



By **Terrance Malkinson**

Engineering Management: What's New in the Literature?

- **LEADERS OF EIGHT** high-performing companies discuss their strategies for motivating staff, clients and themselves in the October 2013 issue of Entrepreneur [“The Best Innovators in Business.” 41(10): 36-48. www.entrepreneur.com]. Author Jennifer Wang muses on why entrepreneurship attracts many talented and ambitious individuals when the failure rate is so high. She then goes on with reference to Daniel Pink’s book *Drive: The Surprising Truth About What Motivates Us* where the author believes that satisfaction depends upon having the right goals. Profiles of chief executives of the eight high-performing companies provide insights into how to inspire and sustain motivation and how this leads to success.
- **“THE NEW RENAISSANCE Is in Our Hands”** is the title of an article by Rolf Jensen in the September-October 2013 issue of *The Futurist* [47(5):52-55. www.wfs.org]. The author believes that our trust in government, business, religion and many other institutions is low. We are as a consequence seeking advice from, forming mutually beneficial one-on-one relationships, and placing trust in each other. The author goes on to describe that an age of individual initiative is looming. Signs include the growth in social media where increasing numbers of people form opinions and make decisions based upon the posted experiences of others. Individuals are respecting and placing their trust in peers who are like themselves. A number of visions of the future of this trend are provided.
- **A SECOND ARTICLE** in *The Futurist*, “Top 10 Disappearing Futures” [pp. 22-39] provides important insights on what, might disappear in the next 15-20 years. Compiled by members and friends of The World Future Society ten disappearing futures are discussed in detail. Concluding the article is a lengthy list of additional things that may disappear by 2030. Today with emerging technologies, business re-engineering, and global competition occupations and skills become obsolete quickly. The savvy person needs to continuously scan their environment, analyze trends, and network with others in order to ensure their personal and career success.
- **“SIX WAYS to Sink a Growth Initiative”** is the title of an article by Donald Laurie and J. Bruce Harreld in *The July-August 2013 issue of Harvard Business Review* [91(7/8):82-90, www.hbr.com]. The authors discuss six traps to avoid to improve the chances of a company’s venture to succeed. Traps discussed include: 1). failing to provide the right kind of oversight, 2). not putting the best, most experienced talent in charge, 3). assembling the wrong team and staffing up prematurely, 4). taking the wrong approach to performance assessment, 5). not knowing how to fund and govern a start-up, and 6). failing to leverage the organizations core capabilities.
- **“THE NEW UNDERCLASS”** is the title of a report by Charlie Gillis and Chris Sorensen in *MacLean’s Magazine*. [126(2):38-45. January 21, 2013]. The authors discuss employment challenges facing ambitious and well educated young Canadians. The November 11 issue of *MacLean’s* provides their annual ranking of Canadian Universities with a number of other articles on the University experience.
- **CONNECTIVITY** and mobile technology when used effectively improve productivity. Communication technologies can also impede productivity if misused. One area of misuse is multi-tasking while at a meeting. Michael Lowe in his article “Attention! Coping with Multi-Tasking Attendees” [Meetings and Conventions, 48(3):31-42, March 2013, www.mcmag.com] discusses the importance of practicing interpersonal respect for participants at a business meeting. The author provides tactics that the chairperson can use for keeping participants engaged rather than attending to their communication devices.
- **THE COVER STORY** of the May 2013 issue of *Scientific American* [308(5):36-51. www.scientificamerican.com] is a special report on “The Future of Manufacturing.” Ricardo Hausmann in his introduction suggests that even though most manufacturing growth now takes place in other countries, the machinery, materials, and know-how emanates from the developed world. Five accompanying articles discuss how information is becoming the driver for technological innovation in manufacturing. Other topics discussed are the economic consequences and benefits of humans and robots working together, seven next-generation materials that will change the way the world is made, 3-D printing, nano-machines and the future of digital simulations.
- **INSIGHTS FROM** new research on techniques entrepreneurs can use to achieve peak productivity are provided in “Get More Done.” [Inc. – The Magazine for Growing Companies, 62-70, April 2013, www.inc.com]. Based on discussions with leading neuroscientists, psychologists and behavioural economists, Issie Lapowsky provides seven strategies that will assist you in getting the most out of your day and your employees. A second article in the same issue of Inc. profiles “The Eight Best Industries for Starting a Business” [pp. 58-61]. Based on extensive research, the authors provide what they believe are the best emerging business sectors destined for growth.
- **THE 100 HOTTEST** Innovations of the Year are profiled in the December, 2013 issue of *Popular Science* [283(6):22- 79. December, 2013. www.popsoci.com]. This is the 26th Annual, “Best of What’s New reports” where leading innovations that will shape the future in a variety of areas are discussed. Time magazine www.time.com has published its ranking of the 25 Best Inventions of the year in the November 15, 2013 issue [pp.69-83]. This is followed by an interesting article by Jeffrey Kluger “The Spark of Invention” [pp. 84-89] on opinions about who inventors are, how they do their work and which countries used to be, and will be, the most inventive.
- **BILL LYDON** discusses in his article “Cybersecurity Strategy and Actions” [InTech 60(5):12-17. September-October, 2013. www.isa.org/intech] how the Automation Federation and The National Institute of Standards and Technology are leading the way in developing a framework for the protection of US critical infrastructure. Implementation of a cyber-security framework has been called for by Presidential Executive Order 13636. This order calls for the development of a national cyber security framework that includes “standards, methodologies, procedures, and processes that align policy, business, and technological approaches to address cyber risks and help owners and operators of critical infrastructure identify, assess, and manage cyber risk” As electronic technologies continue to evolve cyberattacks present a serious and growing threat to our well-being.
- **MANCHESTER UNITED** is the English football (soccer) club that is considered to be one of the most successful and valuable franchises in sports. Sir Alex Ferguson recently retired (May, 2013) as manager/coach of the club after 26 seasons. Some have called him the greatest coach in history. Harvard Business School Professor Anita Elberse reports on his management approach in *Harvard Business Review* [91(10):116-125. October, 2013. www.hbr.com]. In this article, she details eight components of his management style, that are not just applicable to sports but also provides valuable strategies in business and life.
- **CORPORATE VENTURING** discusses advantages and strategies on company investment in promising start-ups to gain knowledge and agility. [Harvard Business Review [91(10):86-94. October, 2013]. Venture funding is always a risky proposition. Josh Lerner provides a six step approach that will help companies avoid the pitfalls of this practice. These include: align goals, streamline approvals, provide powerful incentives, tolerate failure, stick to your commitments, and harvest valuable information. ■