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# Knowledge and insights collected through engaging in social and professional events for sharing with students

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#### Abstract

This study presents relevant and valuable knowledge collected through intentionally engaging in social and professional events for sharing with students. We describe ten cases of such social interactions. Through these ten cases, we learned rich insights about the job market, the skillset expected from the industry, the interview process, and the role of resume, certification, internship, and the cutting-edge Information Technology (IT) innovations and applications. We believe that this research potentially contributes to the Information Systems (IS) discipline in the following aspects. First, by studying the knowledge and insights from these ten cases, IS educators can quickly grasp the essence. Then they can distribute the lessons through classroom discussions, student advising, and other informal venues. Second, our research methodology may inspire other IS researchers to adopt a similar approach to intentionally engage in social and professional events to absorb knowledge and share it with students. Third, IS students will directly benefit from reading these ten cases. Students will broaden their horizons and gain valuable insights into the current job market, interview process, skills expected from the industry, new IT industry trends, and life lessons.

Keywords: collecting knowledge and insights, engaging in social and professional events, sharing with students, teaching, information systems

# Introduction

There is a growing demand for Computer and Information Systems major students from the economy. From 2020 to 2030, the number of computer and information technology jobs is expected to grow by 13% or add about 667,600 new jobs. This growth rate is faster than the average rate for all occupations (U.S. Bureau of Labor Statistics, 2022). According to the U.S. Bureau of Labor Statistics, Cloud computing, big data, and information security are key areas driving the growth of computer and information technology jobs. Moreover, computer and information technology jobs are well paid. In May 2021, the median annual wage for computer and information technology was \$97,430, while the median yearly salary for all jobs was \$45,760 (U.S. Bureau of Labor Statistics, 2022).

While the professional career prospect for Information Systems (IS) students is up-and-coming, IS students still face the challenges of navigating the job market to land their first job. Many IS students are unclear about the skillset expectation from the industry, unfamiliar with the interview process, and the role of resume, certification, internship, and cutting-edge Information Technology (IT) innovations and applications. As IS educators, we feel obliged to help students with relevant knowledge and insights. Hence, our students will be more advantageous when entering the job market.

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IS faculty has proactively sought new knowledge in social encounters to stay updated with the latest technology trends for teaching (Ngo-Ye, Choi, & Gittens, 2021). IS faculty has worked with college IT staff by leading IS students on a campus network tour, discussing network administration in a network class, and facilitating continuous faculty learning (Ngo-Ye & Baxter, 2015). Actively engaging in social interactions with adult students, alumni, college IT staff, local college faculty, and local business and IT professionals, IS faculty has performed social learning (Ngo-Ye, McNeal, & Gittens, 2017).

We engaged in various social and professional events, such as informal conversations with other professors, personnel of university student career service, and school alumnus, local meetings attended by IT professionals and business owners, a field trip visiting a well-known local business owner, an information session sponsored by a large public accounting firm, a talk by two IT professionals from a local Fortune 500 company in our MIS club, and local IT workshops.

We absorbed as much information as possible that we deem relevant and valuable for our IS students through careful listening to formal and informal talks and presentations and engaging in purposeful conversations. We documented what we heard from the events. Next, we reorganized and refined them into ten cases reported in this paper.

This paper aims to better inform IS students about the different aspects of the real-world job markets, interview process, skills demanded by the industry, and IT hiring practices. We report our preliminary exploratory case studies.

#### Literature Review

As IS educators, we are keen on knowing what kind of skills and qualifications businesses want from our IS graduates entering the job market. From the literature, we find the following discussions.

A case study method has been applied to investigate computer literacy skills for computer information systems majors (McDonald, 2004). Researchers have used a web content mining program to extract the skills mentioned in one-quarter of a million U.S. job advertisements for computer and information technology positions from various job websites (Litecky, Aken, Prabhakar, & Arnett, 2009). The most frequently mentioned business skills include managing, supervision, financial, business process design, and re-engineering. The top three soft skills are leadership, problem-solving, and responsibility (Litecky, Aken, Prabhakar, & Arnett, 2009). Other researchers compared students' and IS recruiters' perceptions regarding IS staffing during a recession (Pratt, Hauser, & Ross, 2010).

System analysts are an essential type of IT professional. What qualities should system analysts possess? System analysts should be motivated and driven to figure out the problem and be good at working with end-users. Having some technical skills would be a plus. However, it is more important to be a quick learner to pick up new technical skills as the project proceeds quickly. Many new technology projects, such as ecommerce, m-commerce, and big data project, are very likely to be new endeavors for the business. Thus, it may require technical skills different from prior experiences. Therefore, the ability to learn new things fast is more valued. It is a positive asset for someone to have a basic understanding of the nature of the business, relate to the business users, and think from their perspectives. It would be more beneficial for different team members to possess diversified skills to work together and provide complementary skills/values to the project. As for the desired personality for the system analyst position, one should be able to get along well with co-workers and enjoy working in a team environment. Collaboration is expected to succeed in most work (Kendall & Kendall, 2014).

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An ideal system analyst should possess good problem-solving skills, communication, interpersonal skills, ability to learn fast on the job, a basic understanding of the business, technical skills, willingness to take the initiative and challenge, and collaboration skills. It also would be great to have a sense of humor to motivate co-workers and offers harmony and chemistry to the team (Kendall & Kendall, 2014).

The common theme of the above studies centers on the skillset demanded by employers.

A fast-growing innovative technology firm Palantir has unique organizational culture and attracts talents fitting its ideology (Vance & Stone, 2011). A job candidate must pass a gauntlet of brainteasers to land a job at Palantir. Palantir likes to hire "software artists." Palantir believes that it cannot be about money to make great work. Palantir is building a culture about a higher purpose that takes the form of a firm. The deep character anomalies of Palantir are the driving reason for its success.

Similarly, from the "acknowledgment" section of the book "Harness the Power of Big Data: The IBM Big Data Platform," we can see the pride and appreciation for working with intelligent and passionate coworkers. Some IBM employees identify and associate them with positive characteristics (Zikopoulos, et al., 2013).

Alibaba acquired Yahoo China. The integration process was challenging in this acquisition and merger. The Chairman concluded that it is more important to find the right talented employee who fits the organization than the best talent (Decker, 2014).

These above studies highlight the critical theme of organizational culture, employees' passion, and employee-organization-fit.

In this section, we present different references and discussions. However, we discovered common themes. We learn the various skills businesses value, the importance of "fit" between employees and organizations, and the often-ignored link between passion (even obsession) and a professional career.

# Methodology

While the literature provides some valuable knowledge on the topic, this study attempts to bring along more updated and enriched insights from real-world cases. The case study approach is a beneficial research method in the IS discipline and produced many insightful findings (Darke, Shanks, & Broadbent, 1998; Halaweh, 2012). The case study method helps IS researchers understand complex phenomena and lay the foundation for new theories (Lee, 1989).

This study adopts the case study method. With the explicit goal of learning new valuable knowledge for our IS students and sharing it with them later, we mindfully participated in various social and professional events. We tried our best to write down notes in real-time during the event. We also paid full attention and absorbed as much information as possible during the event. When appropriate in the scenario, we raised questions relevant to the event and beneficial for our students. In this way, we shifted the conversation toward our goal of learning new knowledge. After the event, we attempted to transcribe our handwritten notes into a digital computer document as soon as possible. We also painstakingly recollected additional information not written down in our notes from our memory during the transcribing process. We included this recalled additional information when our memory was still relatively fresh. We attempted to keep the information learned from the event as complete as possible. When preparing this manuscript, we gathered all the relevant write-ups of the events. Then we reexamined the notes for each event. We reorganized and refined the notes to make the cases more coherent and clarified while maintaining the main points intact.

#### Cases

This section presents ten cases in which we actively participated. For each case, we describe the setting of the social or professional event, the main actors or sources of information, and what we learned from the social interaction. For those cases with a large amount of information, we organize the content into subsections highlighting the gist of each main topic.

Table 1. summarizes the social and professional interaction scenarios for the ten cases, including the date of the event, the social setting, and the knowledge sources (actors involved). The ten cases are presented in a chronicle order from the oldest to the latest.

Table 1: Social and Professional Interaction Scenarios for the Ten Cases

Case	Date of	Social and Professional Scenario	knowledge Sources
#	Event		
1	08/2009	We had a casual conversation with a faculty	A faculty colleague
		colleague at our university.	
2	05/2011	We participated in a local professional gathering in a	A small public accounting firm
		Midwest city and spoke with the owner of a small	owner
		public accounting firm.	
3	05/2014	At an academic conference, we heard a talk by a	An alumnus from the hosting
		successful alumnus who graduated from the hosting	public university
		public university in the Midwest.	
4	03/2015	We invited two IT professionals from a local Fortune	Two IT professionals from a
		500 manufacturing firm to our MIS Student Club	local Fortune 500 manufacturing
		meeting to give a talk.	firm
5	04/2015	We had an informal conversation with our	A student career service staff
		university's student career service staff.	
6	03/2016	We participated in an information session sponsored	A representative from a famous
		by a famous large public accounting consulting firm	large public accounting
		at our university's campus.	consulting firm
7	03/2016	We invited an expert in business etiquette to conduct	An expert in business etiquette
		a workshop on guiding students in practicing proper	
		business etiquette.	
8	03/2016	We led a group of business school students on a field	A very successful business
		trip visiting a very successful business owner	owner
9	05/2017	We participated in a local IT professionals' gathering	Local IT professionals
		and listened to their talking.	
10	11/2017	We participated in a local IT Workshop and listened	Multiple IT professionals
		to multiple presentations from various corporations.	

# Case 1

We had an informal discussion with an IS professor on the IT job market and employers' preferences. We will refer to this IS professor as Dr. Jonathan (a pseudonym for convenient communication). Next, we report what we learned from the conversation.

Dr. Jonathan commented that there is more supply of IT job candidates than demand during the economic recession. Therefore, small firms can be meticulous in choosing IT job candidates during a downturn. Of course, companies always want to hire the most competent employees. However, can firms keep bright talents for the long term? Therefore, maybe firms wish to hire talented employees. At the same time, companies try their best not to waste money and time on those who are likely to leave anyway. Dr. Jonathan

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mentioned that employers who hired his students always say that it is about attitude, discipline, people-skill, and being a team player. Specific technology skills are less of a concern because employers can and are willing to train graduates in any way they like for their platform once hired. Dr. Jonathan doubted those attributes could be taught in an online virtual teaching format anytime soon.

#### Case 2

We participated in a local professional gathering in a Midwest city and spoke with the owner of a small public accounting firm. Next, we report what we learned from the event.

We learned the different expectations between small public accounting firms and large accounting firms. The owner of a small two-employee public accounting firm said the firm was in a dilemma. On the one hand, the firm currently could not handle all the work from clients. On the other hand, if the firm hires a junior employee and puts him or her on the project, it uses two employees to do one person's job. One senior employee does the actual job, and the junior employee gets the on-job training. The client will only pay for one employee's work. It is a waste of money and time for a small public accounting firm to have an unproductive junior employee on the payroll. Some accounting professionals work in public accounting firms in the early stage of their careers. Later they move to the corporate accounting area for lifestyle reasons.

#### Case 3

We attended an academic conference and heard a talk by a successful alumnus who graduated from a public state research university in the Midwest. We will refer to this alumnus as Mr. Henry (a pseudonym for convenient communication). Next, we report what we learned from the event.

Mr. Henry said that he went to Silicon Valley to develop a career in IT and innovation when he was young. Later he returned to his hometown, the largest city in a Midwest state. He felt that he could do anything in the largest city in that Midwest state. The living cost is much lower in the largest city in that Midwest state than the Silicon Valley. Mr. Henry said that he did not need to stay in Silicon Valley to be a successful business owner in IT and do innovations. Mr. Henry has more social and professional resources in his hometown because he has deep roots.

From this case, we learn the importance of professional and social networks for an entrepreneur, and an IT startup firm can take advantage of local resources to be successful.

#### Case 4

We invited two IT professionals from a local Fortune 500 manufacturing firm to our MIS Student Club meeting to give a talk. Next, we report what we learned from their address. We will refer to these two IT professionals as Mr. Smith and Ms. Tina (a pseudonym for convenient communication). We will refer to the local Fortune 500 firm as Company JKL (a pseudonym for convenient communication).

# Role of Resume

Mr. Smith said that a resume is crucial for getting a job and in the interview process. A resume needs to be very good. Usually, a good resume should be one page, highlighting things well and making the job candidate stand out.

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# Prepare for a Job Interview at JKL

Ms. Tina took Java courses a few years ago. Ms. Tina said that she needed to go back to review the stuff to be better prepared for a job interview.

Ms. Tina wrote her personal statement and cover letter, expressing her willingness to work hard to show what kind of person she is. Ms. Tina cautioned students to be prepared for the worst in an interview.

#### Job Interview Process at JKL

JKL requires job candidates to have a bachelor's degree. JKL has its talent acquisition managers. Talent acquisition managers use phone interviews at the first level to determine if a candidate is a potentially good employee. During the initial phone interview, talent acquisition managers usually do not ask technical questions because they typically do not know the technical stuff.

During the next round of job interviews, the hiring managers at JKL give a job candidate a minor problem to solve. The purpose is to hear the job candidate's idea. Ms. Lina as a job candidate once asked permission to use a marker to draw on a whiteboard to express her concept during her interview with JKL. Drawing a picture and mapping out the idea puts out the view. Such an interview question aims to see how job candidates think and work through it. It is not about right or wrong answers. However, it is not a good sign if a job candidate gives up. Ms. Tina thought that drawing a picture on the whiteboard was one crucial reason that got her hired at JKL.

At JKL, there are many levels of job interviews. During the following interviews, job candidates need to demonstrate that they know the basics of Java programming language for the software developer positions.

#### Job Interview Ouestions for a Programmer Position

Ms. Tina said that during a job interview for a programmer position, a hiring manager would ask questions about basic concepts and judge job candidates on the foundation of Object-Oriented programming. For example, what is the difference between class and object? What is polymorphism, and give an example for that? What is multiple-inheritances?

Ms. Tina mentioned another vital job interview question: what do you see yourself in five years? This question is used to gauge if a candidate sees a future self and has aspirations. If a candidate only says that he or she wants a job, it is not a good answer. A candidate can say that this job is my career starting point, and I plan to grow into a manager in five years. Ms. Tina thinks that having a long-term goal is one crucial reason that got her hired at JKL.

Ms. Tina made it clear that she has a career goal to move to a managerial position in the future. She feels that she has strong technical skills and relevant background. She was enrolled in a local State University's MSIM/MBA dual degree program. She believed that she needed more schooling in management to advance her professional career. Ms. Tina expressed that her future professional career may or may not be in JKL.

# Get into the Door and Continuous Learning

Ms. Tina said that as a student, one has to take so many courses and does not have enough time to learn things that one wants to know. However, as an employee, one gets to spend eight hours a day learning

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things on his or her job. Therefore, while in school, one needs to know enough to get into the door of the desired company. Then one needs to learn more on the job.

Ms. Tina said that the basic things that one learned in a Java class, such as inheritance, are enough to get a college graduate into the door of the desired firm. Then an employee needs to learn on his or her own and understand things.

Ms. Tina stressed that it is vital to first get in the door of JKL. Once inside JKL, it is easier to transfer to the desired department. Usually, at JKL, Human Resource managers are very motivated to help employees transfer to their desired positions. Internal transfer is a common way for career advancement within JKL. It also makes Human Resource managers look good by enabling employees to achieve their career goals.

One career path is first to be hired as a plant operator or a customer representative and then transferred to be a software developer. Ms. Tina personally took that path. One might think the time spent on the jobs of a plant operator or a customer representative is a waste. However, surprisingly, Ms. Tina said that the experience and knowledge learned in the position before were beneficial for the software developer's job. By starting as a plant operator or a customer representative, one gained knowledge of the plant and company.

# Passion for Programming and Want to Learn

Ms. Tina said that a job candidate needs to show that he or she wants to learn and loves to do programming during a job interview. If a person truly loves to do something, it will naturally come across in the interview. Ms. Tina said when she was in high school, she did something on a calculator like programming. That demonstrated her passion of doing programming. Ms. Tina recommended students do something extra, not just schoolwork.

According to Mr. Smith and Ms. Tina, good job candidates and employees need to fit different pieces together and want to learn. A programmer's job is not rocket science.

#### Intern Positions at JKL

JKL has MIS intern positions. However, they were usually filled up very fast because of their scarcity. Students have to check JKL's website often for opening MIS intern positions, according to Ms. Tina. MIS interns are usually summer interns.

# Value of Certifications

When asked about the value of certifications for getting a job, Mr. Smith said that it depends on the type of job. For hardware/servers/network jobs, certifications are more valuable. However, for software developer jobs, certifications are not necessary.

### Case 5

We had a casual conversation with our university's student career service staff and learned what potential hiring managers are looking for from job candidates. We learned that mock interviewers are interested in the following aspects of potential job candidates.

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- 1. It is a job candidate's knowledge of the hiring firm. The hiring firm is expecting a job applicant to have done the essential homework of learning the basic facts of the hiring firm. If a job candidate does not know the basic information of the hiring firm, it is a warning sign.
- 2. It is a job candidate's enthusiasm about the position and work opportunity at the hiring firm. If a job applicant does not show much interest during the job interview, it is a warning sign.
- 3. It is a job candidate's professionalism manifested in the interview. Does the job applicant show up on time? Does the job applicant dress up professionally? Does the job applicant address the hiring manager respectfully? Does the job applicant send a Thank-you note or email within 24 hours after the job interview? If the answer is no, it is a warning sign.

Based on what we learned from the student career service, we can better inform and remind our students to prepare well for their job interviews and avoid pitfalls.

#### Case 6

We participated in an information session sponsored by a famous large public accounting consulting firm at our university's campus. We will refer to this significant public accounting consulting firm as company GHI (a pseudonym for convenient communication). Next, we report what we learned from GHI's recruiting event. We will refer to the GHI representative as Ms. Lucy (a pseudonym for convenient communication).

# Highly Selective Hiring at GHI

GHI requires students to have an overall GPA of at least 3.7 out of 4.0 and a major GPA of at least 3.8 to be eligible for a job interview. The hiring process at GHI is very selective. Because so many students go through this internship route at GHI, it is very competitive now. Students have to stand out from the crowd.

# Not Monday through Friday, 8:00 a.m. to 5:00 p.m. Culture

GHI looked for job candidates who would work very hard. GHI does not want to hire people who only want to work 40 hours/week. GHI made it clear that it is not a typical Monday through Friday 8:00 a.m. to 5:00 p.m. company. Ms. Lucy said that there is a lot of energy in the team. GHI employees work hard, play hard, and have a lot of fun. GHI had a lot of teamwork. However, it is also very competitive at GHI. There is the pressure at GHI. Employees work many hours at night, not just 8:00 a.m. to 5:00 p.m. The whole team stayed late at night to work.

# Role of Personal contact for getting a job at GHI

Personal contact is most important for landing a job at GHI, according to Ms. Lucy. Ms. Lucy recommended students go to GHI's conference. Ms. Lucy told students to ask the following questions to their supervisor at GHI in the future. For example, "I want to be promoted at this date. What should I do?"

# Value of Internship at GHI

Ms. Lucy recommended students start with a summer internship at GHI after the freshmen year. Then students should come back to GHI after sophomore year and junior year. If doing so, after graduation, students will get a full-time job at GHI without the need for a job interview, according to Ms. Lucy.

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# Certification, Career path, and Promotion at GHI

At some schools, CPA preparation courses are embedded in the curriculum. Ms. Lucy mentioned that an employee at GHI needs a certification to be promoted from an associate to a senior. It usually takes about three years for promotion at GHI. Ms. Lucy shared her personal experience of working long hours during the day at GHI and spending hours at night preparing for the CPA certification exam. The career path or career ladder at GHI includes associate, senior, manager, senior manager, director, and partner. Partners get a pension until they die. Promotion at GHI is based on if an employee is ready. GHI does not have a hard limit, such as promoting five people a year.

#### Critical Skills Needed to Succeed at GHI

Time and project management are essential skills learned at GHI. GHI employees need to juggle around tasks and understand which is ball and egg, according to Ms. Lucy. GHI employees should focus on highpriority work. Students should fine-tune core competency skills through training, recommended Ms. Lucy. Ms. Lucy also highlighted that building relationships at GHI is crucial. Communication is essential for one's success at GHI. GHI employees need effective verbal/oval and written communication, according to Ms. Lina.

# Case 7

We invited an expert in business etiquette to conduct a workshop on guiding students in practicing proper business etiquette. We will refer to this business etiquette expert as Ms. Alice (a pseudonym for convenient communication). Next, we report the valuable lessons we learned from Ms. Alice.

Ms. Alice emphasized the importance of the first impression of greeting. Ms. Alice demonstrated how to do a very firm and solid handshake. Ms. Alice recommended that we always put our nametag on the right side of the body because most people are right-handed. Doing so will enable others to see our name better.

Ms. Alice advised us on the right way to wear a suit. When we stand up, we should button up the suit. However, when we sit down, we should unbutton the suit.

Ms. Alice cautioned us always to stand up to talk to people and not let other people dominate us. We should avoid situations where we sit down while opponents stand up and talk down to us.

Ms. Alice advised that students write a thank-you note within 24 hours after a job interview and send it out to the interviewers to show appreciation.

Ms. Alice pointed out that "Class" costs nothing, but it buys us everything! Ms. Alice recommended positive thinking. Ms. Alice said that if our mind conceives it and our heart believes it, we can achieve it.

# Case 8

We led a group of business school students on a field trip visiting a very successful business owner. We will refer to this successful business owner as Mr. Don (a pseudonym for convenient communication). Mr. Don is well known for his business success and widely respected in the community because of his philanthropy acts. Mr. Don gave an inspiring talk to our students, sharing his journey to success and offering valuable life advice. Next, we report the valuable lessons we learned from Mr. Don during this field trip.

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### Mr. Don's Business Journey

Mr. Don made money mainly through three revenues: education enterprises (charter schools and daycare centers before), investment, and real estate. His first buckle of gold came from investing in eight units of an apartment building decades ago.

In the beginning, Mr. Don was a full-time public school music teacher, earning \$5,600 for the first year. Because of his full-time job and affiliation with a teacher credit union, Mr. Don could get loans from the teacher credit union. It was his critical first step on his business journey. Mr. Don fixed problems for the apartment building, like basement flooding. Mr. Don wore boots and cleaned things up. It was dirty and brutal work.

Later, Mr. Don missed an excellent investment opportunity for another apartment building because he talked loudly about the chance in a barbershop. Another person heard about the business opportunity, got ahead, and bought the apartment building. Mr. Don learned to listen more than speak and shut his mouth up.

Later, Mr. Don invested in a Daycare center as more women went to work, and there was a demand for daycare centers. Mr. Don confessed that timing is crucial, a grace from God.

### Mr. Don's View on Law, Ownership, and Money

Mr. Don said that laws are set for rich people and people who want to be rich in the United States of America and most nations. Laws are not set up for broke people. Mr. Don explained that there are different views of the capital gain law in the United States. In general, one political party treats capital gain like an ordinary income and wants to tax at least 18% or higher to reduce the rich and poor gap. On the other hand, the other political party wants to reduce the capital gain tax to 14% - 15% to encourage investment and economic development.

Mr. Don explained that in the United States, to be rich, one needs to own things. Mr. Don emphasized ownership, ownership, and ownership! For people not setting up their own business, buying stocks is a good way of ownership, according to Mr. Don. Mr. Don recommended that minority communities own more things and not rely too much on government help. Mr. Don was very sick of people talking only about grants. Mr. Don stated that no one gets rich because of grants.

Mr. Don said money gives people choices. Mr. Don said that it is good to have some money saved aside. When an opportunity comes, you can invest. Banks will not lend you money if you are broke and empty-handed. You have to show that you have something to bring to the table. Mr. Don stated that lending loans or screening business plans are more like art than science. It is not all about numbers. In the end, it is about the person.

Mr. Don stated that now technology advances and helps people save a lot of time. People can multitask and do entrepreneur things. Mr. Don observed that some people have a main full-time job, such as a teacher, and on the side have a small business to supplement income.

### Mr. Don's View on Mentor, Business Execution, Extraordinary Work, and Promotion

Mr. Don told students that if they do not know something, do some research, and figure it out. Mr. Don recommended students find good mentors who are already successful in the area they want to be successful.

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Students should follow and learn from mentors. Mr. Don asked students to associate themselves with people who have achieved something they want.

Mr. Don said working for a company is like driving a car because everyone knows the need to get a job. However, an entrepreneur is like building a car, from conceptualization to execution. Mr. Don stated that an idea is worth only 10 cents, a good idea is worth 25 cents, and a great idea is worth 50 cents. According to Mr. Don, the most important thing is execution, implementing the concept, putting things together, and making it work.

Mr. Don gave a real-world example, where a young male student visited him a few weeks ago during a school field trip. We will refer to this young male student as Mr. Joe (a pseudonym for convenient communication). Mr. Joe has already started his own business, buying socks from China for \$2 a pair and selling them for \$10 here in the United States. Mr. Joe made several hundred U.S. dollars while at Mr. Don's place. Mr. Joe was very aggressive and bugging around Mr. Don and another entrepreneur. The other entrepreneur helped Mr. Joe with two business contacts and already saw the new progress of Mr. Joe's business.

Mr. Don said that anything worth well is not easy and needs time and effort. Mr. Don pointed out that some workers watch the clock and cannot wait until 5:00 p.m. to go home. These workers will not succeed in their professional careers. Doing the ordinary, like most people, will not be extraordinary, said Mr. Don. Mr. Don found that most people are just doing their jobs. On the other hand, some people perform additional work before being promoted. They deserve the promotion a while ago and later are promoted indeed.

# Mr. Don's Other Advice for Students

Mr. Don said that students need to show passion for what they are doing and let others feel it. It is crucial for people in the job market, said Mr. Don.

Mr. Don explained that exposure expands people's horizons. Therefore, Mr. Don suggests students get out of their comfort zone and expose to broader perspectives.

When asked whether students should start working upon graduation with a Bachelor's degree or pursue a graduate degree immediately, Mr. Don reminded us that a graduate degree could not substitute for real-world work experience. One can always go back to school for a graduate degree later.

### Case 9

We participated in a local IT professionals' gathering and listened to their talking. Next, we report what we learned from the event.

According to one regional IT manager, the No. 1 skillset for engineers is communication, writing, and speaking. Another IT professional mentioned that companies often prefer "B" grade students with internship experiences to "A" grade students without internship experiences. An IT professional from a Fortune 500 company told us that his company requires that job candidates take the Microsoft Excel certification exam.

From the conversations with real-world professionals, we learned that communication skills, technical Office software skills, and work experiences are essential for success in a professional career.

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#### Case 10

We participated in a local IT Workshop and listened to multiple presentations from various corporations. Next, we report the exciting new technology and industry trends we learned from the event.

# Innovative Application of Drones

A company presented its innovative application of drones. After a natural disaster, such as a hurricane, providing timely delivery of medicine packages to people in the affected area becomes critical. Drones were experimented with for medical usage, attached to the top of the package delivery car, and loaded on the rooftop. In rural areas, drones were used for 40 miles delivery, reducing mileage driven and speeding the access time.

# 3D Printing Technology

A large package delivery firm was piloting 3D printing technology. With 3D printing capability, the firm attempted to "print out" shoes custom-made for individuals. It is a good use case for applying 3D printing to produce on-demand products. Another example was customized smartphone earbuds that better fit individual customers.

#### Smart City

One firm challenged us to think about what problems technology can help solve. Technology may potentially solve the issue of insufficient wealth. Some large metropolitan areas were exploring the idea of a "Smart City." Utilizing technologies such as the Internet of Things (IoT), network-connected sensors, and citywide data API, a city may improve efficiency and better serve people. In pilot work, recycling can usage was monitored in real-time, and the information was made readily available online. In the future, smart cities will be connected, shared, and electrified.

# Blockchain Technology

One company forecasted that by 2027, 10% of global GDP would be stored on Blockchain technology. Blockchain technology can be used in various supply chain processes, such as sharing invoices, shipping, packing, and commissioning. Blockchain technology can enable enterprise, operations, and IoT. Because of the nature of Blockchain, data stored in Blockchain cannot be changed or deleted. Therefore, Blockchain technology may foster trust in data. The value drivers of Blockchain include multi-party collaboration, process optimization, transparency & audibility, and security.

# Customer Relationship Management at an Automobile Company

A significant luxury automobile company transformed itself to be customer focus. We will refer to this automobile company as XYZ (a pseudonym for convenient communication). XYZ attempted to integrate seamless emotional experience, brand, and holistic customer experience. XYZ's marketing changed from a single channel approach to the new multiple channels approach. XYZ reorganized around the customer. XYZ put customer relationship management on top of SAP HANA infrastructure. XYZ takes people to its science lab to explore. In essence, XYZ blends business, people, and technology. With more than nine years of customer data in its vast SAP CRM system, XYZ experimented the new subscription business model so that more people could experience XYZ's fleet. Technology enables XYZ to lower the barrier of entry for

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incremental innovations. XYZ has a new organizational culture of non-regret and courage. Courage changes everything!

# Customer Relationship Management at an Agriculture Equipment Company

A significant agriculture equipment company presented its innovative applications of technology. We will refer to this agriculture equipment as DEF (a pseudonym for convenient communication). DEF provided its customers with mobile training remotely. The mobile training solved many issues and lower warranty costs. Farmers in the field use smartphones and ask questions to DEF's dealers. DEF's dealers have voice transcripts. DEF could run fast report from its SAP CRM. DEF also conducted data mining of the transcripts data along with Internet data. DEF collected a lot of data. As for what to do with the data, DEF looked for correlations.

# Other Insights

One firm cited the famous U.S. Air force methodology: observe, orient, act, and review. Following this cycle or process, an organization can achieve continuous improvement.

One college in a Midwest state performed a retention study using artificial intelligence.

A new industry trend is not developing applications but taking and using existing services.

# **Conclusion**

To get ready for the job market, IS students need guidance about the skillset expectation from the industry, the interview process, and understanding of the role of resume, certification, and internship. Moreover, knowing the cutting-edge IT innovations and applications will also benefit IS students.

This study presents an approach of intentionally engaging in social and professional events to obtain relevant and valuable information to share with students. This study describes ten cases of such social interactions. Through these ten cases, we learn rich insights about the job market, the skillset expected from the industry, the interview process, and the role of resume, certification, internship, and the cutting edge IT innovations and applications. Among many valuable lessons, this study has the following takeaways.

- 1. Personal contact, professional, and social networks are critical for landing a job. Entrepreneurs can also leverage professional and social networks to get to the next level.
- 2. When looking for jobs, students need to demonstrate their passion for the work and willingness to learn new skills.
- 3. It is vital to get in the door of a desired large company first. Once inside, it is easier to transfer to the desired department.
- 4. Many large consulting firms do not have the typical Monday through Friday, 8:00 a.m. to 5:00 p.m. culture. Students need to be prepared to work hard.
- 5. An entrepreneur is like building a car, from conceptualization to execution. The most important thing is execution, implementing the concept, putting things together, and making it work.

We believe that this research potentially contributes to the IS discipline in the following aspects:

- 1. By studying the knowledge and insights from these ten cases, IS educators can quickly grasp the essence. Then they can distribute the lessons through classroom discussions, student advising, and other informal venues.
- 2. Our research methodology may inspire other IS researchers to adopt a similar approach to intentionally engage in social and professional events to absorb knowledge and share it with students. We hope to see more of this type of study to exchange knowledge and insights.
- 3. Students will directly benefit from reading the ten cases. Students will broaden their horizons and gain valuable insights into the current job market, interview process, skills expected from the industry, new IT industry trends, and life lessons.

We acknowledge that this study has several limitations. The ten cases may not represent the whole job market, skillset expected from the industry, the interview process, and views on the role of resume, certification, and internship. The cases presented in the paper are constrained by the social and professional networks that we can access. A more rigorous and quantitative follow-up study will complement this initial exploratory study. We plan to expand this research by participating in more professional events to gather new insights. We will also explore ways to quantify this study.

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