Engineering Management/Gestion du génie

The editors of MIT Technology Review provide their listing of top companies that they believe have truly innovative technology and a business model that is both practical and ambitious. ["The 50 Smartest Companies." 118(4):45-47. July-August, 2015 www.technologyreview.com]. Leading the list is Tesla Motors with its spinoff extending its battery technology to applications which have the goal of remaking the energy grid for industry, utilities and residences. In their analysis the editors believe that biomedicine has had an outstanding year turning basic research breakthroughs into disease treating application success stories for patients. This is in contrast to the energy industry which was seen to be less innovative.

In today's world we are surrounded by noise. M. Charles Liberman in his article "Hidden Hearing Loss." [Scientific American. 313(2):48-53. August 2015. www. scientificamerican.com] discusses how common sources of noise in everyday life can cause irreparable damage to our ears in unexpected ways. The author discusses current research on the subject and how even temporary short exposure to loud noise can result in immediate and irreversible damage to fibers in the auditory nerve which conveys sound information to the brain. They call this hidden hearing loss because a normal audiogram test will not detect the nerve damage. This is not just a problem of the elderly but the damage is being discovered in the young. The author provides information on how to protect your hearing and links to further information.

The cover story in Railway Age is on passenger rail as a safe, reliable, and growing method of transportation. Carolina Worrell and William Vantuono provide in their article "2015 Passenger Rail Guide." [pp. 34-44. June 2015. www.railwayage. com] dozens of examples of North American cities and larger jurisdictions who have developed outstanding rail systems. As world population grows and more and more people live in dense urban areas it is inevitable that automobile transport will not be feasible and rail systems will be the mobility method of choice by most individuals.

Establishing and running a new business is challenging, exciting, and filled with opportunities and hazards. In "How I Spot Winners," [Inc. pp. 86-102. July-August, 2015. www.inc.com] twelve of Americas most successful founders describe how they became successful. You will draw inspiration and obtain valuable insights from their experiences. Continuing on with the theme of how to



achieve success Joe Robinson in his article "Where There's Willpower There's a Way" [Entrepreneur. pp. 50-54. July, 2015. www. entrepreneur.com] discusses how steely resolve and self-control can help you overcome challenges on your path to entrepreneurial success. Case studies and strategies to enhance your "willpower success" are provided. The author compares entrepreneurs to scientists who have multiple laboratory failures but realize that failure is part of the process to success.

Dangerous infections that are resistant to antibiotics are spreading and growing stronger. In "How to Stop a Superbug: Part I" [Consumer Reports. 80(8):20-26. August, 2015. www.consumerreports.org] important issues related to the seriousness of the problem, how superbugs spread through a community, the misuse of antibiotics, and the quest for new drugs are discussed. Interesting insets provide information on how to avoid infections, myths about antibiotics, and when to say no to a prescription.

Digital overload is fast becoming the number one problem in today's world. Information overload resulting from a plethora of media is making it increasingly difficult to find focus on a task. In "Conquering Digital Distraction," [Harvard Business Review. 93 (6):110-113. June 2015. www.hbr.com] Larry Rosen and Alexandra Samuel provide two viewpoints, discussing the issues and providing strategies to bring balance to your life while effectively using these essential tools for today's workplace and personal life activities.

The cover story and spotlight of the July-August, 2015 issue of Harvard Business Review discusses the revolutionary concept "It's Time to Blow up HR and Build Something New: Here's How" [93(7/8). July-August, 2015]. Three articles "Why We Love to Hate HR...and What HR Can Do About It," "People Before Strategy: A New Role for the CHRO," and "Bright, Shiny Objects and the Future of HR" investigate topics such as identifying and separat-

ing best practices from worthless ones, bringing HR into the inner organizational circle, and setting the stage while applying new ideas that have true impact.

McKinsey & Company [www. mcinsey.com] is a leading global management consulting firm that serves businesses, governments, non-governmental organizations, and not-for-profits who over nearly a century have helped companies improve their performance and realize their goals. They are also an important publisher on management. Recent, [July, 2015] articles include 1). "What 'Digital' Really Means." Karel Dörner and David Edelman suggest that digital is about unlocking growth now and having a clear understanding of what digital means allows business leaders to develop a shared vision of how it can be used to capture value. 2). "Getting a Better Handle on Currency Risk." Marc Goedhart, Tim Koller, and Werner Rehm discuss the volatility of exchange rates and provide strategies on how to minimize potential losses by hedging their risks. and 3). "Growing Beyond the Core Business" where the key findings from a 2014 survey of 1,143 executives of large diverse companies on how they expand into product or service categories beyond their core business are provided.

About the Author

Terrance Malkinson is a communications specialist, business analyst and futurist. His career path includes technical supervisor and medical researcher at the University of Calgary, business proposal manager for the General Electric Company, and research administrator with the School of Health and Public Safety at SAIT Polytechnic in Calgary. He is currently an international correspondent for IEEE-USA Today's Engineer, contributing editor for IEEE Canadian Review, and a member of the editorial advisory board of IEEE The Institute. He was Vice-Chair of the IEEE-USA Communications Committee (2004-2010), and editor-in-chief of IEEE-USA Today's Engineer Digest (2004-2008). He was an elected Governor of the IEEE Engineering Management Society as well as past editor of IEEE Engineering Management. He is the author of more than 500 earned publications, and an accomplished triathlete. malkinst@telus.net