TREXIN INSIGHT PAPER

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PRAGMATIC ANALYTICS TO HELP GAIN A DECISION ADVANTAGE

A multi-part series focusing on how your organization can tame the onslaught of data, pulling out key analytics that will help drive your business forward.

Information of all kinds is flying at us at a tremendous and increasing rate and volume, but many companies are fruitlessly trying to extract value and meaning from that information. Ever since data science has become an integral part of our daily lives, our news feeds, inboxes and water cooler conversations have been inundated with differing opinions on what data science is and why we should care about it. Data science affects all aspects of our lives, whether or not we are conscious of it. I've read countless articles on data science but they're often detached from the realities of extracting meaning and knowledge, let alone driving business value via data science. The term "Big Data" in particular is subject to all kinds of claims, most of which could be put into the "trough of disillusionment" category.

To help companies and individuals find their place in the world of data science, Trexin is publishing a multi-part series focusing on the pragmatic aspects of the major themes of data science, offering concrete advice on how best to utilize data science and analytics to gain a decision advantage. Those themes include:

- What is Trexin's philosophy and process of data science? This TIP tracks the birth and growth of the
 - data science field, making a distinction between a data scientist and an applied statistician and casts an eye towards the future of data science, a topic explored more fully in the final TIP, "Where do we go from here?".
- How do you build and maintain a culture of analytics? Everyone would agree you need the right team to understand the wealth of data around us. This TIP discusses the pragmatic aspects of building that team, including how to fit that team in to a management culture which is apprehensive or ignorant about the value of data and data science. Also discussed is an often overlooked but critical aspect of analytics success; how to overcome a variety of human cognitive barriers that prevent analytics from being used to maximum advantage.



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- Is "Big Data" a magic bullet? Yes (sometimes) and no (mostly). This TIP discusses the merits and pitfalls of big data including a conversation on how it became such a phenomenon, how to use it, in which situations it's most useful, and how to avoid many of the common blunders made when initiating Big Data initiatives.
- How is effectively managing an analytics team or project different from managing most kinds of
 projects or teams? This TIP discusses how an analytics project necessitates a different style of
 management, including different expectations, achieving a high degree of domain specificity, and
 what's unusual about effectively communicating and implementing the findings of analytics projects
 to other departments.
- Where do we go from here? This final TIP takes a look ahead to what the future of data science looks like including a discussion on artificial intelligence, deep learning, the internet of things and the automation of data science, how we can improve everyone's access to data, what companies can do to ensure success in the future of analytics, and how Trexin can help them get there.

The potential for what data science and its emerging cousins, Machine Learning and Artificial Intelligence, has to offer is truly unimaginable at this point. This series leverages Trexin's decades of "in the trenches" experience to enlighten where data science has brought us today and where it has the potential to take us. It is certainly not too late to jump on the analytics bandwagon or to point your existing data science and analytics initiatives in the right direction, provided you do so with a clear vision for where analytics can take you and a clear understanding of the pitfalls that could affect initiatives in a waste of time and money.



This TIP was written by John Crowell, a senior principal, who specializes in healthcare & life sciences. John welcomes comments and discussion on this topic and can be reached at john.crowell@trexin.com