

WORKING PAPER SERIES

Improving Technology-Based Change Processes Through Measurement and Communication: A Case Study on Indus International

Theresa M. Welbourne
Robert W. Felton

Working Paper 97 - 29



**Improving Technology-Based Change Processes
Through Measurement and Communication:
A Case Study on Indus International**

Theresa M. Welbourne
J. Thomas Clark Professor
Cornell University

and

Robert W. Felton
CEO
Indus International

To appear in the Journal of Strategic Performance Measurement.

<http://www.ilr.cornell.edu/cahrs>

This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make results of Center research available to others interested in preliminary form to encourage discussion and suggestions.

ABSTRACT

This case study describes an e-mail based employee survey that was developed at Indus International to help the company as it underwent a large-scale organizational change. In February of 1996 the company went public, and their measurement tool (called the pulse) became a useful management change intervention because it also served as a communication device. This case study discusses the development of the survey, how it helped Indus progress through the changes they experienced as a result of rapid growth, and how this same intervention could be used by organizations undergoing transformation initiatives that include enterprise-wide software solutions.

Continuous change is a given in today's fast-paced work environment, and this escalating level of change affects companies of all sizes and at all stages in the life cycle. Although most of the organizational change literature focuses on large corporations that are undergoing major reengineering and transformational changes, smaller, entrepreneurial firms are also continuously changing. And due to their entrepreneurial nature, these businesses are inventing and reinventing new ways to cope and even thrive during change. This article discusses a case study on a fast-growth software firm, Indus International, and how they are transferring their measurement technology to their clients, who are primarily large, traditional firms implementing large-scale enterprise-wide software solutions.

The purpose of this article is to describe an innovative communication and measurement process that Indus used during one of its most demanding organizational change initiatives. The company went public in February of 1996, and as part of the process, they implemented a new tool called the pulse. Changing from a private to a public company was a major change for Indus employees. At the same time, the firm implemented a new organizational structure that included regionalization. And, in the middle of all these changes, the top management team was "on the road," conducting the road show for the IPO.

The pulse defined

The pulse is an e-mail-based weekly employee survey. It consists of one question, applied to the individual employee and to the company. In addition, employees provide open-ended comments. Every Friday an e-mail message is generated. The e-mail message asks employees for their personal pulse for the last week, what they think the pulse is of the company (based on those they have worked with for the past week), and for comments on either their individual pulse or the company pulse. Employees enter two numbers, comments if they have any, and then return the message. The process takes about 2 minutes.

The pulse is different from other survey and communication methods in two important respects. The first is confidentiality. The data go directly to a third party, and employees are assured that the data are confidential. The second important differentiation is that although the responses are confidential, they are not anonymous. This means the data can be used to develop models to predict employee attitudes, performance, and turnover.

The pulse is a 1 to 10 scale that measures vitality, or the degree to which employees are energized by their jobs. Just as the physical pulse provides a medical doctor with an overall understanding of how well a human body is doing, the company pulse provides the management team with a reading of the company's vital signs. The pulse is the indicator, and the comments provide the detail.

The low end of the pulse scale¹ (from 0 to 2.5) represents the "at rest" zone. When employees report a number in this range, it means they're not engaged in their job; they may be sick, between projects, upset with their managers or coworkers, or on vacation. From 2.6 to 7.5 the scale changes to the "aerobic" zone. As the number increases, it represents increased activity and efficiency. At a 7.5, employees are busy, in demand, feel good about the work they're doing, are efficient, and having "fun" at work. The last part of the scale, from 7.6 to 10, is called the "anaerobic" zone. As the number increases, people report being busier, but they're less efficient. Again, it's similar to your body's pulse. When you exercise, you have a target pulse rate; if you exceed that pace, you become inefficient and can harm yourself.

The results of data analyses show that the average pulse for a person over time is positively related to their attitudes (work-related and personal, such as life satisfaction), ratings of performance conducted by their managers, and turnover. The standard deviation for a person over time, however, is negatively related to those same variables. Therefore, being higher and stable results in peak performance. When people get to a pulse rate that is too high for them, they don't settle in at a comfortable range afterwards; instead, they move to a range that is much lower than what they prefer (usually in the "at rest" zone). Thus, the standard deviation (fluctuation from week to week - or 'swing') results in poor performance, negative attitudes, and in many cases turnover.

The data aggregated to the department level are diagnostic in two ways. Healthy departments report low variance (minimum to maximum on self reported pulse) and an average pulse for individuals that is higher than the average pulse reported for others in the company. This means that employees in a 'healthy' department look out at others and think that those people have a lower pulse. However, if the department is not doing well (e.g. low sales, poor management), employees seem to think that everyone else has a higher pulse than that reported by them. Trend data are also useful in diagnosing employee responses to organizational initiatives.

What happened when Indus went public?

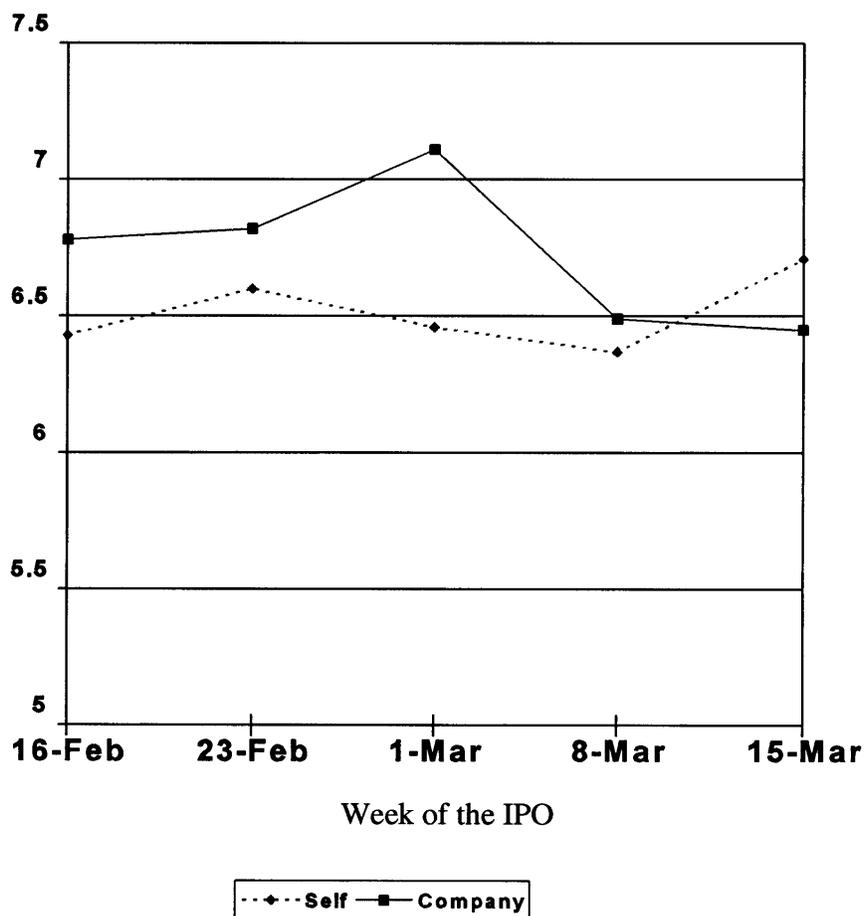
The data collected during Indus' IPO resulted in a detailed and extensive study of employee reactions to this major organizational change. When the data were aggregated to the overall company level, the results indicated that prior to the EPO, the self reported pulse (the "me" pulse) was lower than the pulse employees reported for the overall company, and the difference between the two was highest during the week of the IPO (See Figure 1). Employee comments accompanying the pulse numbers explained what happened. In addition to many

¹ Copyright Theresa M. Welbourne, 1996.

people feeling they were not part of "IPO fever" (because many were not directly involved), there were growing rumors and misperceptions that were detected from reviewing the comments. Employees looked around the firm and thought that everyone else benefited more from the IPO than did they. For example, comments such as the following were received "everyone else made more money than me," "everyone else is a millionaire today, but not me," and lastly "the opportunity is gone; the money has been made." But not everyone was concerned with the "gain" of the IPO; the other set of comments focused on the management team. We heard "I am worried that the CEO is going to cash out and leave," and "we're worried the management team will retire, and then who will be left."

FIGURE 1

THE PULSE
At the time of the Indus IPO
Average ratings for self and company
Company went public 2/29/96



The change in the pulse data and comments from employees alerted management to a need for action, which they responded to quickly. Through direct communication from the CEO and support from the rest of the management team, impressions were quickly corrected, and employees were reassured. Details of the employee stock purchase plan and incentive stock option plans were once again explained to employees. Post IPO growth opportunities were emphasized, and the CEO told the workforce that he had no immediate plans to retire. By the next week the pulse pattern changed (see the week of March 15th on Figure 1), and the self-reported pulse was higher than the company reported pulse.

Protection motivation theory

The theory used to model and develop the pulse is based on protection motivation theory (Tanner, Hunt & Eppright, 1991)². Marketing researchers used protection motivation theory to model ways in which fear appeals could be effectively used in advertising campaigns to change consumer behavior (e.g. anti-smoking campaigns). The theory can be applied to the topic of organizational change because the purpose of a transformational change is also to change employee behavior³. Protection motivation theory states that two things are needed for successful change.

The first is a high level of emotional stimulus (marketing researchers focused on fear appeals in advertising campaigns). The emotional stimulus provides the energy or vitality necessary to "light the fire" or encourage people to change from what has been comfortable. Effective advertising campaigns were said to include "hot information." But equally important to increasing energy is supplying the ability to cope with that enhanced emotion or energy level. Marketing researchers showed that fear and coping had to be balanced to produce positive change (e.g. high fear anti-smoking messages had to be accompanied with information that described ways to quit smoking).

When applied to employees and organizational change, we suggest that in order to obtain the type of behavior needed to make a change effort successful, employees need a high level of energy or a high vitality level. In addition, employees need to feel they can cope. By opening up communication channels and letting employees know that their opinions are valued, a company can enhance an employee's ability to cope. The IPO created a high level of energy at Indus, and the weekly pulse survey provided an outlet for employees to talk, vent, or simply get information to management. Providing an additional communication and measurement outlet

² Tanner, J.F., Hunt, J.B. & Eppright, D.R. (1991). The protection motivation model: A normative model of fear appeals. *Journal of Marketing*, 55, (July), 36-45.

³ Welbourne, T.M. (1995). Fear: The misunderstood component of organizational transformation. *Human Resource Planning*, 18(1), 30-37.

during a time of dramatic change made employees feel more valued. Equally important was the swift management response to the employee generated information. Employees knew that the CEO and top management team were interested in how they reacted to the change.

Communications during enterprise-wide software implementations

Enterprise-wide software solutions are being provided by a number of firms, including Indus International, SAP, PeopleSoft, and BAAN (to name a few). Although all of these implementations start with high expectations, for some reason, there are many "not so successful" stories. Something is missing, and we think that "something" is the people.

Indus International uses an implementation process called ABACUS. The system is software based, and it is the result of all the "best practices" data that Indus has collected from multiple successful implementations. The system shares those best practices with the on-site implementation team. Even though ABACUS results in more efficient management of the implementation process and enhanced communication within the working team, during most of the process the "bystanders" or the rest of the employee population are left out.

We think that a major software implementation is an event that is similar to the road show. Although only the top management team was involved in the road show during the IPO process, management knew it was critical to provide all employees with a mechanism for communicating their concerns. The management team also needed an easy measurement tool that kept them in touch with the 'pulse' of the employees as the company underwent a major organizational change. The communication technology turned into a measurement tool that was useful to Indus.

For software implementations to be maximally successful, we think that large firms undergoing major transformational change can benefit from the "lessons learned" within Indus International. Armed with a measurement tool that *frequently* assesses the vital signs of the organization during the implementation process, firms can obtain the benefits that employees at Indus had as the company changed. The benefits are twofold: (1) for the employees because they have an outlet that increases their coping ability, and (2) for management because it provides a measurement tool that assesses employee reaction to the change effort.

We have learned that measurement of "people-related criteria" requires more than finding the right question(s) to include in a survey. Employees need to view the measurement process as being in their best interests, and the pulse process worked for Indus International because it was a measurement tool and a communication process. If people really are a firm's most important asset, then measurement and assessment of their vital signs should be a critical component of the way every company does business.