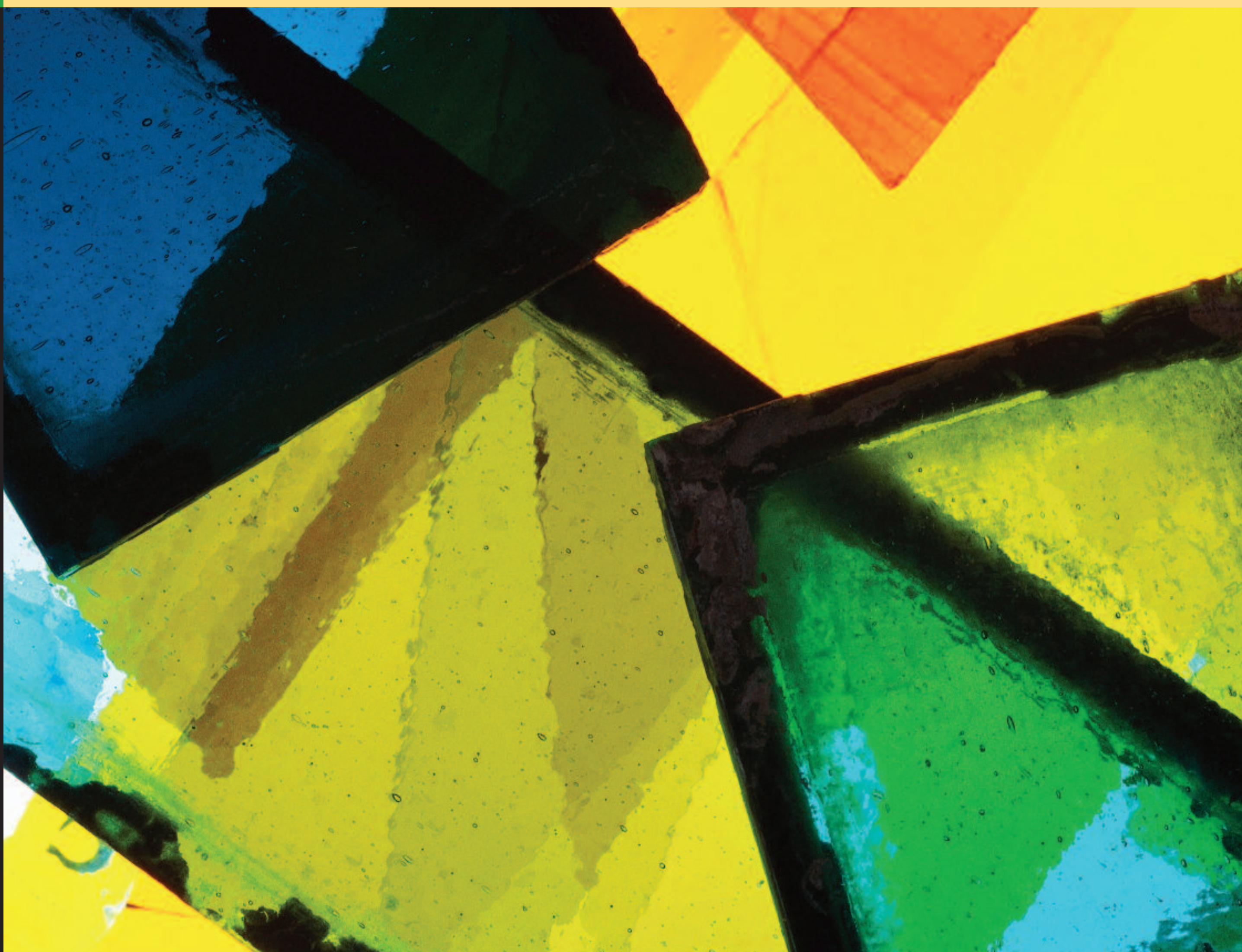
Measuring Results of MBTI® Type Training

ROI in Action

TYPE PRACTITIONER SERIES



RICHARD J. WAGNER & ROBERT J. WEIGAND

The MBTI® Tool: Organizational Use

Businesses today have at their disposal any number of assessment tools of every conceivable type. Yet research tells us that the MBTI assessment is used by more than 70 percent of the Fortune 500 companies. With so many choices literally at a manager's fingertips through online access, why is the MBTI tool so popular?

Why Do Organizations Use the MBTI® Tool?

The specific reasons organizations use the MBTI tool vary but generally include the following:

- Communication improvement
- Team development
- Leadership development
- Conflict resolution
- Problem solving
- Interpersonal skills building
- Sales and marketing training and development
- Organization culture change

Let's take a look at some ways organizations have applied the MBTI instrument as part of their performance improvement strategy.

A Leading Discount Airline

A customer-friendly, dynamic airline employs more than 25,000 people, supports more than 2,300 flights per day, and has enjoyed industry success for more than a decade. In an industry that revolves around people, it understands that communication is key to success. The company created an internal "university," an educational vehicle enabling employees to learn both in a classroom or workshop setting and on the job. It uses the MBTI assessment to promote learning among employees and to help them resolve interpersonal problems by appreciating others' gifts and differences. Type is applied to team development, conflict resolution, and leadership development.

A Major U.S. Bank

The bank had a concern: How was it going to help employees who were displaced by growing technology in the banking industry? Moving from a large mainframe environment to a client server format represented a significant shift for the organization. Because of this institutional change, people who typically were more comfortable working with objects than with people were being asked to solve problems with single network user groups, a process involving much interpersonal interaction. This meant working directly with groups of people to identify and discuss a variety of issues and to help customers solve problems.

The MBTI tool was introduced to the organization as a solution for helping employees learn to establish and maintain relationships with others in the workplace, so that they could work toward dealing with these new issues. The return on investment was real and direct. The bank retained long-term, loyal employees and at the same time enjoyed the benefits of decreased hiring and training costs.

A Canadian Bank

Banking, because of its highly competitive nature, now has to sell its services. A Canadian bank responded to this reality by using the MBTI tool as part of its employee development program. It applied the assessment to train its sales representatives to identify type in the clients they service. Marketing services also tapped into type-based information for a television ad created to appeal to the NF function pair. This ad, based on a careful analysis of MBTI type, shows people talking about their dreams with the slogan "We see what you see."

A Midwestern Insurance Company

A midwestern insurance company had 200 employees at its headquarters and another 50 at other locations. In the late 1990s it began using the MBTI tool as part of its training and development interventions, offering all employees an opportunity to take the assessment. The company's use of type helped it more clearly define team-related problems and anticipate potential leadership issues arising from team dynamics.

The company also applied type to several key organizational issues, including restructuring and customer service. Rather than a "flavor of the month," the MBTI instrument became a part of the fabric of the redesigned work culture.

A Widely Known Computer Company

Several years ago members of a computer company's leadership development team were charged with developing team training for the entire organization. They selected the MBTI tool as their instrument because of its statistical grounding, its flexibility in self-scoring, and the opportunities it presented for continuing learning through conference and workshop programs. As a result, they created three learning modules, incorporating the application of the MBTI assessment in each.

- The first module incorporated the use of preference-pair information to resolve team conflicts and included an action plan for working on team differences.
- The second module expanded on the first and began to look at the SJ, SP, NJ, and NP function pairs. The individual work groups within the company became keenly aware of how functions had driven past team decisions and how problem solving could be improved in future situations.
- The third module examined leadership and learning styles based on the four temperaments. Participants were asked to examine their own style as well as the styles of other team members. The added value was the discovery of team type and how that dynamic affected team functioning.

The company marketed its successful program to other organizations, including a large hotel chain, a telephone company, and a charitable organization with operations worldwide. Understanding that great companies invite and thrive on diversity, the computer company has helped its employees gain insight into the value of personality differences in building and maintaining successful teams.

A Major Healthcare Network

A major healthcare network began using the MBTI assessment in October 2001, initially offering it to the management team on a voluntary basis. Participation was high: Approximately 95 percent of the management team participated, taking Form M of the instrument and generating an Interpretive Report for Organizations.

The rollout, positioned as the start of the journey toward becoming an MBTI organization, featured a one-day learning session designed to offer a grounding in type knowledge. Subsequently, several people completed MBTI qualification training and began offering monthly lunch-and-learn sessions for the management team. These hour-long, experiential sessions enabled managers to observe how type differences were expressed, and they provided exercises for exploring different type preferences, function pairs, and behaviors. Participants learned to depersonalize behavior by looking at responses based on type.

Project groups increasingly brought the language of type into meetings, while senior leadership incorporated type into its team processes. Elsewhere type was being driven down to the next level. Managers requested that staff take the MBTI assessment for team development: the trauma, ICU, emergency, engineering, security, CSICU, family practice residency program, and OB/GYN residency program teams all learned about type and applied it to their work environment. Type applications expanded to inform team construction, conflict resolution, and diversity training. The MBTI assessment has even helped this organization achieve the distinction of being named one of America's best hospitals.

How Do Organizations Assess the Value of MBTI® Training?

If an organization using the MBTI tool (1) looks at the big picture and is an industry leader, (2) retains employees and reduces its hiring and training costs, (3) increases its sales revenue, and (4) successfully completes corporate restructuring, with teams functioning well and employees talking about type at meetings, does this mean the MBTI tool is working for the organization? Apparently, yes. But how can the organization know the real impact of using the MBTI tool? That is, how might it go about assessing the actual value the tool has contributed to the organization?

The best way to approach this issue is to view this use of the MBTI tool as what it is, an HRD intervention designed to bring about some level of change in the organization. Thus we can begin our assessment by asking a direct question: How are other HRD interventions evaluated?

Kirkpatrick's Model of Training Evaluation

Donald Kirkpatrick's (1998) model of training evaluation is a common jumping-off point for assessing HRD efforts. Kirkpatrick identified four levels for evaluating any training:

- Level 1: Reactions
- Level 2: Learning
- Level 3: Behavioral changes
- Level 4: Organizational results

As we shall see, levels 3 and 4 of Kirkpatrick's model focus on issues more critical to most organizations than do levels 1 and 2.

Level 1: Reactions

Level 1 measures reactions: How did the participants like the training program? This is the evaluation method most commonly used by organizations. Typically, participants are given a posttraining questionnaire that uses a Likert-type scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree). Response items focus on the participants' opinions on various aspects and outcomes of the program, such as

- I really enjoyed attending this program
- This program will be a great help in my job
- The instructor was very knowledgeable about the topic
- I would recommend this program to my peers

Reactions are easy to measure, and they can certainly give trainers (and others) a sense of well-being and comfort about their HRD program. The feeling is that if participants really liked the program, it must be a good one. Reactions can also be seen as one measure of how motivated trainees are to attend the program. Motivation is not always a good indicator, however, because reactions can be easily manipulated. Good food and a pleasant day away from work can make an HRD program very attractive. Who wouldn't rather spend a day at a resort, eating good food, than slaving away at the office?

Level 2: Learning

Level 2 focuses on participant learning. While measuring learning is very useful for evaluating some programs, it is of little value for many others. For example, if we are training someone to use a computer spreadsheet program, it makes sense to evaluate the training by "testing" the person's knowledge before and after the training to determine what he or she learned about the spreadsheet program. Alternatively, if we are training someone to perform CPR, does it really matter if the person can pass a written test on the subject, or would we rather see whether he or she can actually perform CPR? Obviously, actually doing CPR is what really matters for a CPR training program.

Learning is usually measured using a test comparing knowledge, skills, and/or attitudes before and after training. Put simply, the pretraining score is subtracted from the posttraining score, and the difference is what was learned from the training program. We also try to identify a *control group* (a group that is as similar as possible to the participant group but that does not receive the training). If the participant group "learns" but the control group does not, most likely the training program is successful.

Learning is a very good measure of training program success, *if* the training program's goal is to teach people something and is easily measured.

Level 3: Behavior Changes

Level 3 measures behavior changes: How has participants' behavior changed since taking part in the training program? This can be difficult to measure and analyze. Usually, both a pretest and a posttest measure are used, and a control group is included for comparison purposes. Presumably, any changes that occur in the group receiving the training but not in the control group can be attributed to the training.

The difficulty of evaluating behavior changes is compounded by the difficulty of measuring behaviors at all. How do we measure behaviors? We can observe how people behave and record those observations, but this is time consuming, and people often behave differently when they know they are being observed. Self-reports are often used to measure behaviors. A self-report* is a questionnaire completed by the participants themselves, usually using a Likert scale as discussed above and containing items such as

- I always ask for help when I have a problem at work
- My colleagues and I communicate regularly
- I always wear my seatbelt when driving

Level 4: Organizational Results

Level 4 measures organizational results, with the focus on the impact the HRD intervention has had on some important and quantifiable measure used by the organization. For example, did absenteeism or turnover decrease, or did productivity increase? Results are generally viewed as the "bottom line" for the organization, and are often measured using the concept of *return on investment,* or *ROI.* This will be discussed in detail in the next section of this booklet.

Kirkpatrick (1998, p. 59) describes this fourth level as "the most important and perhaps most difficult of all" to determine. He suggests trainers consider a number of questions to evaluate results. These questions include (pp. 60–61)

- How much did quality improve because of the training program?
- How much has it contributed to profits?
- What reduction in turnover and scrap rate did we get after training?
- What has been the result of all our training programs?
- How much has productivity increased and how much have costs been reduced as a result of our training efforts?
- What is the return on investment for all the money we spend on training?

But the ultimate issue for trainers and managers is this: How can they determine the return on investment? While both the concept and the formula for calculating ROI appear simple and straightforward, the application of both is considerably more difficult. All this will be discussed in the next section, where we will explore how to apply ROI to evaluate the impact of HRD interventions.

* *Note:* Podsakoff and Organ (1986) identified a serious problem with using self-report data to evaluate training. This is the issue of the *socially desirable response.* Respondents may give the response they think the boss wants to hear rather than give a candid answer.

ROI in Action: Sample Analyses

As we have seen, the *Wagner-Weigand ROI Survey* is a useful tool for quantifying the organizational impact of using the MBTI assessment. This section presents a sample analysis of the application of the survey to an organizational group. It concludes with a case study analyzing the ROI of MBTI type training for an individual.

Using the Survey for Group Assessment

Following is a sample analysis using the *Wagner-Weigand ROI Survey*. This analysis involved a work group of 40 employees, each of whom had attended MBTI training and completed the survey. The chart summarizes the steps involved in our model, which are further described below, and lists sources of data for each step.

Summary of Analysis

	Action	Sources of Data
Step 1	Determine the behavioral changes that will result from training	Training participants Key staff managers Supervisors Training staff
Step 2	Determine the organizational results that might be improved because of these behavioral changes	Training participants Supervisors Training staff
Step 3	How would these changes affect revenue and costs?	Training participants Supervisors Key staff managers
Step 4	Where would the actual data be found to support the estimates above?	Organizational financial managers Key staff managers
Step 5	Link the behavioral changes to results that are already being measured	Organizational financial managers Key staff managers

Step 1: Determining the Behavioral Changes that Will Result from Training

To accomplish this step, we used a fairly simple spreadsheet to average the responses of the 40 participants on the Personality Type Assessment Survey. The formula for scoring Part 1 was applied. Our results are shown below.

Scoring Summary Chart

Assessment Indicator	Score (from Scoring Worksheet)	Check if 3.75 or >
Partnering/Mentoring	4.08	✔
Workforce Diversity	3.50	
Performance Contracting	2.99	
Communication	3.61	
Problem Solving	3.32	
Type Flexibility	3.89	✔
Customer Service	3.93	✔

Based on these scores, we anticipated anecdotal evidence to support changes in:

- Partnering/Mentoring
- Type Flexibility
- Customer Service

Step 2: Determining the Organizational Results that Might Be Improved

Next we examined the anecdotal evidence reported on the Behavioral Indicators Survey to confirm these behavioral changes. We found that the 40 participants reported a number of anecdotal observations suggesting positive change for the three indicators identified above. The specific number of anecdotal observations was:

- Partnering/Mentoring 7
- Type Flexibility 7
- Customer Service 6

These were the highest numbers of positive changes reported for any of the seven indicators. A summary of these anecdotal changes is presented below.

Summary of Anecdotal Changes Reported

- At meetings with superiors, I am learning to give either more details or more ideas, depending on the needs of the individual.
- My officemate is a different type, and we frequently role-play with each other to get a different perspective on the subject.
- I have seen this specifically when dealing with staff-to-staff conflict. Helping staff understand each other's personalities decreases conflict and enhances teamwork.
- I think this is more noticeable with the J and P preferences. It explains a lot about how people view and work on projects.
- We now have meetings to do exercises to help us see other perspectives.
- We met with a new director and discussed our likenesses and differences and how we will work together. We also looked at the MBTI types of those who would report to her and discussed challenges and perks.

Step 3: Looking at How Changes Affect Revenue and Costs

We then looked at how these changes would affect revenue. The responses we got included the following.

Responses Regarding Revenue and Costs

1. Less time is needed to convey project information (15–30 minutes per assignment; saves approximately $50 per week).
2. Team members (my customers) are more satisfied (lower turnover).
3. We save $250 a week in increased efficiency.
4. Productivity has improved, with increased patient numbers and increased revenues (saves an estimated $300 per week).
5. Less time is spent on communication (saves approximately 15 minutes per day).
6. Whenever I get a patient or physician complaint I listen better, and now the outcomes seem to be improved—complaint resolution is up by 20%.

Step 4: Finding Data to Support the Revenue and Cost Estimates

Where would the data be found to support the estimates enumerated above? Answering this question was the next step in our search.

Where Data Could Be Found

- For #1 above, it was determined that productivity data were maintained by each department and could be converted to dollars, with salary data available from payroll.
- For #2, turnover statistics and cost data are both maintained by the human resources department.
- For #3, efficiency is found in the same area as #1 above.
- For #4, these data are maintained in the marketing department.
- #5 and #6 are not supported by specific ROI data.

Step 5: Linking the Behavioral Changes to the Results Being Measured

This step involves getting the actual numbers from the sources in Step 4. Since this is only an example, the numbers would be meaningless at this point. But we would be able to generate the following all-important dollar improvements:

- Gain in productivity and efficiency after MBTI type training
- Reduction in turnover costs

As any manager will realize, even small gains in these two critical areas can result in large dollar savings.

Using the Survey for Individual Assessment

Case Study: Mary, OBGYN Resident

Mary is an OBGYN resident at a prominent hospital. She became familiar with the MBTI assessment in the first year of her residency program. Over the past 2 years, she has incorporated her knowledge of type in two areas of her training.

First, Mary's ENFP type preferences had an impact on her ISTJ residency director. Her Perceiving time frame regarding coming to closure on assignments and seeing patients frustrated her Judging supervisor. Once Mary understood the issue in type terms, she learned that through "type flexing" into the J world she could accommodate the need for quicker closure on tasks. Also, Mary was able to avoid personalizing the responses from her supervisor once she had an understanding of his ISTJ preferences.

Second, Mary uses type daily in working with the nursing staff at the Women's Health Clinic. A type chart is posted in the clinic listing the types of all the residents and the clinic nursing and support staff. Mary checks the board at the beginning of her shift to find out the MBTI type of the nurse assigned to her that day. This has become a routine for her and other residents in the clinic as well as the staff.

In analyzing Mary's situation, we applied the following process.

Linking individual gains to organizational outcomes, we determined that the outcomes identified were related to the following behavioral indicators:

- Improved communication (Communication)
- Understanding of work flow and pace for that day (Partnering/Mentoring)
- Decreasing miscommunication (Communication)

Translating the anecdotal evidence to revenue data, we found:

- Improved treatment times and more efficient work flow
- Happier patients and thus more referrals to this unit

At this point we were able to begin converting this anecdotal evidence into actual dollars for Mary's hospital.

Concluding Remarks

The journey has now come to an end. We hope you have found some light at the end of this long tunnel. We consider this a work in progress and not a done deal, and we are very open to discussing and sharing our work with interested readers. You can contact either of us with your suggestions, concerns, or criticisms, or simply to talk about your experiences.