



CONFERENCE REPORT

FUTURE OF WORK & AI: A GERMAN- CANADIAN PERSPECTIVE

The Transatlantic Dialogue Initiative - Together into the Future

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As part of the [Transatlantic Dialogue Initiative](#), an initiative financed through the European Recovery Program of the Federal Ministry for Economic Affairs & Energy of Germany, the Canadian German Chamber of Industry & Commerce Inc. organized the “Future of Work & AI - A German-Canadian Perspective” conference on September 18, 2019 at the Ontario Investment and Trade Centre in Toronto. The Chamber brought several German experts to Canada in order to discuss relevant topics within the field of AI and what impact it will have on the future of work. Together with Canadian experts they participated in three panel discussions. These panel discussions had as subtopics “*Recruiting with AI - Biases, Opportunities & Possibilities*”, “*Future Talent - How can it be retained and developed using AI?*” and “*AI and the Work Environment - How will the job of the future look like?*”.

This report will outline the different conversations between the panellists, its key discussion points and what recommended action should be taken on both sides of the Atlantic.

Panel 1: Recruiting with AI - Biases, Opportunities & Possibilities

The first panel discussion focussed on how AI technologies will change the work of recruiters. Participants of the panel were Mo Moubarak (Head of Business Development at MoBerries GmbH), Roy Pereira (CEO & Founder of Zoom.ai), Emma Hunt (Head of Talent at Looka) and Maaz Rana (Co-Founder of Knockri). The panel was moderated by Traci Cheng (Head of AI

Operations at the Bank of Montreal Financial Group).

The panel discussion commenced with outlining how the recruiting industry will benefit from the introduction of AI driven technologies. It has had two benefits for recruiters: 1) It saves time by automating time-consuming and repetitive tasks, such as screening resumes or scheduling interviews with candidates and 2) it improves the quality of hire through standardized job matching. AI has the capability of using data to standardize the matching between candidate experience, knowledge and skills, and the job requirements. The freed-up time through the introduction of AI can now be used to create better interview experiences and to give the entire hiring process a more personal touch. This will make candidates feel more valued and appreciated. This freed up time can further be used to focus on more essential and human tasks. As one of the recruitment experts stated during the discussion: “We can focus on what we really want to do. Low value tasks will be automated, which will allow humans to be more human at work.”

Emotional- and human empathy will become more important with the replacement of repetitive and low-value tasks. The future of AI for recruiting is “*Augmented Intelligence*”, one of the panel participants stated. Augmented intelligence is the belief that you cannot fully replace human capabilities with technology. It suggests that we should look at creating technology to enhance human aptitude and efficiency. Especially in recruiting, there will always be a human involved in the process to interview another human on their fit for the

open job position. This has to do with the fact that emotional intelligence and cultural fit (some argue now for the term “cultural addition” instead), which are very difficult to quantify, play a key role for the majority of jobs. It is just a matter of how to enhance the process towards the actual interview between humans. The challenge for the developers will be on how to integrate a certain degree of human empathy into the algorithms (if that is even possible). This empathy in the algorithm can then be used for giving disadvantaged or stigmatized people such as former prisoners an opportunity to get re-integrated into the job market.

The deployment of AI technologies throughout the recruitment process also comes with challenges. Within the recruiting industry there is currently a heated debate. One side believes that AI will remove biases from the recruitment process, the other says it will not. Those arguing for the elimination of biases make the point that resumes and motivation letters will be screened by the “neutral” AI technology which is programmed to not discriminate. On the other side the argument is made that AI needs historical data, which is generated by humans (mostly Caucasian men) with all its biases and flaws, and that the AI internalizes this through the algorithms on which it is based on. A prominent case is Amazon’s recruiting engine which discriminated against women.¹ The company had developed an AI to review job applicants’ resumes with the aim of automating the search for top talent. The developers realized that its new system

was not rating candidates for software developer jobs and other technical posts in a gender-neutral way. This has to do with the fact that the computer models were trained to vet applicants by observing patterns in resumes submitted to the company over a 10-year period. Most came from men; a reflection of male dominance across the tech industry. No one has the perfect answer to this problem yet, however, inclusion will definitely be one key aspect the industry needs to improve on. Currently developed technologies require more diverse data-sets for them to work inclusively and ensure that algorithms are not biased. Bringing more transparency into the technology and opening up the black box are essential. As one of the penalises stated: “There needs to be reverse engineering to find out whether the technology is biased or not. Only if experts are unable to find a minority in the data, then the algorithm is good.” Additionally, training on unconscious bias should be mandatory in the industry. Recruiting professionals need to be aware of diversity and should have a rough idea on how technology can potentially discriminate.

The final part of the discussion centered around the fact whether we will see an increase or decrease in jobs in the recruitment and HR industry due to AI automation. It was noted that AI will definitely make certain aspects of the job easier and will create entire new jobs; such as chatbots trainers who ensure that there is a more natural human-machine interaction. In line of this discussion one panellist commented that “jobs which will

¹ Dastin, J., 2018. Amazon scraps secret AI recruiting tool that showed bias against women, Reuters. (Online) available at: <
<https://www.reuters.com/article/us-amazon-com->

[jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G](https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G) >.

be automated are mostly the unwanted jobs or service desk jobs. The emerging challenge will be the internal motivation

Panel 2: Future Talent - How can it be retained and developed using AI?

The second panel discussion focussed on how AI technologies will enable HR to retain and train talent within the organization. Participants of the discussion panel were Prof. Dr. Christian Meske (Assistant Professor of Information Systems for Digital Transformation and Strategic Information Management at Freie University Berlin), Pat Whelan (CEO & Co-founder of Paddle HR), Andrew Noble (Account Executive at plum.io) and Dean Delpeache (Manager for Talent Acquisition at Fiix Software). The panel was moderated by Maysa Hawwash (Founder and CEO of ScaleX).

The conversation started with the issue of retaining employees. In today's job market, people do not stick with their job for a lifetime anymore. Nowadays there are many changes and breaks in career paths. Especially for people in their 20s job-hopping is the norm and as one LinkedIn survey indicates, millennials do more job-hopping than any other generation.² There isn't always a "smoking gun" reason for why employees quit. It's typically a combination of things that weigh on their minds and impact their decision to leave their job. Nevertheless, there are three major reasons why employees leave which were identified: lack of opportunities, pay rate and colleagues/supervisor. Especially for creating opportunities for employees to

and re-skilling of the people who will be displaced."

grow within the organization AI offers great potential.

HR departments have to find new ways to retain employees and AI can help them match opportunities with internal talent. AI can give decision makers data on how their employees are performing, what skills they have and what they see next on the horizon of their career path. Especially this information is useful for employers, as they can evaluate what future or currently open position could be a good fit for a current employee. It should be noted that this kind of sensitive information can also be misused. Employers might be able to see which employee is on his or her way out or if he/she is lacking behind in developing new skills which are required for the company in the future. There will be an imminent need to change the applicable regulatory framework for the wide-scale implementation of AI in the HR field. The general consent in the panel was that it is better to use the knowledge of current employees and train them with the help of new technology instead of hiring new external employees with the desired qualifications, as the hiring process of new employees is an expensive procedure. AI can help identify what employees really want and what they are good at. Technology can even bring to light skills of employees the employer wasn't even aware of - skills which might be useful for the organization. Furthermore, knowing where employees

² Landrum, S., 2017. Millennials Aren't Afraid To Change Jobs, And Here's Why, Forbes. (Online) available at : <

<https://www.forbes.com/sites/sarahlandrum/2017/11/10/millennials-arent-afraid-to-change-jobs-and-heres-why/#5aa591bb19a5> >.

might be heading next in their career is extremely valuable for organizations, especially when taking into consideration that 91% millennials want rapid career progress.³ New responsibilities and tasks can be assigned to employees, align with their desire for growth in their career.

Implementing such new technology will lead to strong resistance. As one of the panel participants stated: “You have to keep in mind that you’re helping your employees and let them know how the decision-making process looks like and that AI is not used for stalking them at work”. AI should be open transparent and the decision-making should be traceable as well as regulated by an independent ethics board. AI should not be a black box, as this will lead to its rejection and, ultimately, to its failure.

The final point of discussion focused on that AI will help people with finding jobs that they probably would not even have considered before. Through new technologies people will be able to easily gain insights into different fields of work. It is often the case that people convers in circles with peers from a similar environment or background (e.g. doctors have mainly friends from the medical field). AI can break this up because it can introduce you to other jobs that you might not be familiar with. This also applies to larger organizations which are active in different sectors. Employees trained in a certain profession and with a certain skill-set from one department can transfer to different areas and work in other departments. This also ties back to the

trend that millennials want to gain experience from a more diverse range of industries.

Panel 3: AI and the Work Environment - How will the job of the future look like?

The third panel discussion focussed on how AI is changing the work environment and how the job of the future will look like. Participants of the panel were Dr. Daniel Sonntag (Principal Researcher and Research Fellow at the German Research Center for Artificial Intelligence), Matthias Oschinski (Director for Innovation Economics at the MaRS Data Catalyst), Jake Hirsch-Allen (Workforce Development and Higher Ed System Lead for North America at LinkedIn) and Dr. Wendy Cukier (Professor of Entrepreneurship and Strategy and Founder of the Diversity Institute at the Ted Rogers School of Management Ryerson University). The panel was moderated by Tamara Balan (Chief Operating Officer at CivicAction).

The starting point of the conversation was the statement that technology should empower job-seekers in these times of job automation and job insecurity. The MaRS Data Catalyst therefore developed a tool called [planex](#). Using labor market information this tool shows users how likely it is that a current profession will be automated and how high the degree of automation will be. It is capable of suggesting alternative jobs with a high degree of skill overlap and which are less likely to be automated. Especially jobs in the financial and customer service industry

³ Robert Walters, 2018. Attracting and Retaining Millennial Professionals. (Online) available at: < <https://www.robertwalters.com/content/dam/robert-walters/corporate/news-and->

[pr/files/whitepapers/attracting-and-retaining-millennials-UK.pdf](#) >.

have a high chance of being automated the tool displayed. Besides, large parts of the legal services industry are currently in the process of being automated. Law firms are already using AI to more efficiently perform due diligence, conduct research and bill hours.⁴ However, there are other jobs which are not so much threatened of being automated. These jobs typically involve a lot of creativity, are complex and strategic, and require empathy. If your current job includes any of these listed aspects in its daily routine, automation will probably lead to a shift in focus towards them.

Nonetheless, there is widespread fear that we embrace technology too much and jump ahead too quickly without thinking ahead. As stated by one of the panel participants: "It will hit us over night and we will be unprepared, as we are just at the tip of the iceberg when it comes to job automation." Besides, how will this impact our society and how will cities generate income when no one gets parking tickets anymore due to driving being automated? Including employees by democratizing the process and polling before the introduction of new technologies or using hybrid applications for now should be the answer. Governments have to put in place a framework of how to do this. Moreover, teaching is still the same as it was 30 years ago. The rate of change is so slow and we need to embrace the concept of life-long learning. Methods of how to effectively spread this need to be developed and the employee of the future should be prepared for how to continue actively learning after graduating and how to start loving learning. As one of the panel participants added, [LinkedIn Learning](#) is

such a concept which tries to teach new skills to professionals who are in the midst of their career and need to develop themselves for remaining employable in today's constantly changing environment.

Finally, the hope is that the work environment of the future will be a more diverse one. As already stated, new hiring technologies might give the chance to minorities or people with different skillsets which were not typically seen at the workplace to get hired. A more diverse workforce has many immediate and tangible benefits for employers, and brings a greater variety of perspectives, increases creativity, productivity and performance, and also boosts brand reputation. The hereby emerging challenge is to identify these minorities with the technology (if possible and legal) and how to ensure that this information is responsibly treated. This is definitely an under-researched field and more impulses are needed.

This conference is part of the [Transatlantic Dialogue - Together Into the Future](#) initiative. The [Federal Ministry for Economic Affairs & Energy of Germany](#) together with the [Canadian German Chamber of Industry & Commerce Inc.](#) have called into life this initiative in order to strengthen the cooperation between Canada and Germany on the field of Big Data, Cybersecurity and AI. The goal of this initiative is to facilitate the exchange of best practices, concepts, new ideas and the creation of a new network between both countries, thereby creating a platform which fosters innovation. Innovation means progress, and only through progress can we create the future.

⁴ Sahota, N., 2019. Will A.I. Put Lawyers Out Of Business?, Forbes. (Online) available at : < <https://www.forbes.com/sites/cognitiveworld/2019/>

[02/09/will-a-i-put-lawyers-out-of-business/#6f94cf0c31f0](https://www.forbes.com/sites/cognitiveworld/2019/02/09/will-a-i-put-lawyers-out-of-business/#6f94cf0c31f0) >.