metrics that matter

Metrics That Matter™ SmartSheets

Predictive. Proven. Powerful.

Evaluations are the foundation for any learning measurement process, but there is a wide spectrum for their relative efficacy from satisfaction-focused "Smile Sheets" to scientifically-proven, impact-focused SmartSheets used by Metrics That Matter.

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What are SmartSheets?

The Learning and Development (L&D) profession has a long tradition of referring to learning evaluations that gather feedback from learners as "Smile Sheets." The main driver for the moniker is the history that Kirkpatrick's Level 1 (L1) evaluations are collected immediately after training, and L1 is synonymous with satisfaction. Smile sheets have damaged the L&D profession by feeding the mistaken notion that L&D is not concerned about business impact and that the measurement of the business impact of learning is very difficult or impossible.

SmartSheets rethink learning evaluations by applying scientific rigor to gather the right set of metrics to measure the business impact of learning, *and* to predict future impact with enough lead time to change and improve the results. Comprehensive feedback is gathered via the perspectives of 3 stakeholders (learners, managers and instructors) at 2 points in time (immediately after training and 60 – 90 day later) across 15 categories of measures (See Figure 1).

Key Takeaway

Comprehensive feedback is gathered via the perspective of 3 stakeholders at 2 different points in time: from the learner, manager and instructor at immediately after training and 60-90 days later, and across 15 different categories of measure.

Instructor	Application	Manager Support
Content	Scrap Learning	Performance Gain
Environment	Net Promoter	Business Results
Knowledge Gain	Criticality	Value
Support Materials	Alignment	ROI

Figure 1: SmartSheet Constructs

There are 4 types of SmartSheets available through Metrics That Matter:

Post Event Learner Evaluations

At the conclusion of a learning event, the participants provide feedback via Post Event Learner Evaluations. These are different from traditional "Smile Sheets" or "Level 1s" in that they gather

comprehensive feedback on the effectiveness of the learning intervention and predict the level of job performance improvement. These SmartSheets are typically tailored to the learning methodology (instructor led, virtual classroom, eLearning, etc.), as well as to the course type (onboarding, sales, leadership, etc.).

Post Event Instructor Evaluations

Designed to be completed by class instructors immediately after facilitating classes, Post Event Instructor Evaluations capture information regarding the level of readiness and engagement of the students, the course content, and class environment (physical or virtual) and technology. Use of this evaluation helps to provide instructors with an easy, consistent mechanism to provide their perspective. Typically, instructor feedback is used by courseware designers as they prepare to update course content.

Follow Up Learner Evaluations

Follow Up Learner Evaluations are designed to be deployed to students after they have had adequate time to apply what they learned in training to the job. These results represent what actually occurred and should be compared to the Post Event results in order to "true up" the predictions they made regarding job impact, results and value.

Typical timing is to gather the feedback after 60 days. Follow Up evaluations are not tailored to the learning method; however, the business results that they measure are commonly tailored to the course type (onboarding, sales, leadership, etc.).

Follow Up Manager Evaluations

Follow Up Manager Evaluations are designed to capture the same types of measures as those included on the Follow Up evaluation from the perspective of the learners' managers. They are typically deployed at the same time the Follow Up evaluation is sent to learners. Please

note that manager feedback is designed to be analyzed in aggregate and is focused on how the training impacted the collective learners' job performance. It is not intended as a performance review or to serve as a 180 degree competency assessment, which is a separate capability and measurement approach available in Metrics That Matter.

Validity of SmartSheets

Metrics That Matter SmartSheets provide timely, credible input to better manage the effectiveness and business impact of learning and development. The level of scientific and statistical rigor invested into the development and refinement of the SmartSheets raises them far above the level of the typical employee survey.

1. **Face Validity:** The SmartSheet evaluations were created in partnership with and reviewed by the leading subject matter experts on measuring learning and development:

- Donald Kirkpatrick, Ph.D.
- Jack Phillips, Ph. D.
- Robert Brinkerhoff, Ph.D.
- Josh Bersin (Bersin by Deloitte)
- Dave Vance (CLO of the Year)
- Jac Fitz-enz, Ph.D.

2. **Reliability:** A Cronbach Alpha analysis on over 250,000 evaluations found correlations to be extremely reliable (exceeding .800) which exceeds the minimum standard reliability threshold of .700.

3. **Construct Validity:** A Confirmatory Factor analysis conducted in partnership with Nick Bontis, Ph.D. confirmed the causal pathways from SmartSheet predictive indicators to future business results.

Metrics That Matter SmartSheets are analyzed regularly and updated based on the latest research in the learning analytics space and statistical analysis of the millions of evaluations collected annually.

Predicting Business Impact

Predictive Learning Impact Model

Dr. Nick Bontis, Director of the Institute for Intellectual Capital Research at McMaster University performed statistical analysis on over a million data points collected on the Metrics That Matter™ SmartSheet evaluations. Dr. Bontis leveraged a technique called Structural Equation Modeling, also known as Causal Modeling, which enabled him to examine the key learning factors that lead to business impact. This resulted in the creation of a causal model known as the Predictive Learning Impact Model.

A causal model is an abstract model that uses cause and effect logic to describe the behavior of a system. Causal modeling parses out the effects of each and every variable and interaction between variables. A causal model effectively captures and displays direct and indirect relationships among variables. With all significant relationships among variables shown, the end result resembles a spider web. If you pull on one string, all other strings in the web are affected. The purpose of the causal model it to find the strongest relationships within the web so the right strings can be pulled to influence business outcomes.

The Predictive Learning Impact Model (Figure 2 below) shows the cause-and-effect relationship from the elements of learning through to business results as measured by SmartSheet evaluations. The coefficient of determination (R^2) of the model is 59.2%, indicating a strong causal fit. Through SmartSheet evaluations, learners' predictions on the degree to which a learning evaluation will influence future business results are rather accurate when trued up with observed results 60 days later.

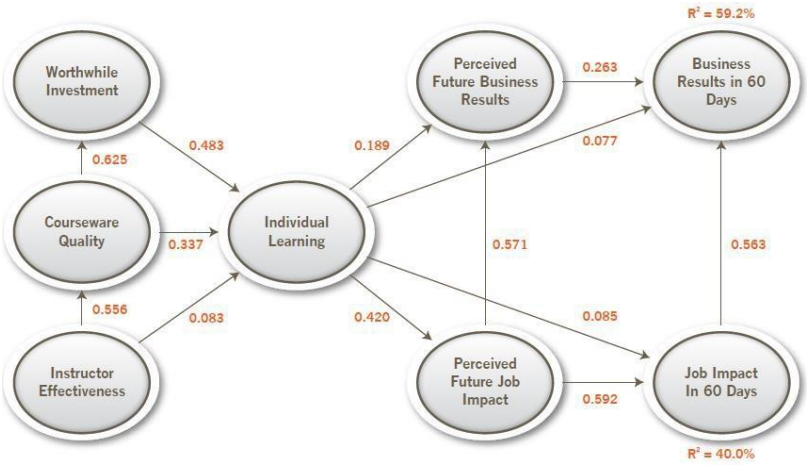

Figure 2: Predictive Learning Impact Model

Predictive Return on Investment

Shreya Sarkar Barney, Ph.D., President of Human Capital Growth, conducted a study to compare the human capital return on investment calculations derived through three different measurement approaches. Results are summarized in Figure 3.

- Statistical Analysis of Performance: analysis of multiple years of performance data of the group trained vs. a control group using a variety of statistical techniques, including analysis of variance, analysis of covariance and regression

- Manager Interviews: 45-60 minute in-depth quantitative and qualitative interviews with managers to quantify observed performance gains of direct reports who participated in the learning program

- Metrics That Matter™ SmartSheets: Post Event Learner Evaluations, which included forecasts of performance gains, were gathered from employees at the conclusion of the learning program

With SmartSheet evaluations, Metrics That Matter guides learners to quantify an estimated Performance Improvement index. It is a conservative estimate of how much training has improved performance. When this figure is added to a proprietary equation in MTM along with the costs of the learning program and the average learner's salary, MTM produces an ROI estimate that demonstrates the value of the training for the organization. The SmartSheet evaluations also capture how those gains should be realized in the organization such as increased sales, increased productivity, decreased risk, etc.

Key Takeaway

When MTM was compared to other approaches to quantifying the return on learning investment, the results were in-line with results based on more time-consuming and resource-intensive techniques.

Measurement Technique	% Improvement Due to Learning	Return on Investment
Statistical Analysis of Performance	7.37%	269%
Manager Interviews	8.03%	302%
Metrics That Matter™ SmartSheets	7.47%	274%

Figure 3: Comparison of Return on Investment Calculations

As can be seen from Figure 3, the results are very similar, demonstrating that the Metrics That Matter™ SmartSheet approach to quantifying the return on learning investments is in-line with results based on more time-consuming and resource-intensive measurement techniques. By reallocating learning measurement investments toward scalable, efficient techniques to quantify the ROI of learning, organizations can refocus energies away from the administrative activities of analytics and toward taking action to improve future results.

Driving Action

Metrics That Matter SmartSheets are action-oriented, built for the purpose of the continuous improvement of a learning and development function.

Beyond the business impact and ROI calculations discussed above, Metrics That Matter provides many other unique insights to improve learning performance.

External Benchmarking

Collecting comparable data across the L&D function is a critical first step to allow for internal comparison. Organizations leveraging Metrics That Matter SmartSheet evaluations can also compare their effectiveness against a variety of robust, relevant and reliable external benchmarks. Having an external measure against which to compare your organization's performance helps to provide additional context when determining where to invest, improve, or cut resources within the L&D operation.

Key Takeaway

Benchmarks provide the context to influence the best decision on where improvements need to be made or to inform a decision to turn attention elsewhere.

As an example, in Figure 4 below, we look at the same set of ranked data first without any benchmarks and then against two different benchmarks. The benchmarks provide the context to influence the best decision. In Example A, substantial improvements need to be made to the bottom two items; however, in Example B with the exact same data set, the benchmark could inform a decision to turn attention elsewhere, since all items outpace the benchmark.

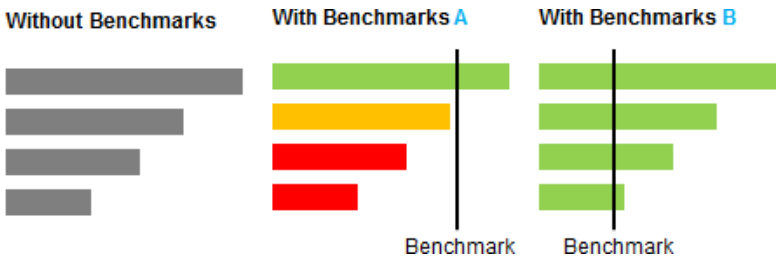

Figure 4: Benchmark Context

Benchmarks in Metrics That Matter enable organizations to make relevant apples-to-apples comparisons down to the individual question level.

Organizations can change benchmarks on the fly and have a range of options to select from:

- 29 job types
- 23 industries
- 20 geographic regions
- 11 course types
- 8 learning methodologies
- 5 classifications of top-performing companies

With the context of external benchmarks, learning and development functions can prioritize investments and improvements, as well as communicate to the business with more credibility and insight.

Learning Net Promoter Score

Metrics That Matter™ SmartSheet evaluations also enable organizations to measure, improve and communicate learning effectiveness leveraging Net Promoter Score (NPS). Founded by Fred Reichheld, Bain & Company and Satmetrix, NPS identifies a single question that differentiates market leaders from lower-performing competitors:

"How likely are you to recommend Company X to a friend or colleague?"

Customers respond on a 0 to 10-point scale, where 0 represents "Not at all likely" and 10 represents "Extremely likely." Responses of 9-10 are "Promoters." They are loyal enthusiasts who will keep buying from a company and urge their friends to do the same. Responses of 0-6 represent "Detractors." These are unhappy customers who will actively communicate their dissatisfaction with a company. Responses of 7-8 represent "Passive" customers who are generally satisfied, but unenthusiastic. Net Promoter Score is calculated by subtracting the percentage of Detractors from the percentage of Promoters. NPS is not expressed as a percentage but as an absolute number lying

between -100 and +100. Figure 5 shows how the rating scale corresponds to customer roles.

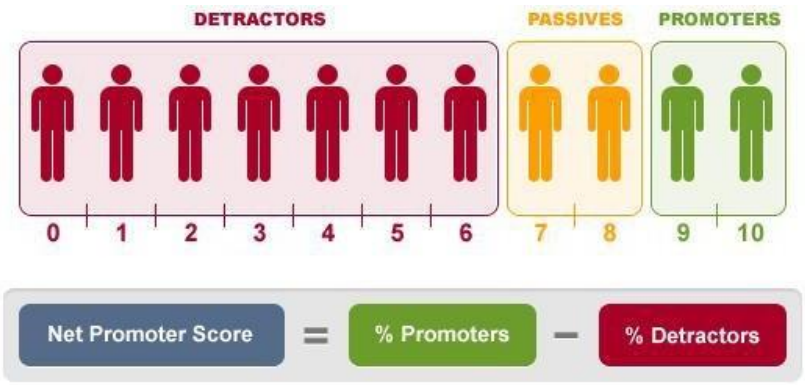

Figure 5: Net Promoter Score

The Net Promoter System involves establishing the processes and accountability to monitor and improve the Net Promoter Score. A key process is the closed feedback loop in which the service provider actively intervenes following feedback from Detractors, working to change their negative perception into a more positive one. In order for this to occur, the customer-facing personnel need to be alerted to Detractor feedback and empowered to take action to improve the customer experience.

Metrics That Matter enables the same approach with learning programs by capturing NPS feedback regarding learning programs and then providing NPS-driven insights in the following forms:

- Daily Detractor Alerts: automated reports filtered to the feedback from Detractor learners for immediate follow up and action

- NPS Ranking: stack ranking of instructors, courses, business units, vendors and more to identify the top priority areas for improvement

- NPS Benchmarking: assess organizational performance against external learning functions to better understand and communicate overall effectiveness

Scrap Learning

As learning participation increases, employees devote a higher percentage of work time to learning activities. This temporary lowered productivity is a worthwhile tradeoff when the new knowledge and skills can be applied on the job to increase performance. But when employees spend time in learning activities that do not directly translate to increased performance, this results in wasted employee time and L&D budget. This is referred to as **Scrap Learning**, which is defined as any learning that is delivered but not applied back on the job.

There are many drivers of scrap. Some are within L&D's direct span of control, others relate to the learners themselves, and some of the causes relate to the business environment as shown in Figure 6.

Instructor	Application	Manager Support
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Figure 6: Root Cause of Scrap Learning

Key Fact

The average organization wastes 45% of their L&D budget and learners' time due to scrap learning.

The learning measurement processes of most L&D organizations are ill-equipped to identify the root causes of scrap learning for a given program, let alone prescribe recommendations for addressing the causes. As a result, the average organization has a scrap learning rate of 45%, which translates to nearly half of L&D investments and nearly half of the time employees spend in formal learning programs producing no value for the organization and ultimately going to waste.

Organizations using Metrics That Matter are able to reduce their scrap learning rate, on average, from 45% to 33%. With the typical L&D spend per employee at more than $1,200, the annual savings represented by a 12% drop in scrap learning would be roughly $1.5 million for an organization of 10,000 employees.

The more significant opportunity, though, comes with transforming the scrap learning into impactful learning. As organizations systemize the approach of identifying and reducing the waste in their learning and development programs, they see the performance gains due to learning programs increase significantly. For the average organization, the L&D programs increase employee performance by 6% annually, whereas those organizations that actively measure scrap learning see annual employee performance gains of 10%. This 4% difference in performance improvement represents $24 million in opportunity costs for every 10,000 employees in organizations that do not take a proactive approach to reducing scrap learning. As organizations become more adept at addressing both L&D and business environment causes of scrap learning, they realize even greater gains. The top quartile of organizations measuring scrap learning manage to reduce it to only 18% and achieve annual performance gains due to learning that are more than triple that of the typical organization.

Closing Thoughts

Metrics That Matter SmartSheets enable organizations to quickly implement a robust, credible, automated, action-oriented approach to learning analytics. They enable organizations to stand upon nearly two decades of research with the confidence that the measures are valid and reliable. While other organizations use "smile sheets" and have endless debates over the wording of questions, organizations that adopt the automated SmartSheets from Metrics That Matter are able to redirect their energies toward taking action: improving the business impact of their learning programs and communicating forecasts and results to their business stakeholders.

About Explorance

Explorance is a Learning Journey Analytics provider that empowers organizations in making the right decisions with fact-based feedback data. Through its main offerings Blue and Metrics That Matter, Explorance is at the heart of the learning organization's continuous improvement strategy.

Founded in 2003, Explorance is headquartered in Montreal with business units in Melbourne, Amsterdam, and Chicago. Since 2014, Explorance has been consecutively ranked as a top employer by the Great Places to Work Institute®. Explorance's clients include a wide variety of learning organizations from various segments including academia, enterprise, consulting, and government across the globe.

About Metrics That Matter™

An end-to-end solution, Metrics That Matter (MTM) automates the learning measurement process across your entire L&D portfolio. By combining data from your enterprise systems (LMS, HRIS, etc.) with information collected through evaluations, MTM paints a complete picture of learning programs and business performance.

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