University of Montana

ScholarWorks at University of Montana

Fall 9-1-2021

BMKT 460.02: Marketing of Hi-Tech Products and Innovations

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BMKT 460 / Sections 1 & 2
Marketing of High-Technology Products and Innovations – 3 credits
Fall 2021

Professor Jakki Mohr   **Phone: 406-544-5837 (cell)**
Classroom: GBB 122   **email:** jakki.mohr@business.umt.edu
Time: Section 2: 11:00-12:20   **Zoom "Office" Hours**: Wedn 2:30-4:00
       Section 1: 12:30-1:50 T/R   https://umontana.zoom.us/my/jakkimohr
In person office hours: 2:30-3:00 Tuesday/Thursday   and by appointment

Communication tool: Microsoft Teams Why? To learn a new technology! Why not? Not only is this an opportunity for you to learn this tool that many companies use; it's also a fundamental part of understanding high-tech customers, who experience the fear, uncertainty, and doubt when they are asked to buy/use a new technology. Download the app on both your desktop/laptop AND your phone. Then, it pretty much works just like instant messaging--voila! Please send me a quick message on Teams when you are on--and/or just send a gif/image to let me know you are there

Communicating with me: I will be available on Teams pretty much any time I'm on my computer (i.e., most of the time). You can also text me: 406-544-5837. Email is less preferred (drowning…).

Missing class: I am experimenting with various ways to do an audio recording of class for those of you who will miss class or would like to re-listen to lectures after the fact. I will keep you posted.

Required Videos, Powerpoints, Readings: On Moodle

Required Pre-requisite: Principles of Marketing. See me if you either lack this pre-requisite or you are worried you forgot what you learned.

Course Content:
0. Code Red for Humanity: ➔ Climate Innovations & Deep Tech.

1. **Artificial Intelligence** … Block Chain … Augmented Reality … Genomics & Precision Medicine … Self-driving cars …. Internet of Things … 5G
➔ How do companies develop business plans and marketing strategies for emerging technologies?

2. Google, Apple, Amazon, Facebook, Microsoft … .
➔ How did these companies grow into such behemoths, and what lessons can we learn from their successes? And, now that they are so big, what are the challenges and risks (e.g., antitrust implications)?

3. Hulu, Netflix, Uber, Salesforce … These companies developed new business models for earning revenue. ➔ What are the new business models and what does this mean for strategic marketing planning for high-tech companies?

4. ➔ Montana-based Tech Start-ups: OnX Maps; Submittable; Zoot Enterprises; etc.

5. Disruption, Dynamic environments, Innovation, Digital transformation. ➔ YEP!
B2B? ➔ Check.   B2C. ➔ Check.   Start-ups. ➔ YEP!

Learning Outcomes: After taking this course you will be able to:
1. Analyze and dissect dynamics of high-technology industries and companies to articulate critical success factors
2. Develop and evaluate marketing strategies for high-technology companies
3. Identify and gather the necessary information to develop solid marketing strategies for technology companies
4. Convey an understanding of critical emerging technologies, including artificial intelligence, clean tech and climate innovations; blockchain, virtual reality, etc.

Educational Philosophy: In my role as the facilitator of student learning, I will help you articulate questions, guide you to resources to address them, and hone your ability to organize/structure and critically evaluate material. It is the student's job to be intellectually curious, to act with integrity and reliability, and to work collaboratively with classmates.

"The Best Way to Learn is to Teach Someone Else"

UM-Approved Covid Instructions (current as of 8/23/2021)

➢ Mask use is required within the classroom.

➢ (Therefore), drinking liquids and eating food is discouraged within the classroom.

➢ Where social distancing (maintaining consistent 6 feet between individuals) is not possible, specific seating arrangements will be used to support contact tracing efforts.

➢ Class attendance and seating will be recorded to support contact tracing efforts.

➢ If you feel sick and/or are exhibiting COVID-19 symptoms, please don't come to class and contact the Curry Health Center at (406) 243-4330.

➢ If you are required to isolate or quarantine, I will do my best to ensure your continued academic progress.

➢ UM recommends students get the COVID-19 vaccine. Please direct your questions or concerns about vaccines to Curry Health Center.

Course Requirements: (Grade Tracker on last page)

3 Exams	60%
Speaker Research; Facts & Insights x 2; Speaker Reflection	20%
Technology Passion Project	20%

Total:	100%

Exams 60%: The exams will test your factual knowledge of class material as well as your ability to accurately apply and use the concepts covered in class. *** * No late exams given * ***

Class Engagement (20% total): The goal of these assignments in general is to keep you on track and keeping up, being PRESENT & PREPARED on a daily basis. The general rule of thumb for an upper division elective is 3 hours outside of class per hour inside of class.
All submissions via Moodle must follow this naming convention:
Firstname.lastname.assignmentname.11 (for 11:00)
Firstname.lastname.assignmentname.1230 (for 12:30)

Always always always put your name and your section number on the top of your Word Doc!

a. Speaker Research (5%): We will be hosting three speakers over the course of the semester:
Bridge Partners (including Taylor Brugh & team September 14th
Laura Orvidas, CEO of OnX Maps, September 30th
Connor Folley (Jungle Scout), November 9 (tentative)

Your assignment is to conduct a 360-degree due diligence on ONE of these speakers (the individual, his/her company, competitors, customers, partners, business/marketing strategy, careers). The purpose of this assignment is (a) to learn about strategy issues in high-tech companies; (b) to help you develop the professional skills necessary for interviewing and job search skills, as well as to give you confidence in coffee/Zoom meet-ups.
  ➤ Last names S-Z assigned to Bridge Partners, due no later than 10:45 a.m. Sept. 9 (Moodle) or at the start of class
  ➤ Last names I-R assigned to OnX Maps, due no later than 10:45 a.m. Sept. 30 (Moodle) or at the start of class
  ➤ Last names A-H assigned to Jungle Scout, due no later than 10:45 a.m. Nov. 4 (Moodle) or at the start of class

Flexibility: You may message me on Microsoft Teams by September 7 if you'd rather do a different speaker than assigned.

More details coming shortly.

b. Speaker Reflection (5%). Your assignment is to write a thoughtful "facts & insights" speaker reflection regarding key take-aways from the presentation. What were the major points & perspectives the speaker shared? How did it tie to high-technology marketing? What personal reflections did you have? (were you inspired? confused? etc.)
Ideas: perhaps in the form of a thank you letter; perhaps in the form of a press release; you could even think about the assignment as a series of tweets or social media posts, or even a LinkedIn post!). I'm trying to give you lots of latitude for developing your voice/story-telling.

  ➤ Last names A-H assigned to Bridge Partners, due no later than 10:45 a.m. Sept. 21 (Moodle) or at the start of class
  ➤ Last names S-Z assigned to OnX Maps, due no later than 10:45 a.m. Sept. 30 (Moodle) or at the start of class
  ➤ Last names I-R assigned to Jungle Scout, due no later than 10:45 a.m. Nov. 16 (Moodle) or at the start of class

Flexibility: You may message me on Microsoft Teams by September 7 if you'd rather do a different speaker than assigned.

c. Technology Readings: Facts & Insights: (5% x 2)
Given my philosophy, that [one of] *the best ways to learn is to teach someone else*, students will prepare for two class days in which they will share their knowledge with their classmates, based on assigned readings. For the first round of this assignment, the sharing will be fairly informal (via class discussion). For the second round, students will work in small groups to prepare a structured learning guide for their peers and will give a more formal powerpoint presentation on the material. This is a new approach to teaching/learning for me, so we will see how it goes! Feedback/ideas welcome. More details coming.

Last Name:	3 Facts & Key Insights #1	Facts & Insights #2 (AI Book)
A-H	Sept. 7	Oct. 21
I-R	Sept. 9	Oct. 19
S-Z	Sept. 16	Nov. 4

Technology Project (20%): See separate handout. Topic must be selected by 9/30. Given that this is an upper-division course in your major, you will choose a passion project that engages and interests you. I have LOTS of ideas, but the point is for you to pick a topic that you would like to roll up your sleeves and learn more about. For example:

- Pick a great book (or a couple interesting technology blogs/podcasts topic relevant to class) and participate with 3-4 classmates in a "book/discussion" club
- Pick one of the companies in our readings on climate tech/clean tech (or a related topic) and educate yourself on what they do, why they do it, what their challenges will be in succeeding (based on what you've learned in class)
- Pick a technology you are interested in learning about and do some reading from some highly credible sources (Harvard Business Review; MIT Sloan Management Review, The Economist, The Guardian; The Wall Street Journal; Technology Review; Fortune; Bloomberg; BBC; any consulting company's white papers or articles; etc.) on cutting edge applications/use cases and barriers to overcome.
    - Sample technologies: empathic AI; NFT; Future of Work; Industry 4.0; etc.

Please note I am a stickler for NO double dipping: if you are doing it for a grade in another class or for an internship/independent study, you can't count it here. However, if you want to carve off a piece of a related topic, I'd love to hear your thoughts.

Your assignment will be to write a mini-article (2000 words); prepare a thoughtfully narrated powerpoint presentation; write a white paper or an executive briefing; write an email to your boss about the topic and why it matters/why she should care about knowing about it). You pick the format; you decide if it's single or double-spaced.

(Continued next page)

- You must have a minimum of five credible citations from business periodicals (except for the book club) that are cited using either APA or MLA.

- You must use page numbers!

- You must use headings and subheadings

- You must build/develop/craft at least one visualization to convey key points/facts/issues (table, graph, etc.)

- Writing matters. Organization matters. Until you have clear thinking, AND you have developed an outline mapped onto your content (an vv) and a position statement, you are not ready to write. Always offer a "road map" for the reader of what s/he will learn in your material.

Suggested outline:
- Creative catchy title.
- Opening vignette to engage reader (aka "story telling")
- WHY the topic matters (statistics; human impacts; etc.)
- Purpose of your article/email/presentation. (position statement)

- Descriptive portion:
  - ✓ What the phenomenon is;
  - ✓ Who the key stakeholders are (think about a diagram?)
  - ✓ What the issues are: upsides/downsides; problems/opportunities; barriers/success factors

- Evaluative portion: What your insights and recommendations are. Tie these to class concepts/learnings.

- Conclusion (one paragraph; summary; action items; etc.) Tie back to opening vignette and the why!
- Works Cited (if you used in-text cites). [Otherwise, use footnotes with full citations for each footnote.]

Semester Grading

A = Tackles "stretch" topics. Demonstrates thorough, sophisticated understanding of the subject, displays mastery of high-tech marketing strategies; answers supported with compelling logic, critical insights, and careful attention to detail; communicated with professional/excellent oral and written communication skills. 93 – 100 A / 90 – 92% A-

B = Good understanding of the material (possible occasional oversight of key facts/ issues) and/or minor issues with clear/concise written/ oral communication; lacks supporting detail/sophisticated insights; always on time. 87 – 89 B+ / 83 – 86% B/ 80-82% B-

C = Tackles easier topics; Basic/rudimentary comprehension of terms (possibly some inaccuracies); unclear communication skills that need significant attention/improvement. Occasional missed deadline 77-79% C+ / 73-76% C/ 70-72% C-

D = Lack of knowledge/proficiency with class concepts and/or inability to communicate your learning about class material; chronic missed deadlines. 67-69% D+/ 63-66% D/ 60-62% D-

F = Dereliction of class responsibilities. Below 60%

Tentative Schedule:

Date	Topic	Assignment	Assigned Readings
Tues 8.31	Team building & introductions Lecture: Why/How High-Tech Differs from Traditional Marketing		
Thur 9.2	Module #1. Review of Marketing; Characteristics of technology industries	Information Sheet due	
Tues 9.7	Types of Innovation	3 Facts + key Insights (A-H)	IPCC Code Red; The Next Generation of Climate Innovations
Thur 9.9	Innovation ecosystems and customer needs	3 Facts + key insights (I-R); Speaker Research #1, (S-Z)	Deep Tech and the Great Wave of Innovation
Tues 9.14	**Speaker #1**: Bridge Partners		
Thur 9.16	Module #2: Strategy in high-tech companies	3 Facts + key insights (S-Z)	Bias in AI, (AI Marketing book) pp. 195-223
Tues 9.21	Platform based business models	Speaker Reflection Due (A-H)	
Thur. 9.23	Tech Start-up Considerations	Speaker Research, (I-R)	Montana's High-Tech Sector Culture of Innovation in high-tech companies
Tues 9.28	Review		
Thur 9.30	**Speaker #2**: Laura Orvidas, CEO, OnX Maps		
Tues 10.5	**Exam period**		
Thur 10.7	Module #3 Crossing the chasm	Speaker Reflection Due (S-Z)	
Tues 10.12	Continued: Developing the whole product		
Thur 10.14	Module #4: Product Management in high-tech companies		
Tues 10.19	Start AI in Marketing book	Facts & Insights presentation (by groups) (I-R)	pp. 7-42
Thur 10.21	Module #5: Go-to-Market Strategies	Facts & Insights presentation (by groups) (A-H)	Types of Machine Learning—pp. 43-57
Tues 10.26	Review		
Thur 10.28	**Exam period**		
Tues 11.2	Module #6: Creating Awareness & Branding Strategies		
Thur 11.4	(Continued)	Facts & Insights presentation (by groups) (S-Z) Speaker Research, (A-H)	Qualities of Good Data 58-65

Tues 11.9	**Speaker #3:** Connor Folley; Jungle Scout		
Thur 11.11	**Veteran's Day: No Class.**		
Tues 11.16	Jakki's tips for Professional Development	Speaker Reflection Due (I-R)	Case Study #1: pp. 68-76
Thurs. 11.18	**AI Case Studies (lecture)**		Case Study #2: pp. 77-85
Tues 11.23	**Special Guest!!**		Case Study #3: pp. 86-98/98-101
Thurs. 11.25	**Happy Thanksgiving!**		
Tues 11.30	**Passion Projects: S-Z**		Case Study #4: 102-114
Thurs 12.02	**Passion Projects: I-R**		Case Study #5: 15-125
Tues 12.07	**Passion Projects: A-H**		Preparing your career for AI, pp. 166-194
Thurs 12.09	Review/Course Evals		
Final Exams: Dec. 13-17	11:00 Section: Thursday, December 16, 10-12 12:30 Section: Wednesday, December 15, 3:20-5:20		

Assignments by Last Name (Word doc uploaded to Moodle)*

Last Name:	3 Facts & Key Insights #1	Facts & Insights #2 (AI Book)	Speaker Research	Speaker Reflection
A-H	Sept. 7	Oct. 21	Nov. 4	Sept. 21
I-R	Sept. 9	Oct. 19	Sept. 30	Nov. 16
S-Z	Sept. 16	Nov. 4	Sept. 9	October 7

* Use naming convention:

Firstname.lastname.assignmentname.11 (for 11:00)

Firstname.lastname.assignmentname.1230 (for 12:30)

Always always always put your name and your section number on the top of your Word Doc!

Academic Misconduct

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. The University of Montana Student Conduct Code specifies definitions and adjudication processes for academic misconduct and states, "Students at the University of Montana are expected to practice academic honesty at all times." IMPORTANT: It is the student's responsibility to be familiar with the Student Conduct Code, including definitions of academic misconduct (found online at http://www.umt.edu/student-affairs/community-standards/default.php\).

The College of Business endorses academic honesty as a pillar of integrity crucial to the academic institution. Academic honesty is an important step towards developing an ethical backbone needed in a professional career. Failure to practice academic honesty is considered academic misconduct. Academic misconduct will be penalized to the fullest extent. Students are expected to:

- Be knowledgeable of activities that are considered academic misconduct, as defined in section V.A. of the UM Student Conduct Code,
- Practice academic honesty on all exams, quizzes, homework, in-class assignments, and all other activities that are part of the academic component of a course,
- Encourage other students to do the same.

Confusion may arise in what is and is not academic misconduct. Students should ask if they are unsure if a behavior will be viewed as academic misconduct. A good rule of thumb is that any credit-earning activity in a course should represent the true skills and ability of the person receiving the credit. A partial list of situations that are considered academic misconduct is in the COB Professional Code of Conduct (found online at http://www.business.umt.edu/ethics/professional-conduct-code.php). If at any point a student is unsure if working with another student is permissible, or whether they can double-dip on an assignment used for a different course), that student should contact the instructor before doing so.

Disability Services for Students
Students with disabilities will receive reasonable modifications in this course. The student's responsibilities are to request them from me with sufficient advance notice and to be prepared to provide official verification of disability and its impact from Disability Services for Students. Please speak with me after class or during my office hours to discuss the details. For more information, visit the website for the office of Disability Services for Students (found online at http://www.umt.edu/dss/).

Mission Statements and Assurance of Learning
The College of Business at the University of Montana creates transformative, integrated, and student-centric learning experiences, propelling our students to make immediate and sustained impact on business and society. We nurture our students' innate work ethic to develop confident problem solvers and ethical decision makers. We pursue thought leadership and collectively create opportunities for a better life for our students, faculty, and staff.

COB Core Values:
•   Students first: We educate the whole person
•   Experiential learning: We create experiences that matter
•   Thought leadership: WE create rigorous and relevant knowledge
•   Stewardship: We value people, planet and profit

Learning Goals: As part of our assessment process and assurance-of-learning standards, the COB has adopted the following learning goals for our undergraduate students:

Learning Goal 1: COB graduates will possess fundamental business knowledge in the core disciplines of Accounting, Finance, Management Information Systems, Management and Marketing.
Learning Goal 2: COB graduates will be able to integrate business knowledge.
Learning Goal 3: COB graduates will be effective communicators.
Learning Goal 4: COB graduates will possess problem-solving skills.

Course Requirements: Tracking your Submissions & Grade/Performance

Assignment/Weight	Your Assigned Due Date	Your Grade
Speaker Research (5%)		
Speaker Reflection (5%)		
Technology Readings: Facts & Insights #1 (5%)		
AI readings: Facts & Insights (5%)		
Exam 1 (20%)		
Exam 2 (20%)		
Exam 3 (20%)		
Passion Project (20%)		