Business intelligence for biopharmaceutical company

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Motivation and Objectives

Competition is a fundamental concept of economic market, which requires companies to practice Competitive Intelligence (CI) in order to be advantageously positioned on the market. Therefore, companies are required to monitoring constantly the information's sources, for detect any change in order to make appropriate solutions in real time. However, for a successful monitoring, we should not be satisfied merely to monitor the opportunities, but before all, to anticipate risks. The external risk factors have never been so many: extremely dynamic and unpredictable markets, new entrants, mergers and acquisitions, sharp price reduction, rapid changes in consumption patterns and values, fragility of brands and their reputation.

To face all these challenges, our research consists in proposing a Competitive Intelligence System (CIS) designed to provide online services. Through in a descriptive and statistics exploratory methods of data, Xplor EveryWhere (XEW) display, in a very short time, new strategic knowledge such as: the profile of the actors, their reputation, their relationships, their sites of action, their mobility, emerging issues and concepts, terminology, promising fields etc.

Methods

In our research team, we coordinate the process of CI around three concepts: strategic analysis, environmental scanning and information system. The CIS XEW (el. haddadi et al., 2011a. b.) aims to improve decision-making in all aspects in business life, particularly offensive and innovative decisions. XEW based on a multidimensional analysis model, whose objective analyzed the information environment in all dimensions of a decision problem, with the exploitation of information by analyzing the evolution of their interactions. Our approach combines two methods: knowledge discovering in text (KDT) and environmental scanning.

The dynamic aspect is vital to any analysis in the context of CI. These dynamics include continuous monitoring of the business environment in order to detect its changes and developments. The proposed information system, based on an exploratory multivariate analysis model: 'the re-
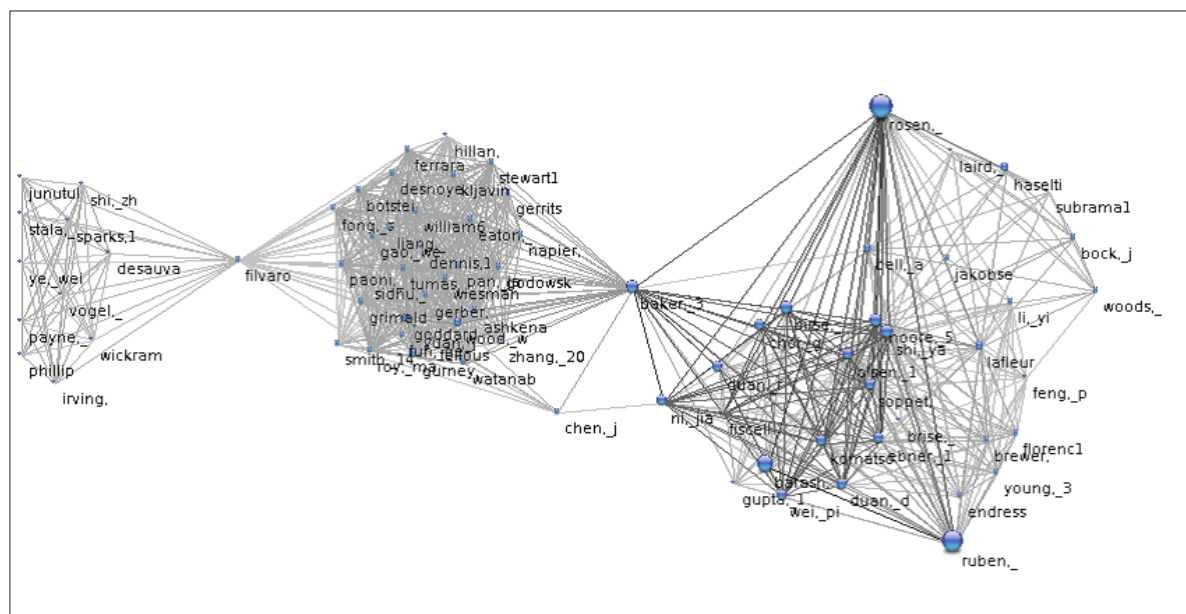

Figure 1. The inventor's networks for scaffolds research

lational aspect and the time dimension', which we call Xplor. It is based on extracting knowledge from textual data by analyzing relational data and their evolution. This model allows time specification to situate events, strategy and actions as well as in: the past by reconstructing the chronology; the present- oriented time to detect weak signal and the future to detect relationships in network, such as partnerships, alliances, mergers, acquisitions, co-citations, co-signatures, co-occurrences of all kinds

Results and Discussion
With the evolution of technology, such a CIS will enables us to increase efficiency and responsiveness, because at any moment, it is possible to gain access all strategic information by markers itself can be information back very quickly "field" which may possibly trigger other strategic analysis, for example it's possible to detect the social network, the semantic network, the company network and the others types of network's (figure 1).

The experimental system XEW shows a user satisfaction, regardless of their field: computer scientists, statisticians, analysts, decision-maker or watchmen, etc.. The majority describes the prototype in interactive, with ergonomic, collaborative and a information system for decision support.

For majority users the mobility is very important. They can now enjoy the advantage of data analysis everywhere. This experiment allowed us to validate the proposed prototype and consider measures to improve Xplor EveryWhere. We analyze these measures in our research perspectives.

References
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