Audit at KPMG in Canada, described it as an experience that was created as they “wanted our people to learn with real-life problems and data so it was really applicable, and they could take what they had learned and apply it immediately to their jobs”⁹. This feature provides students with an important applied experience while reducing individual faculty supervision requirements and the impact on faculty resources that is necessary in thesis-based programs.

As the Beedie School of Business collaborates with a wide range of clients to provide innovative strategic learning solutions, we approach each industry as a unique organizational learning opportunity and work closely with key stakeholders to ensure that learning resonates with individual and organizational goals. Our 50 years in graduate business education combined with two decades of experience in on-line education provide the foundation for programming that allows students to effectively learn when and where it makes sense to them. Additional faculty will be needed as the program grows. It is also expected that program revenues will fund additional faculty needs.

⁹ See the following article accessed June 11, 2020: <https://www.theglobeandmail.com/business/careers/business-education/article-auditors-brush-up-on-their-digital-skills-to-keep-pace-with-clients/>

27) Is the program focus primarily on meeting social benefit(s) or economic benefit(s)?

The program will provide both social and economic benefits by aligning with upskilling needs of the accounting labour force. CPA Canada’s Audit Data Analytics Committee (ADAC) cautioned in their Audit Data Analytics Alert that “Auditors need to respond to ever-increasing and diverse uses of information technology by audited entities. More use by auditors of technology-enabled data analytics is an important aspect of that response”¹⁰. Included in this report was a call to action encouraging auditors to explore the field of audit data analytics; a gap that the MSc and Certificate programs aim to fill.

Regarding economic benefits, the MSc program is enabling accounting firms to realize the full economic potential of their employees by upskilling them in data and analytics. The technological adoption the program fosters enables these benefits to be realized. Examples of the return on investment (ROI) from program graduates include the winning project presented from the first cohort of the Certificate estimating an ROI of \$330,000 if implemented and the third-placed project idea estimating savings in excess of \$500,000. Impact is extending beyond the program too as one graduate received recognition from a client, one of Canada’s largest banks, for the impact made on 8 million in individual loans, which represents \$380 billion. Combined with increased recruitment and employee retention, this program provides a national benefit for the profession of CPA’s and the potential benefit for their clients as well. The potential benefits can span across the accounting industry to other accounting firms as well.

28) How would the proposed program advance social goods or government priorities?

The program supports the Emerging Economy Task Force for B.C. through strategic priority one: embracing technology and innovation, strategic priority three: building a highly skilled and adaptable workforce, and strategic priority four: ensuring an effective enabling ecosystem.

The MSc program supports the embracing of technology and innovation by equipping students with the data and analytics software and tools to innovate in their positions. Through the program, graduates learn how to develop strategic business solutions that can improve overall business productivity and revenues. The program also helps to build a highly skilled and adaptable workforce by developing the future workforce and providing them with the skills to be successful in the emerging economy in the field of accounting and data analytics. Lastly, to ensure an effective enabling ecosystem, the MSc allow for the flow of ideas from graduates to the business through the use of the latest technology and cognitive analytics sills.

29) What social, cultural, regional, community, environmental, institutional and/or intellectual benefit would the proposed program provide?

The collaborative model established between SFU Beedie School of Business and KPMG in the creation of the Certificate and MSc programs provides a different outlook on how education programs can be customized for the workforce. The program model offers a way for industry to build programs that upgrade employees’ skills that can be applied to their day-to-day jobs while partnerships with organizations offer schools creative solutions to access highly qualified candidates.

¹⁰ Information summarized from the CPABC in Focus Cover Story “Training for a Data-Driven Future”, from Michelle McRae, <https://www.bccpa.ca/news-events-publications/publications/cpabc-in-focus/2019-issues/july-august/cpabc-in-focus/cover-story/> accessed June 11, 2020.

In a Deloitte Insights (2019) article, “Learning in the Flow of Life”, it is mentioned that the changing landscape of the world and technology means that the nature of work itself is changing, making the connection between learning and work more important than ever. It is said that over 54% of all employees “will require significant reskilling and upskilling in just three years”¹¹. “In a world where technology is changing jobs and people are living longer lives with more diverse careers, organizations not only have an opportunity, but a responsibility, to reinvent learning so that it integrates into the flow of work—and life”⁷.

Furthermore, the program aligns with the values underlying SFU Beedie’s vision which suggests that business education has the potential to spark new ideas, fuel social innovations, and advance society as a whole. Through teaching and learning powered by world-class research, meaningful community engagement, and a global outlook, SFU Beedie has the potential to take business education beyond the traditional academic environment and empower people to reimagine the role of management in tackling a company’s and society’s most significant challenges. This integration between work and learning and the innovative way in which this program is designed fits with both the future of work, the changing landscape of education, and it aligns with SFU Beedie’s calling.

30) How would the proposed program support economic growth and/or government economic priorities?

The Emerging Economy Task Force (March 2020) describes trends influencing B.C.’s economy; some of which include technology and innovation and social and demographic shifts¹². This program addresses these economic shifts by fully utilizing workforce potential and developing accountants and auditors with the ingenuity to analyze large amounts of data across a variety of platforms.

Similarly, the economy of the future is being changed by technology and innovation and this program aims to change the workforce alongside it. As Kristen Carscallen, Canadian Managing Partner for Audit at KPMG in Canada mentioned in the CPABC (2019) article “Training for a Data-Driven Future”: “Cognitive analytics is about leveraging all types of data to unlock hidden insights and augment human ability to identify patterns and anomalies and predict outcomes ... we believe cognitive analytics will enhance quality and transform how we understand financial and other data in the context of our audit. We’re focused on preparing the next generation of accountants and auditors to develop these essential capabilities”¹³.

This shift towards training students for the economy of the future will allow for opportunities in increased productivity, sustainable business solutions, and increased retention and recruitment. In this way, this program aims to move alongside shifting trends influencing B.C.’s economy.

31) What direct and/or indirect economic, industrial or labour market benefits would the program offer the student, community, region or province?

The program provides direct economic, industrial and labour market benefits in better meeting the upskilling needs of the labour force with targeted post-secondary education. As noted earlier, the need for upskilling and reskilling in the workplace has increased and technology and innovation are changing the landscape of the future economy.

¹¹ Deloitte Insights (2019). Learning in the Flow of Life. <https://www2.deloitte.com/us/en/insights/focus/human-capital-trends/2019/reskilling-upskilling-the-future-of-learning-and-development.html#> Accessed June 11, 2020.

¹² Emerging Economy Task Force (March 2020). Final Report https://www2.gov.bc.ca/assets/gov/employment-business-and-economic-development/economic-development/emerging-economy-task-force/eetf-final_report-20200511-final.pdf Accessed August 4, 2020

¹³ CPABC (2019). In Focus Cover Story “Training for a Data-Driven Future”, from Michelle McRae, <https://www.bccpa.ca/news-events-publications/publications/cpabc-in-focus/2019-issues/july-august/cpabc-in-focus/cover-story/> accessed June 11, 2020.

According to RBC, more than 25% of Canadian jobs will be heavily disrupted by technology in the coming decade and 50% of occupations will undergo a significant skills overhaul¹⁴. In a recent McKinsey report a survey saw that at least 66% of respondents saw that a top priority will be to address the skills gap related to digitization within their workforce and the driver behind this is accelerating¹⁵. For KPMG this means “we need to get our people the capability to understand our clients as they digitize and evolution-ize their own businesses... when you look at what we do – we go in and audit a company – we need to understand the company’s systems and their control environment; and it is getting more and more complex”¹⁶.

The benefit of this program is to reduce the skills gap identified in the industry to contribute to economic growth. The challenge is not only to survive in the changing world, but to innovate and shape the profession’s future.

¹⁴ Information from RBC Upskill, <https://www.rbcupskill.ca/> accessed August 4, 2020.

¹⁵ McKinsey Global Institute (January 22, 2018). “Retraining and Reskilling Workers in the Age of Automation”, from Pablo Illanes, Susan Lund, Mona Mourshed, Scott Rutherford, and Magnus Tyreman <https://www.mckinsey.com/featured-insights/future-of-work/retraining-and-reskilling-workers-in-the-age-of-automation#> accessed August 4, 2020.

¹⁶ See the following article accessed June 11, 2020: <https://www.theglobeandmail.com/business/careers/business-education/article-auditors-brush-up-on-their-digital-skills-to-keep-pace-with-clients/>



SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

APPENDICES

Master of Science in Accounting with Cognitive Analytics
Full Program Proposal



SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

APPENDIX 1

Calendar Entry

Calendar Entry Change for MSc in Accounting with Cognitive Analytics

<p>Summary of change: Description change (from auditing to accounting), program requirements description (units were incorrect), and course title changes.</p>
<p>Rationale for change: To better reflect the updated content of the program</p>
<p>Effective term and year: Spring 2022</p>
<p>Will this change impact current students? If yes, what is the plan for current students? No</p>

FROM	TO
<p>The Master of Science in Accounting with Cognitive Analytics develops auditing with data analytics capabilities. With a curriculum integrating advanced auditing techniques, data and visualization skills, statistical and analytical capabilities, and agile teaming skills, accounting industry professionals will learn to contribute and lead analytical teams in organizational projects. Students are challenged in a team environment to demonstrate significant benefits that could accrue from real-world analytic projects in accounting, enabling graduates to excel as participants and business leaders in complex data and analytic projects.</p> <p>[...]</p> <p>Program Requirements</p> <p>The Master of Science in Accounting with Cognitive Analytics consists of course work (27 units) and an applied project (6 units) for a minimum of 33 units. Courses from other SFU graduate business programs, or a special topic course, may be substituted at the discretion of the academic director.</p> <p>Students must complete all of</p>	<p>The Master of Science in Accounting with Cognitive Analytics develops accounting with data analytics capabilities. With a curriculum integrating advanced accounting techniques, data and visualization skills, statistical and analytical capabilities, and agile teaming skills, accounting industry professionals will learn to contribute and lead analytical teams in organizational projects. Students are challenged in a team environment to demonstrate significant benefits that could accrue from real-world analytic projects in accounting, enabling graduates to excel as participants and business leaders in complex data and analytic projects.</p> <p>[...]</p> <p>Program Requirements</p> <p>The Master of Science in Accounting with Cognitive Analytics consists of course work and an applied project for a minimum of 33 units. Courses from other SFU graduate business programs, or a special topic course, may be substituted at the discretion of the academic director.</p> <p>Students must complete all of</p>

<p>BUS 830 – Foundations of Business Systems and Data (3)</p> <p>BUS 831 – Analyzing and Visualizing Accounting Data (3)</p> <p>BUS 832 – Data Analytics for Auditing Practice (3)</p> <p>BUS 838 – Collaboration, Teaming, and Agile Methods (3)</p> <p>BUS 840 - Data Mining and Business Intelligence (3)</p> <p>BUS 841 - Predictive Analytics for Accounting (3)</p> <p>BUS 842 - Advanced Analytical Auditing (3)</p> <p>BUS 844 – Fraudulent Financial Reporting (3)</p> <p>[...]</p>	<p>BUS 830 – Data Management and Business Solutions (3)</p> <p>BUS 831 - Analyzing and Visualizing Business Data (3)</p> <p>BUS 832 – Accounting Data Analytics (3)</p> <p>BUS 838 – Creativity, Collaboration and Leading Change (3)</p> <p>BUS 840 - Data Mining and Business Intelligence (3)</p> <p>BUS 841 - Predictive Analytics for Business (3)</p> <p>BUS 842 - Advanced Accounting Data Analytics (3)</p> <p>BUS 844 – Forensic Accounting and Data Analytics (3)</p> <p>[...]</p>
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SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

APPENDIX 2

Letters of Support

October 30, 2020

To Whom it May Concern:

Re: SFU Beedie Master of Science in Accounting with Cognitive Analytics

The Chartered Professional Accountants of British Columbia (CPABC) is the only training, governing, and regulatory body for professional accountants, with over 37,000 CPA members and 5,000 CPA students. Our primary mission is to protect the public by enforcing the highest professional and ethical standards, which includes ensuring only qualified individuals enter into membership. To become a CPA, students must complete pre-requisite courses, a rigorous post-graduate program and final exam, and complete relevant practical experience requirements.

CPABC works closely with post-secondary institutions like Simon Fraser University (SFU), as many future CPA students complete their pre-requisite requirements there and at other institutions across the province. These institutions play an integral role in the CPA education pathway, ensuring students are ready and able to enter into the CPA program after completing their undergraduate education.

For some time, the profession has recognized that we live in a swiftly evolving digital environment led by the overwhelming pervasiveness of technological change. Businesses are moving to real-time data when making decisions, there is an exponential increase in data to draw from, and the scope and nature of work for professional accountants is changing. This is why the profession recently updated the CPA Practical Experience Competency May to ensure data analytics and information systems were incorporated throughout the learning experience.

The continuation of the Master of Science in Accounting with Cognitive Analytics at the Beedie School of Business at SFU will create a foundation for students focused on digital skills, and new tools and technologies that are essential now and into the future, and are now a core part of the CPA program.

We support the Master of Science program, and believe it will set students up for success within the CPA program as they continue to advance their skills in data and analytics.

Sincerely,

Lorena Christensen, CPA CMA
Director, Student Recruitment and Employer Relations
lchristensen@bccpa.ca



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333 Bay Street
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Fax 416-777-8818
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October 5, 2020

To Whom it May Concern.

RE: SFU Beedie's Proposed Master of Science in Accounting with Cognitive Analytics

I am writing to express my support for the proposed **Master of Science in Accounting with Cognitive Analytics at Simon Fraser University's Beedie School of Business.**

In April of 2019, KPMG partnered with SFU Beedie to launch this Master's program, an industry-leading program that provides our audit professionals with the opportunity to build their skills for the future. Through specialized courses on the latest advancements in technology and data and analytics, this program prepares professionals for an era of machine learning, artificial intelligence, and other digital advances.

The impetus to deliver this program was born from an understanding that serving today's global companies requires more than a deep knowledge of accounting and auditing. Harnessing the power of data requires industry professionals that are savvy about data and analytics, and have the critical thinking skills needed to translate data patterns and anomalies into higher quality audits, all while providing relevant and meaningful business insights. This integration of human, digital, and performance skills is crucial to the success of our profession and this program is enabling our people to upskill.

We selected SFU Beedie to deliver this program because of the school's ability to deliver forward-looking education programs. Given the success of our partnership with Beedie, I am confident to support the proposed Master of Science in



Accounting with Cognitive Analytics degree. I am confident that Beedie is committed to providing the skills training that professionals need in order to deliver positive economic, social and environmental impact in a complex global world.

Sincerely,

A handwritten signature in black ink that reads 'Kristen Carscallen'. The signature is written in a cursive style with a long horizontal flourish at the end.

Kristen Carscallen



SIMON FRASER UNIVERSITY
ENGAGING THE WORLD

APPENDIX 3

Program Steering Committee

Details of Program Steering Committee

For the purpose of developing this program, the Steering Committee consisted of the following groups of people (and their titles at the time):

Proposal:

Ali Dastmalchian, Dean, Beedie School of Business

Andrew Gemino, Associate Dean, Graduate Programs, Beedie School of Business

Valerie Zuccolo, Associate Director, Custom & Corporate Business Programs, Beedie School of Business

Maria Szymczak, Associate Director, Graduate Programs, Beedie School of Business

Program Development:

Ali Dastmalchian, Dean, Beedie School of Business

Andrew Gemino, Associate Dean, Graduate Programs, Beedie School of Business

Jennifer Beale, Project Manager, Program Redesign, Graduate Programs, Beedie School of Business

Jamal Nazari, Associate Professor, Accounting, Beedie School of Business

Nick Zap, Instructional Designer (Contractor), Beedie School of Business

Maria Szymczak, Associate Director, Graduate Programs, Beedie School of Business

Currently, the internal Steering Committee for the program consists of:

Admin Team:

Jamal Nazari, Associate Professor, Accounting, Beedie School of Business Jennifer Beale, Executive Director, Executive Education, Beedie School of Business

Chantelle Lorieau, Coordinator, Executive Education, Beedie School of Business

Andrew Gemino, Dean pro tem, Beedie School of Business



SIMON FRASER UNIVERSITY
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APPENDIX 4

Abbreviated Faculty CVs

Curriculum Vitae

Andrew C. Gemino,

Dean pro tem, Beedie School of Business
Professor, Management Information Systems
Beedie School of Business, Simon Fraser University
E-mail: gemino@sfu.ca

Educational Background

- 1999 Ph.D. Management Information Systems, University of British Columbia, Canada
- 1993 M.B.A. Management Science/ Management Information Systems, Simon Fraser University
- 1989 M.A. Economics, Simon Fraser University
- 1986 B.A. Economics, Simon Fraser University

Employment History

- Sept. 2020 – current Dean pro tem, Beedie School of Business, SFU, Vancouver, British Columbia, Canada
- Sept. 2011 - current Professor, Management Information Systems, Beedie School of Business, SFU, Vancouver, British Columbia, Canada
- March 2006 – Aug. 2011 Associate Professor, Management Information Systems, Simon Fraser University, Vancouver, British Columbia, Canada
- July 1999 – March 2006 Assistant Professor, Management Information Systems, Simon Fraser University, Vancouver, British Columbia, Canada

Refereed Journal Articles

(<https://scholar.google.ca/citations?user=lyEYrQwAAAAJ&hl=en&oi=ao>)

1. Serrador, P., Gemino, A., & Reich, B. H. (2018). "Creating a Climate for Project Success." *Journal of Modern Project Management*, 6(1). doi:10.19255/jmpm338
2. Gemino, A.C., Reich, B.H., Sauer, C. (2015). "Plans versus People: Comparing Knowledge Management Approaches in IT-Enabled Business Projects", *International Journal of Project Management*, 33,2, 299–310.
3. Reich, B.H., Gemino, A.C., Sauer, C. (2014). "How Knowledge Management Impacts Performance in Projects: An Empirical Study". *International Journal of Project Management*, 32:4, 590-602.
4. Reich, B. H., Liu, L., Sauer, C., Bannerman, P., Cicmil, S., Terry Cooke-Davies, Andrew Gemino, Brian Hobbs, Harvey Maylor, Carla Messikomer, Beverly Pasian, Monica Semeniuk, Janice Thomas. (2013). "Developing better theory about project organizations," *International Journal of Project Management*, 31 (7), 938–942.
5. Reich, B.H., Gemino, A., and Sauer, C. (2012) "Knowledge Management and Project-Based Knowledge in IT Projects: A Model and Preliminary Empirical Results", *International Journal of Project Management* 30, 6, 663-674.
6. Tingling, P., Gemino, A. and Parker, D. (2011), "Changing Channels: The Impact of Web 2.0 on Supply Chain Management" *Production and Inventory Management Journal*, Vol. 47, No.2, 31-44.
7. Gemino, A., Sauer, C. and Reich, B.H. (2010), "Using Classification Trees to Predict Project Performance in Information Technology Projects" *Journal of Decision Systems*, 19, 2, 201-223.
8. Parker, D. and Gemino, A. (2009). "Use Case Diagrams in Support of Use Case Modeling: Deriving Understanding from the Picture", *Journal of Database Management*, Vol. 20, 1-24.

Curriculum Vitae

9. Brydon, M. and Gemino, A. (2008), "Classification Trees and Decision-Analytic Feedforward Control: A Case Study from The Video Game Industry", *Data Mining and Knowledge Discovery*, Vol. 17, 317-342.
10. Brydon, M. and Gemino, A. (2008). "You've Data Mined. Now What?" *Communications of the Association for Information Systems*: Vol. 22, Article 33. <http://aisel.aisnet.org/cais/vol22/iss1/33>
11. Reich, B. Gemino, A., Sauer, C. (2008). "Modeling the Knowledge Perspective of IT Projects", *Project Management Journal*, Vol. 39, S4-S14.
12. Masri, K., Parker, D. and Gemino, A. (2008). "Using Iconic Graphics in Entity-Relationship Diagrams: The Impact on Understanding" *Journal of Database Management*, 2008, Vol. 19, Iss. 3, 22-41.
13. Gemino, A., Horner-Reich, B. H. and Sauer, C. (2008). "A Temporal Model for IT Project Management", *Journal of MIS*, Winter 2007–8, Vol. 24, No. 3, 9–44
14. Sauer, C., Gemino, A. and Reich, B.H. (2007). "Managing Projects for Success: The Impact of Size and Volatility on IT Project Performance", *Communications of the ACM*, 60:11, Nov. 2007, 79-84.
15. Parent, M., Vandebeek, C. and Gemino, A. (2006), "Building Citizen Trust Through e-Government", *Government Information Quarterly*, Vol. 22, No.4, 2006, 720-736.
16. Gemino, A., MacKay, N., and Reich, B.H. (2006). "Executive Decisions about Website Adoption in Small and Medium-Sized Enterprises", *Journal of IT Management Volume XVII*, number 1, 2006, 34-49, <http://jitm.ubalt.edu/XVII-1/article3.pdf>
17. Gemino, A., Parker, D., Olnick Kutzschan, A. (2005). "Investigating Coherence and Multimedia Effects of a Technology-Mediated Collaborative Environment", *Journal of MIS*, Winter 2005, Vol. 22, No. 3, 99-124.
18. Gemino, A. and Wand, Y. (2005), "Simplicity versus Clarity: An Empirical Comparison of Mandatory and Optional Properties in Conceptual Modeling", *Data and Knowledge Engineering*, 55, 2005, 301-326.
19. Gemino, A and Wand, Y. (2004). "A Framework for Empirical Evaluation of Conceptual Modeling Techniques", *Requirements Engineering Journal*, Vol. 9, No. 4, 2004, 248-260.
20. Gemino, A. (2004). "Empirical Comparisons of Animation and Narration in Requirements Validation", *Requirements Engineering Journal*, Vol. 9, No. 3, 2004, 152-168.
21. MacKay, N., Parent, M. and Gemino, A. (2004). "A Model of Electronic Commerce Adoption by Small Voluntary Organizations", *European Journal of Information Systems*, Vol. 13, 147-158, June 2004.
22. Gemino, A. and Wand, Y. (2003). "Evaluating Modeling Based on Models of Learning", *Communications of the ACM*, Vol. 46, No. 10, October 2003, 79-84.
23. Parker, D., and Gemino A. (2001). "Inside Online Learning: Comparing Conceptual and Technique Learning Performance in Place-based and ALN Formats", *Journal of Asynchronous Learning Networks*, Volume 5, Issue 2, September 2001, 64-74.

Textbooks

Kroenke, D., Gemino, A. and Tingling, P. "Experiencing MIS", 1st edition, Pearson/Prentice Hall, Upper Saddle River, New Jersey, 2008. (ISBN: 0-13-143372-7). *(**Pearson Education Canada, Book of the Year, 2008**)

Teaching Awards

- SFU Teaching Excellence Award, 2011, Simon Fraser University.
- TD/Canada Trust Teaching Award (1993; 2001), Beedie School of Business, SFU.
- MBA Teaching Excellence Award (1997) from Faculty of Commerce at UBC.
- PhD Outstanding Teaching Award (1996) from Faculty of Commerce at UBC.
- Teaching honor roll (awarded 15 times from 1999-2019) indicates top 10% in Beedie School.

ROBERT E. KRIDER

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Simon Fraser University
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EDUCATION

Ph.D. in Marketing, 1993, University of British Columbia
M.Sc. in Geophysics, 1985, University of British Columbia
B.Sc. in Physics, 1975, University of British Columbia

ACADEMIC POSITIONS

2007-present Professor, SFU
2016 (January-December) Dewey Fellow, Institute for the Study of Teaching and Learning
in the Disciplines, Simon Fraser University
2012 (May) Visiting Professor, Pforzheim University, Germany
2011 (March-April) Visiting Professor, City University of Hong Kong
2010 (March-April) Visiting Professor, City University of Hong Kong
2002-2007 Associate Professor, SFU
2003-2004 Visiting Scholar, University of British Columbia
1999-2002 Assistant Professor, Simon Fraser University
1993-1999 Assistant Professor, Hong Kong University of Science and Technology

SELECTED PUBLICATIONS

Jason Yiu Chung Ho, Robert E Krider, Jennifer Chang (2017). "Mere Newness: Decline of Movie Preference over Time." *Canadian Journal of Administrative Sciences*.

Mora, José-Domingo, Robert E. Krider and Jason Ho (2015). "Who Decides What to Watch on TV at Home? Insights from People-Meter Data in Mexico: Measuring Co-Viewing and Preference Influences to Help Broadcasters Promote Programming." *Journal of Advertising Research*,

Krider, Robert E. and Dan Putler(2013). "Which Birds of a Feather Flock Together? Clustering and Avoidance Patterns of Similar Retail Outlets." *Geographical Analysis*.

Putler, Daniel S. and Robert E. Krider (2012). *Customer and Business Analytics. Applied Data Mining for Business Decision Making Using R*. Boca Raton FL: CRC Press, Taylor & Francis Group

Krider, Robert E., Ariana Arguello, Colin Campbell, and Jose-Domingo Mora (2010) "Trait and Image Interaction in Ecotourism Preference", *Annals of Tourism Research*,

Krider, Robert E. (2006), "Comment: Research Opportunities at the Movies," *Marketing Science*. (25th anniversary edition of *Marketing Science*.)

Krider, Robert E., Yong Liu, Tieshan Li, and C.B. Weinberg, (2005) "The Lead-Lag Puzzle of Distribution and Demand: A Graphical Method Applied to the Movies," *Marketing Science*.

TEACHING EXPERIENCE

- Consumer Behaviour (undergraduate)
- Introduction to Marketing (undergraduate)
- Marketing Strategy (undergraduate)
- Market Research (undergraduate)
- Marketing Strategy Business Game (Executive Programs and MBA, and undergraduate)
- Analytic Marketing (MBA)
- Models and Mining in marketing (MBA and undergraduate)
- Database Marketing (MSc)
- Marketing Management (Executive MBA)
- Marketing Management (MBA)
- Customer Analytics (undergraduate)
- Analytics Certificate Project Capstone (undergraduate)
- Cognitive Analytics (MSc)

PROFESSIONAL MEMBERSHIPS and COMMITTEES

- American Marketing Association
- Institute for Operations Research and Management Sciences
- Member, INFORMS Analytics Education Committee
 - Industry subcommittee 2013 – 2016
 - Information subcommittee 2013- 2016

PROFESSIONAL EXPERIENCE

- 1978-1982 Petroleum Geophysicist: Hudson's Bay Oil and Gas Co. Ltd., Calgary, Alberta, Canada; Arabian American Oil Co., London, England and Dhahran, Saudi Arabia
- 1985-1986 Scientific Imaging Software: Inverse Theory and Applications, Vancouver, B.C., Canada

Jamal Nazari, PhD, CPA, CMA, CGA

Associate Professor of Accounting and Academic Director of KPMG Graduate Programs

Beedie School of Business

Simon Fraser University

8888 University Drive

Burnaby, B.C. V5A 1S6

Email: jnazari@sfu.ca

Phone #: 778-782-4604

EDUCATION

PhD, Accounting, University of Calgary, Calgary, Canada, 2010

Dissertation Title: "An investigation of the relationship between components of intellectual capital and firm's financial performance"

MA, Accounting, University of Tehran, Tehran, Iran, 2001

BA, Accounting, University of Mashhad, Mashhad, Iran, 1998

PROFESSIONAL DESIGNATIONS

CPA, Chartered Professional Accountant, Canada, 2014

CMA, Certified Management Accountant, Alberta, Canada, 2011

CGA, Certified General Accountant, Alberta, Canada, 2011

WORK HISTORY

Academic Experience

- Academic Director, KPMG Graduate, Simon Fraser University, Vancouver, 2018- Present
- Associate Professor of Accounting, Simon Fraser University, Vancouver, 2017- Present
- Assistant Professor of Accounting, Simon Fraser University, Vancouver, 2013- 2017
- Associate Professor of Accounting, Mount Royal University, Calgary, 2010-2013
- Assistant Professor of Accounting, Mount Royal University, Calgary, 2007-2010
- Part time Professor of Graduate Programs, Sharif University, Iran, 2007-2009
- Sessional Instructor, University of Calgary, Alberta, 2006-2012

Business Experience

- CPA Facilitator, CPA Canada and CPA Western School of Business, 2013-2016
- CMA Instructor, CMA Alberta, Calgary, 2012-2013
- Chief Financial Officer, Respect General Trading Co., Dubai, UAE, 1999-2003
- Chief Financial and Administrative Officer, Bahman Investment Co, Iran, 2002
- Senior Finance Expert, Bahman Group, Mazda subsidiary in Tehran, 1999-2002
- Auditor, National Audit Organization, Tehran, Iran, 1998-1999

TEACHING

University Teaching Experience

Variety of courses from introductory to advanced financial and managerial accounting courses at the undergraduate, graduate and PhD levels at the University of Calgary, Mount Royal University, Sharif University, and Simon Fraser University

Professional Teaching Experience

Facilitator and instructor for a number of modules and programs for CPA Canada, CPA Western School of Business, and CMA programs.

Recognition

Have continuously received one of the highest evaluations in the faculty and have been on teaching honor rolls (top 10%) continuously

RESEARCH SUMMARY

Citation Impact as of December 2019

Google Scholar Profile:

https://scholar.google.ca/scholar?hl=en&as_sdt=0%2C5&q=Jamal+Nazari&btnG=

- Citations: **987**; h-index: **15**; i10-index: **16**

Overall Research Output as of December 2019

- Peer Reviewed Book Chapter Publications: **4**
- Peer Reviewed Journal Article Publications: **18**
- Applied Journals and Magazines and Online Publications: **5**
- Peer Reviewed Conference Proceedings/Presentations: **52**
- Internal and Practitioner Presentations and Workshops: **16**
- Internal Grants: 8 ($\Sigma = \$ 98,300$)
- External Grants: 6 ($\Sigma = \$ 146,400$)

Recognition

Publications appear in a variety of top and quality business and accounting journals. Several of the papers have received best paper awards at recognized accounting and business conferences.

SERVICE

- Several university and school level committees in Calgary and Vancouver
- Peer reviewed numerous accounting and business journal papers as well as conferences
- Supervised a number of graduate and undergraduate students
- Served on several professional organization committees including CPA Canada committees and national governmental grant agencies
- Active membership in Canadian Academic Accounting Association, American Accounting Association, and European Accounting Association.

JIE MEIN GOH
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ACADEMIC APPOINTMENTS

Beedie School of Business, Simon Fraser University
Associate Professor, 2018 - Present
Assistant Professor, 2015 – 2018

IE Business School (Instituto de Empresa), IE University
Assistant Professor, 2010 – 2014 (contract renewed)

EDUCATION

Robert H. Smith School of Business, University of Maryland, College Park, USA
Ph.D., Business Administration, Concentration: Information Systems, 2011

School of Computing, National University of Singapore, Singapore
MSc Computer Science and Information Systems, 2004
BSc (First Class Honors), Computer and Information Science, 2001

PROFESSIONAL EDUCATION

Harvard Business School
Case Writing Workshop, 2014
Program for Case Method and Participant Centered Learning, 2012, 2013

RESEARCH INTERESTS

IT Value, Online Communities, Healthcare IT

RESEARCH FUNDING

1. SFU/SSHRC Institutional Grants Program, VPR Small Research Grant, “Developing a Measure of Software Product Interoperability”, Proposal 23704, with Nilesh Saraf.
2. SFU Teaching and Learning Development Grant, \$6000, “Updating and Redesigning BUS237 - Introduction to Business Technology Management”, with Aishwarya Shukla.
3. SFU Teaching and Learning Development Grant, \$6000, “Understanding Challenges Faced by Undergraduate Non-computing Students to Facilitate Computational Thinking”.
4. Funcas Research Award, €20,000, “Reporting Strategy of European Banks”, 2014
5. Fundacion Ramon Areces Research Award, €36,000, “The Social Value of Online Health Communities”, 2012

PUBLICATIONS (Google Scholar Citation Counts: 1691)

1. Goh, J. M., and Arenas, A. E. 2020. “IT Value Creation in Public Sector: How IT-Enabled Capabilities Mitigate Tradeoffs in Public Organisations,” *European Journal of Information Systems* (29:1), Taylor & Francis, pp. 25–43.
2. Arenas, A.E., Goh, J.M., and Matthews, B., “Identifying the business model dimensions of data sharing: A value-based approach.” *Journal of the Association for Information Science and Technology*, 70(10), 1047-1059. (Journal ABDC Rank: A*)
3. Arenas, A.E., Goh, J.M., & Uruena, A. (2019) “How does IT affect design centricity approaches: Evidence from Spain’s smart tourism ecosystem.” *International Journal of Information Management*, 45, pp. 149-162. (Journal ABDC Rank: A)
4. Li, Y., Liu, H., Lim, E.T.K., Goh, J.M., Yang, F., and Lee, M.K.O., (2018) “Customer’s reaction to cross-channel integration in omnichannel retailing: The mediating roles of retailer uncertainty, identity attractiveness, and switching costs.” *Decision Support Systems*, 109, pp. 50-60. (Journal ABDC Rank: A*)
5. Goh, J.M., Gao, G., & Agarwal, R. (2016). “The Creation of Social Value: Can An Online Health Community Reduce Rural-Urban Health Disparities?” *MIS Quarterly*, 40(1), pp. 247-263.^{1 2 3}
6. Mithas, S., Tafti, A.R, Bardhan, I., & Goh, J.M. (2012). “The Impact of IT Investments on Profits” *MIT Sloan Management Review*, Spring, 15.⁴
7. Mithas, S., Tafti, A. R., Bardhan, I., & Goh, J. M. (2012). Information Technology and Firm Profitability: Mechanisms and Empirical Evidence. *MIS Quarterly*, 36(1), 205-224. Winner of the **European Research Paper Of The Year Award**, CIONET, 2013⁵ Featured in Computerworld⁶
8. Goh, J. M., Gao, G., & Agarwal, R. (2011). Evolving Work Routines: Adaptive Routinization of Information Technology in Healthcare. *Information Systems Research*, 22(3), 565 -585. Finalist for **Diana Forsythe Award**, American Medical Informatics Association (AMIA) 2012.
9. Azad, B., Faraj, S., Goh, J. M., & Feghali, T. (2010). What Shapes Global Diffusion of e-Government. *Journal of Global Information Management*, 18, 85-104.
10. Lucas Jr., H. C., & Goh, J. M. (2009). Disruptive technology: How Kodak missed the digital photography revolution. *The Journal of Strategic Information Systems*, 18, 46-55. Reprinted in *IEEE Engineering Management Review* (2013), 41(4), 81-93.⁷

GRADUATE STUDENTS SUPERVISION

1. Manan Podar (IE Business School, PhD)
2. Bertrand Legros (IE Business School, DBA, Bank of International Settlements)

¹ <http://www.beckersasc.com/asc-turnarounds-ideas-to-improve-performance/can-online-communities-reduce-health-disparities-between-rural-urban-patients-5-insights.html>

² <https://www.dotmed.com/news/story/34452>

³ http://magazine.hankyung.com/apps/news?popup=1&nkey=2016101001089000111&mode=print_view

⁴ <http://www.mckinsey.com/industries/high-tech/our-insights/big-data-getting-a-better-read-on-performance>

⁵ <http://www.cionet.com/erpotv/>

⁶ <http://www.computerworld.com/article/2502559/data-center/it-investments-deliver-profits--study-finds.html>

⁷ http://ethw.org/The_Kodak_Camera

Michael Favere-Marchesi, Ph.D., CPA

CURRICULUM VITAE



Associate Professor of Accounting
Beedie School of Business
Simon Fraser University
WMX 3365
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<http://beedie.sfu.ca/profiles/MichaelFavere-Marchesi>

Educational Background

1995	Ph.D. (Accounting), University of Southern California, USA
1980	Master of Accountancy, Brigham Young University, USA
1979	B.Sc. (Accounting), Brigham Young University, USA
1977	Diplôme d'Études Universitaires Générales mention Droit (Law), Université des Sciences Sociales de Toulouse, France

Recent Employment History

Jul 2000 - Current	Associate Professor of Accounting, Faculty of Business Administration, Simon Fraser University, Canada
Aug 1998 - May 2000	Associate Professor of Accounting, Fisher Graduate School of International Business, Monterey Institute of International Studies, Monterey, California, USA
Sep 1995 - Jun 1998	Associate Professor of Accounting and Director, Global MBA Program, Graduate School of Business Administration, National Institute of Development Administration, Bangkok, Thailand

Professional Certificates

1983	Certified Public Accountant (California), License No. 36784
1988	Certified Internal Auditor, License No. 15898
2012	Chartered Global Management Accountant

Michael Favere-Marchesi, Ph.D., CPA

CURRICULUM VITAE

Recent Research and Publications

Research interests include audit judgment and decision-making, audit review, forensic accounting and analytics, fraudulent financial reporting and audit analytics, audit quality, and international audit environment.

Favere-Marchesi, M. and C. Emby. 2018. "The Alumni Effect & Professional Skepticism: An Experimental Investigation". *Accounting Horizons*, vol. 32, No. 1, pp. 53-63.

Favere-Marchesi, M. 2013. "Effects of Categorization and Decomposition on Fraud-Risk Assessments," funded by Social Sciences and Humanities Research Council Small Research Grant. *Auditing: A Journal of Practice and Theory*, vol. 32, no. 4, pp. 201-219.

Teaching

Teaching interests include managerial accounting, audit and assurance services, and international financial reporting. In the past few years, I have taught six different accounting courses with a primary emphasis in managerial accounting and auditing, across all levels of the undergraduate program and in the MBA program. I was awarded several times the Faculty's Teaching Honor Roll. I have successfully integrated technology into the learning environment. In all my courses, I use Canvas allowing students access to discussion groups which have greatly enhance their learning capacity as well as providing them with ancillary materials and web links to enrich the in-class learning environment. In close cooperation with KPMG, I have developed a new course in Forensic Accounting with Data Analytics, which was first offered in spring 2019. I have developed a forensic accounting course for our KPMG Master of Accounting of Data Analytics, which was delivered online in July 2020, and introduced students to a variety of data analytics and artificial intelligence tools. I provide students with most current materials through a weekly briefing of accounting and auditing developments. I continuously strive to link my current research and/or relevant research to the topics I teach, allowing students to understand better the important symbiotic relationship in accounting and auditing between research and practice. I was the course coordinator for BUS 254 - Managerial Accounting (2000-17) and I am the course coordinator for Bus 426 – Auditing (2016-Present) and BUS 428 – Forensic Accounting and Data Analytics (2019 – Present). I am currently piloting a new COIL initiative between Beedie and ITAM in Mexico.

Recent Service

Simon Fraser University

- Sep 2020 – Aug 2022 Member, **Faculty College**, Simon Fraser University
- Sep 2018 – Aug 2020 Member, **International Programs Committee**, Beedie School of Business
- Jun 2018 – May 2021 Member, **University Senate**, Simon Fraser University
- Jun 2018 – May 2022 Member, **Senate Committee on International Activities**, Simon Fraser University

Professional Service

- Jun 2020 – Jun 2021 Past-President, **Canadian Academic Accounting Association**
- Jun 2019 – Jun 2020 President, **Canadian Academic Accounting Association**
- Jun 2018 – Jun 2019 President-Elect, **Canadian Academic Accounting Association**

Dr. Michael R. Johnson

Abbreviated Curriculum Vitae

Employment History at Academic Institutions

- September 2010 – Present Senior Lecturer, Beedie School of Business, Simon Fraser University
- September 2014 – 2017 Academic Director, Management of Technology (MOT) MBA Program, Beedie School of Business, Simon Fraser University
- September 1998 – 2010 Faculty, School of Business, Operations Management, BCIT

Other Employment History

- June 2003 – 2004 Insight Engineering, Principal Consultant
Vancouver, BC.
- July 1998 – 2002 Co-founder and President, Renewit Product Stewardship Solutions, Inc.
Toronto, Ontario.
- September 1998 – 2001 Research Engineer, Vehicle Recycling Partnership (VRP),
Highland Park, Michigan
- June 1997 – 1998 Principal, Yellow Creek Consulting,
Toronto, Ontario
- February 1996 to Aug/96 Production Supervisor, Pirelli Cables Inc.
Surrey, BC
- November 1994 to Aug/95 Industrial Engineer, Seanix Technology
Richmond, B.C.

Educational Background

Ph.D. (2002) University of Windsor, Windsor, Canada.
Dept. of Industrial and Manufacturing Systems Engineering

M.A.Sc. (1994) University of Windsor, Windsor, Canada.
Dept. of Industrial and Manufacturing Systems Engineering

B.Eng. (1992) Ryerson Polytechnic University, Toronto, Canada.
Dept. of Industrial Engineering (Management Science Option).

Teaching History

Courses Taught at SFU:

- BUEC 232: Data and Decisions I (Business Statistics)
BUS 336: Data and Decisions II (Introduction to Management Science)
BUS 474: Supply Chain Management
BUS 553: Business Analytics
BUS 758: Business Operations Design
BUS 831: Analyzing and Visualizing Data

Courses Taught at BCIT:

Business Statistics (OPMT 1130, 1208 and 1211)
Quantitative Methods for Business (OPMT 3301 and 3308)
Management Science (BUSA 3500, BUSA 3515, OPMT 2197)
Math Models for Business (OPMT 5751 and OPMT 4408)
Business Mathematics (OPMT 1110 and 1510)
Introduction to Operations Management (OPMT 1100)
Topics in Operations Management – Environmental Management (OPMT 4442)
Information Technology (OPMT 3344) / E-Commerce I (OPMT 4344)
Project Management (OPMT 1170)
Problem Solving and Process Improvement (OPMT 2201)
Synchronous Systems (OPMT 4465)
Total Quality Management (OPMT 1182)
Industrial Engineering (OPMT 1184)
Reliability Principles (OPMT 4446)
Advisor - Applied Industry Project (OPMT 4449)
Advisor – Process Improvement Project (OPMT 3341)

Selected Works

McCarthy, I.P., Collard, M., Johnson, M.R. (2017). Adaptive organizational resilience: an evolutionary perspective. Current Opinion in Environmental Sustainability, 28, pp.33-40.

Treen, E.R., Atanasova, C., Pitt, L.F., Johnson, M.R. (2016). Evidence from a large sample on the effects of group size and decision-making time on performance in a marketing simulation game. Journal of Marketing Education, 38(2), pp.130-137.

Johnson, M.R. and McCarthy, I. (2014). Product recovery decisions within the context of Extended Producer Responsibility. Journal of Engineering and Technology Management – Special Issue in Sustainable Business Development, 34, pp.9–28

Spicer, A.J. and Johnson, M.R. (2004). Third-party demanufacturing as a solution for extended producer responsibility. The Journal of Cleaner Production, 12(1), pp.37-45.

Johnson, M.R. and Wang, M.H. (2002). Evaluating Policies and Automotive Recovery Options According to the European Union's Directive on End-of-life Vehicles (ELVs). The Journal of Automotive Engineering, 216(9), pp. 723-739.

Huang, H.T., Wang, M.H., and Johnson, M. (1999). Disassembly Sequence Generation Using A Neural Network Approach. Journal of Manufacturing Systems, 19(2), pp.73-82.

Johnson, M.R. and Wang, M.H. (1998). Economical Evaluation of Disassembly Operations for Recycling, Remanufacturing and ReUse. International Journal of Production Research, 36(12), pp.3227-3252.

Notable Awards

TD Canada Trust Distinguished Teaching Award - Beedie School of Business, 2011.
Beedie School of Business – Teaching Honour Roll (9 years)
Best Paper Award (1998) – International Journal of Production Research (IJPR).
BCIT's Excellence in Teaching Award – The School of Business, British Columbia Institute of Technology (1999).

Curriculum Vitae: Nilesh Saraf

Associate Professor, Beedie School of Business
Vancouver, British Columbia, Canada

Contact: WMC 3317, 8888 University Dr., Burnaby, BC V5A 1S6

Phone: 778 782 6725 Email: nsaraf@sfu.ca

EDUCATION

- 2003 Ph.D. in Business Administration (MIS), Marshall School of Business, University of Southern California, Los Angeles, USA
- 1996 Masters in Business Administration (MIS), Indian Institute of Management, Lucknow, India
- 1993 Bachelors in Electronics Engineering (Minor: Communications), Maharaja Sayajirao University, Baroda, India

EMPLOYMENT HISTORY AT ACADEMIC INSTITUTIONS

- 2011 - Associate Professor (with tenure), Beedie School of Business, Simon Fraser University, Burnaby, BC, Canada
- 2017-18 Visiting Faculty, Erasmus School of Economics, Erasmus University, Rotterdam, Netherlands
- 2004-11 Assistant Professor, Beedie School of Business, Simon Fraser University, Burnaby, BC, Canada
- 2003-04 Instructor/Assistant Professor, Florida Atlantic University, Boca Raton, Florida, USA

RESEARCH GRANTS, AWARDS AND RECOGNITION

- Small SSHRC Grant (2019) (Co-Applicant, \$10,000) "Developing a Measure of Software Product Interoperability" with J.M. Goh (2019-2021)
- SSHRC Insight Grant (2017 – 2020). *Principal Investigator*. \$88,000 "On inter-operability standards in the information and communications technology sectors".
- Small SSHRC Grant (2017) (PI, \$10,000) "On Inter-operability Standards in the ICT Sectors (2017-2019)
- CIHR Implementation Science Grant (2017), Collaborator, \$2,000,000. "Understanding contextual factors to effectively and equitably scale up GetCheckedOnline to diverse populations and geographic settings" (2017-2022)
- Runner-up ACM-SIGMIS PhD Dissertation Competition (2003)
- Merit scholarship from Gujarat State Government, India (Grade 12th state-wide rank: 36)

RESEARCH ACTIVITY

Google scholar citation count: 3712 (March 3, 2020)

Selected Publications (Published/ Forthcoming)

- Liang, H.G., N. Saraf, Q. Hu, and Y.J. Xue (2007). "Assimilation of enterprise systems: The effect of institutional pressures and the mediating role of top management," *MIS Quarterly*, 31:1, 59-87.
- Saraf, N., C.S. Langdon, and S. Gosain (2007). "IS application capabilities and relational value in interfirm partnerships," *Information Systems Research*, 18:3, 320-339.
- Saraf, N., Liang, H., Xue, Y., and Hu, Q. (2013). "How does organizational absorptive capacity matter during

the assimilation of enterprise information systems?," Information Systems Journal (23:3), pp 245-267.

Ruckman, R., Saraf, N., Sambamurthy, V. (2015). "Market positioning by IT Service Vendors through imitation". Information Systems Research (26:1), pp 100-126.

Park, Y., Pavlou, P., Saraf, N. "Configurations of Innovation Ambidexterity using Information Technology". Forthcoming, Information Systems Research

Research in progress

Saraf, N., Dasgupta, S., and Blettner, D. "How do managerial perceptions of performance feedback affect innovation?" under revision for 3rd round at Strategic Organization

Kumar, S., Saraf, N., Cyr, Dianne. "A Privacy Based Model of Online Social Network Usage: Evidence of Cognitive Biases Driving Privacy Behaviors", Under review

Matta, M., Vijayraghavan, R., Saraf, N., Cavusoglu, H. Effects of Internal Control Weakness Disclosures on Information Technology Investments: An Institutional and Agency Perspective

Saraf, N., Bharati, P., Ravichandran, T. "Enterprise and Public Social Media Usage in Organizations: Building or Dissipating Social Capital?"

TEACHING ACTIVITY

Undergraduate: Systems Analysis and Design, Business Data Management, Managing IT for Business Value

Graduate: Management of Information Technology, Foundations of Business Systems

Ph.D. Seminar on Information Systems, Social Network Analysis

ACADEMIC SERVICE (EXTERNAL)

Associate Editor (2017-), MIS Quarterly

Associate Editor (2014-2016), Information Systems Research

Reviewer for Information Systems Research, Management Science, MIS Quarterly,

National Science Foundation of China, National Science Foundation (USA)

ACADEMIC SERVICE (INTERNAL)

Area Coordinator, Appointments committee, Academic Director, Business Technology

Management Certificate (2016-), Tenure and Promotion Committee (2009-2010), Ph.D.

Committee (2008-09, 2010-11, 2014-2016), Nominations Committee (2008-09), Undergraduate

Curriculum Committee (2005-06, 2013-14) MIS Area Coordinator (2011-12), IT Steering

Committee (2015-16), Faculty Recruitment Committee (2016) SFU Faculty College (2014-

2016)

PROFESSIONAL AFFILIATIONS

INFORMS, Academy of Management, Association of Information Systems, IEEE



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APPENDIX 5

Program Budget

Budget for the Proposed Program (financial and personnel)

Resource Requirements

Since this program was previously submitted under Cohort Special Arrangement, the Master of Science in Accounting with Cognitive Analytics program will not require additional resources.

Proposed tuition and other program fees

Tuition Fees

Tuition is to be charged on a per credit basis, using the existing Master of Science in Finance (MSc Fin) tuition of \$693.83 per unit plus additional student fees of approximately \$200 per term (without a U-Pass, as the proposed program is primarily delivered online) as per the academic calendar.

The MSc Fin tuition was chosen as a per credit tuition comparator because of the similar credential and market differential required as compared to the more established Master of Business (MBA) degree.

Total Program Fees

The total program fees for students will be \$22,896.39.

Projected Program Surplus

Based on these tuition fees, the program is expected to generate a small surplus given the costs of delivering the program.