

# Communicating Strategy with Information Markets

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## ABSTRACT

In this paper, we present work-in-progress on applying information markets for the communication of strategy in a multinational corporation (MNC). We describe the project set-up and the implementation of markets for forecasting selected balanced scorecard based key performance indicators (KPI) within the service business of a MNC. Our research will help to answer whether information markets are a technology that can be used to improve the communication of strategy in international companies across distance, time and culture.

We are currently analyzing the data gleaned from the markets that ran from October until December 2006. The empirical analyses of trading-data are complemented by detailed questionnaires and select in-depth face-to-face interviews. We expect to be able to present our findings at the latest by the end of April 2007.

## Categories and Subject Descriptors

J.4 [Computer Applications]: Social and Behavioral Sciences - Economics

## General Terms

Management, Measurement, Economics, Experimentation.

## Keywords

Information Markets, Prediction Markets, Strategy, Communication Tool, Experiment, Information Derivatives.

## 1. INTRODUCTION

Information markets (also known as prediction markets) have in recent times received a growing amount of attention. Interest is apparent in press, research and business, and information markets are increasingly being considered by corporations as a method for gathering and aggregating information from various and dispersed participants.

So far, information markets have mostly been used as a

novel instrument for forecasting. They have demonstrated their potential to outperform traditional forecasting instruments (surveys, polls, extrapolation etc.). Particularly in dynamic contexts, traditional forecasting methods are not the best choice: because they cannot take all influencing factors into account, they can only handle limited complexity. In addition, most traditional methods do not give experts appropriate incentives to collect information or to answer correctly. These and other disadvantages of traditional forecasting instruments can be avoided by making use of information markets. Therefore, several companies have successfully utilized the predictive potential and the functionality of information markets for aggregating information, e.g. for sales forecasting, price determination, for estimating product success, project readiness or for forecasting more general industry trends.

## 2. MARKETS AS A STRATEGY COMMUNICATION TOOL

However, to our knowledge, up to now there has been no case in which information markets were used as a tool for communicating strategy. Both strategy and its clear-cut communication are cornerstones of successful corporations and must continuously be maintained throughout the year. Teams and individuals alike must base their actions on a shared understanding of the implications of the strategy. This is mandatory for achieving the business vision and being successful in an environment characterized by a highly dynamic future. In particular, the business reality of MNCs requires a clear and precise understanding of strategically relevant topics in different countries and markets worldwide. Consumer preferences and related product demand will be very dynamic on a global scale, while at the same time highly region-specific. However, the current organization of information-processing in MNCs often does not reflect this need for fast reactions to the varying developments on regionally diverse markets. Classical communication channels don't seem to be able to utilize the full collective intelligence of the employees within a company. One of the challenges faced by MNCs is to find ways to balance local responsiveness with global integration in a way that enables worldwide learning and creativity.

At present, many companies use standard strategy-sharing tools such as strategy road-shows, web-casting or - more advanced - interactive tools for communicating strategy, in order to ensure that the implications of their strategy are understood. This is especially important in virtual working environments that are spread across both time and space.

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### 3. TESTING THE HYPOTHESIS

In order to test whether information markets can be an effective tool for communicating strategy, we implemented several projects that utilize information markets not only to forecast, but also to support the communication of the corporation's strategy and especially of new KPI's. From the business side, the goals were to enable efficient cross-community communication and the activation of the people involved.

From October until December 2006, several information markets have been run, with more than 120 international people from different organizational levels from across the world. The core metric markets were started in early October and ran until December 31<sup>st</sup>, 2006. They encompassed four markets that were to forecast different KPI's. For each market, four predefined outcomes were linked to four so-called Information Derivatives (ID). This way, each participant could speculate on which one of the four outcomes would be realized:

1. below minimum of the target
2. between minimum and target
3. between target and maximum
4. above maximum of the target

The next strategy markets were launched at the end of November 2006 and also ran until December 31<sup>st</sup>, 2006. These markets were designed to identify focus projects. In each market, participants could try to forecast the relative importance of predefined projects for the strategic targets.

### 4. PRELIMINARY RESULTS

So far, the results have shown that the "Strategy Market" has generated a high level of participation and that the community of participants has actively been listening to the communicated strategy in an "easy to use" and cost-efficient way. More than 55% of all invited employees actively participated in the information markets, so that insights were gained regarding the level of understanding

Valuable feedback was collected regarding the prioritization of focus projects. This feedback was subsequently compared with management evaluations and perceptions, and discrepancies between the two were analyzed and will be used by management to reflect upon the further development of strategy.

### 5. ANALYSIS

We have been analyzing whether - and if yes - how information markets can be used for communicating strategy in MNCs, and whether this leads to a better understanding of strategically relevant issues. The objective of the research project is to analyze whether information markets can be used as a tool for communicating strategy and whether there are observable differences due to participants coming from different cultural backgrounds and hierarchical levels. For example, the in-depth analyses of the information market on one KPI have brought to the fore some training- and information-sharing needs that had previously not been recognized.

In addition, we will show how the communicative effect of information markets is perceived by the employees, in comparison with face-to-face communications and meetings,

telephone calls, teleconferences and e-mail communications. We will differentiate these communication tools by their respective costs of communicating, and also by their efficiency.

Currently, we are analyzing the data of the information markets that ran from October until December 2006. The empirical analysis of the trading-data is complemented by detailed questionnaires and selected in-depth face-to-face interviews. We expect to be able to present our findings by the end of April at the latest.

### 6. LESSONS LEARNED

We have learned several important lessons, both at content- and at information-tool level. For example, market designs that sported twelve possible outcomes appear to have confused participants. Also, to encourage continuous participation, markets that run for several months should be interspersed with markets that run for only a few days. At the level of software development, additional efforts will be made to ensure the involvement of both experienced and un-experienced traders. Also, reserving some trading times for participants to learn to operate the tool are expected to further increase participation. Finally, a weekly management-report would ensure that current data is provided to management on an ongoing basis.

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