Executive Summaries

Employee Health Plans Powered by Analytics.

Wallace Hopp, Ross School of Business, University of Michigan; **Jun Li**, Ross School of Business, University of Michigan; **Soroush Saghafian**, Harvard Kennedy School, Harvard University; **Guihua Wang**, Jindal School of Management, University of Texas at Dallas

Large firms in the US have begun to embrace a new health care practice in which they bypass insurers for major care such as surgeries and cancer treatment, and instead contract directly with hospitals designated as centers of excellence (COEs). Although companies have already reported encouraging improvements in both quality of care and cost-efficiency, our research suggests that machine learning and data analytics can make these programs even more effective and efficient. Our idea is to mine currently available data to determine which patients would benefit from diagnosis and/or treatment at a COE and which would be better served by a local hospital. By collaboratively collecting and analyzing the data needed to guide patients to the most cost-effective care, firms can reap additional savings, whether by partnering with an independent organization or by forming their own collaborative. As well as transforming employee health plans, data analytics can be used to personalize treatment and so elevate the quality and efficiency of our entire health care system.

Mandatory Corporate Carbon Disclosures and the Path to Net Zero.

Patrick Bolton, Columbia University, NBER & CEPR; **Stefan J. Reichelstein**, University of Mannheim & Stanford Graduate School of Business; **Marcin T. Kacperczyk**, Imperial College London & CEPR; **Christian Leuz**, University of Chicago, Booth School of Business & NBER; **Gaizka Ormazabal**, IESE Business School & CEPR; **Dirk Schoenmaker**, Rotterdam School of Management, Erasmus University & CEPR

Despite widespread concern about global climate change, the overwhelming majority of publicly listed companies around the world still do not disclose their carbon emissions. Even fewer privately held companies do. Making carbon disclosures mandatory for both public and private companies is an elementary but essential step in the drive towards a net zero carbon economy. Firms should be required to report their annual direct greenhouse gas emissions, called scope 1 emissions, as measured in CO2 equivalents, with possible deductions for high quality offsets. Going forward, firms should also be required to report the history of their annual carbon emissions. Such a disclosure mandate is simple, transparent, and readily implemented. It will aid policy makers and asset managers alike in managing the risks of carbon transition and accelerate the reduction of carbon emissions in future.

Designing Omni-Channel Retailing to Align Financial Performance with Strategy.

Sunil Chopra - Kellogg School of Management, Northwestern University

The strengths of traditional decentralized retail channels and centralized online channels are complementary. The decentralized retail channel keeps transportation costs low and brings informationally complex products directly to customers. The more centralized online channel produces higher inventory turnover and can offer a wide variety of products with a lower investment in property, plants, and equipment. Showrooms allow customers to absorb complex information about products, while centralized production and fulfilment improve turnover. Offering pickup locations, meanwhile, gives custom-

ers online shopping with a lower-cost delivery option. By focusing on the two components of ROIC (return on invested capital) a firm can identify which combinations of product and channel will create value by increasing turnover, so that it can forgo a large margin, and which combinations require a higher price because they have higher fulfilment costs or lower turnover. With this information, the firm can create a successful omni-channel portfolio, trusting some channels to compete on price alone while offering attractive services with others so that customers are willing to pay a premium.

Service Industrialization, Convergence, and Digital Transformation – II. **Uday Karmarkar**, UCLA Anderson School of Management, UCLA

Information and communication technologies are driving a new wave of industrialization which is changing industry structure across all sectors. The greatest impact has been on information intensive services, many of which have already experienced severe disruptions, while others soon will. The effects are also reaching into physical service sectors. As a result, companies need to reexamine their strategies and find ways to reposition themselves. Often, they must restructure internally, sometimes radically, through process industrialization and digital transformation. These changes and disruptions are occurring in major information intensive service sectors such as transactional, functional, content-based, and knowledge-based services. The changes follow patterns which are predictable to a certain extent because they arise from the nature of the new technologies, the characteristic economics of information processes, and the phenomenon of convergence. These factors influence consumer behavior, customer experience, service delivery, and even physical services. While consumers generally benefit from the changes, the effects on firms and jobs can be less positive. And companies that are late to adapt or slow in pursuing appropriate industrialization and digital transformation strategies may find themselves in irreversible difficulties.

Using Business Analytics to Upgrade Sales Promotions. **Lennart Baardman**, Ross School of Business, University of Michigan; **Maxime C. Cohen**, Desautels Faculty of Management, McGill University; **Kiran Panchamgam**, Oracle Retail Global Business Unit; and **Georgia Perakis**, Sloan School of Management, MIT

Sales promotions are an important lever with which to create a competitive advantage and increase retail profits. Most retailers therefore dedicate significant effort to more efficiently planning these promotions. We worked with the Oracle Retail Global Business Unit to develop a data-driven tool that helps to automate promotion planning. The tool uses models from optimization, statistics, and machine learning to address store and product selection, demand forecasting and validation, promotion optimization, and more. To assess the effectiveness of this tool, we applied it to data from a large retailer that sells outdoor supplies and equipment to farms, ranches, and households through more than 100 stores in the United States. We found that using our tool to optimize promotions increased our retail partner's profits up to 10 percent without sacrificing sales and revenue. Our approach is also sufficiently generic to help a wide range of retailers to use business analytics to improve their promotions.

How to Choose the Right Strategy for Digital Transformation **Sunil Mithas**, Muma College of Business, University of South Florida and **Roland T. Rust**, Robert H. Smith School of Business, University of Maryland

Conventional strategy advises firms to choose between revenue growth and cost reduction. Yet the ever-increasing importance of information technology (IT) and digitization have made the choice difficult. We have found

that, with sufficient investment in IT, firms can profitably focus on both revenue expansion *and* cost reduction so as to meet the rising expectations of their customers. Indeed, our research suggests that ambidextrous digital strategies, which focus on both revenue growth and cost reduction, have a higher market value and become more profitable with a greater investment in IT. Firms should therefore use ambidextrous governance and agile IT management to pursue digital transformations which enable both revenue growth and cost reduction.

The Complete Turnaround of a Boutique Bank: A Practical Guide to Leading a Complex Transformation

. **Karen Ayas** - The Ripples Group & Babson School of Executive Education

The metamorphosis of Leumi into a boutique relationship bank illustrates the key theoretical and practical principles necessary for complex business transformation. When enacting such deep transformative change, the devil is in the details. A close examination of this remarkable five-year journey and its dramatic results offers many insights and practical guidance, revealing what it takes to bring a small, sleepy organization to life, turn a bold vison into a collective ambition, and create a roadmap to guide the transformation. Leumi's cohesive changes in strategy, structure, systems, and culture had a lasting effect. The bank's Change Leadership Forum, officially charged with leading the transformation, successfully sustained the necessary momentum for change. Its periodic off-site meetings to review progress, coupled with a relentless focus on accountability for change, were highly effective in keeping the business growing. By dividing the transformation into change cycles (with a clear beginning and end) and celebrating accomplishments, Leumi kept everyone energized and engaged and built longevity into its growth platform.

Can Blockchain Manage Trust in Organizations?

David De Cremer, NUS Business School, National University of Singapore and **James Pang**, NUS Business School, National University of Singapore

Organizations need innovation if they are to compete. In the 21st Century, innovation is driven primarily by new technologies. One of those is blockchain. Can blockchain technology be used to manage relationships and trust within organizations? If so, how? Building a culture of trust promotes the creativity that encourages innovation. And blockchain has been hailed as the new currency of trust. We have therefore explored the potential uses of blockchain technology in managing organizational trust. We found that building trust within organizations requires that people be vulnerable. Only by accepting risk can they discover whether they are trusted. Blockchain's power, on the other hand, lies in building risk-free circumstances. We therefore conclude that blockchain technology cannot be used to build trust *within* organizations, however it is useful in building trust *between* organizations.

Nobel Laureate Herbert A. Simon: Pioneer of Artificial Intelligence and Trailblazer in Decision-Making

. **Suresh P. Sethi**, The University of Texas at Dallas

Herbert A. Simon, a father of artificial intelligence, renaissance man, and true polymath, made pioneering contributions to many fields including economics, management, psychology, and philosophy of science. As artificial intelligence rapidly transforms our world, Simon's work gains ever greater importance. He argued that human rationality was limited by the availability of information and by the human mind's processing capacity. Specifically, he noted that we tend to choose a merely satisfactory solution, rather than insisting upon the optimal one. He coined the term satisfice, a combination of satisfy and suffice, to describe how both individuals and organizations make decisions. This concept revolutionized the world of management long before the impact of AI was broadly felt. A concise and lucid writer and a supportive teacher, Simon was known for his affable character. Nonetheless he held his ground tenaciously in professional discussions.