



ITSO...Good

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BRIDGING THE GAP: INCREASING THE NUMBER OF WOMEN IN THE IT FIELD

According to an article, only 18 percent of computing and information sciences degrees were received by women in 2009 (David Zielenziger David. "Who are the Top 10 Women in U.S. Technology?."). As a woman graduating this May with majors in marketing and information technology, I am certainly a part of the minority. I can honestly say, though, that I have never felt like being a woman in this industry has put me at a disadvantage or been cause for discrimination. In fact, the only time I ever notice that my major is sparse among women is when I tell others that I am an IT major and watch them react with surprise. Many have told me that they cannot see me sitting in front of a computer coding all day, to which I respond that IT offers a wide variety of career paths that do not necessarily include coding.



Throughout my IT courses at Marquette and my various internships, I have not noticed a substantial divide in the number of men verse women in the field. Marquette's IT program does a great job of promoting the IT major as offering far more career opportunities than the stereotypical programming job, which I believe has significantly contributed to the successful conversion of female business students to IT majors. I have many female friends in the area of IT, all of which have gained strong internship experience and even job offers from incredibly well known firms in-

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INNOVATION IN MILWAUKEE

Renowned for its production capabilities, the city of Milwaukee has a rich history as an industrial and commercial hub of the Great Lakes Region...but what is manufacturing these days without a pinch of technology and creativity? Recently to remain competitive and avoid abandoning its core industrial strengths, the city has adapted a complimentary strategy as it marches into the 21st Century by embracing cluster initiatives.

As defined by John Schmid of the Journal Sentinel a "cluster is a concentration of interconnected businesses, innovators, and university programs with enough critical mass to lure even more investment and jobs."

Currently home to nine different industry clusters at various stages of development, Milwaukee aims to drive economic development, support an ecosystem of entrepreneurship, and foster regional competitiveness through an infrastructure of business clusters. Perhaps the most well-known is the Milwaukee Water Council, followed by Wisconsin Energy Research Consortium, Food Industry Cluster, Creative Alliance Milwaukee, and Wisconsin Wind Works.

In September 2011, The Greater Milwaukee Committee announced the launching of the newest cluster initiative: Innovation in Milwaukee (MiKE). Funded by a grant from ArtPlace, MiKE focuses on design, technology and innovation and intends to combine arts and artists into the economic activities of

transportation, housing, community development, and job creation.

Co-chairs of MiKE, Telvin Jeffries – VP of HR at Kohl's Corp – and Todd Teske – CEO at Briggs and Stratton Corp – commented in an article, "while technology in many different forms drives the business world, it's the creative application of technology that allows a business to differentiate itself."

Contributing to the revitalization efforts of downtown, MiKE is centrally located in The Shops of Grand Avenue and neighbors one of its supporting partners, start-up incubator Spreekler Talent Labs (featured in the April 2011 issue of ITS...Good).

As business structure innovates and adapts new technology, it is hoped that MiKE will ensure that Milwaukee companies do not fall behind. In its short life, MiKE has already begun to nurture components of success such as technology, fresh talent, and collaborative leadership across the Milwaukee community.




-Elise Chapman, Senior

Chief Editor

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Core Elements of MiKE

-  Developing hi-tech talent for design and technology start-ups aligned with service and product delivery for companies in the cluster and for entrepreneurship within the cluster.
-  OPEN MiKE — a physical and virtual space that promotes open source entrepreneurship and technology prototyping.
-  The MiKE Council, a leadership group consisting of CEOs and top level management from our major manufacturing and global innovation companies and leading higher educational institutions.



BEST PRACTICES IN INTERNET VENTURE PRESENTED BY GARY MILLROOD

On November 16th, Marquette University and ITS0 welcomed Gary Millrood to campus to speak regarding technological trends in business and entrepreneurship. Millrood currently serves as the Senior Vice President of Sales for Hubcast Cloud Print Solutions and is a member on the Board of Advisors for Rapid Buyer in Concord, MA. His distinguished career also includes previous roles as the Vice president of Enterprise Sales and Channel Development for Mimeo.com, Vice President and General Manager of the OEM and Channel Development Group, and the Vice President of Sales for Sum Total Systems in Mountain View, CA. In addition, Millrood received his Bachelor's Degree in History at Marquette University.

To begin, Millrood proceeded to state that IT is experiencing "very special times." Millrood explained that as a result, we as IT majors and enthusiasts must be knowledgeable of the opportunities ahead of us and remain aware that technology in business is constantly changing. Since he started in the technology industry in 1999, Millrood explained that the opportunity for advancements in technology has increased as businesses have adaptively progressed from technology such as Web 2.0. These opportunities provide valuable niches for startup businesses to simplify a process and create revenue in a troubled economy. It is through niches of this nature that Millrood has excelled, creating services that allow businesses to perform more efficiently and professionally through utilization of specific technologies. For example, Millrood explained that Hubcast's main objective is to allow businesses to transform methods of using documents on the web, and provide the opportunity to have one or

"Opportunities provide valuable niches for startup businesses to simplify a process and create revenue in a troubled economy"

many documents printed and sent anywhere in the world. with 99.5% efficiency.

According to Millrood, innovative companies thrive in the current market if their services are in high demand, a simple solution to a common problem, easy to comprehend, and able to differentiate themselves from competitors. By meeting these requirements for success, Hubcast has projects revenues of \$30 million moving toward 2016. Although these components seem reasonably simple to attain and result in a huge payoff, Millrood explained that approximately 9 out of every 10 of internet ventures fail. However, despite the odds, Millrood has personally completed seven internet startups, deeming him a successful player in the industry.

In addition to his insight regarding technology in business and entrepreneurship, Millrood also discussed some important points to consider when choosing a job in technology. First, know why you like the company's product and whether they are classified as a "need to have" product/service or a "want to have" product/service. According to Millrood, the differences between these categories are distinct and important when considering your position in the company's future. Also, when looking at a new company for employment, it is imperative to pay attention to the company's mission statement. If you find that the mission statement aligns with your own principles, the company should be an acceptable place for employment.



Next, Millrood mentioned the importance of sustainability. He claimed that sustainability factors such as demand in the marketplace and economic resilience to market conditions are essential for employment satisfaction moving forward. These components are important to the long term growth of the company and help determine whether one has the potential for advancement. These points are important for all IT majors because as we search for jobs either this year or in the future, we should try to choose the best fit company that identifies our personal goals and can offer long-term happiness.

Finally, on behalf of Marquette's ITS0, I would like to thank Gary for his valued time and encouraging presentation. His words were enlightening and gave a great deal of insight into the technology industry as a whole. We wish him well at Hubcast Cloud Print Solutions and appreciate his enthusiastic return to his alma mater.

-James Lenahan, Senior VP of Website



"Approximately 9 out of every 10 of internet ventures fail"

ITSO COMMUNITY OUTREACH

Status Report: Urban Faith Roundtable



The ITSO community outreach program is off to a great start this semester. We are currently working with the non-profit organization Urban Faith Round Table. Urban Faith Roundtable (UFR) works with returning citizens from correctional institutions to help them avoid the type of lifestyle that is a breeding ground for criminal behavior and provide them the tools to live a meaningful life. Their vision is essentially to provide all returning citizens counseling, job training, reentry services, and safe housing to assist them in properly readjusting to civilian life. Although the goal is simple, the processes involved in coordinating the operation of UFR can be complicated and intricate, due mostly to the fact that much of the information involved is confidential and also there are a number of third parties who are partners in the business process.

When ITSO first began working with Urban Faith Roundtable it quickly became apparent that information organization was an area that needed to be addressed and improved. With data scattered throughout multiple excel spreadsheets, searching and analyzing data to pull out information was nearly impossible and too time consuming. The second major issue in UFR's business

model was communication with its third-party affiliates. UFR is required to track its clients attendance to programs, meetings and workshops, and this process can be time consuming and tedious.

To address these issues ITSO developed a salesforce.com site customized for Urban Faith Roundtable. There were a number of platforms that could have provided adequate solutions, but Salesforce.com was the best fit for a number of reasons. Much like Marquette, Salesforce.com recognizes the importance of being positive and active members of the broader communities that they live and work in. With this philosophy in mind, Salesforce provides is software service free to qualifying 501c-3 non-profits. The no-cost feature was a major factor when deciding to use the Salesforce.com platform for our solution; however, there are also technical and functional reasons that made Salesforce.com the best choice. Salesforce provided the best option in part because it is a cloud-based service that allows for easy management of user access to the system's data. With Salesforce, it is possible for organizations hosting programs for UFR clients to record attendance without installing applications, and at the same time restrict third-party access to confidential information.

In addition to tracking client attendance at various programs, the Salesforce system assists in other tasks such as donation campaigns, donation dollars, and donors. The Donations portion of the system makes it possible to track a number of valuable statistics that allow UFR to improve the management of its donor relationships. Specifically enabling the ranking of donors based on the overall value they provide to UFR, it also gives workers the ability to quantify individual donation campaigns based on the amount of money raised and also the number of contacts reached.

The current status of the project stands at the end of the design phase moving into the implementation stage. Some tweaks and adjustments are needed to fit UFR's end users' preferences but the organizations staff has already received some training on the new system. Look for further updates of ITSO's community outreach efforts in upcoming issues of ITSO Good.

-Charles McCloughan
VP of Community Outreach

Urban Faith Roundtable

Seeking transformation through faith, education, and action.



Help Help Help Help Help



Currently, Salesforce is restructuring their approach to supporting Milwaukee non-profits and they're looking for volunteers. Interested students will be trained in Salesforce to set up solutions by Salesforce employees and then implement this knowledge at a local agency. This is a great opportunity to add a tangible deliverable to your resume and network with Salesforce employees. Even if you have an internship, this work can be done from home, and would only require 1-2 hours of commitment per week. If you'd like additional information or are interested, please contact: Heather.Jeffery@marquette.edu.

WOMEN IN TECHNOLOGY

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cluding Harley Davidson, GE, Accenture, and Deloitte. It has become increasingly more evident that this male-dominated industry does not differentiate job candidates based on gender rather on true qualification.

As a former executive board member of the Women in Business organization here at Marquette, I remember asking one of our guest speakers if she had any advice for young women entering the work place. Her response was one that I have not since forgotten; she said that we must first forget the idea of men verse women in business, as women have come to hold their own, it is no longer a matter of male and female rather of working hard and being confident in your ability to “play with the boys” so to speak.

Her response has continued to hold true within my own internship experiences, both

at Fiserv my junior year and now at Assurant Health. Both companies proved to be strong environments for cultivating female leadership as well as for providing a healthy work life balance. In my experience I have been given a great deal of responsibility, independence, and flexibility and I have always been treated with respect, these are values that I would expect to be supported by the vast majority if not all of companies these days.

According to The National Center for Women and Information Technology (NCWIT), women now make up over half of undergraduate degree recipients and over half of the professional workforce, but only 25 percent of computing occupations. NCWIT explains how tech companies with more women on their management teams have a 34 percent higher return on investment because the presence of women on technical teams increases teams’ collective intelli-

gence and especially problem-solving ability and creativity. Equipped with technological capabilities to work remotely, women are more empowered than ever to be both the successful career woman and the perfect family-oriented mother and wife. It is my hope that in the near future more women will consider careers in technology as there is clearly a growing need for professionals and especially women in this area.

-Tara Holderness,

IT Senior



WHAT RESEARCH TELLS US: INSIGHTS FROM DR. ADYA

In her article, Tara Holderness raises very valid concerns about underrepresentation of women in the IT workforce. More importantly, in an excellent way, Tara points out how today’s organizations are geared, more than ever, to receive and encourage women in technical roles. Why are organizations interested in having more women in these positions? First, a diverse pool of employees can bring rich perspectives to the design, development, and utilization of technology-driven business solutions. Women are an important source of this diversity. Second, greater participation from women increases their representation in middle and upper management roles. Third, women in leadership roles can serve as role models for young women choosing IT careers.

“IT has been viewed as a male dominated field because of female underrepresentation, and this bias exacerbates the underrepresentation issue.”

The problem of female underrepresentation is concentrated in western nations – UK, US, and Australia are most impacted by this trend. Many Asian nations such as

China, India, and Indonesia, in contrast, do not face the same

issue yet. Not all of this is explained by economics and labor market since western nations have continued to see a decline in women professionals even when the IT job market has boomed. Research, however, points to strong socio-cultural influences in decision for or against IT careers.

Most often, the “geek” and “nerd” image falsely conjured about technical careers turns away girls as early as in middle-school! This is exacerbated in high school as women and men receive differential advice regarding career fit from counselors, parents, and peers, many of who are not fully aware of the diversity offered by today’s IT careers. In contrast, research finds that girls who have a parent or older sibling in



technical careers have a greater tendency to select IT1. In college, exposure to courses such as Introduction to IT is effective in attracting women, especially when service oriented projects are integrated in such courses. Peers, more than role models, have a strong influence as well. I

am sure many of you learned about a specific IT course or the major from your peers during freshman and sophomore years. Finally, exposing women to the range of opportunities in technical careers has proven to be beneficial.

Why should women be interested in IT careers? First, academically, professionally, and personally, women are as capable as men at participating in technical careers. At all levels of academic testing today, women are performing as well as men. Second, as Tara points out, IT is not merely about programming. You can choose to be business analysts, project managers, consultants, relationship managers, or risk managers, among others. If these careers are not where you envision yourself, con-

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LIFE AFTER MARQUETTE: DREAMS OF A SMALL TOWN FARM GIRL



When I arrived at Marquette University (small town farm girl in a big city) I had dreams of majoring in Entrepreneurship and Marketing. I always thought I would land a "dream job" working at a large marketing firm in NYC or Chicago

making a bazillion dollars, wearing fabulous clothes and driving a fast car. So, I quickly had to form a plan to create this lavish life-style that I always wanted upon leaving my hometown of Cleveland, Ohio for college.

However, I rapidly became accustomed to Marquette living: in and out of Straz, in and out of Angelo's & Murphy's, and then in and out of the library (yes, I did things a little out of order). But, throughout all of my learning at Marquette, I quickly realized that I was not passionate about marketing or entrepreneurship. I truly had no real goals pertaining to those majors and felt defeated with my career path (or lack thereof a "path.") I always thought that I would like where I worked and love what I did. Unfortunately, when I was in marketing and entrepreneurship classes I realized this was not what I wanted to do with the rest of my life.

Registering for classes junior year was tough. I always felt gyped on my time slots and got stuck with all the miserable classes and less-than-ideal teachers, which included "Intro to IT" with Prof. Ow. I dreaded thoughts of an IT course. I felt like I was the least technical person at Mar-

quette. So, I did what any smart person would do. I sat next to the most "techy," "nerdy" looking boy there was in our class. Of course that plan backfired and the "techy," "nerdy" looking boy wasn't any of those things. I quickly turned to Plan B, which meant I would have to allocate more time than usual to this IT class that I had no interest in. It also meant that I would actually have to learn IT. It turned out that this extra time generated a deep passion within for IT.

"I never thought I would fall into this bucket. But I could never imagine my life anywhere else now."

More than I can say, I fell in LOVE with IT. I connected with all of the people, teachers, IT lingo and content of the major. I was hooked after my Intro class with Prof. Ow. However, I did contemplate thoughts, at this point, about the lifestyle that I had always wanted. Right then I started to research salaries and realized I could more quickly attain my dream lifestyle through IT—more than marketing could ever even come close to. I decided to go "gazelle speed" ahead with this choice by changing my major to IT.

I was lucky enough to land a job within the IT department at Harley-Davidson Motor Company my junior year and I benefitted by gaining a ton of outside classroom knowledge. Then, through BizNet I caught my dream job at C.H. Robinson Worldwide. C.H. Robinson is one of the largest 3rd party logistics company in the world.

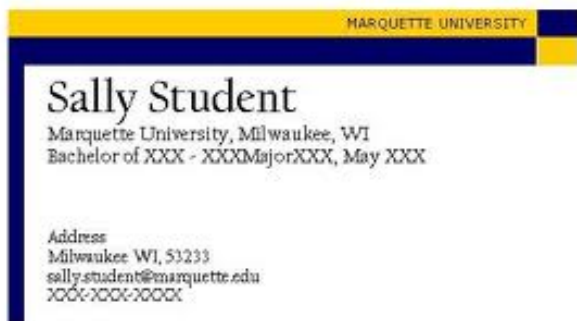
My role at CHRW is a Business Analyst on the Transportation Technology Strategy team. This is the perfect placement for what I wanted out of a job and company. My team focuses on strategic IT projects that grow and im-



prove the company, including new development initiatives, support of the sales team and branches with customer opportunities, and integration of acquired companies into C.H. Robinson technology and processes. I get to play various roles within the corporation and on many different projects. Currently, I am working on an Access DB project with a top 100 account at C.H. Robinson. I am also in charge of running customer demos for Dock and Yard Manager. This is a program created by CHRW to manage docks and yard appointments at warehouses via one centralized website. Currently, I am also working on a matrix to audit the technology and application use of each C.H. Robinson transportation branch. From there, my team and I will assist the branches in eliminating their slow and costly manual processes by switching to automated processes instead. Ultimately, this will save C.H. Robinson time and money, making processes more efficient for all parties involved.

It is crazy to think I could be somewhere other than with the IT professionals of the world. I never thought I would fall into this bucket. But I could never imagine my life anywhere else now. I am so excited for technological changes and career path moves within this field. I am fortunate that Marquette and Professor Ow opened my eyes to this industry and am happy to be considered an IT professional.

-Catherine Stefanek



Need business cards?

Marquette students and alumni can purchase a box of 30 business cards for \$3.00 from the Career Services Center.




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sider IT as advancing your careers in marketing, supply chain, or any other major since all business functions are so reliant on information technology today. The analytic skills you learn in the IT major are directly relevant to many of these majors. Third, with IT, women are exposed to numerous

opportunities for a rewarding and flexible career that compensates more than most non-technical positions. Finally, with offshoring of some technical functions, skills needed for the US IT workforce have evolved to include strong communications, business, and management skills along with a good understanding of IT. This partially explains the diverse IT career options that we see today.

CIO INSIGHT **IT's Gender Gap: What's Really to Blame?**



VALUE OF SKILLS
Technology skills are ranked as the most important factor by men (57%) and women (64%) for them to be successful in their IT jobs over the next five years.

IT has been viewed as a male dominated field because of female underrepresentation, and this bias exacerbates the underrepresentation issue. You, both men and women in the IT profession, have the ability to bring about a change. As more of you join the IT workforce, consider the potential influence you might have on the coming generations and on more balanced gender participation in technical careers.



- Dr. Monica Adya, Associate Professor of Management

Dr. Adya has professional interests in human resource issues in information technology

including offshore project and project team management, women in technology, culture and IT as well as in forecasting support systems such as knowledge-based systems for forecasting and integration of judgmental and statistical approaches.

ANNOUNCEMENTS



JAVA & JOBS
Feb 14, 2012

Suggestions:

Do you have any ideas for articles you would like to see in ITSO Good? Write to elise.chapman@mu.edu



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Recruiting Zone:

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Presentation - TBD

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