

The Haskayne Report

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Foreword



Dr. Anup Srivastava

Professor of Accounting at the Haskayne School of Business

“It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness...,” said Mark Twain. Was he describing the current age?

On one hand, world has seen unprecedented progress in technology. AI and Machine Learning are at the cusp of solving humanity’s most wicked problems. We could discover a Covid vaccine in less than a year. World became more integrated with global trade, making things affordable. And ESG causes really started taking roots, shaking multinational corporations’ complacency.

On the other hand, the opportunity and wealth gap between rich and poor keeps growing. Russian attack on Ukraine, and the horrible atrocities Russia committed, questions the role of fairness and human values in the 21st century. The war has made 5 million refugees homeless. It threatens the existence of a vast swathe of the world population with food insecurity. Resulting inflation has left half of the world’s households thinking how they would meet their next month’s budgets.

Closer home, Alberta tries to wean off its dependence on oil. It attempts to move towards tech as the key employment and wealth generators. On the other hand, disgruntled youth and talent keep leaving Alberta.

As a part of your well-rounded business education, you must be able to speak up on important issues facing the society. Particularly those that impact, or are impacted by, the business. Such an expression, however, must be grounded in solid research and must not be mere rhetoric. Writing requires discipline, hard work, and research, and must bring some unique insights. I can say that with experience, having published more than 30 articles in Harvard Business Review (HBR) and California Management Review (CMR).

Let me highlight my own articles. In a CMR article, “Private Sector. Don’t Just Stand There, Do Something BIG!” I pushed private corporations to do something concrete, like mandated internship programs for underprivileged youth, leading to a path of college degree and guaranteed employment, instead of empty words. In an HBR article, “We Are Nowhere Near Stakeholder Capitalism,” I argued that stakeholders other than capitalists would never get voice, unless the way businesses are formed changes. In another HBR article, “The Gap Between Large and Small Companies Is Growing. Why?” I showed that the growing gap in society is not confined to rich and poor but is also evident between large and small corporations. In a CMR article, “Doubling Down on Double Sandwich Tax Schemes,” I explained how large multinationals avoid paying their fair share of taxes with innovative transfer pricing schemes.

In sum, you must speak on issues that you care about. I strongly recommend that you consider Haskayne Report as a platform, to hone your skills for thoughtful expressions. Developing that ability will complement the excellent education you receive at the University of Calgary. Many future leaders began their careers like this. President Barack Obama was the first black president of the Harvard Law Review. And Ketanji Brown, the first black woman to be appointed as a Supreme Court judge, served as an editor of the Harvard Law Review.

I strongly admire Haskayne Report. I admire the width and depth of articles published in this journal. Be a part of this journey. Make your voice heard. Offer your insights--they make a difference to someone somewhere in the world!

A Message

From Our Editor

To the reader,

In just two years, the Haskayne Report (HSKR) has immensely grown as a student-led publication, reaching thousands of readers. We are grateful for the support that we have received from our readers and advisors as well as the dedication reflected by our chosen writers. HSKR has seen participation from a variety of faculties - from the Haskayne School of Business to the Schulich School of Engineering. I hope this momentum continues well into the future.

Additionally, it has been a pleasure to work alongside both external and internal HSKR advisors. Their insight has been invaluable. Each member of the HSKR Executive Team (2021-2022) has also played a key role in this year's success as a publication. As a team, we have been able to further expand the Haskayne Report and truly deliver a medium where timely and important topics can be brought to the forefront.


For this edition, HSKR has introduced a novel concept to its publication: spotlighting extraordinary student entrepreneurs from the University of Calgary. With the University of Calgary being a global intellectual hub and its recent focus on entrepreneurial thinking, HSKR believes showcasing the stories of student entrepreneurs will encourage more discussion around entrepreneurship and celebrate the accomplishments that occur both within our university and the local business community.

In the upcoming academic year, we look forward to leading with a newly recruited HSKR Executive Team (2022-2023).

As a final note, I hope you are able to take out some time to read the articles within this edition and share your thoughts on the publication as a whole.

Enjoy reading!

Best,



In This Edition

The student-curated articles contained within this fourth edition address relevant and pressing business topics. The initial featured article will examine the ethics behind gene-editing and business-centered medicine. Next, the moral decision-making of the pharmaceutical industry to introduce price hikes in times of a pandemic will be questioned. This article will be followed by a discussion about the recent supply chain crisis and its impact on GPU availability. The fourth article will address the conventional work week and present a case for the emerging four-day work week. This article will be followed by a discussion around the importance of implementing a purpose-driven organizational strategy to attract and retain quality talent. The final article will address the current Canadian housing market and offer key recommendations on how to navigate the housing bubble and its everlasting effects. Upon the conclusion of the articles, the stories of five student entrepreneurs and their associated startups will be showcased.

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THE HASKAYNE REPORT



Designer Babies: An Ethical Shopping Choice?

By Ghada Eldib

As technological advancements forge through the healthcare industry, a very critical progression that has the potential to change our future revolves around the genetic modification of babies. Designing the genetics of a future child is becoming normalized now more than ever, and needs to be addressed for better, or for worse. Doctors have conducted procedures to aid in these genetic selections and have received both positive and negative feedback. The increasing eugenics in this field has raised many warning signs, which have been addressed by medical ethics boards. However, there is a growing concern around doctors that take advantage of the pregnant woman's dollar. If one doctor refuses to do a procedure for safety reasons, for the sake of the unborn child, another doctor will pick up the slack and take the lead. This growing black market type of practice is raising grave concerns that mandates need to immediately address. Can there be an ethical method to commercialize the genetic modifications of unborn babies, or does this growing technology need to come to a halt?

Firstly, “designer babies” are babies whose genetic makeup has been specifically chosen or changed with the ideal goal to remove diseases hidden in genes (Pang & Ho, 2016). This field of altering the genetics of unborn children is increasing, and it is important to understand why it is becoming more popular amongst women who want to have children. A family that has a heritable disease such as cystic fibrosis would want to ensure that their child does not have to go through a chronic illness for the duration of their life. It is easy to sympathize with parents who would desire this for their offspring. The Pew Research Centre in Washington, DC conducted a study on 2,537 U.S adults from April to May 2018 and found that 72% believe that altering a baby's genes is appropriate to treat a disease that the baby would have at birth (Funk & Hefferon, 2020). To reduce the risk of a serious disease that could affect the lifetime of that baby, 60% of adults deemed it appropriate. However, 19% of that same group of adults found it appropriate to use medical technology to make the baby

“more intelligent”. The conclusion derived from this study is that the support for gene editing is dependent on the purpose for which the gene editing is used for.

The perspective of Pew Research Center showed some interesting results, especially around the 19% who believed that the use of medical technology to make an unborn child supposedly more intelligent is appropriate. But one must ask themselves, “what are the perspectives of those in the medical field and what do they envision for the future of eugenics?”. Dr. Jonathan Moreno, who is a professor at University of Pennsylvania, Department of Medical Ethics and Health Policy at the Perelman School of Medicine, believes that the future of designer babies is a possibility no one needs to express concern for (Berger, 2018). A simpler way to think about this issue is through an example provided by Dr. Moreno. If the human population suddenly decided to create mosquitoes in a lab, and release them all at once with the undoubted understanding that there would not be a next generation thereafter, what would be the expected outcome? While getting rid of a deadly disease such as malaria sounds like a very promising plan, have the lasting effects on the environment been considered? Dr. Moreno believes that the reason society is so fixated on this seemingly “science-fiction world” is due to the fact that there is an entire human evolution that precedes us. Tampering with what currently exists could be futile to humanity’s future. The reality is that there are not many traits that can actually be altered, so there is the need for different questions to be posed concerning promoting good practices for doctors as well as eliminating threats to an unknown science-fiction future.

The international scientific community has many boards to address the standard of care such as the National Academy of Sciences and the Nuffield Council on Bioethics (UK). However, these boards need to become more foundational and set forth strong mandates that can

be held to a standard for patients, especially regarding unborn children. Business-centered medicine is starting to show its claws and ethics boards need to start catching up. In his book, *Designing Babies*, Dr. Robert Klitzman captures some of the hidden darkness revolving around the design of unborn children (Klitzman, 2019). He discusses how the market of buying and selling eggs is highly unregulated and unfortunately is extremely profitable. He highlights that approximately 20% of American families use Assisted Reproductive Technologies (ARTs). The CDC highlights that as of 2019, 489 clinics in the US used ARTs (CDC, 2019). Privatized clinics have the potential to reject or accept mothers who are willing to pay, no matter the consequences. The question is no longer if it is possible to create designer babies, but rather if it should be done or not. Private clinics still owe a duty and standard of care to patients, but who is monitoring them? So now, as a reader, where do you think the line should be drawn? Is it really necessary to police what eye colour a child can or cannot have? If there are too many restrictions, is there potential for backfire from the scientific community? Is there really room for a world in the future where most of the population is genetically designed?

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THE HASKAYNE REPORT



Big Pharma's Addiction to Greed

By Faiq Naveed

Marketing Tactics

The first medication, Morphine, was created in 1804 by Friedrich Sertürner (Hartley, n.d.). Ever since then medications have gradually evolved from being a substance primarily used for the overall wellbeing of the patient to a marketed product. In current times, large pharmaceutical industries utilize advertising mechanisms to invoke interest and trust within target populations. However, over the years crucial medications that support an individual's life have been marketed and turned into a product rather than a life-saving medication that provides vital sustainability for the individual. Considering the information a critical question arises: do the pharmaceutical companies that advertise and create trust within the patient population truly care about patient health or are their minds more profit-focused?

Greed

Rodelis therapeutics is a drug company that substantially increased the price of their life saving tuberculosis drug, Cycloserine. Tuberculosis is a disease that is spread from close contact with other individuals who carry the disease. This disease predominantly affects the lungs, however, it can spread to other vital organs such as the kidneys, brain, and spine (Centers for Disease Control and Prevention, n.d.). Rodelis therapeutics acquired Cycloserine and dramatically raised the price from \$500 to \$10,800 (Pollack, 2015). A total of 1.5 million individuals died from Tuberculosis disease in 2020. Globally, Tuberculosis is the 13th leading cause of death and leads to the second highest number of deaths due to an infectious disease after COVID-19 (World Health Organization, n.d.). With these substantial price hikes, one may question what or who permits these insanely large price hikes. Do we not have

governmental systems in place to deter these actions from occurring? The underlying answer to this critical inquiry is rather simple: most of the time governments and political parties directly benefit from the unjust system. According to the Independent, pharmaceutical companies greatly impact national political systems. This is done by funding various political parties in their electoral platforms which allows the party leaders to disregard corruptive acts committed by the industry (Independent Digital News and Media, 2016). The pharmaceutical industry has great power which is primarily due to the market they have developed, a market that healthcare is dependent upon. With the global spending on medications expected to rise to 1.3 trillion dollars, it undoubtedly provides comfort for the pharmaceutical industry to initiate and execute its agenda (Independent Digital News and Media, 2016).

Pandemics and escalation in pharmaceutical prices

The COVID-19 pandemic incorporated teams of many scientific research corporations to rapidly produce and distribute a vaccine that allows protection from the life-threatening virus. Throughout COVID-19, costs of vital COVID-19 drugs increased significantly. Was the desire to provide an improved quality of life, as advertised by pharmaceutical companies, in the best interest of the general public, or was increasing the prices for these necessary life-saving drugs during a global pandemic just another profit-creating opportunity?

Dexamethasone, a critical medication that was sought during COVID-19 and is known to treat chronic lung disease and brain swelling (two major symptoms of the COVID-19 infection), displayed the largest increase in price (Wikimedia Foundation, 2022). It rose nearly three-fold in the Netherlands (+277%) (Ando, 2020). Diazepam, another crucial drug, increased prices in Lithuania (+167%), Denmark (+128%), Canada (+114%), New

Zealand (+100%), and United Arab Emirates (+100%) (Ando, 2020). Allowing for these discrepancies within the drug market creates a divide between rich and poor. Rather than having these drugs be readily available to any human being, the drug is more available to an individual depending upon their socioeconomic background rather than their qualification and necessity of the drug. The 2016 Canadian Community Health Survey proclaims roughly 8.2% of Canadians who are prescribed medications (about 3 million people) stated the inability to obtain their medications due to affordability issues (Government of Canada, 2022). Another study indicated almost 1 million Canadians had to resort to decreasing their food and heating comforts in order to purchase medications. It also found that 2.5 percent of Canadians relied upon the borrowing of money to pay for necessary prescription pharmaceuticals in the preceding year (Law et al., 2018; Government of Canada, 2022). Studies have found that Canadian senior citizens and individuals on social assistance who are unable to afford medications have increased hospitalized rates and death rates and 43% of individuals who were unable to afford prescription medications had their health worsen (Government of Canada, 2022).

Actions that can be taken to alleviate the issue

The main actions that can be taken to alleviate the stresses of increased unaffordability for drugs primarily rely upon governmental interference. One policy that is currently under debate and is being assessed by the United States government is that of price negotiation. A recent successful price negotiation accomplished by the government of the United States is that of the COVID-19 vaccines (Gustafsson & Nuzum, 2021). Pharmaceutical companies agreed to the price request put forth. This resulted in the United States to provide free of cost COVID-19 vaccines to all of its population. The concept of drug pricing

reformation is greatly beneficial to governments and the general public. A plan had been set for the United States to negotiate prices of various drugs, and if successful, it could allow its government to obtain a comforting \$500 billion over a course of 10 years (Gustafsson & Nuzum, 2021). An option that is considered by many countries that have adopted a public healthcare system is regarding universal pharmacare. It is a pathway that has been discussed by the Canadian government and Parliament. National pharmacare would allow for the price of drugs to be covered by the government. This would allow for necessary medications that are not easily affordable to be obtained by individuals who require them (Clement & Memedovich, 2018). Research has indicated that opting for a universal pharmacare plan could save governments upwards of \$7.3 billion (Clement & Memedovich, 2018).

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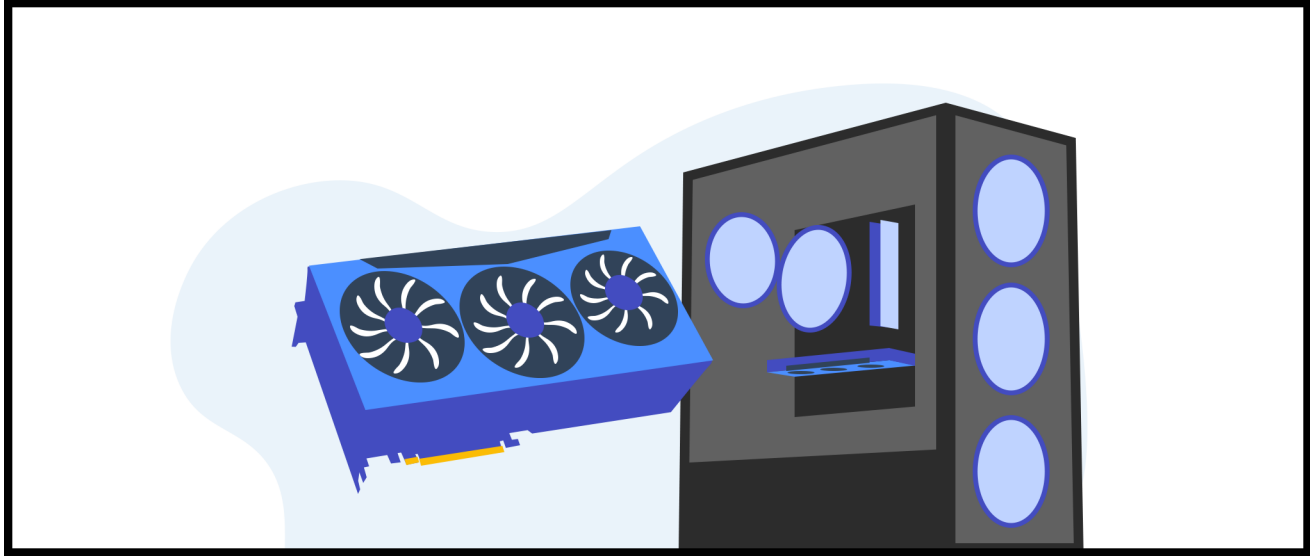
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The GPU Shortage: Another Victim of the Supply Chain Crisis

By Harjot Dhaliwal

Overview

A GPU (Graphics Processing Unit) is a physical unit of a computer that processes data into 2D and 3D graphics by performing complex calculations to map out images (Berman, 2022). GPUs are essential to most computers and have increased in demand due to multiple new applications.

There are two main types of GPUs. A dedicated graphics card (GPU) is generally used in higher-end desktops and is physically separate from the motherboard (Berman, 2022). An integrated GPU is mounted to the motherboard and is not removable (Berman, 2022). Integrated GPUs are generally in lower-end desktops and most laptops as they are practical for everyday use such as watching videos and reading text. However, most modern 3D games require dedicated graphics cards to adequately display the detail

and quality of images. There is currently an international GPU shortage. On most GPU websites one will likely find that GPUs are out of stock or listed at a significant markup. It has become nearly impossible to buy a modern GPU without paying over 200% of the MSRP. Most stores no longer take waitlists due to large backorders. Currently, we are undergoing the biggest GPU shortage to date. No end seems to be in sight.

What is impacting GPU supply?

Cryptocurrency mining has significantly impacted GPU supply. As cryptocurrency continues to grow in popularity, the volume of cryptocurrency miners will continue to grow as well (Bispo, 2021). GPUs are used to solve complex mathematical problems to mine for cryptocurrencies (Bispo, 2021). Large-scale crypto mining operations are known to buy large quantities of GPUs

from websites using bots. Bots are bits of software that can complete tasks such as making purchases on websites and gathering data (Computerinfobits, 2022). They act quickly to process purchase orders before actual consumers are notified of stock replenishments. High-end GPUs are sought after by crypto miners for their speed as miners are in a constant rat race against each other (Bispo, 2021).

Individuals known as GPU Scalpers are also contributing to this shortage. GPU Scalpers are individuals who purchase large sums of GPUs from websites using bots and resell these GPUs at a large markup on third-party marketplaces, undoubtedly contributing to the high demand and significant markup (Computerinfobits, 2022).

The “Bullwhip Effect” is another phenomenon that can explain the GPU shortage. The bullwhip effect is when a sudden spike in demand occurs and in response, retailers order slightly more than the anticipated demand. As a result of the retailers’ response, suppliers then also order slightly more than the retailers (Ridley, 2021). This pattern continues down the supply chain and magnifies, with everyone eventually waiting for backorders (Ridley, 2021). Once all orders are filled, demand appears to decrease, leaving retailers left with extra inventory. Retailers fear this eventual decrease in demand and are not willing to place large orders they may not be able to sell. GPUs have short shelf lives and thus, retailers do not want to be left with last generation GPUs they cannot sell. (Ridley, 2021).

Another factor contributing to this shortage is the COVID-19 chip shortage. Computer chips are used in GPUs, and there are only a handful of chip manufacturers, the largest producers being TSMC, Intel, and Samsung (Ridley, 2021). These companies have promised expansion. For example, Intel recently broke ground on two new factories in Arizona (Ridley, 2021). However, chip

production is complex as chips require many different materials such as silicon, metals, and minerals for wafers and circuitry (Ridley, 2021). This makes the GPU supply chain particularly complex and working to increase quantity can take several years.

Who has been affected?

This shortage affected PC gamers significantly, as a dedicated GPU is required to play most modern games. In turn, they are left with two choices: overpaying for a GPU or being left without a method to game. Cloud gaming services like Google Stadia have attempted to mitigate these issues by offering another method to play without owning a GPU. However, cloud gaming is no match for the speed and quality that a personal GPU provides.

Console manufacturers are also affected by this shortage. PlayStation 5 (PS5) and the Xbox series X/S consoles are scarcely supplied. Sony itself has stated that it is having trouble manufacturing PS5s due to logistics and the chip shortage (Martin, 2022). This has left many console gamers stuck without a console or with their previous generation consoles. Consequently, console companies are losing revenue as they are unable to meet demand.

Solutions that have been tried

Nvidia has attempted to deter crypto miners from purchasing GPUs by limiting their hash rate (Kan, 2021). A hash rate can be thought of as a measure of how fast a GPU computes (Kavanagh, 2022). This limit was only effective for the cryptocurrency “Ethereum” (Kan, 2021). Miners seemed to have found a loophole as some miners were able to restore up to 70% of the mining performance to Ethereum and allocate 30% to a second cryptocurrency (White, 2021). This resulted in no significant difference made to supply. Another loophole sought by miners was

the ability to buy supplies of GPUs which did not have the hash rate limitation, such as the RTX 3090, a top-of-the-line dedicated GPU offered by Nvidia (Kan, 2021).

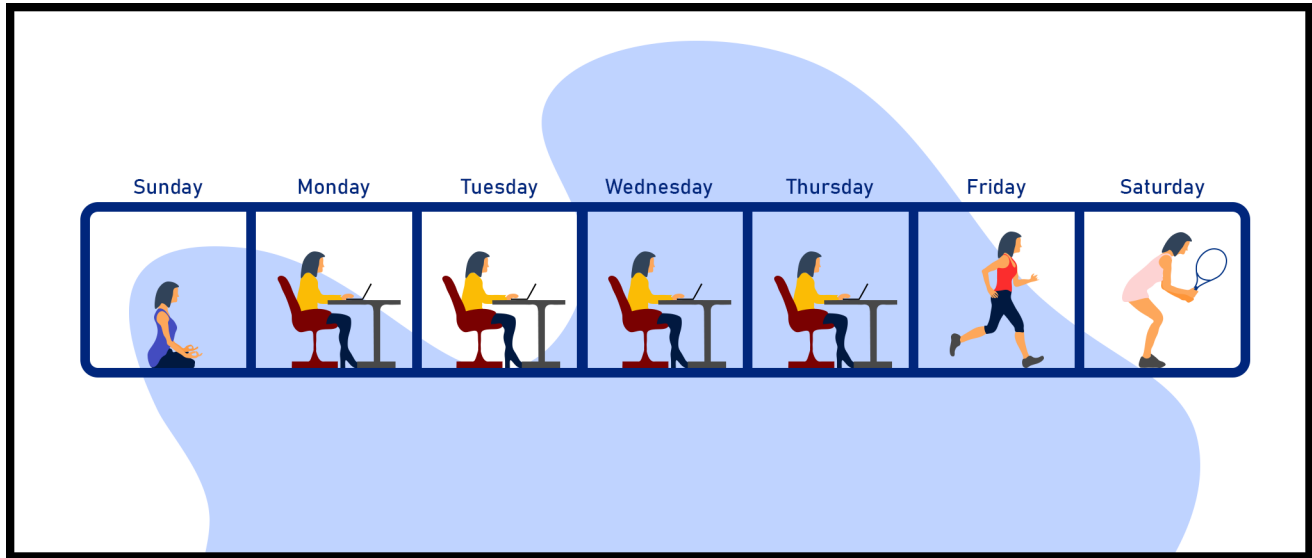
Stores have employed anti-bot measures on their websites, however, these have largely been ineffective (Whitwam, 2022). Although Best Buy had implemented an expensive paywall, this in turn had actually assisted scalpers. One had almost bought \$20,000 in GPUs (Kan, 2022). Skilled bot programmers also possess the ability to reverse engineer website security and bypass it. One way to combat bots could be to have releases in-person, until stock stabilizes. This method could ensure that each person has a verifiable identity and only purchases a set quantity.

Implications

Some implications of the GPU shortage could be a decrease in the number of game releases, crypto mining, and jobs for professionals. Without a steady supply of modern GPUs, game development companies have not been able to create games as rapidly. Crypto mining may also decrease as fewer cryptocurrencies can be mined. This implication could possibly further lead to a slight increase in cryptocurrency values as the stream of new coins may decrease. Furthermore, the shortage of crypto mining may also lead to a decrease in jobs for professionals such as 3D modellers and animators. All in all, the implications of the GPU shortage could be overarching.

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The Four Day Work Week: A Silver Bullet for Burnout

By Christian Lowry

In general, most of Canada's workforce work a single job for 40 hours a week. It is not unheard of for that week to last longer. Many recent trials of a shorter week, however, have been conducted at the level of regional companies and even entire nations, as coronavirus-induced remote work has made employment options more flexible. The adoption of a shortened work week is a step in the right direction for virtually all companies, workers and managers. To see why, it is worth comparing the conventional work week and its effects with many of the alternatives that have been tested across different companies and countries.

In the current conventional work week, which normally lasts 40 hours (or longer), workers are locked into a series of constraints. If one earns hourly wages for a defined number of hours each week, finishing one's tasks sooner does not bring an end to the day or any greater

compensation, so the employee has a scarcity of incentive to work harder than necessary. Phenomena like foot-dragging, time theft, busywork, and burnout have become commonplace. The eight-hour day, the bulwark of the current five-day week, represents an even work-life balance in theory, with "eight hours labour, eight hours recreation, [and] eight hours rest." (Widrich, 2014). While it was undoubtedly an improvement, the limited time outside of work and sleep is often filled with personal tasks such as parenting, caretaking, errands, cooking, household chores, and other calls on one's very limited "free" time (Bird, 2010). This is as true for managers – who must spend as much time supervising as workers spend working – as it is for the workers under their charge.

A shortening of the working day means the same tasks must be completed in less time if productivity is to remain

stable or improve. The lesser amount of time spent at work is therefore compensated for by more effective completion of tasks. They would also be more motivated to finish these tasks and to finish them with proficiency. This was the same rationale for one of the first company-wide reductions of a 48-hour week to a 40-hour week by the Ford Motor Company 108 years ago (Xing, 2022).

Far from being a utopian idea, the shorter week is highly pragmatic and has strong precedents, if only recent ones. So far, trials of shortened work weeks at dozens of companies and ministries across high-income countries have shown that workplace productivity is maintained or increased while work-life balance and mental health improves (Bird, 2010; Pang, 2021).

The most famous recent example was a four-year trial encompassing one percent of Iceland's workforce, drawn from the nation's public service, which reduced weekly working hours from 40 to 36 (Haraldsson & Kellam, 2021). In the end, "participants maintained or increased productivity and service provision." (ibid.) In August 2019, Microsoft Japan gave its 2,300 employees every Friday off, resulting in a 40 percent jump in productivity over August 2018 levels (Porter, 2019). Similar findings have been reported in many multinational companies across a variety of industries (Pang, 2021).

For management, shorter work weeks mean reduced psychological burnout and employee turnover among an overburdened workforce. A recent survey of 1,000 American workers found that 98 percent believed that the shortened work time of a four-day week would improve their mental health (Castrillon, 2021). It is far cheaper to retain an employee than to replace them, so the retention of skilled and motivated workers becomes an investment. By acquiescing to or even exceeding a required shortening of the work day, firms also avoid reputation costs and

boost their public profile as good places for talented individuals to work. The shorter week can also improve the interpersonal quality of the workplace by dangling the "carrot" of more relaxation rather than the "stick" of an overbearing, authoritarian boss during a longer week. Firms can and have competed for workers at the expense of the latter, but can also do so to their benefit.

The well-being of labourers, however, is the overwhelmingly important ethical consideration for a business, since they make up the majority of almost any workplace's staff, and the consumer of one business' goods and services is usually a labourer elsewhere.

It is also important to distinguish between different kinds of "shorter" working weeks. One cunning strategy some orthodox employers have used is the "compressed work week", which shortens the number of working days while keeping hours static (Bird, 2010). For instance, in workplaces with compressed weeks, two more hours of work are often added to each of the other four workdays to make up for the lost hours of the fifth day, making the majority of a given staffer's time – whether at work or home – more packed, burdensome and stressful in the process. It has the form of a shortened work week with none of the substance, defeating the purpose of any shortening. A genuinely shortened workweek would be uncompressed, shortening the total working hours first and days second.

The shortening of the working week should - and just might - become a reality in our time of successful trial runs, increasingly remote work, greater bargaining power, and labour shortages. It already has strong public support and precedent. All that is needed now is the corporate – and more importantly, the political – will to adopt it. Much of the business world's future undoubtedly waits on it.

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THE HASKAYNE REPORT



Retaining Top Talent with a Purpose-Driven Organizational Strategy

By Rachel Hughes

Years ago, the prevailing notion of organizational purpose was that corporations existed solely to maximize profitability and, by extension, returns for shareholders (Berman et al., 2020). Today, however, chasing the profit motive is an insufficient organizational purpose to satisfy key stakeholders. Over time, stakeholders, including employees, have come to recognize that corporations play a key role in society and have an obligation to maximize the triple bottom line of people, planet, and profit (Berman et al., 2020). In response to evolving stakeholder expectations, many corporations have developed purpose statements that are grounded in the organization's values and address the company's unique role in society. Having a well-articulated purpose statement is critical to increasing employee engagement as modern employees seek to perform meaningful work that makes a positive difference (KPMG, n.d.).

Unfortunately, many organizations have generic purpose statements that do not reflect the company's unique strengths and ethos, or they have not yet integrated the essence of their purpose statement into the company's culture and operations (Carlisi et al., 2017). Consequently, only 42% of employees say their organization's purpose drives impact (Gast et al., 2020) and only 28% feel connected to their company's purpose (Blount & Leinwand, 2019), despite 72% stating that purpose should be prioritized over profit (Gast et al., 2020). The gap between employees' expectations and their workplace experiences is part of why disengagement is rampant in the corporate world (Bulgarella, 2018).

For organizations that have a well-defined purpose, the purpose will not drive impact unless managers help their team members to recognize how their roles contribute to

the organizational purpose (Quinn & Thakor, 2018). Unfortunately, only 27% of leaders reported having conversations with their employees about the importance of their work (Schuyler & Brennan, 2016). As a result, employees struggle to see the value of their jobs, which leads to disengagement.

Today, more than ever, it is crucial for organizations to commit the time and resources needed to perfect their purpose statement and help employees at all levels of the corporation to embrace the organizational purpose. This is because companies are facing high recruitment costs and frequent disruptions to business operations due to above average levels of employee turnover during the “Great Resignation,” a voluntary mass resignation caused by the COVID-19 pandemic (Bolton, 2021). Fortunately, corporations can attract intrinsically motivated candidates to fill vacancies and reduce turnover amongst employees by leveraging their organizational purpose. Half of today’s workforce would accept a 15% reduction in pay to work for an organization with an inspiring purpose (KPMG, n.d.). Additionally, employees who feel aligned with their organization’s purpose are more willing to recommend their employer to others, which can help recruiters fill vacancies with top talent (Dhingra et al., 2021). From a recruitment perspective, highlighting organizational purpose through the employer brand will help corporations to differentiate themselves from competitors and attract candidates who are seeking meaningful work (KPMG, n.d.).

From an employee engagement and retention standpoint, employees who embrace the organization’s purpose are more engaged and loyal. In fact, Millennials are 5.3 times more likely to stay and non-Millennials are 2.3 times more likely to stay when they have a strong connection to their employer’s purpose (Schuyler & Brennan, 2016). Additionally, at companies with a clearly articulated

purpose, 63% of employees say they are motivated and 65% say they are passionate about their work, compared to 31% and 32%, respectively, at other companies (Blount & Leinwand, 2019). When employees are motivated and passionate, business results follow (Carlisi et al., 2017). Employee engagement partially explains why over 90% of organizations with purpose-driven corporate social responsibility initiatives experience growth rates and profitability at or above the industry average (Blount & Leinwand, 2019).

Giving employees a voice in defining and executing the organization’s purpose is key to helping them embrace the purpose (Eaton et al., 2021). Organizations can develop a purpose that resonates with their employees by holding structured interviews and focus groups (Fealy & Grise, 2020), but employees must also be able to influence the actions the organization pursues to live its purpose (Eaton et al., 2021). This can be achieved by forming employee “action committees” or inviting them to define success metrics (Eaton et al., 2021). When employees and leaders were willing to collaborate and share decision-making power in situations relating to the organization’s purpose, the companies saw a double-digit increase in their employee engagement scores (Fealy & Grise, 2020).

Once an organization’s purpose has been defined, embedding the purpose in all aspects of the talent strategy, from talent acquisition to total rewards, is necessary to create a purpose-driven culture (Schuyler & Brennan, 2016).

During recruitment, it is important to talk with candidates about the organizational purpose (Dhingra et al., 2020). Candidates who, during the interview process, frame their skills, experience, and values in the context of contributing to the organizational purpose are the ones who should be selected because they will be the most engaged and will seek

out opportunities to apply their skills for impact on the job (Schuyler & Brennan, 2016).

During onboarding, new employees should be encouraged to reflect on how the organizational purpose relates to their individual purpose (Dhingra et al., 2020). Encouraging employees to express personal values at work helps them to outperform their peers by a significant margin and increases retention by more than 30% (Dhingra et al., 2020).

Formal and informal learning opportunities should be leveraged to facilitate the development of behaviours that support the organization's purpose (Schuyler & Brennan, 2016). Training, coaching, and mentoring programs should also be designed to help leaders connect their employees' work to the organizational purpose (Quinn & Thakor, 2018).

Embedding purpose into the performance management process will hold employees accountable to acting in accordance with the organization's purpose (Schuyler & Brennan, 2016). To start the performance management process, leaders should co-create goals with their team members that align with the organizational purpose (Blount & Leinwand, 2019). During performance review conversations, leaders should provide feedback on how the employee's work and performance relate to the organization's purpose (Dhingra et al., 2020). If it is identified that employees are not acting in alignment with the organization's purpose, it is important to call out those behaviours and provide coaching to improve performance (Hay, 2020). To hold leaders accountable for embracing the purpose, some companies embed purpose metrics in managers' performance appraisals (Dhingra et al., 2021).

Additionally, some organizations embed purpose into their total rewards program by offering donation matching

incentives or compensating employees for volunteer hours (Schuyler & Brennan, 2016).

Ultimately, the organizations that will be able to attract and retain top talent are those that adopt a purpose-driven strategy and recognize their responsibility to make meaningful contributions to society.

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THE HASKAYNE REPORT



The Bubble That Will Not Burst: Canada's Housing Market

By Kyle Minato

Canada's Housing Market

The current state of the housing market has led to questions about the future of homeownership in Canada, with affordability being the primary concern. Despite this, Canadians are not shying away, with 75% of urban Generation Z adults saying they plan to buy a home in their lifetime (Sotheby's International Realty, 2021). This next generation of Canadians will face new challenges when pursuing homeownership, but what has led to this, what should they expect, and what can we do?

In February 2022, the average price for a home in Canada hit \$816,720, the highest level on record and an increase of 20% from the previous year (Carrick, 2022). Compared over time to international peers, the increase appears even more dramatic. The Organization for Economic Cooperation and Development cited Canada as having a

188.60% growth in real house prices between 2000 and 2021, nearly three times that of the United States (OECD, 2022).

Systemic Constraints

The issue at the core of this rise is systemic supply constraints. New housing projects are being stifled in many urban areas, severely limiting supply. Long and uncertain timelines, excess costs, and the prevalence of rezoning away from residential use have all hindered development (Di Matteo, 2021). Toronto and Vancouver, where prices have spiked the highest, are especially susceptible due to their geography already limiting the amount of land available. The lucrativeness of the market brought on by the low supply has attracted the attention of investors. A new study from the Bank of Canada found that speculative investors were responsible for 19% of home purchases since

2014. This group purchased houses at significantly greater rates during the COVID-19 pandemic, outpacing purchases by repeat and first-time buyers (Khan & Xu, 2022). The appeal of the lucrative Canadian market has also attracted investment from outside of the country. In 2019, foreign ownership rates were reported as 2.2% in Ontario and 3.1% in British Columbia (Statistics Canada, 2022). All of these factors have led to a buyer mentality focused on the fear of missing out. As Beata Caranci, Chief Economist at TD Bank, suggests, “tight supply starts to become a justification for all outcomes” (Castaldo, 2017).

The Future

So, what is next for house prices? The short answer is it is difficult to answer. Predicting house prices is an inaccurate science. How many experts foresaw the massive increase during the peak of a global pandemic? Nevertheless, various analysts offer their best guesses. A recent report from RBC Economics found that prices are likely to grow by 6.2% during 2022, with a further 0.8% increase in 2023 based on plenty of unmet demand (Hogue, 2022). Conversely, the latest forecast from Oxford Economics predicts house prices falling 24% by mid-2024 citing current prices are well above the borrowing capacity of median-income households (Heaven, 2022). What is certain is that rising interest rates will impact the housing market. With inflation at record levels, Scotiabank expects the Bank of Canada to raise interest rates from 0.5% to 2.5% in 2022, with further hikes planned for 2023 (Perrault, 2022). The rise in interest rates will cause existing and new mortgages to cost more in the coming years.

Government Action

At this point, affordability will continue to be an issue regardless of what direction house prices go. The 2022 federal budget includes new spending to accelerate housing

construction and proposes a two-year ban on residential real estate purchases by foreign buyers. Also included is the new Tax-Free-First Home Savings Account (FHSA). First-time homebuyers will be able to contribute up to \$8,000 a year to a maximum of \$40,000 starting in 2023. Contributions are tax-deductible, and withdrawals to purchase a home are tax-free (Willms & Subdhan, 2022). While these measures are a step forward, critics argue that they do not go far enough. Municipal councils continue to block attempts to change zoning rules leading the Editorial Board at The Globe and Mail to declare, “city councils are at the root of what ails Canada’s housing markets”. The root cause of a lack of supply will continue to plague affordability unless governments take aggressive action. New Zealand recently introduced a law that aims to tackle this, allowing owners to develop up to 50% of their land and build up to three stories without requiring consent from municipal authorities. Some in the industry believe this case can serve as a model for how Canada can curb prices (Hopper, 2021). Federal and provincial governments serious about making housing affordable should act along the same lines, requiring municipal governments to comply with an affordable housing agenda. With rising interest rates and a ban on foreign buyers, the next two years may be the best opportunity to take meaningful action.

Personal Action

Beyond the headlines, buying a house will still be a goal for many. And rightfully so. Homeownership can be extremely rewarding, financially and non-financially. But what can someone do to make the process as frictionless as possible? First, any investment is a personal decision and should match an individual’s risk profile. There are advocates of strategies that do not purchase property and instead focus on investing elsewhere. For future home buyers, the new FHSA and existing tax-advantaged accounts offer vehicles to accelerate savings. Becoming

knowledgeable about the structure and strategies for these accounts can lead to a faster accumulation of a down payment. Credit score maintenance can also make a tangible difference in mortgage costs. In one example, someone with a credit score of 600 would pay \$17,770 more over a 5-year term compared to someone with a credit score of 680 (RATESDOTCA, 2021). Overall, being prepared in advance can help set realistic goals and plans. A good resource is the Canadian Mortgage and Housing Corporation, which offers guidance on a variety of topics related to housing and purchasing decisions (CMHC, 2022).

Concluding Thought

The next generation of Canadians undoubtedly faces a new challenge when it comes to housing. While individuals will continue to navigate their personal journeys, governments must play a key role in ensuring affordability.

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VISUAL SOURCES

Visuals in this publication were designed by Harjot Dhaliwal

[Down payment vector created by vectorjuice -
www.freepik.com](https://www.freepik.com/vectors/down-payment)

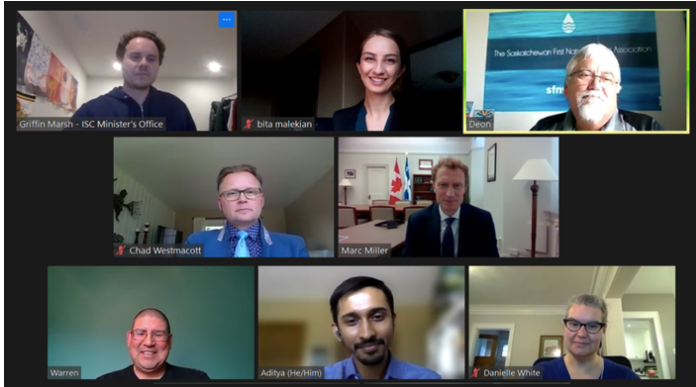


Someone is sitting in
the shade today
because someone
planted a tree a long
time ago.

- WARREN BUFFETT

The next five pages showcase the entrepreneurial journeys of selected student entrepreneurs.

WATER MOVEMENT



Zoom meeting with Indigenous water treatment operators, Warren Brown and Deon Hassler regarding issues operators face and changes needed



Anita Malekian

Q: Introduce your start up, teammates, and yourself.

A: My name is Anita Malekian! My studies in Mechanical Engineering at the Schulich School of Engineering have allowed me to support the founding of *Water Movement* as an Ambassador. Water Movement fills a void in an often-fragmented industry and bridges the connection between Indigenous water operators whose work is vital to the health and well-being of countless communities. Through the joint efforts of industry professionals and university students, it provides a collaborative online space where operators can connect and learn. In addition to an interactive collaboration zone for those in the industry, Water Movement seeks to raise awareness among the next generation of water leaders.

Q: What is the story or inspiration behind your start up?

A: How is it possible that Canada, a country with one of the largest freshwater reserves in the world still has so many communities without water? This question sparked a 3-year long investigative journey where we connected with, listened to, and learned from Indigenous community members. Overtime, we began to hear common challenges facing Indigenous water treatment operators - the first line of defense against water advisories. The challenges centered around training resources, collaboration opportunities, and retention of new operators. To fill these gaps, the development of the online Water Movement Platform began.

Q: What advice would you give your fellow peers that are looking to enter the entrepreneurial space?

A: Steve Jobs once said, "Innovation is the ability to see change as an opportunity- not a threat". Applying yourself to your passions can only open you to new possibilities. When the idea behind Water Movement first began, there was a lot of hesitancy about whether we could truly make a difference. For decades now, billions of dollars have been written-off to address this water crisis and countless companies have offered solutions. But it still exists. In these moments it is crucial to realize that you have the potential to be a game changer. Regardless of what space you want to enter and change, research and understanding the underlying issues is of utmost importance. Do not try to reinvent the water wheel - first reach out to academia, industry professionals, and experts to deeply understand the topic at hand as well as what has been done and why certain issues still exist.

FLORAGREEN



Kristy Wong



Elyse Petanca

Q: Introduce your start up, teammates, and yourself.

A: My name is Kristy Wong, I am a soon to be graduate of the BComm program with a major in Marketing and minor in Communications and Media Studies. I co-founded Floragreen, a start up aiming to reduce the use of toxic and single-use plastic called floral foam. My co-founder is Elyse Petanca, who graduated the BComm program with a major in Accounting in 2020.

Q: What is the story or inspiration behind the start up?

A: We came across this problem in ENTI 317, a course offered at the Haskayne School of Business. My co-founder Elyse brought this idea to the table when her friend, who had been studying floral design, was telling Elyse about her experience working with foam. We were horrified by the negative impacts on the environment and thought that we could do better for our world.

Q: What are some upcoming plans in store for your start up?

A: The startup is in the product development stage and we have already won several pitch competition awards. We are currently in

talks with post-secondary institutions and applied research centers in hopes of finding a strategic partner with relevant product development expertise. Our next goal is to have a minimum viable product that can be tested with a small group of customers.

Q: What advice would you give your fellow peers that are looking to enter the entrepreneurial space?

A: Be bold, but also be humble. Know how to talk to people, whether they are potential investors or interested customers. Do not be afraid of rejection as not everyone will understand your idea. Lastly, use the many resources available to you as a student entrepreneur, both on-campus and off-campus.

Q: Introduce your start up, teammates, and yourself.

A: JAMH is a one-of-a-kind software house focused on an impact-first approach to addressing sustainability and climate change. We are empowering decision-makers to build an informed and sustainable world through democratizing the availability of valid and accurate information. Our most recent product, Carbonlytics, is an international carbon policy database that we hope to use in the creation of a fully automated carbon project developer. Previous products include our Sustainability and Climate Indicator Tracker, a platform used by companies and consultants to understand their sustainability and ESG metrics as well as our Fake News Extension, a tool used to detect misinformation on a website.

Our team has four co-founders who founded JAMH in their first year of engineering at the University of Calgary, including Jackson Cooper, Alec Lamb, Maggie Thai, and Huda Abbas.

Q: What is the story or inspiration behind your start up?

A: Founded in March of 2020 and incorporated in September 2020, our accomplishments since incorporation include holding a contract with a national environmental consulting company, hiring and working with 19 employees, contractors, and interns, having one of our products used by Fortune 500 companies like TC Energy, Brookfield Renewable, and Enbridge, and increasing our operating budget to nearly \$100,000 within the first year and a half of our operations. At the moment, we are also pursuing conversations with the Government of Canada's Environment and Climate Change Department regarding one of our new products.

Our team has also had the privilege of participating in multiple ecosystem incubators across Canada such as Platform Calgary's Summer Incubator Program (May 2020), Toronto Metropolitan University's DMZ Basecamp (July 2020), League of Innovators LABS Program (September 2020), The Accelerator (2021), and have been also pre-accepted into the Fuel Accelerator (August 2022), an Arkansas based innovation program partnered with well-known companies such as Walmart, Tyson, and J.B Hunt.



In the picture, from left to right, are: Maggie Thai, Huda Abbas, Alec Lamb, Jackson Cooper

Not to sound too cliché but each of us wants to positively impact the world during our lifetimes. To us, positive impact manifests itself as creating a more sustainable world. It's one thing to be a sustainable individual and do what you can for yourself. But for us, we thought it would be more effective to create tools that empower society at large. We desired to scale the concept of change.

Q: What advice would you give your fellow peers that are looking to enter the entrepreneurial space?

A: Don't be afraid to ask questions. There are several resources available for anyone looking to begin their entrepreneurship journey. Our all-time favorite is Platform Calgary, the city's go-to innovation hub and entrepreneurial conductor.

If you are looking to be gently exposed to the community, attend "Lunch without Lunch" events held by Rainforest Alberta - another prominent entrepreneurial community.

Reach out to someone on LinkedIn if you are interested in learning more from them. As long as you are wanting to learn, there will always be someone there who will teach. For more information on JAMH, feel free to follow them on LinkedIn or email info@jamh.ai.



In the picture, from left to right, are: Anthony Tran, Rachel Nguyen, Jeffrey Banawa, Amity Liang, Lawrence Nguyen

Q: Introduce your start up, teammates, and yourself.

A: My name is Anthony Tran, a recent Haskayne alumnus. Lawrence Nguyen and I co-founded Onedonate in October 2021. Our team consists of Lawrence who is creating the mobile app, Amity Liang, who does our marketing, Jeffrey Banawa who handles our front-end development, Rachel Nguyen who helps us secure funding, and I consider myself as the jack of all trades but master of none.

Onedonate is a mobile platform that allows Canadians to begin donating with as little as \$1 or donate their spare change from everyday purchases. Onedonate allows users to discover, learn, and donate to charities in less than 3 steps. You can think of us as Wealthsimple Trade but for donating to charities. We've recently completed our MVP and are currently developing our high-fidelity prototype which we hope to launch by the end of Summer 2022.

Q: What is the story or inspiration behind your start up?

A: In 2020, I had the pain of trying to find all my donation receipts during tax time as they were buried in my emails. A simple task that should have taken minutes ended up taking a few hours. Which led me down a rabbit hole of finding a solution to my problem and after learning more about the space I discovered only 21% of Canadians utilize the tax benefit either because they are unaware or unable to find their lost donation receipt. I started speaking with friends and family about their experiences and learned about their problems when donating. That is when I decided that I wanted to

tackle this issue and created Onedonate. It began with an accounting problem and snowballed into a task of assisting Canadians to access over 86,000 registered charities with a click of a button.

Q: What advice would you give your fellow peers that are looking to enter the entrepreneurial space?

A: "Fail fast, fail often" was a quote I heard in ENTI 317. I didn't understand it but after creating a start-up, this quote has been very applicable. My best advice would be to just try and if it doesn't work out... try again!

Other tips and resources I'd recommend:

1. Check out Y Combinator's digital library on YouTube
2. Apply to accelerator programs (Y Combinator, TechStars, Plug and Play, Alberta Catalyzer, League of Innovators, Start-up Canada, etc.)
3. Reach out to other founders as they've been in your shoes. I've had other founders provide me with templates and referrals, saving me many hours
4. Build your network as it will help you in the future (especially when you want to build a team with a diverse set of skills)

If you're interested in learning more about Onedonate, be sure to sign-up for their waitlist at onedonate.ca.

FLUIDOME



In the picture, from left to right, are: Ghada Eldib, Dr. Stephanie Bishop, Dr. Mehdi Mohammadi, Dr. Atefeh Rafiei, Dr. Sören Wacker

Q: Introduce your start up, teammates, and yourself.

A: My name is Ghada Eldib and I am a third year Chemical Engineering with a minor in Biomedical Engineering and a minor in Entrepreneurship and Enterprise Development (MEED). I'm part of Fluidome, a startup I have helped co-found with my colleagues including Dr. Stephanie Bishop, Dr. Mehdi Mohammadi, Dr. Atefeh Rafei, Dr. Sören Wacker, and Dr. Ian Lewis (our advisor). Fluidome is a state-of-the-art metabolomics technology for the development of high quality diagnostic platforms at a fraction of the price of existing workflows.

Q: What is the story or inspiration behind the start up?

A: During their post-doctoral studies with the Lewis Research Group, Dr. Mohammadi and Dr. Bishop recognized that there were unmet needs in the metabolomics research market. Specifically, if a researcher does not have expertise in metabolomics, they would have difficulty accessing useful applications. Thus, they decided to go ahead and solve a gap in the market through Fluidome. Fluidome is a state-of-the-art metabolomics technology for the development of high quality diagnostic platforms at a fraction of the price of existing workflows.

Q: What are some upcoming plans in store for your start up?

We have passed the first round of assessments within the TENET i2c competition. As one of the finalists, we are looking

to pitching our company during INVENTURES to the health and innovation community across Alberta and Canada on June 3, 2022.

Q: What advice would you give your fellow peers that are looking to enter the entrepreneurial space?

A: I am a big believer that you get what you put into your own experiences. When I started at the University of Calgary, I immediately became involved in many clubs. Eventually certain activities led to further opportunities and that is what led me to where I am today. To my fellow peers, I strongly encourage you to get involved in the entrepreneurial community as we are headed in that direction in the future. I'd highly recommend researching and being involved with the Hunter Hub for Entrepreneurial Thinking. They have many workshops, programs, and opportunities for students across all faculties. If you are interested in taking entrepreneurial courses, especially within engineering, I would recommend taking the MEED minor. If you are outside of Schulich, the Management and Society minor is an amazing way to get a holistic perspective of entrepreneurship. Finally, the University of Calgary also offers an embedded certificate in Entrepreneurial Thinking. I strongly encourage you to find someone within the entrepreneurial community and get to know their backstory and what they do. You will surprise yourself with the different ways you can learn from them!



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