

**DSO 599 – Digital Foundations for Business Innovation**

**Syllabus**

**Spring 2017 – Wednesdays, 6:30-9:30 (first 8 weeks) – JFF  
322 – 1.5 Units**

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**Office Hours: Wednesdays, 5:30-6:30 – BRI 400C**

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**Course Description**

Every business has become, or is transitioning into, a digital business. Consumers today live in a world where the most valuable retailer has no inventory, the world's most popular media owner creates no content, the world's largest accommodation provider owns no real estate and the world's largest taxi company owns no vehicles. But the forces shaping this digital revolution are often difficult to understand, for both these consumers and many business leaders.

This course will largely be based on discussion and require students' active participation in every session. Its content and format stem from a successful initiative recently undertaken at The Walt Disney Company to provide greater context around digital innovations to thousands of its business leaders addressing current business realities.

**The course examines 15 emerging digital innovations shaping consumer-oriented businesses, in order to provide a basic framework for these concepts and provide leaders a greater understanding of how to leverage these powerful capabilities to build or grow businesses. For each of these digital innovations and in each class session, the course is focused on five questions:**

- **What does it mean?**
- **Why is it an important trend?**
- **What is the landscape?**
- **What are the key metrics?**
- **What are the implications for users, organizations and business leaders?**

Beyond knowledge gleaned from classroom teaching and insights shared from today's business world, students will put their knowledge to work, developing a briefing book on a specific digital innovation and a business plan based on one or more of these digital innovations.

**Learning Objectives**

1. Students will demonstrate fluency in the language framework of digital as a tool for business innovation, via creation of written material and presentations.
2. Students will engage in dialogue with one another and with executive guest speakers how the emerging digital tools and technologies of our time can provide opportunities for business leaders, along with potential drawbacks to be safeguarded against.
3. Students will infuse perspectives from thought leaders and business executives working to address real-world business needs into their written work.
4. Students will build a business case based on digital innovation, enhancing written and verbal communication skills.

### **Required Materials**

You will receive a briefing deck each week following a class session. There are no other materials that you need to purchase.

### **Prerequisites and/or Recommended Preparation:**

No prerequisites. Assigned readings will consist of:

- Why Software Is Eating The World, Marc Andreessen (<http://www.wsj.com/articles/SB10001424053111903480904576512250915629460>)
- Startup = Growth, Paul Graham (<http://www.paulgraham.com/growth.html>)

Students may also find the following readings to be beneficial – these readings are not required, but presented as ways for students’ personal development and to deepen their understanding:

- MIT Technology Review (<https://www.technologyreview.com/>)
- McKinsey & Company Business Technology (<http://www.mckinsey.com/business-functions/business-technology/our-insights>)
- Techcrunch (<https://techcrunch.com/>)
- Who Says Elephants Can’t Dance, Louis V. Gerstner
- Zero to One, Peter Thiel
- The Innovators, Walter Isaacson
- The Everything Store, Brad Stone
- How To Create A Mind, Ray Kurzweil
- The Innovator’s Dilemma, Clayton Christensen
- Countdown to Zero Day, Kim Zetter
- Losing The Signal, Jacquie McNish and Sean Silcoff
- The Intel Trinity, Michael Malone
- Our Final Invention, James Barrat

### **Course Notes:**

This course meets for eight sessions, with each session consisting of a lecture-style briefing regarding two specific digital innovations, led by a subject matter expert currently working in the digital realm, followed by ample time for Q&A and open discussion around the five key questions examined in the briefing and future implications for users, organizations and business leaders. The key deliverables for grading will be an individual analysis memo, an individual briefing book assignment, and a group project executed by self-organized teams of 4-5.

The analysis memo, due in week 2 is to be composed individually and examine the application of an emerging digital tool or technology by a traditionally non-digital company. The memo, which should be no longer than 1 page, should take the form of an executive summary and cover questions like:

- What was the business need the company was looking to address through the employment of digital tools and technologies?
- How successful was the company in addressing this need?
- What alternatives could the company have considered?
- What future opportunities are now possible for the company following the implementation of this digital tool or technology?
- What threats are posed to the company because of the implementation of this digital tool or technology that did not exist before?

The second individual project, due in week 6, is a briefing book covering one digital innovation. The digital innovation may be one discussed in class or one of your own choosing. Regardless of your choice of topic, you are expected to go deep into the subject matter, examining questions like:

- What is the landscape when it comes to this digital innovation?
- What firms are leading the way when it comes to digital innovation, and what firms have fallen behind? Why?
- What developments or trends have emerged in this field in the previous six months?
- What developments or trends are about to emerge in the next six months?
- Put yourselves in the shoes of the CEO of a large company. What implications does this digital innovation pose? What would you do to make best use of this digital innovation?

Each briefing book, not to exceed 5 slides/pages, is expected to refer to relevant sources in academic or popular media, and cite appropriately. The briefing book must be submitted in week 6.

The group project, the business case, completed by the same team as the briefing book, is to develop a plan for a company or organization to take advantage of one (or more) of the digital innovations discussed in class. You can take the position of a company currently in existence or create a business plan for a new company. There are four deliverables:

1. A project proposal (10% of group project grade), in the form of an executive summary, not exceeding one page, to be submitted in week 3.
2. A written presentation (35% of group project grade), in the form of a document or slide presentation 5-6 pages in length (Keynote or PowerPoint, saved as PDF), submitted in week 7.
3. A live presentation (45% of group project grade), not exceeding 15 minutes, delivered as a group to a panel of business leaders, whose feedback will be incorporated into your project's grade. This will take place during the final examination period. Each student will be required to present and the instructor has the opportunity to evaluate each presenter as part of this grade.
4. Peer evaluation (10% of group project grade), based on teamwork, combined effort, thoughtful consideration of each team member's perspective and individual contribution to project.

The course schedule will be as follows:

Week 1	Introduction & Key Drivers, Internet of Things
Week 2	Cybersecurity, Digital Currency & Payments
Week 3	Big Data, Augmented & Virtual Reality
Week 4	Digital Advertising, Web vs App
Week 5	Post-Screen Usability, Cloud
Week 6	Beacons & Localization, Artificial Intelligence
Week 7	Wireless Connectivity, Wearables
Week 8	Next-Generation Social Networks, Drones

Final Project Presentations date, time and location to be determined (during final exam period).

### **Grading Policies:**

Students' success in this course will depend on their critical thinking, problem-solving and collaboration skills. They will be asked to thoughtfully consider concepts shared in class, trends identified in the course materials, personal experiences and emerging innovations to develop clear business plans and original perspectives. Students will be exposed to questions faced by global businesses and will be asked to examine both positive implications from emerging digital innovations as well

as potential drawbacks, with the goal of developing business plans that are beneficial to customers, employees and companies as well as communities.

Written work on the analysis memo, briefing book and printed elements of the business case will be evaluated based on how thoroughly the topic is examined and the actionable insights provided. For the presentation, students will be evaluated on how effectively they demonstrate the viability and potential impact of their plan, as well as their professional delivery of the presentation itself.

### **ASSIGNMENTS AND GRADING DETAIL**

<b><u>Assignments</u></b>	<b><u>Points</u></b>	<b><u>% of Grade</u></b>
<b>Individual Project – Analysis Memo</b>	10	10%
<b>Individual Project – Briefing Book</b>	30	30%
<b>Group Project – Business Case</b>	45	45%
<b>Class Participation</b>	<u>15</u>	<u>15%</u>
<b>TOTAL</b>	100	100.0%

Your course grade will be based on the following individual and group assignments:

Class Participation: 15%

Individual Project – Analysis Memo: 10%

Individual Project – Briefing Book: 30%

Group Project – Business Case: 45%

For class participation, each student should be prepared to contribute individually to the class discussion. Students will be graded on their participation for each course session, however, the quality of each session's contribution is more important than the quantity of contributions.

### **Assignment Submission Policy:**

Assignments must be turned in on the due date/time electronically via Blackboard. Any assignment turned in late, even if by only a few minutes, will receive a grade deduction (for example, if your work is a B+ grade, you will be given a C+ grade). If your internet breaks down on the due date, you must deliver a hard copy at the beginning of class on that day. If you are unable to attend class on that day, make arrangements for it to be delivered to the classroom or to my box by the start of class. Late or not, however, you must complete all required assignments to pass this course.

## **ADDITIONAL INFORMATION**

### **Add/Drop Process**

The last day to add the class or withdraw without receiving a "W" is *day, month date, year*. The last day to drop with a mark of a "W" is *day, month date, year*.

*Example:* If you are absent 2 or more times prior to February 24 (the last day to withdraw from a course with a grade of "W"), you may be asked to withdraw from the class by that date.

### **Retention of Graded Coursework**

All graded work which affected the course grade will be retained for one year after the end of the course **if** the graded work has not been returned to the student (i.e., if I returned a graded paper to you, it is your responsibility to file it).

### **Technology Policy**

*Example:* Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the respective professor and/or staff. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during academic or professional sessions. ANY electronic devices must be completely turned off during class time. Upon request, you must comply and put your device on the table in off mode and FACE DOWN. You might also be asked to deposit your devices in a designated area in the classroom. Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audiotaping may be permitted if approved by the professor. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

### **Academic Integrity and Conduct**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own (plagiarism). Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. All students are expected to understand and abide by the principles discussed in the *SCampus*, the Student Guidebook ([www.usc.edu/scampus](http://www.usc.edu/scampus) or <http://scampus.usc.edu>). A discussion of plagiarism appears in the University Student Conduct Code (section 11.00 and Appendix A).

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>. Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://dps.usc.edu/contact/report/>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. *Relationship and Sexual Violence Prevention and Services* (RSVP) <https://engemannshc.usc.edu/rsvp/> provides 24/7 confidential support, and the sexual assault resource center webpage <https://sarc.usc.edu/reporting-options/> describes reporting options and other resources.

### **Support Systems**

Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* ([www.usc.edu/disability](http://www.usc.edu/disability)) provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* (<http://emergency.usc.edu/>) will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

### **Students with Disabilities**

The Office of Disability Services and Programs ([www.usc.edu/disability](http://www.usc.edu/disability)) provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting

academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to your TA) as early in the semester as possible. DSP is located in GFS (Grace Ford Salvatori Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Email: [ability@usc.edu](mailto:ability@usc.edu).

### **Emergency Preparedness/Course Continuity**

In case of a declared emergency if travel to campus is not feasible, the *USC Emergency Information* web site (<http://emergency.usc.edu/>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of Blackboard, teleconferencing, and other technologies.

### **If you use Blackboard regularly . . .**

Please make sure you can access this course in Blackboard and retrieve the course syllabus and other course materials electronically. You should check Blackboard regularly for announcements and new materials. In the event of an emergency, the ability to access Blackboard will be crucial. USC's Blackboard learning management system and support information is available at [blackboard.usc.edu](http://blackboard.usc.edu).

### **Incomplete Grades**

mark of IN (incomplete) may be assigned when work is not completed because of a documented illness or other “emergency” that occurs after the 12<sup>th</sup> week of the semester (or the twelfth week equivalent for any course that is scheduled for less than 15 weeks).

An “emergency” is defined as a serious documented illness, or an unforeseen situation that is beyond the student’s control, that prevents a student from completing the semester. Prior to the 12<sup>th</sup> week, the student still has the option of dropping the class. Arrangements for completing an IN must be initiated by the student and agreed to by the instructor prior to the final examination. If an Incomplete is assigned as the student’s grade, the instructor is required to fill out an “**Assignment of an Incomplete (IN) and Requirements for Completion**” form which specifies to the student and to the department the work remaining to be done, the procedures for its completion, the grade in the course to date, and the weight to be assigned to work remaining to be done when the final grade is computed. Both the instructor and student must sign the form with a copy of the form filed in the department. Class work to complete the course must be completed within one calendar year from the date the IN was assigned. The IN mark will be converted to an F grade should the course not be completed.

## COURSE CALENDAR/READINGS/CLASS SESSIONS

	Topics/ Daily Activities	Readings and Homework	Deliverables and Due Dates
<b>Week 1</b> Dates	Introduction & Key Drivers, Internet of Things	Read “Software is Eating the World” by beginning of class; course content, pages 3-21	
<b>Week 2</b> Dates	Cybersecurity, Digital Currency & Payments	Read “Startup = Growth” by the beginning of class; course content, pages 22-35	Individual Analysis Memo, due by beginning of class
<b>Week 3</b> Dates	Big Data, Augmented & Virtual Reality	Course content, page 36-50	Group project proposal, due by beginning of class
<b>Week 4</b> Dates	Digital Advertising, Web vs App	Course content, pages 51-64	
<b>Week 5</b> Dates	Post-Screen Usability, Cloud	Course content, pages 65-78	
<b>Week 6</b> Dates	Beacons & Localization, Artificial Intelligence	Course content, pages 79-92	Individual Briefing Book, due by beginning of class
<b>Week 7</b> Dates	Wireless Connectivity, Wearables	Course content, pages 93-106	
<b>Week 8</b> Dates	Next-Generation Social Networks, Drones	Course content, pages 107-120	Group written presentation, due by beginning of class
<b>FINAL</b> <b>Date</b>	Group Presentations	n/a	Group presentations during exam period

Please note: The date/time of the Final Exam is determined by the University. For the date and time of the final for this class, consult the USC *Schedule of Classes* at [www.usc.edu/soc](http://www.usc.edu/soc). Select the corresponding semester to view and click on the “Final Examinations Schedule” link on the left side of the screen.

### Appendix VI

*Explanation – A completed copy of this appendix must be submitted along with the syllabi for all proposals for new or revised graduate courses. This is a Marshall requirement, not a University requirement. This document does not need to be attached to syllabi distributed to students.*

How Digital Foundations for Business Innovation Contributes to Student Achievement of USC Marshall’s Six Graduate Programs Learning Goals		
<b>Marshall Graduate Programs Learning Goals</b>	<b>Degree of Emphasis (1=Low, 2=Moderate, 3=High)</b>	<b>Learning Objectives that support this goal</b>

<b>Learning goal #1: Our graduates will develop a strategic level of understanding of the key functions of business and be able to comprehend the relationships between the core business disciplines in order to <i>make holistic judgments and decisions in analyzing business situations.</i></b>	<b>3</b>	<b>1, 2, 3, 4</b>
1.1 Students will demonstrate foundational knowledge of core business disciplines, including their interrelationships.	3	1
1.2 Students will analyze business scenarios, such as cases, with a firm grounding of how each of the core fields play into decisions made.	3	2, 3
1.3 Students will apply theories, models, and frameworks to analyze relevant markets (e.g. product, capital, commodity, factor and labor markets).	1	1
1.4 Students will show the ability to utilize technologies (e.g., spreadsheets, databases, software) relevant to contemporary business practices in a variety of disciplines and industries.	3	1, 2, 3, 4
1.5 Students will demonstrate the ability to utilize interdisciplinary business skills in case analyses, exams, presentations and projects, including capstone projects.	3	1, 4
<b>Learning goal # 2: Our graduates will develop a global mindset and a competitive edge in this interdependent, fast-changing, diverse and volatile world through structured educational opportunities. They will acquire knowledge, both theoretical and practical as well as experiential, about America and the rest of the world, and the economic/financial interdependencies that signify current geopolitical, economic and financial relationships that impact business decisions <i>so as to make a difference in the world.</i></b>	<b>2</b>	<b>1, 2, 3, 4</b>
2.1 Students will understand how local, regional and global markets interact and are impacted by economic, social and cultural factors.	2	2, 3
2.2 Students will understand that stakeholders, stakeholder interests, business environments (legal, regulatory, competitor) and business practices vary across regions of the world.	2	2, 3
2.3 Students will demonstrate the ability to evaluate global business challenges and opportunities through experiential learning, immersion international trips, case studies, international business consulting projects and exams.	2	1, 4
<b>Learning goal 3: Our graduates will demonstrate critical thinking skills by making the intellectual connection between quantitative and qualitative tools, theories and context to provide the basis for proper and effective problem solving and decision making as well as the development of new and innovative business opportunities to strategically navigate the complex demands of the current and dynamic national and international business environments.</b>	<b>3</b>	<b>1, 2, 3, 4</b>



3.1 Students will understand the concepts of critical thinking, entrepreneurial thinking and creative thinking as drivers of innovative ideas.	3	2, 3, 4
3.2 Students will critically analyze concepts, theories and processes by stating them in their own words, understanding key components, identifying assumptions, indicating how they are similar to and different from others and translating them to the real world.	3	1, 4
3.3 Students will be effective at gathering, storing, and using qualitative and quantitative data and at using analytical tools and frameworks to understand and solve business problems.	3	1, 4
3.4 Students will demonstrate the ability to anticipate, identify and solve business problems. They will be able to identify and assess central problems, identify and evaluate potential solutions, and translate a chosen solution to an implementation plan that considers future contingencies.	3	4
3.5 Students will demonstrate the ability to be accurate, clear, expansive (thorough, detailed) and fair-minded in their thinking.	3	1, 3, 4
3.6 Students will demonstrate their ability to apply critical thinking tools and the USC-CT Framework in designated exercises, cases, projects and exams.	2	1, 4
<b>Learning Goal 4: Our graduates will develop people and leadership skills by demonstrating self-awareness, emotional intelligence, curiosity, visionary and strategic thinking, teamwork, reflection and knowledge transfer skills to promote their effectiveness as <i>business managers and leaders</i>.</b>	<b>3</b>	<b>1, 2, 3, 4</b>
4.1 Students will recognize, understand, and analyze the motivations and behaviors of stakeholders inside and outside organizations (e.g., teams, departments, consumers, investors, auditors).	2	2, 3
4.2 Students will be able to demonstrate various emotional intelligences and leadership skills such as self-awareness, self-management, teamwork and collaboration to better understand the potential complexities in organizations in papers, exercises, cases, exams and projects.	3	4
4.2 Students will recognize, understand and analyze the roles, responsibilities and behaviors of effective managers and leaders in diverse business contexts (e.g., marketing, finance, accounting, etc.)	2	3
4.3 Students will be able to demonstrate the understanding of visions and values of world-class companies and the impact it has had on financial results.	3	2, 3
4.4 Students will understand factors that contribute to effective teamwork.	3	2, 4
<b>Learning goal 5: Our graduates will demonstrate ethical reasoning skills, understand social, civic, and professional responsibilities and <i>aspire to add value to society</i></b>	<b>2</b>	<b>1, 2, 3, 4</b>

5.1 Students will understand professional codes of conduct.	2	2, 3, 4
5.2 Students will recognize ethical challenges in business situations and assess appropriate courses of action.	2	2, 3, 4
5.3 Students will be able to apply ethical principles and professional standards in analyzing situations and making informed decisions.	3	2, 3, 4
5.4 Students will demonstrate an understanding of and consistently apply the ethical principles and professional standards related to the business world and show the ability to express and follow results of independence and the highest sense of professional ethics.	3	1, 2, 3, 4
5.5 Students will demonstrate the ability to research, critically analyze, synthesize, and evaluate information, including professional standards for decision making, in the local, regional and global business environment.	3	1, 4
5.6 Students will enhance their appreciation of values of social responsibility, legal and ethical principles and corporate governance through the analysis and discussion of pertinent articles and real business cases, seminars and summits.	2	2, 3
<b>Learning Goal #6: Our graduates will be effective communicators to facilitate information flow in organizational, social, and intercultural contexts</b>	<b>3</b>	1, 2, 3, 4
6.1 Students will identify and assess diverse personal and organizational communication goals and audience information needs.	3	2, 3
6.2 Students will understand individual and group communications patterns and dynamics in organizations and other professional contexts.	3	1, 2, 3, 4
6.3 Students will demonstrate an ability to gather and disseminate information and communicate it clearly, logically, and persuasively in professional contexts.	3	1, 4
6.4 Students will be able to clearly communicate in oral and written formats the solutions to business issues and problems accurately and effectively.	3	4

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