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MAGAZINE FOR BUSINESS, ECONOMIC DEVELOPMENT, EDUCATION & ENTREPRENEURS

Vol. 35 No. 2 NOVEMBER/DECEMBER 2017 - \$6.95





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On the Cover: UW President Feridun Hamdullahpur is ready to go for the gold on a global stage.

EXCHANGE

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EXCHANGE magazine is a regional business publication published by Exchange Business Communication Inc., CEO Jon Rohr. Seven issues per year are distributed to each company in Kitchener, Waterloo, Cambridge, Guelph, and area as determined by Canada Post Business Walk Analyst. Subscriptions are available for \$85.43. Send cheque or money order to Exchange, PO Box 248, Waterloo ON N2J 4A4. Attn: Circulation Department. Back issues are available for \$12.00 per copy. Phone: (519) 886-0298 x 301. ISSN 0824-45 Copyright, 2016. No part of this magazine may be reproduced without written permission from the publisher.



CONESTOGA PRESIDENT JOHN TIBBITS AND PROFESSOR LARRY SMITH HAVE THE NUMBERS TO PROVE THE COLLEGE'S INCREDIBLE COMMUNITY IMPACT - PAGE 13 NOVEMBER/DECEMBER 2017

CHANGE

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GOING FOR ONI OBAL STAGE

UW President's goals are "internationalization, interdisciplinarity, and innovation"

BY PAUL KNOWLES

eridun Hamdullahpur believes the University of Water-◀ loo and the Region of Waterloo have an intricately interwoven, symbiotic relationship. He says, "We are the creation of this community," and, after a pause, he adds, "and we've returned that investment, many-fold."

Hamdullahpur is in his second five-year term as President and Vice Chancellor of the University of Waterloo. He came to Waterloo in 2011, and in mid-2016, he was appointed to a second term.

He believes he has made a significant difference at the university. From its founding in the mid-60s, he says, UW has seen continuous growth and made an ever-increasing impact on its community and on the world. He adds, "During my term, the slope has become much steeper, not because of one single person, but as a community. We believe in the mission and the vision."

Speaking of mission and vision, UW is coming to the end

of its current strategic plan and will launch a new plan in 2020. Hamdullahpur says that a lot of consultation will take place between now and that date... but he has already identified three pillars of the plan that are important to him: "internationalization,

interdisciplinarity, and innovation... at the cellular level of our university."

The President clearly believes the time has come for his university to take its rightful - and leading - place on the world stage. "The University of Waterloo is not a local success phenomenon," he says. "It's a global entity."

It is time "to take the university outside Canada, as a global player. We're no longer interested in belonging in the House League - we are playing in the Olympics and going for the gold."

And he adds that this is not a vision for future - it is today's reality. "In many cases, we have gone for that gold. We are a global player."

Hamdullahpur told Exchange that he has communicated

that vision to the university's Board of Governors, and "I have their full support."

Anyone who studies the history of this community understands that, in large measure, what is good for the University of Waterloo will probably be good for the community at large, especially in the business sector. UW student entrepreneurs have raised over \$500 million in investment, and have created nearly 1,700 jobs, many of them in the region.

And the university has an economic impact in other significant sectors, too. The Co-op program - which, along with the unique UW Intellection Property policy that encourages entrepreneurs, has been credited for much of the university's success - means that students earned over \$241 million from employers in 60 countries in 2016/2017 – and brought a lot of it back to Waterloo when they returned to the classrooms and labs.

Last year, new research funding totaling \$205.7 million

"I want to create an environment so that people

from all over the world... can come together. That

this is the place to be. We will bring the world to

Waterloo, and take Waterloo to the world."

awarded to was UW researchers.

As well, the university is a major employer of local residents, including over 1,200 faculty members and 2,377 staff members.

These are impressive statistics - and they're not good

enough for Hamdullahpur. "My challenge is to create a different type of environment, now," he says. The university's record of spawning start-ups is amazing, but what happens to those start-ups once they hit a certain level of success? Hamdullahpur argues that the university should still be a major factor in those companies.

"We have these start-ups, and this is fantastic. So, should we just pop the cork and have some champagne?" His quick answer - 'No'. He doesn't want UW only to be a nursery for start-ups. "Instead of an exodus [of growing companies] from here, I want to create an environment so that people from all over the world... can come together. That this is the place to be. We will bring the world to Waterloo, and take Waterloo to the world."



He adds, "Ideas definitely start here. We want ideas to grow here, we want ideas to explode here, and to connect with other ideas, here."

Asked if Hamdullahpur sees the university as an institutional equivalent to agencies like Communitech, the Accelerator Centre, of even the new Waterloo Economic Development Corporation, he is diplomatic but frank.

"I support Communitech, the Accelerator Centre, the great work that Tony [LaMantia, CEO of Waterloo EDC] does... The difference is, this [UW] is where the action takes place. Things are happening here."

Perhaps somewhat surprisingly, Hamdullahpur insists that the "happening things" are not only in the areas of engineering and computer studies. In fact, he insists that UW's status as a "comprehensive university, committed to delivering education in a large number of areas" is the key to the kind of economic success its students have experienced. "This is what makes us very unique," he says, and he posits an argument that, in a world where robotics, artificial intelligence and all manner of other innovations may change the roles of humans, it is the "comprehensive"

capacities that will make humans invaluable.

"A lot of the things we do as humans can be done by AI, and so on... I want our students to be the kind of talent who can never be replaced by that."

He also believes that UW produces students who, in the currently popular vernacular, will be "disruptors."

"The kind of talent we attract here - they believe this is not a place just to get a piece of paper. I want them to think, 'I have the privilege of having studied at the University of Waterloo, I'm a leader, I can change things, I can be completely disruptive'."

He adds that today's most impactful "disruptors" are entities that have found at way "to bring multiple disciplines together.... philosophers, sociologists, psychologists, computer architects, engineers... Things we cannot even imagine will happen at the intersection of a number of disciplines."

He cites a study that shows that 42% of undergrads at UW believe they could be, or could try to be, an entrepreneur. That's a much higher percentage than other schools with similar programs, the highest in Canada, and more than double the response rate at MIT.

"That," says Hamdullahpur, "is the reason why I am delighted to be the President of the University of Waterloo at this point in time. It is the most exciting place to be. We have places to go and not a second to waste."

HeForShe

One of those "places" is named equality.

Hamdullahpur remembers "my first 'town hall' meeting" when he started at UW. Someone asked a question he had not expected, about the low percentage of female faculty members. He says he gave the stan-

dard response of the time – that there was "a shallow pool" of applicants. Even he was not happy with that answer, and, he says, "I made a promise to myself, that this would not be my answer next year."

His first step was to appoint a special advisor to the President on women and gender issues.

Subsequently, Hamdullahpur was one of ten university presidents globally to be invited to participate in the United Nations Women's HeForShe campaign. The university committed itself to boosting female student participation in STEM (science, technology, engineering and mathematics) outreach experiences and academic careers to build the pipeline of future female leaders in traditionally male dominated disciples, to enhance female faculty represen-

tation "to improve campus environment today and drive towards parity in the future"; and "attract and advance female leaders into senior academic and administrative university positions."

Hamdullahpur is proud that UW not only set targets to

meet this program, but that many of these goals have been surpassed ahead of schedule. For example, the goal was to increase the number of girls and women in STEM outreach experiences to 33% by 2020, but the university hit 35% this year.

Female faculty goals for 2020 are 30%; in 2017, the percentage is already at 29%. The goal for female

leaders in senior academic and administrative positions is 29% by 2020; today, the total is 27.5%.

Hamdullahpur notes that "there were artificial roadblocks" discouraging and preventing young girls and women from choosing many disciplines, including engineering.

The President – who holds a PhD in chemical engineering, and is Chair of the Leadership Council for Digital Infrastructure – told Exchange, "I can't understand as an engineer myself, why someone would be discouraged from take those disciplines."

"We are working very hard, and succeeding, that this place is 100% equal for students, faculty, staff, for anything you want to do. There will be no discrimination."



"I support Communitech, the Accelerator

Centre, the great work that [Waterloo

EDC] does... The difference is, this [UW]

is where the action takes place. Things

are happening here."

Wated Focuses on **RECRUITMENT, RETEN-**TION AND ADVOCACY

Thirty one new deals in Regional economic pipeline BY PAUL KNOWLES

ony LaMantia understands that there are currently challenges to the regional economy - controversial federal L tax changes, the provincial minimum wage law, and significant disruptions to businesses caused by major infrastructure projects – but he still believes that the overall economic development situation is Waterloo Region is positive. In fact, very positive.

LaMantia is the President and CEO of Waterloo EDC (Economic Development Corporation, and he told Exchange that 2017 has been a very positive year for the region, and "2018 will be more of the same... there is a healthy roster of companies looking at investing in Waterloo Region."

When it comes to new companies coming to the region, and existing companies expanding their footprints, LaMantia says "there are about 31 deals in the pipeline right now," including about six he expects to be completed by the end of

"It's going to be a really good year," he says. "I think it's been really successful."

This is really Waterloo EDC's first full year of effective oper-

ation. LaMantia came on board for 2016, but much of that year was spent, as he has said, "listening" to determine the real needs and vision of the regional economic community, and also in assembling a team.

So 2017 was when the rubber met the road, and on any measure, the CEO believes the results have shown significant success – which he expects to continue in 2018.

He points to the high level of cooperation and collaboration between Waterloo EDC and the economic development

LaMantia says "there are about 31 deals in the pipeline right now," including about six he expects to be completed by the end of 2017. "It's going to be a really good year. I think it's been really successful."

offices of the eight municipalities that make up Waterloo Region – the Region itself, three cities, and four townships. He points to "our cohesive, integrated narrative."

And he's quick to highlight the fact that there have been wins, not only in the cities, but in the townships, with new companies locating in Woolwich and North Dumfries, projects in the pipeline for Wilmot, and a developing relationship with Welleslev.

Waterloo EDC is a regional entity, says LaMantia, and







"the townships have to derive value from what we are doing", right alongside the cities. But he also is happy to list city-site successes as well, pointing to the September announcement of expansion by Germany's Erwin Hymer Group, first located in Kitchener and now with a second, new facility in Cambridge.

That's just one example of new-found collaboration between the cities, and LaMantia calls it "a great Kitchener-Cambridge story."

LaMantia told Exchange that the EDC has so many projects on the go, that "sometimes, we just plow ahead and don't pause to look at what we have accomplished." But he clearly takes pleasure in the roster of successes – as well as the ongoing activity of the organization.

For instance, he points to the Auto-Tech Symposium held in recent weeks at the Waterloo Centre for Automotive Research, an opportunity "to showcase what we've done in terms of autonomous vehicles" and other R&D advances in the automotive field.

He notes that, only five years ago, very little automotive R&D was happening in Canada, but today, many of the top car-makers – GM, Ford and of course, Toyota, among others – are very active in R&D in collaboration with the region's post-secondary institutions.

Collaboration

Collaboration is a key word in economic development today. And LaMantia talks about it, not only in terms of collaboration between Waterloo Region municipalities, but also on the broader, provincial scale.

He's a proponent of entities like the Toronto-Waterloo Region Corridor, noting that this larger district attracted \$1 billion in Venture Capital funding in 2016. "I think that, together, we're stronger."

He is also calling for more cooperation with Ottawa companies and entities, noting that many of the large and growing companies – Blackberry, Google, Shopify, for example – "have



a major presence in Toronto, Ottawa and here."

"It's really exciting to see the inter-regional collaboration," he says. "We don't compete with Ottawa and Toronto as much as we collaborate." One example of that, much in the news, is the bid for Amazon's headquarters, where Waterloo EDC is partnering with Toronto. "We want to be part of a proposition that has a shot," he says. "I'd rather be a smaller part of a winning proposition than 100% of nothing."

LaMantia says that the successful collaboration, especially with Toronto and increasingly with Ottawa, is attracting attention. "Other people want to be a part of it, too," he says, citing Guelph, Hamilton, London and Windsor as examples. That's fine with LaMantia: "It's important to have a big tent."

"Before major changes to small business taxation. they need to do a regulatory analysis."

He sees collaboration reaching well beyond provincial and even national borders, as well. He points to the potential for working together with districts and companies in Germany, the United Kingdom, and Japan.

Retention

LaMantia emphasizes that attracting new companies to the Region is only part of the EDC's role. "The retention piece is an important part of the mandate. I would not have taken the job if it was strictly green-field [bringing new companies in]."

He points to "wonderful scale-ups" by successful corporations that have maintained and increased their footprint in the region, companies like Vidyard, Thalmic Labs and Axonify.

Advocacy

LaMantia says that the Waterloo EDC also has an advocacy role, representing the economic community to government, and collaborating with other organizations like Chambers of Commerce. He acknowledges a plethora of current "differentiators" for companies, from NAFTA negotiations to Ontario Bill 148 (changing minimum wage and other regulations) to the national taxation proposals. "One of our roles is to advocate on the part of companies," he says. For example, NAFTA regulations such as rules of origin "are really important to automotive suppliers here."

He admits, "these are the kinds of things that might be causing companies to pause, so our job is to work with the company and educate them on risks and rewards."

As well, the current federal tax proposals mean that "across the board there are significant concerns for small businesses. The federal government needs to be aware of the bigger picture," and LaMantia believes his organization must play a role in painting that bigger picture for the lawmakers. The CEO, who was previously a highly-place provincial civil servant, says, "I'm very active in that dialogue."

He believes that a step is often missing in formulating legislation that will impact on business. "Before major changes to small business taxation, they need to do a regulatory analysis."

LaMantia says that since coming to Waterloo, he has scarcely had time to breathe. "The last 21 months have gone by in five minutes, and I've aged 10 years."

THE IMPACT OF ONE **COLLEGE**

More than 50% of regional residents have studied at Conestoga

BY JON ROHR

raterloo Region and Guelph are two communities built on the foundation of entrepreneurship, innovation and education. Strategically, the area has four amazing post secondary institutions that provide a diversity of expertise and transfer of knowledge that is as unique as it is, is highly valued. And for the last 50 years, one institution has shaped the communities' landscape in a way that touches a majority of the people who are building the future in these communities.

Conestoga College is one of the fastest growing colleges and a leader in Polytechnic education. It has educated more than half of the communities' workforce, it has empowered entrepreneurs who own more than 3500 local businesses,

"If you bump into someone in Waterloo Region, Guelph or Stratford, you have 50% odds that you're going to bump into a graduate."

and has educated graduates who produce over \$2.3 billion worth of commerce that is injected into the local economy annually.

The economic impact of Conestoga was recently presented at a celebration by University of Waterloo Economist Larry Smith. Smith is a specialist on entrepreneurship and has lectured, guided and developed strong friendships with many of his students that have gone on to perform



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amazing feats in the world of technology and entrepreneurship.

His findings seem astonishing, but he insisted that his presentation was "by the numbers", presented without "exaggeration, puffery, hype or anything else". The numbers

clearly demonstrate that Conestoga College is the primary educator and trainer for the local area, "full stop".

In a nutshell, he states that "if you bump into someone in Waterloo Region, Guelph or Stratford, you have 50% odds that you're going to bump into a graduate."

"It's hard to exaggerate the importance of that contribution," says Smith. Focusing on the theme of adaptation, and the pace of change in our economy, Smith is a prophet whose mantra is that adaptation is one of the "highest economic priorities that we can talk about".

Over the past few years, Conestoga conducted a data col-

It's about innovation. Adaptation is about new business, new skills, new possibilities, new products and new uses of old technologies

lection process that rigorously collected numbers measuring the institution's contribution. "It's hardly an exciting job," adds Smith, "but it's vital, and the college now allows us to say this figure with confidence."

One such verified number: more than 5000 businesses have been started by Conestoga graduates, with 3500 of them located in the Waterloo Region and Guelph economic catch basin.

There are approximately 539,232 adults in Waterloo Region, Guelph and Stratford (working or retired). Smith states that he can confidently say that "Conestoga has



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trained almost half of the employed labour force, and that by all standards that number is an extraordinary one."

His presentation highlighted the three areas in which Conestoga contributes more significantly to the local work force. Smith stresses that a painstaking approach was taken in determining these numbers, so as not to "double count and to make sure that the students are actually contributing here in the Waterloo Wellington area and not some 'foreign' place like Mississauga."

He first highlighted the students who have graduated and received diplomas, certificates and degrees - the introduction of men and women into a productive world some 73,874 of them.

The second group falls into the category of the life long learner, where some "186,375 plus have taken advantage of the continuing education offerings at Conestoga College. Smith tells the audience that "those are important contributions to the adaptation of this society," stressing hat the alternative would be for them to be removed from their ability to contribute to the economy, which would

Both Conestoga President John Tibbits and Larry Smith agree that the college needs to take its game up yet another notch.

only stress the economy via welfare instead of reinforcing with employment.

The third area is corporate training, as the college also does targeted training where enterprises and employers can "tell the college what it needs" - a whole variety of programs, long, short, customized and specifically tailored. The college has contributed corporate training to 34,437 people.

This all totals 294,686 individuals or 54.64% of the working adults in Waterloo Region, Guelph and Stratford a truly extraordinary number.

Smith tells it as it is, with no doubt that "the college is about applications in the job market, it's about making sure that our graduates, and everyone touched by the college, is job ready, and job ready for the new job, job ready for the job that they'll be working at."

Calculating this critical number is one thing, but it's a fluid mass as that keeps growing. Both Conestoga President John Tibbits and Smith agree that the college needs to take their game up yet another notch. It's about innovation. Adaptation is about new business, new skills, new possibilities, new products and new uses of old technologies. Both agree that innovation is a big part of this mix, both agree that entrepreneurship is vital. "That's why continuing education is so important," says Tibbits. "You don't create innovation with old skills, or old attitudes, so the college needs to be forward looking, but it also needs to be mindful of the quality of life in these area."

Smith adds, "It's a game of talent. The talent locates here or goes elsewhere, and talent is mobile, and we need to pay attention to that."

Their presentation and concern for talent retention

comes at a time when governments and their policies are altering the landscape of economic development. Governments and policy makers need to look hard at the global landscape and adapt their thinking to the times. Entrepreneurship via local talent is paramount to the success of not only this community but all communities.

As an inclusive community, "how can we not believe this, we can look at that and say, well that's politically correct rhetoric? I don't do politically correct rhetoric," says Smith. "And neither does John".

Smith adds that although the college has educated more than half of the population, the impact reaches even beyond that number. "We don't serve half the community by serving narrow slices," he says, "we serve all of it, the young, the old, Canadians who have been here since the beginning of time and Canadians who have arrived three and half minutes ago ... we are the community. And we're going to celebrate that."

As Conestoga prepares for the next 50 years, both Smith and Tibbits joke that they will be here for as much as of it as they can, to continue to serve the community. Not because of these numbers, but because "we've got programs that will make your brain hum". X

MIDTOWN MOVEMENT

Infill development booming throughout KW core

BY JON ROHR & PAUL KNOWLES

rogress on the ION Light Rail Transit system in Kitchener-Waterloo and related construction projects may seem to be ponderously slow, but new development in the core area defined by the LRT seems to be happening at the speed of light.

There is action in Uptown Waterloo – including the Post Office site (King and Bridgeport) slated for redevelopment by HIP Developments – and in downtown Kitchener – including 8

Major redevelopment is happening all along the news transportation corridor, and Kitchener and Waterloo are home to properties that have seized the imaginations of developers.

Queen, headed by Frank and Steve Voisin - but there is also a lot of excitement in part of King Street unofficially known as "midtown."

Not everyone agrees on the precise boundaries of "midtown" – Frank Voisin includes "HIP Development's fantastic project, over at the Brick Brewery site," in his description of midtown, while HIP's own Scott Higgins prefers to think of the Brick project – officially "Circa 1877" – as part of Uptown Waterloo.

HIP does have an admittedly "midtown" project – 741-751 King Street West (with a new 30,000 square foot office building and 170 rental apartment units), while Voisin is a partner





in Catalyst 137, again "midtown", on Glasgow.

Informal geographic boundaries aside, what is clear is that major redevelopment is happening all along the news transportation corridor, and that both the cities of Kitchener and Waterloo are home to properties that have seized the imagi-

nations of developers like Higgins and Voisin – and a number of colleagues, including the Zehr Group.

Besides, both Voisin and Higgins told Exchange that the "midtown" designation may

well disappear in the fairly short term. Voisin says, "Downtown Kitchener and Uptown Waterloo are sort of joining," and he adds, concerning Catalyst 137, "we are in the middle with an LRT stop at Grand River hospital."

Higgins, whose development at 741-751 King Street West is also close to Grand River Hospital, says, "You will see the two cores merge together, at least in respect to King Street. I think it's a ten-year-plus horizon" until infill redevelopment unites the two cities.

Higgins has a unique take on sites like those being redevel-

oped by HIP and Voisin's partnerships. "These infill sites are the new farms," he says, explaining that not that many years ago, developers would buy farms that were adjacent to cities, and wait for subdivision approval.

That no longer happens, he says, "and that's a good policy... so these infill sites are the new farms."

If so, there is a lot of farming going on. Catalyst 137 – which measures an enormous 24 acres, with the building covering half of that – is already attracting tenants. It is described as "the world's largest IoT manufacturing space." It will also include office space for service providers to IoT businesses, including lawyers. In fact, the facility's second tenant is a law firm.

Voisin – a third generation Waterloo Region developer – has also recently acquired the former Legion building in downtown Kitchener, purchased from the city. That project is entirely his own, through his Voisin Capital corporation, while Catalyst 137 is in partnership with Kurtis McBride of Miovision and Toronto-based real estate firm Osmington Inc.

The core district projects tend not only to involve innovative re-purposing of existing buildings – factories, a Legion, a funeral home, a brewery, a medical office – but they also tend

to be really, really big.

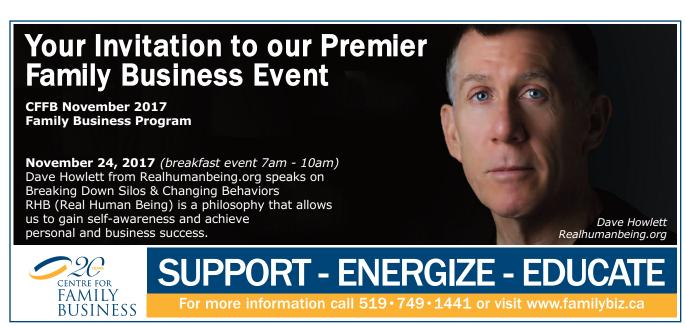
Higgins smiles as he explains, "We try to dream big."

Their current projects are precisely that. HIP's Post Office site – which is still going through planning appeals, and

is described as being at "the conceptual stage" – will stretch to 750,000 square feet, including 45,000 square feet of office space, and 300 rental units.

Circa 1877, the former Brick Brewery, is "our first flagship in the K-W area," says Higgins, whose company is also developing the ambitious Gaslight District in Galt Cambridge. The finished product – occupancy is anticipated by fall of 2019 – will include 188 condo units and a 56,000 square foot bar and restaurant – a nod to the beer-making history of the place.

Not surprisingly, Catalyst 137 will also have special ameni-



Voisin and Higgins point to the fact that their

various projects are taking full advantage of the

tech reputation of K-W.



ties, including a brew pub, a restaurant, and a public meeting

Both Voisin and Higgins point to the fact that their various projects are taking full advantage of the tech reputation of K-W. Everything, in commercial, retail and residential space, will be high-tech state-of-the-art. One example of this is that Grand Innovation - the centre for applied research, development and innovation in the tech industry located in the Gaslights development in Cambridge – will have a Waterloo Hub at Circa 1877.

Not surprisingly, parking is becoming a significant question in the rapidly-filling core area of the twin cities. Voisin thinks he has that beat at Catalyst 137, where "unlike everything else that is close, we've got free parking."

Higgins has innovative parking plans, too – at Circa 1877, residents who don't want a parking space get a discount; at the Post Office development, which will not be occupied until "early 2021", parking spaces allocated to the commercial clients will change designation on evenings and weekends to add to the public parking available in Uptown Waterloo.

Some buyers of condo and rental apartments have tradi-

tionally been personal corporations making investments and that advantage could be taken away with the still-to-beapproved federal tax proposals.

Higgins says that he is not worried that this will impact on sales of condo and rental apartments. He says that up to 25% of sales have been to investors as opposed to residents, but the majority of them have not be people with private corporations, "maybe 5-10%."

He points out that the Gaslight condo project was launched after the proposals were suggested by the government, and it had no impact on sales - "we were virtually sold out in three

BUSINESS BLASTS GOVERNMENT

Small Business minister says she is listening, and changes will come

BY JON ROHR & PAUL KNOWLES

he government of Canada has proposed significant changes to taxation legislation, causing an almost unprecedented outcry among business owners in the country. And Canada's Minister for Small Business, Waterloo MP Bardish Chagger, says that she welcomes that response, telling Exchange that the current proposals are just that – proposals – and that consultation with Canadians is very likely to lead to amendments to the legislation.

The changes, introduced by Finance Minister Bill Morneau, are complex and detailed, but analysts suggest the major impact will fall in three areas – restricting "sprinkling" or sharing income with family members; restricting private corporations from making "passive investments" unrelated to the business; and restricting the conversion of income into capital gains, in order to pay less tax.

Exchange conducted an on-line survey that attracted 42 responses from business people; all respondents were in corporations, and 55% reported they were involved in family

Important message to all

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businesses.

The accumulated results were clear – 93% said the proposals will affect the way they operate their business, with 65% saying holding a passive investment portfolio as their number 1 concern. 98% of respondents believe that private "and particularly family" business are being targeted unfairly in the proposals, with 90% indicating that private corporations have been "painted as the bad guys within the Canadian economy."

Ninety eight percent rejected the idea that the proposal "was designed in an open an collaborative process," and 93% believe that fairness is not the reason for the proposals. 95% agreed that the proposals will hurt the Canadian economy.

The survey sparked a lot of comments, almost all against the proposals. Some examples:

"This is a punitive move to satisfy general voters who know nothing about the complexities of running a business."

"This is just a tax grab by the federal government, plain

"Canada has a tendency to paint businesses of all levels as corrupt, selfish, tax dodging and underhanded. This is just not true." - Survey quote

and simple."

"Perhaps eliminate income sprinkling to the children of business owners, but keep the 'sprinkling' to the spouse as they are equally at risk."

"Canada has a tendency to paint businesses of all levels as corrupt, selfish, tax dodging and underhanded. This is just not true. The hardest workers and contributors to our economy can be found in the small business owners."

"The question that should be asked is should small businesses receive different tax treatment to compensate for the risk factor and lack of benefits."

"It has been rushed without consultation. I would agree to looking into the issues raised with more time."

MP Chagger – who is Leader of the Government in the House of Commons and Minister of Small Business and Tourism – says that she welcomes such comments. In an exclusive interview with Exchange, she said, "We're having a conversation. I appreciate constructive comments and feedback."

She rejects the idea that her government is attacking

small business. "Small business is the backbone of the Canadian economy," she said. "We have to be sure that any measure we bring forth works for small businesses."

But she does not deny that some changes will be enacted. "Change," she said, "is hard."

Chagger noted that new tax legislation was part of the Liberal platform in the most recent federal election, adding "We owe it to Canadians to look at it, but we want to do it in a good way. We decided to share the proposals so that Canadians can be a part of that conversation."

She contends that the government wants to tap into the expertise of the Canadian business community, and says,

"Small business is the backbone of the Canadian economy. We have to be sure that any measure we bring forth works for small businesses." - Chagger

"We've had a lot of great feedback within this consultation process."

That feedback, she insists, will make a difference. She believes that before the proposals become law, there will be significant changes. As Government House Leader – the member of cabinet charged with the responsibility to guide legislation through the House of Commons – she says "On numerous occasions we have seen legislation amended. We've also taken amendments from the Senate." She reiterated, "We want the law to work for Canadians."

Much of the rhetoric around the new proposals centres on the concept of helping the "Middle Classs". And yet this appears to be a very amorphous term. One definition, published in the Globe & Mail, suggested that a middle class family has an income between about \$25,000 and \$42,000 – which seems very low, considering the low end is well below the poverty line established by Statistics Canada. So who are these "middle class" people? Chagger won't put a figure on it, but suggests that there are a number of factors: "I grew up in a middle class family. That can be defined by income, by type of job, by how you feel, by what you have. What we know is, for our country to be as strong as possible, we need a strong middle class."

She contends that the government's intention is to continue to nurture an atmosphere of job creation. "The government's role is to create the conditions for success. We don't directly create jobs, but we can make strategic investments."

Returning to the issue of the tax proposals, Chagger told Exchange that nothing is set in stone. "People believe the decision is already made. But no, the government is listening."

News reports continue to highlight developing issues with the proposal. Repeatedly scenarios are presented, as to the financial effects of each new amendment. It's complicated, as there is such a wide variety of SME business structures. What is certain is that business confidence in this government has already waned, as these proposals have generated a disincentive for ownership, a skewed definition of fairness and needed clarity on just who are the middle class? What long term effects the proposals will have on Canada's "backbone", the SME's, is still unknown and will be up for debate, for quite some time. X



THE CITY OF KITCHENER HAS OPENED an Innovation Lab in Communitech, part of the city's commitment to its "digital Kitchener" strategy. Lab Director Karl Allen-Muncey launched the facility earlier this fall.

He told Exchange that the Lab is one element of the larger smart city thrust, headed by Dan K. Murray, Director of Technology Innovation and Services for the city.

Allen-Muncey is a full-time city employee, even if he is not based at City Hall. In fact, he explains that this is a deliberate strategy on the part of the city, with the Communitech location offering a new perspective on tech issues – and also allowing significant interaction between people playing the same role for entities as diverse as

Mattel and the Province of Ontario – both near neighbours in the Digital Lab wing of Communitech.

Allen-Muncey says that while the idea of an Impossion Lab may initially

Allen-Muncey says that while the idea of an Innovation Lab may initially sound a bit removed from the day to day life of Kitchener residents, in fact, the city's digital strategy will impact on everyone: "Everything technical... the user experience of living in the city."

He credited Kitchener Mayor Berry Vrbanovic with being "a huge proponent" of the tech strategy.

Kitchener is dubbed a "smart city", but Allen-Muncey says there is not yet a hard and fast definition of that term. None the less, he is committed to finding ways to make the city smarter. Current projects of Digital Kitchener include replacing municipal lighting with LED lights, building a smart grid, and developing a city-wide wifi network.

It's early days, says Allen-Muncey. "We're still defining the mandate for the lab," but he insists that mandate will include the opportunity for vision and dreams. He predicts that the lab – which will expand its staff when several interns join in January – will spend 70% of its efforts of "safe projects" – such as reinforcing existing programs; 20% on more research-based efforts; and 10% on "more speculative exploration into new technologies and how they can benefit the city."

THE COWAN FOUNDATION IS INVESTING in the future of the community with a transformative gift of \$4 million to support the expansion and redevelopment of Conestoga's Waterloo campus. The gift is the single largest from a private donor in the college's 50-year history and marks the launch of Transforming Together, a new initiative to help build a bright and prosperous future for individuals and businesses here in our region and beyond.

"We are deeply grateful for the leadership of The Cowan Foundation in supporting Conestoga's efforts to address the needs of our growing community, foster innovation and create new opportunities for individuals to build the skills and knowledge that will contribute to successful careers, stronger businesses, and economic growth across our dynamic region," said Conestoga president John Tib-

bits.

"Past experience has shown us the positive impact of an investment in Conestoga College," explained Maureen Cowan, Chair of the Board of The Cowan Foundation. "They continue to create additional opportunities for students to achieve their academic goals by providing more pathways for people to seek post-secondary education, in a manner that is responsive to students' changing needs and businesses and organizations' demands."

BLACKBERRY LIVES! SOFTWARE NOW MAKES UP

more than 40% of BlackBerry's sales. The company recently reported a profit that topped Wall Street's forecasts. The news sent the stock soaring. Shares of BlackBerry rose nearly 15% after the company posted strong gains in sales of its software and services. The stock has now gained more than 50% this year. BlackBerry has cleaned up its balance sheet under CEO John Chen. The company now has \$2.5 billion in cash and investments and just \$739 million in long-term debt.

ONE OF KITCHENER'S PRESTIGIOUS professional services firms is reinforcing its presence in Waterloo Region with a move to the city's Innovation District – joining other global brands that are capitalizing on strength of opportunity in the heart of downtown Kitchener. International law firm Gowling WLG announced its upcoming move into brand-new office space in a building to be developed at 345 King Street West

"Gowling WLG has been a part of



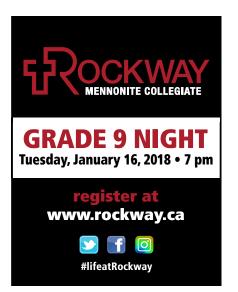


Waterloo Region for more than 30 years, and they have been a strong presence in downtown Kitchener for a large part of that history," said Mayor Berry Vrbanovic. "We are thrilled that they have chosen to reaffirm their commitment to downtown Kitchener; they will be a natural fit in the Innovation District."

"As a global law firm with deep roots in the Waterloo Region, we're very excited to be joining the city's Innovation District – an area that reflects our approach to legal services, as well as the clients we work with," said Bryce Kraeker, managing partner of Gowling WLG's Waterloo Region office.

Perimeter Development Corporation acquired 345 King Street West in a competitive bid process earlier this year, after the City declared the land surplus. Located in the heart of the Innovation District, Perimeter's development will add 120,000 square feet of Class 'A' LEED Gold office space to the Innovation District. 345 King West will be the first new Class 'A' office building developed in downtown Kitchener in over 25 years.

waterloo region has announced a Community Innovation Grant created to support new sustainable approaches to addressing social, community and health needs in Waterloo Region. The new \$50,000 CIG program will provide one-time grants to support not-forprofit community organizations, partnerships or groups undertaking innovative projects with potential to pro-





vide effective and sustainable solutions to existing or emerging needs within the region. "The CIG program is linked to our objectives as a Region," said Ken Seiling, Regional Chair. "We are aiming to harness some of the region's innovative energy and direct it towards our healthy, safe and inclusive communities focus area this year." The focus area will change annually.

THE WATERLOO WELLINGTON LOCAL HEALTH Integration Network (LHIN), announced the appointment of Michael Delisle as Board Chair. Delisle is a local business leader and quality improvement expert with significant experience in health care governance. Delisle is currently the CEO of The Registrar Company. Former Waterloo Wellington LHIN Board Chair Joan Fisk finished her term as Chair in early June before accepting a new role as CEO of United Way Waterloo Region Communities.

THE PROPOSED ADVANCED MANUFACTURING

"Supercluster" in the Toronto-Waterloo Corridor has been short-listed among nine proposals across Canada. The Canadian government has committed \$950 million to the eventual five winning proposals. Two of the nine on the short list are from Ontario – the local advanced manufacturing Super Cluster, and another from Sudbury. Jan De Silva, President & CEO, Toronto Region Board of Trade and Ian McLean, President & CEO, Greater Kitchener Waterloo Chamber of Commerce, issued a joint statement:

"For the past year the Greater Kitchener Waterloo Chamber of Commerce and Toronto Region Board of Trade have worked in partnership with more than 100 business, academia, not-forprofits and our chamber partners on an advanced manufacturing bid for the Innovation Supercluster Initiative. Our goal for this business-led collective is to realize the Toronto Waterloo Region Innovation Corridor's potential and create a best - in - class advanced manufacturing supercluster through the application of innovative technologies. Moving forward on this important initiative will accelerate our region's advanced manufacturing industries and support our innovation ecosystem. It will create jobs, spur economic growth and drive investment in the region which reinforces our efforts to stimulate and promote the economic potential of the Corridor."

THE KING VICTORIA TRANSIT HUB PARTNERS INC.

(which is a consortium of three companies) successfully responded to the Region's Request for Qualifications call for building the new transit hub at King and Victoria Streets, and has qualified to participate in the Request for Proposal process. The King Victoria Transit Hub Partners Inc. is made up of Perimeter Development Corp., Ellis Don Capital Inc. and the Kilmer Group. It is reported that only carpenter union-certified companies could qualify to be participate, which automatically eliminated a significant number of major Waterloo Region construction companies. X



CONTINUED FROM PAGE 22

eyes opened to something new; there was a Second Quantum Revolution."

In fact, he says, that revolution has not yet arrived, but is just beyond the horizon, and Lazaridis believes his work over the past several decades has helped prepare Waterloo Region to be a world leader in the utter disruption that faces technology and industry in general.

He recalls how, with "my colleagues", he began to strategize: "How could we help Canada capitalize and intercept this second quantum revolution in a way that would be far more significant that the first one?"

He likes the word "density. He says he realized "We needed to build density in theoretical physics, we needed to build density in quantum information science, in quantum materials, we needed to build a commercialization framework to be able to leverage the discoveries that were about to come."

He says, "We started with the Perimeter Institute for Theoretical Physics, not only to create the density, but as a way to begin to market this region as the place to go. Because what we realized was, if we are going to be successful as a country, as a region, we have to recruit and retain the very best people and continue doing that until we hit critical density until all of a sudden, spontaneous things happen, like entrepreneurship and companies and venture capital and discoveries and jobs.

"Going forward, we are going to use our understanding that the world is actually quantum to do things that look basically magical."

"So that was the beginning. We needed to get the theoretical underpinnings happening in Waterloo so that our researchers, interacting with industry, academics and business and government could get a head start. It's very, very important to get that head start."

Lazaridis has always been a hands-on kind of guy, so not only did he contribute the funds to bring the "very best and brightest" to Waterloo - he sought their advice. They said that quantum computing is going to happen - although in reality, it is still in the future. The very near future, according to Lazaridis. "A quantum computer is the holy grail, one of the most disruptive things that will happen to humanity."

Step Two in a plan which he calls "a 25-year strategy starting in 1999" was therefore the Institute of Quantum Computing, a \$160 million facility that Lazaridis brought into being, "working together with the university, working with my colleagues, working together with government."

He adds, "Perimeter and IQC were begun through this incredibly successful public-private partnership. I would argue that it's the most successful and certainly the largest public-private partnership in Canada."

He calls for a continuation of that partnership, saying, "the federal, provincial and regional governments... provide the sustainability to this kind of enterprise in this country."

Lazaridis has no doubt at all that the local quantum



ecosystem – which has involved total investments of \$1.5 billion – is worth every dollar. "Canada is on the map, in the top five, arguably in the top four [in the world]. That's a major achievement in one of the most exciting new areas for transformation, for disruption, for value creation."

He gets excited about what can already be done - "We can build materials that were never formed in the universe before" - and what will be done: "These researchers are doing things that sound impossible, but they're very real, and with the right support and resources, I believe those researchers will be successful... Going forward, we are going to use our understanding that the world is actually quantum to do things that look basically magical."

Lazaridis adds, "Not only will the Second Quantum Revolution impact all technologies and all industries, it will transform our lives."



"Perimeter and IQC were begun

through this incredibly successful

public-private partnership... the most

successful and certainly the largest

public-private partnership in Canada."

If you were to ask a sampling of Waterloo Region residents "Who has made a difference in this community," it would be a quantum-level surprise if they did not name Mike Lazaridis.

Lazaridis' fingerprints are all over many of the most spectacular success stories in the region, from Research in Motion (now Blackberry) to his multi-million dollar philanthropic investments in the Perimeter Centre for Theoretical Physics, the Institute for Quantum Computing, the Quantum-Nano Centre (all connected to the University of Water-

loo), and the Lazaridis School of Business and Economics at Wilfrid Laurier University. He has also become a significant venture capitalist; in March 2013, Lazaridis and his original RIM partner, Doug Fregin, established the \$100 million Quantum Valley Investment Fund.

No question, Mike Lazaridis is an agent of change and disruption; but according to Lazaridis, the curve of

change is about to become even steeper than it has been in recent decades – all because of quantum computing.

The man who has been dubbed "the mayor of Quantum Valley" was a keynote speaker at the 2017 Waterloo Innovation Summit.

He began by sketching out the relatively slow evolution of change – "over thousands of years, the curve of history barely moved" – until recent centuries. He cited a few innovations that kicked the curve upward, but stressed that it wasn't the invention itself that made the difference – such as the steam engine – it was new understandings of

physics. "It was the basic insight into dynamics of thermodynamics, theoretical physics, that when applied to an engineering problems led to efficient engines. That was the beginning."

And that observation, going back more than two centuries, links directly with Lazaridis' keen interest in funding the exploration of theoretical physics today. He emphasizes the role of the scientists, who were followed by the entrepreneurs, such as Henrich Hertz, who experimented with radio waves, to be followed by Marconi, who "started com-

mercializing radio."

That is a pattern embraced by Lazaridis, and helps explain why he has donated multi-millions of dollars to institutions focused on research and development, while also founding the Quantum Valley Investment Fund to provide funding to entrepreneurs looking to commercialize opportunities discovered by the researchers.

Lazaridis told his audience, "In the last century, we discovered quantum mechanics. That... opened our eyes to a whole new dimension.

That became the First Quantum Revolution. That gave us the insight of how to make things smaller, how to make things solid state, like the transistor in 1947, and integrated circuits in 1956, and of course lasers, computers... Everything just got transformed, and that curve got more and more steep."

Lazaridis has always been a visionary. He recalls, "During my times in physics at the University of Waterloo, I had my

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