

Behavioral Systems Analysis

What is Behavioral Systems Analysis?

Behavioral Systems Analysis (BSA):

Applies behavior analysis and systems analysis to human performance in organizations.

Builds competitive business and organizational performance through the application of applied behavioral research and systems analysis.

Managers, executives and practitioners apply Behavioral Systems Analysis by:

- **A behavioral systems based assessment of factors leading to productive and non-productive performance**
- **Identifying process and system changes necessary for improved performance**
- **Redesigning systems and processes to generate high levels of discretionary effort**

Stands on a foundation of basic and applied research with proven effectiveness in building:

- **Profitability**
- **Productivity**
- **Performance of**
 - **Organizations**
 - **Work teams**
 - **Individual employees**
 - **Supervisors**
- **Leadership and executive coaching**
- **Injury reduction**
- **Quality improvement**
- **Change Management**
- **Incentive and reward systems**

Is demonstrably effective in building outcomes such as productivity, safety, quality, cycle times and customer service in many industries, including:

- **Banking and financial**
- **Chemical and petro-chemical**
- **Human services**
- **Manufacturing**
- **Paper**
- **Transportation**
- **Utilities**

A closer look: Behavioral Systems Analysis focuses on performance improvement in organizations through the methods and principles of behavior analysis and systems analysis.

Behavior Analysis is a scientific discipline that studies the behavior of individuals. Behavior Analysis maintains that behavior is the product of individual's interaction with his or her environment (e.g., physical environment, social environment, genetic environment) and the history of that interaction. All social organizations are comprised of individuals' behaviors and their products.

Systems Analysis is a scientific discipline that studies the operations of complex systems such as organizations, and focuses on the interactions between parts of those systems. A system can be understood as interrelated components or parts that interact toward a common purpose. Accordingly, the behavior or functioning of one part or parts affect(s) the behavior or functioning of other parts. In systems analysis, a system is not considered to be reducible to its parts. Therefore, the parts can only be understood in terms of their interaction with other parts of the system.

Behavioral Systems Analysis draws upon basic and applied research on behavior and the research and practice in Organizational Behavior Management, Performance Management and Systems Analysis.

Behavioral Systems Analysis views organizational performance as a scientific subject matter. From this perspective, an individual's behavior in organizations is a naturally occurring phenomenon. Moreover, the discovery orderly relations between behavior and the system in which it occurs gives us opportunities for Behavioral Systems Applications to improve individual and system performance.

Behavioral Systems Analysis is an approach to organizational design and management. It is based on the premise that organizations are complex systems. As such, changes in one aspect of performance in an organization necessarily affects performance in another parts of an organization. A primary goal of BSA is to create a balanced applications in which areas of poor performance are improved, areas of high performance are maintained, and employee performance outcomes are directed towards organizational goals. This is done through the careful use of behavioral and systems theories, and the application of research based principles of behavior, such as reinforcement, punishment, stimulus control, discrimination and generalization.

Through articles, book reviews, case studies, questions and your comments, we hope to bring the Behavioral Systems Analysis to a larger audience. Therefore, we invite your participation in this section of the CCBS web site by submitting cases and articles that combine principles of behavior analysis and systems analysis to build organizational performance and profitability. We are particularly interested in cases that explore the redesign of systems in ways that generate innovation and "free operant behavior", leading to improved outcomes.

[More About Behavioral Systems Analysis](#) by Dr. Dale Brethower, Western Michigan University Emeritus