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POST COVID-19:

Whitman Faculty Research Plans for New Discoveries and Opportunities

by Olivia Hall

The past year has no doubt been the most turbulent in many of our lives. The impacts of COVID-19 have cut through large swaths of our everyday existence, forcing changes to everything from how we shop to how we work, travel, communicate, learn, and more. Even as a form of normalcy returns to some countries, it is clear that the pandemic will continue to shape our reality in significant ways.

Along with unpredictability and pain, however, these disruptions are also bringing opportunities—to gain novel perspectives, to ask different questions, to make new discoveries. What might these look like for scientists who are already working at the cutting edge of knowledge? We've asked faculty experts from across the Whitman School of Management to weigh in on how the COVID-19 crisis is impacting their research and shaping their fields.

ENTREPRENEURSHIP

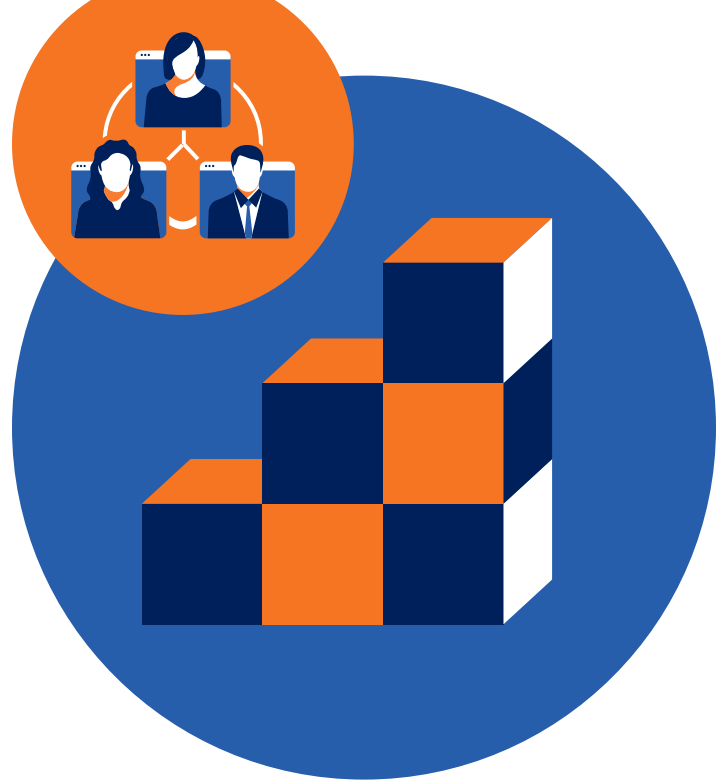
Zachary Rodriguez and Maria Minniti

The pandemic has given Zachary Rodriguez, a postdoctoral researcher in the Department of Entrepreneurship and Emerging Enterprises (EEE), the chance to study in real time how entrepreneurs have been adapting to the current crisis. Businesses successful at maintaining revenue have frequently already had digital infrastructure in place to allow remote work, or they have been able to shift their business model to other goods and services or offer customers new delivery and pickup options. Rodriguez hopes to help identify digital solutions and other ways businesses can prevent being hurt during future crises.

Rodriguez has also been working with Maria Minniti, the Bantle Chair in Entrepreneurship and Public Policy, to assess how the structure of healthcare decision-making has impacted the number of COVID-19 cases and deaths in counties across the United States. The hypothesis is that decisions' speed and fit with local needs significantly outweigh the benefit of coordination. Because counties with more authority to make their own decisions fared better, the researchers plan to investigate whether states with centralized healthcare decision-making ought to consider switching to become more resilient.

Johan Wiklund

The Al Berg Chair and Professor of Entrepreneurship Johan Wiklund is cooperating with 28 other researchers from around the world on a survey of 5206 entrepreneurs in 23 countries that represent over half the world's population and three quarters of the world's GDP. Mapping the impact of the pandemic on the entrepreneurs and their businesses, the group has found that significant numbers of entrepreneurs (61%) saw the existence of their business under threat but also adapted their plans (68.2%). Some (40%) recognized new business opportunities during the pandemic and nearly half (45.5%) believed that the



pandemic could have a positive impact on their business in the long run. These preliminary descriptive findings open a host of research questions on what we can expect to see post COVID-19 and why.

Mirza Tihic and Alexander McKelvie

EEE postdoctoral researcher Mirza Tihic and Professor of Entrepreneurship Alexander McKelvie are among five co-authors of a report on veteran-owned businesses during the pandemic. It is part of the National Survey of Military-Affiliated Entrepreneurs, a multi-year, annual and longitudinal, study of veteran and military spouse entrepreneurs. In the 2020 survey, veteran entrepreneurs were much less likely to experience stress and anxiety regarding their business than non-veterans—results that align with existing research that shows military experience to be positively correlated to the ability to accurately evaluate a dynamic decision environment and subsequently act in the face of uncertainty, as well as findings of lower burn-out rates and greater resilience among veterans. Military experience may therefore be linked to high levels of resilient behavior.

McKelvie is also looking to a Swedish governmental agency to fund research exploring what Swedish retailers did to adjust to COVID-19, especially in the context of the country's unique response to the pandemic and very strong regional variation between large and other cities, as well as between different types of retail firms.



FINANCE



Erasmus Giambona

While finance theory has long recognized the importance of network relationships for firm performance, COVID-19 has shown that network disruptions are costly for firms. Professor of Finance and Falcone Chair in Real Estate Erasmus Giambona, who specializes in corporate finance and real estate, expects more research in the coming years on how firms should manage network disruption risk.

Markus Broman

Assistant Professor of Finance Markus Broman expects the pandemic to have an impact on research related to the performance of mutual funds: A popular hypothesis states that investors are willing to tolerate active equity mutual funds underperforming passive benchmarks because active fund management adds value in downturns, just when investors need it the most. Preliminary evidence by University of Chicago-based researchers Luboš Pástor and M. Blair Vortatz from the early stages of COVID-19, however, suggests that mutual funds in fact underperformed during the 10-week crisis period under study. What makes this crisis different?

David Weinbaum

Professor of Finance David Weinbaum is examining the relationship between the variation in stock market prices and changing growth expectations versus discount rates. The value of the stock market equals the present value of future dividends or cash flows. However, the sum of the value of aggregate dividends for the next 10 years accounts for only 20 percent of the value of the stock market. Therefore, if discount rates do not change, the stock market decline

of 33.9 percent experienced during the pandemic would imply that investors expected dividends to drop to zero for over 10 years because of COVID-19, which seems difficult to believe. This suggests that discount rate changes matter. But how much, especially when compared to dividends?

Lai Xu

Assistant Professor of Finance Lai Xu, whose research expertise centers on the risk and reward relationship in the stock market, knows that the effect of COVID-19 on volatility will certainly make its way into her work.

Roger Koppl

Professor of Finance Roger Koppl has been exploring the current pandemic as a case in point for the framework on “expert failure” he established in a 2018 book of the same title. In it he argues the need for real competition between experts, who can be unreliable, especially when they hold monopoly power. For example, he sees a root problem in the division of labor into silos of expertise, making it difficult to adjudicate between competing frameworks and offered solutions, as well as in the tendency toward uniform opinions within professional licensing organizations such as the American Medical Association. As the urgency of COVID-19 retreats, Koppl hopes to explore how to dispense with a “rigid hierarchy of knowers” and instead turn back toward a more distributed, decentralized form of knowledge and expertise.

Robert Arscott

Assistant Professor of Finance Robert Arscott, whose current work focuses on pricing loans, believes there is much opportunity for research in his area looking at the potential for the COVID-19 pandemic to create new opportunities for lending capital as well as increase the risk of business and commercial loans in new ways.



MANAGEMENT

Lynne Vincent and Joel Carnevale

The pandemic forced many companies and their employees to suddenly shift to work from home. In-person contacts were replaced with exchanges through Remote Interaction (RI) technologies, for which standards and best practices had often not yet developed. As the world begins to return to a new state of normal, companies have the opportunity to adopt and manage RI-technologies more consciously, considering, for example, the most effective leadership and communication styles for this setting. Research to date suggests that a less hierarchical, more shared style of leadership may encourage informal communication and thereby social bonds among team members. In this context, Assistant Professor of Management Lynne Vincent is curious whether it is possible to replicate the same organizational culture that flourished in the office among employees interacting primarily through computer screens, while her colleague Joel Carnevale, assistant professor of management, foresees a workplace culture that will likely forsake such perks as free lunches and on-site gyms for those that give more value to employees, such as flexibility and autonomy. The question is which values organizations will emphasize and how they will best deliver on them.

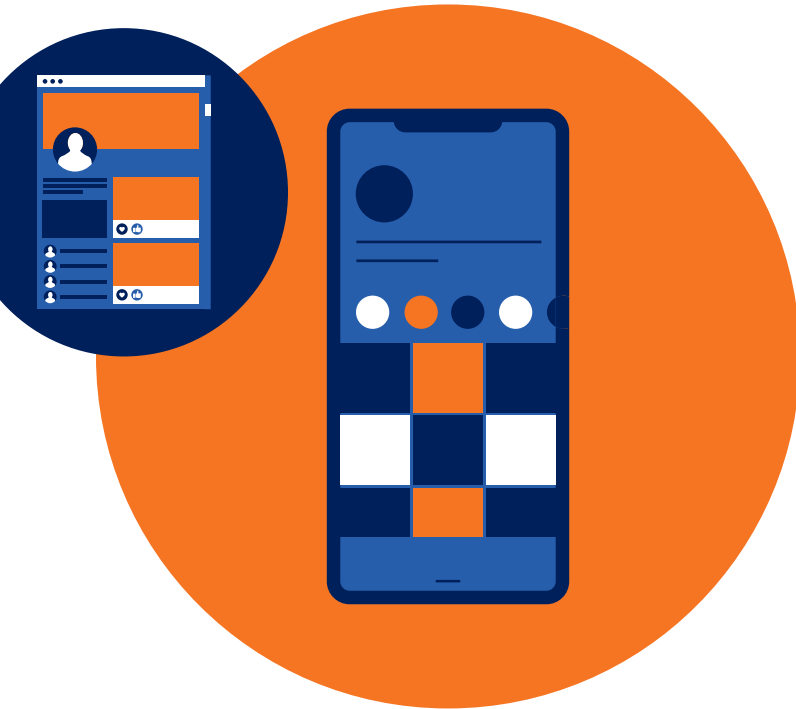
Natarajan Balasubramanian and Cameron Miller

Technological changes tended to happen fast during the pandemic. Remote work tools such as Zoom or Slack jumped over multiple stages of the typical, multi-step adoption pattern and became integral means by which companies run and interact with customers. Professor of

Management Natarajan Balasubramanian and Assistant Professor of Management Cameron Miller are among those faculty thinking about what lessons organizations can draw from these recent events and what they mean for the future, including in such areas as industry evolution, compressed adoption cycles, and the changing global geo-political environment. Miller, for example, has considered how third-party sellers can strategize to maintain some of their leverage in the face of the enormous bargaining power of online platforms such as Amazon, which experienced rapid growth thanks to COVID-19.



MARKETING MANAGEMENT



Meheli Basu

Assistant Professor of Marketing Meheli Basu is looking into a number of questions surrounding the rise of online shopping during the pandemic, including: Has the digital path to purchase for consumers evolved during the pandemic? Has the average online shopping session duration increased? Has online shopping for essentials gone up during the pandemic and will this trend continue in the post-pandemic era?

Guiyang Xiong

With many sales moving online, Associate Professor of Marketing Guiyang Xiong sees greater urgency for companies to consider the degree to which they want to offer virtual fitting rooms, unlimited free returns, buy-online-pickup-in-store options and other conveniences to digital native customer citizens. His research offers concrete advice: Virtual fitting rooms, for example, help bridge the gap between the experiential feel of in-store shopping and digital browsing. Giving customers a realistic view of what clothes will look like on them in fact increases sales and post-sales satisfaction, but only if it replaces the use of traditional, idealized model photos.

Scott Fay and Kyu Lee

As shoppers move away from brick-and-mortar stores, traditional malls may morph into “destination stores,” where the customer experience becomes more important than shopping itself. Professors of Marketing Scott Fay and Kyu Lee, who both study multi-channel

retail, are exploring the intriguing questions emerging from these trends, including about the degree to which retail spaces will be used to showcase products rather than offer a large inventory of variety and sizes—reducing inventory costs—and to provide authentic experiences, intended to build brand loyalty.

Scott Lathrop

The pandemic has far outlasted the typical three-month period it takes consumers to adapt to new behavioral patterns. Professor of Marketing Practice Scott Lathrop is targeting the question: what lasting changes we can expect in consumer, business and regulator behavior as a result. Take the perceived risk of outdoor activities such as travel and outdoor events: Will regular outdoor consumption habits resume after vaccinations? Will cruises and resorts see a comeback in popularity with new social distancing and masking norms, and will state legislators continue to regulate their business practices? Lathrop also wonders whether the definitions of “discretionary” or “non-essential” consumption will persist and how businesses may change their marketing strategies based on their placement along the essential business continuum.



REAL ESTATE MANAGEMENT

Milena Petrova

Both the residential and commercial real estate markets were shaken by the pandemic—at the same time revealing new opportunities. The sizeable growth of e-commerce has boosted demand for warehousing and industrial space, while increased reliance on cloud computing and digital communications has led to an ever-growing demand for data centers and digital properties. In light of these effects, Associate Professor of Finance Milena Petrova anticipates research on permanent developments in several areas: How, for example, will changes in transaction volume, as well as changes in income from operations due to lower occupancy rates and reduced rent collection rates affect valuation in real estate? With reduced demand for housing in urban areas and reduced office occupancy rates due to work from home, what impact will employees' increased wish to continue remotely, at least partially, have on markets restructuring?



SUPPLY CHAIN MANAGEMENT

Burak Kazaz

Incentivizing pharmaceutical companies to increase production capacity for vaccines is a critical component in developing COVID-19 vaccines and bringing them to the world's citizens to protect their health and safeguard the global economy. Within these healthcare supply chains, Burak Kazaz, the Steven R. Becker Professor of Supply Chain Management, examines public-private partnerships (such as Operation Warp Speed or programs by the Gates Foundation) aimed at ensuring that sufficient quantities of vaccines, therapies, and supplies are produced and distributed around the globe.

Rong Li

Associate Professor of Supply Chain Management Rong Li sees different business fields linked more interdependently during and after a crisis such as COVID-19. In a post-pandemic future, supply chain management and logistics will need to focus on risk management strategies, and particularly on generating more and sustainable end-consumer demand, she believes, by better understanding what consumers want and can afford. This, in turn, will largely shape the outlook of the up streams, including natural resources. In her research, Li examines real-time data for traditional supply chain-management metrics such as inventory but also develops metrics such as employee health, machine conditions, and consumer demand changes.

Karca Aral

Many companies were unable to weather the financial impact of the pandemic. Assistant Professor of Supply Chain Management Karca Aral's research examines the role and size of supply base on bankruptcy potential and the effect of sourcing strategy in reducing bankruptcy likelihood.

Julie Niederhoff

Images of empty shelves will probably be indelibly linked to this pandemic, as COVID-19 created a substantial amount of hoarding behavior in consumer consumption. Associate Professor of Supply Chain Management Julie Niederhoff incorporates such behavioral aspects into her research on supply chain operations. For companies, for example, this type of surge in demand and other disruptions require more robust flexibility and contingency plans to bolster very lean and efficient flows that are highly dependent on the environment for which they were designed.



Zhengping Wu

The pandemic drastically boosted online demand, where delivery lead-time is a crucial competitive factor. Associate Professor of Supply Chain Management Zhengping Wu explores the impact of lead-time competition on businesses' optimal decisions and profits, finding that companies can benefit in this new environment because competition in lead-time can diffuse price competition.

Fasheng Xu

Around the world, live-streaming product sales through influencers have skyrocketed as a way to reach customers. Assistant Professor of Supply Chain Management Fasheng Xu studies the optimal characteristics of an influencer when trying to reach a target audience and criteria that help companies decide when and how to leverage this new link in the supply chain.

Gary La Point

For nearly every company and government, the pandemic has been a harsh wake-up call to reevaluate, and in many cases overhaul, supply chains to increase resilience for future crises. Professor of Supply Chain Practice Gary La Point believes we will see more supply chains designed for the region in which their consumers are—for example more products destined for North America being sourced from Mexico or Haiti. This might also be accompanied by laws limiting the amount of critical goods such as antibiotics that can be manufactured overseas. The question whether the pandemic and the great risks it introduced provide a solid economic justification for such a trend should be of great research interest.

While the future may be unpredictable, it holds the promise of exciting new knowledge. We will continue to share what our Whitman faculty discover as the impacts of the COVID-19 pandemic on their diverse fields begin to emerge. 