

Technological Innovation Through Tech Mining For Market Dominance

Innovation means technological change. The [technology](#) change results in practical implication or commercialization, it does not mean just generation of ideas. The importance of technological innovation in today's competitive economy is very clear, as today the worldwide economy depends on technology and technological innovation to an extraordinary degree.

Technological innovation plays important role in the economical growth of any country. Us, Japan, and other European countries are developed only due to there technological progress. In recent years, Singapore, India, China and many other countries are advancing dramatically due to technological innovations and progress. High technology companies are a significant and growing component of the economy. The competitive of these companies depends on technological innovations. Innovations improves standard of living. Developments in medical and pharmaceutical technologies have delivered extensive returns in health and life span.

Technological innovation involves tech mining. Tech mining includes understanding the technological innovation processes to track them more effectively and get informed about latest happenings and make valuable business decisions about R&D and subsequent implementation and adoption choices.

Innovation is defined as the process by which technological ideas are generated, developed and transformed into new business products, process and services that are used to make a profit and establish marketplace advantage. A better understanding of the innovation process is essential to figure out empirical measures deriving from innovation activities to generate actionable technological intelligence.

Tech mining is done through data or information extraction from multiple data sources, compilation and analyzing the results and represents key findings in actionable visual representation for easy understanding to what is happening now and predicting the future technologies.

Various types of technology analysis that can be aided by tech mining is as follows:

- (A) Technology Monitoring (technology watch) - cataloguing, characterizing, identifying and interpreting technology development activities
- (B) Competitive Technological Intelligence (CTI) -exploring out "Who is doing what?"
- (C) Technology Forecasting-anticipating possible future development paths for particular technology domains
- (D) Technology Road mapping - tracking evolutionary steps in related technologies and, sometimes, product families, technology diversification and technology tree
- (E) Technology Assessment - anticipating the possible unintended, direct, indirect, and delayed consequences of particular technological changes
- (F) Technology Foresight - strategic planning (especially national) with emphasis on technology roles and priorities
- (G) Technology Process Management - getting people involved to make decisions about technology

(H) Science and Technology Indicators - time series that track advances in national (or other) technological capabilities

Reasons to Do Tech Mining

Forecast likely development paths for emerging technologies - identify new products, research or service opportunity
Identify competitors, or collaborators, at the "fuzzy front end" of new product development - keep track of your competitor's activity for market dominance.

Identify potential customers for your intellectual property ("IP") - new licensing, collaboration, acquisition and merger opportunities.