

PROJECT SELECTION

January 18, 2017

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College of Information Sciences and Technology

Penn State University



Mon 1/23 – Teaching Observation

ProfDev #1 Discussion

Project Overviews

Team Selection

TEACHING OBSERVATION

Mon 1/23 – I will be evaluated for my teaching by IST

Please be on time and engaged

Limit your use of technology (computers, phones, etc.)

Lecture will combine my expertise/research with SDLC

Will be recorded and other faculty may attend

PROFDEV #1 DISCUSSION: MILLENNIALS IN THE WORKPLACE

GENERATIONS IN THE WORKPLACE

SO WHO ARE THE DIFFERENT GENERATIONS?

Here is how they are often grouped:



TRADS
1928 – 1944

TRADITIONALISTS:

Value authority and a top-down management approach; hard working; 'make do or do without'.



BOOMERS
1945 – 1964

BABY BOOMERS:

Expect some degree of deference to their opinions; workaholics



GEN X
1965 – 1979

GENERATION X:

Comfortable with authority; will work as hard as is needed; importance of work life balance.



GEN Y
1980 – 1994

GENERATION Y:

Respect must be earned. Technologically savvy; goal and achievement oriented.



GEN Z
1995+

GENERATION Z:

Many traits still to emerge. Digital natives, fast decision makers, highly connected.



Why should we care about generational differences?

You're transitioning into a new role where your professional managers, colleagues, clients, and even employees come from different generations

THE MILLENNIAL QUESTION – SIMON SINEK



December 30, 2016 = <https://youtu.be/vudaAYx2lcE>



Q2a) How does Simon describe millennials?

- Tough to manage
- Entitled
- Narcissistic, self-interested
- Unfocused
- Lazy



Q2a) How does Simon describe millennials?

Q2b) What does Simon say millennials want in a job?

Q3) List 1 interesting point in the 4 areas Simon explores

BUT MILLENNIALS AREN'T HAPPY...WHY?

1) PARENTING

- “Failed parenting strategies”
- You’re special...
 - ✓ *You can have anything you want just because you want it*
 - ✓ *Overly involved parents*
 - ✓ *Participation awards for everyone*
- Rude awakening when you enter the working world and find out that “you’re not special”

BUT MILLENNIALS AREN'T HAPPY...WHY?

1) PARENTING

- Conditioned to put filters on everything like in social media → Appearance of confidence but actually the generation with the lowest self-esteem

2) TECHNOLOGY

- “Addiction” to technology
 - ✓ *Dopamine release in brain*
 - ✓ *Dependency on tech to help cope, zone out, feel included, etc.*
 - ✓ *Started young, learned behavior*
- Focusing on technology prevents ability to form deep, meaningful relationships

BUT MILLENNIALS AREN'T HAPPY...WHY?

1) PARENTING

- Used to instant gratification
(next day shipping, TV binging, swipe right)
- ...But you can't get job satisfaction or strong relationships instantaneously

2) TECHNOLOGY

“Any meaningful part of life will be a slow, meandering, uncomfortable, messy process”

3) IMPATIENCE

- The mountain metaphor
- Worse case = Disengagement
Best = Never really finding joy – “I’m fine”

BUT MILLENNIALS AREN'T HAPPY...WHY?

1) PARENTING

- “Companies care more about numbers than the long-term life of this person”

2) TECHNOLOGY

- Companies need to help you...

- ✓ *Build confidence*
- ✓ *Balance use of technology*
- ✓ *Find life/work balance*
- ✓ *Overcome need for instant gratification*

3) IMPATIENCE

4) ENVIRONMENT

- We need to work together to change our existing environments to help each generation benefit from each other

MILLENNIALS IN THE WORKPLACE

You're transitioning into a new role where your professional managers, colleagues, clients, and even employees come from different generations

- **Be aware** of how your and other generations are viewed by others (both positives and negatives)
- **Take responsibility** for areas where you can improve
- **Learn how to best work** with other generations and **respectfully articulate what you value** in your job



PROJECT SELECTION

PROJECT OVERVIEW

- Teams of **4-6 students**
- Select an **existing client project** (from me)
OR select your own or classmate's idea & find clients
- Every project is **different**
- All projects will walk through the **4 SDLC phases**:
 - Planning
 - Analysis
 - Design
 - Implementation (and transition)

PROJECT 1: IST RECRUITING

- **Main Client:** Angela Miller, Director of IST Recruiting
(https://ist.psu.edu/directory/office/grad_undergrad_studies/recruiting)
- **Requirements:**
 - “Buzz-feed” like website aimed at high school students
 - Creation of content about IST and Penn State that is interesting and engaging to high school students
 - Creation of quizzes (like Buzz-Feed) to help sort students into IST, SRA, or Data Science major options or minors
 - Integration with main IST page
- **Technical skills:**
 - Website development, including creation of quiz mechanisms

PROJECT 2: BOROUGH OF STATE COLLEGE

- **Main Client:** IT and Security employees of the Borough of State College (<http://www.statecollegepa.us/>)
- **Requirements:**
 - Creation of a disaster recovery and resilience plan
 - More requirements based on team skills, needs of borough, and continuation of previous students projects
- **Technical skills:**
 - Knowledge of SRA tools that can help assess risk, anticipate disasters and necessary recovery, and generate contingency plans
 - Great for SRA students!

PROJECT 3: FUGACITY COSMETICS

- **Client:** Dr. Janna Maranas, Professor in ChemEng and founder of Fugacity Cosmetics (<http://sites.psu.edu/jannamaranas/>)
- **Requirements:**
 - Create a website to showcase existing products
 - Include videos of the company's mission and products
 - Establish an e-commerce platform for purchasing online
- **Technical skills:**
 - Website development, integration of e-commerce platforms (or the ability to assess options), video production

PROJECT 4: OMEGA NOTES

- **Client:** Andrew Lang, CEO and Founder of Omega Notes, a State College startup (<https://www.omeganotes.com/>)
- **Requirements:**
 - Open to ideas! Willing to meet to see what type of project would work for needs of company and team's skill set.
- **Technical skills:**
 - To be determined – Typically web or app development, improvements to existing internal processes, etc.
 - Opportunity for future internship (already has 3)

PROJECT 5: GAMESHARKZ.COM

- **Client:** Greg Warfel, CEO and Founder of GameSharkz
An platform for online video game tournaments and gamer communication hub (<http://www.gamesharkz.com/>)
- **Requirements:**
 - Website was previously built by consulting group and hand-off wasn't great. Need a team who can evaluate existing site and make improvements (or possibly migrate to new platform)
- **Technical skills:**
 - Web development and knowledge of development platforms

PROJECT 6: PHOSPHOLUTIONS LLC

- **Client:** Hunter Swisher, CEO and Founder of Phospholutions LLC, State College startup

Created a soil additive used in a multitude of markets and want to make it accessible to the average gardener (<http://www.phospholutions.com/>)

- **Requirements:**
 - Website to promote product (and most likely offer e-commerce capabilities)
- **Technical skills:**
 - Web development and knowledge of e-commerce platforms

PROJECT 7: ReDi Index

- **Client:** Brendan Bagley, Founder of ReDi Index, a startup within the OPP department at PSU

Offers guidance and methods to measure an organization's recycling efforts to identify improvement and progress towards zero waste (<https://redi.opp.psu.edu/>)

- **Requirements:**

- Evaluate existing websites (informational + e-commerce) and help improve user experience
- Identify a reasonable server hosting solution external to PSU and potentially help transition to that new server.

- **Technical skills:**

- Web development and knowledge of e-commerce and server hosting platforms

OTHER PREVIOUS 440 CLIENTS

- Masser Potatoes – Tim Ruppert
- Erie Insurance – MaryJo Ingalls
- Undergraduate Admissions Office –Guoyang Lin
- AccuWeather – Parker Nevengloski
- Emergency Operations – Pamela Soule
- Education in remote areas of Nigeria – Dr. Anthony Olorunnisola

YOUR IDEAS!

- **Neil = Drone hacking project**
- **Projects about PSU Students**
 - Ride Sharing
 - Textbook purchasing and re-sale
 - Evaluation of courses and help map out course schedule
 - Help students make connections with other students (tutoring, recipes, small jobs/tasks)
 - Better organize and promote clubs and events
 - Ability for students to share job pay and benefits
 - Find local events, pickup games, fitness classes, sublet or housing, or hiring opportunities
 - University/local alert system with real-time campus conditions
 - Identify local restaurant, bar, gym and display crowdedness, wait time, specials, events, etc.
 - THON!

YOUR IDEAS!

- **Create or improve web presence for startup or small business**
 - General website/platform to promote local businesses
 - Ultimate Facility Services
 - GreenBowl
 - Nittany Mall
- **Evaluation of existing websites/company/product**
 - How can TripWire affect business cybersecurity needs
 - Improvements to LionPath
 - Fix Hearthstone's arena mode issues

YOUR IDEAS!

- **New services or products**

- App for victims of domestic violence
- Yay/Nay evaluation of products or people
- Mobile phone lock to prevent drivers from using phone while driving
- Transfer physical loose change into your bank or Venmo account
- Help pharma companies handle DSCSA, tracking of all pharma products
- Rate my Toilet!
- SocialFit – Connecting people with same fitness goals
- App for hunters, fishers, and hikers that want to explore different parks and locations
- Virtual cart for physical stores

FOR NEXT CLASS FRI Jan 20...



- ✓ Identify your team + project
- ✓ Come ready for ProfDev #2