

DIGITAL BEAT

A Love-Hate Thing

By Darin E. Hartley

ROI and learning analytics are topics that I get excited—and irritated—about simultaneously. I think it is great that many learning organizations are evolving into pragmatic and business-driven entities. These organizations are fostering greater access into upper levels and across greater boundaries in organizations than ever before.

I get excited about some of the powerful tools that are out there for training professionals and other stakeholders to

measure training effectiveness in a variety of ways, using an array of tools to do that. So, what irritates me about ROI and learning analytics? I think there are still too many “training metrics” in organizations that are really only important to training organizations. I hope that one day, the term *learning analytics* goes away and everyone in organizations will be using business analytics and business measurements to describe the effectiveness of learning interventions. I also

hope that learning organizations measure what really needs to be measured and start the ROI-learning analytics process very early in the learning cycle—during the analysis phase of projects.

Now that I've vented, let's talk about some of the types of tools that are out there to help organizations.

Tool types, valid processes

A variety of tools are used for learning analytics, including enterprise resource planning (ERP) tools such as SAP and PeopleSoft; enterprise relational databases such as SQL and Oracle; departmental relational databases such as Access; online analytical processes (OLAP) tools such as Cognos, Business Objects, SAS, and Hyperion; spreadsheets like Excel; and miscellaneous tools like SPSS, Survey Tracker, and Lotus Notes.

Learning analytics tools gather input from multiple databases and, when conjoined with appropriate queries, can pull data and create a real-time slice of an organization's training metrics. These systems can be tied into business data (sales, manufacturing, inventory, operations), as well as HR, financial, and training data, in a variety of combinations to create reports, dashboards, and management sites for learning and business professionals.

All of that sounds wonderful. In fact, when learning analytic systems are configured appropriately, you and your organization can gather and assess data effectively. The key is, however, that the human processes and the data that are used to run the queries against in systems like those are the accuracy gauges for the reports, dashboards, and other systems that are used. If your human processes are broken, developing, running, and assessing the output of these initiatives will be nothing short of frustrating.

One company I worked for in the past used spreadsheets filled with data from paper-based Level 1 surveys (smile sheets)

to monitor class and instructor trends. After each class, the instructor would submit to participants the Level 1 surveys, which would be collected and given to the training administration department for data entry. Two administrative people spent the bulk of their work hours entering that data into spreadsheets to tabulate the results—a tremendous resource vacuum. Invariably, the people entering the data made mistakes, because people aren't infallible and make mistakes. So, if you have issues with the data entering the system, it's possible that decisions downstream aren't always made with the most accurate information.

I tell you that story so you can consider areas in which you rely on "training" data or other types of data to create reports.

- Are the processes you're measuring in working order?
- Are the points in the process where data is gathered the best place or source to gather that data?
- How reliable is the data you are querying against?
- How often is it updated?

What I find in organizations, even small ones where you'd think it would be easier to have consistent processes, there's tremendous variability. That variability in processes, and the way people interpret the same processes, can cause huge disconnects in the learning analytics and in determining ROI. So, make sure your human processes are in place and working well if you are considering running learning analytic reports from them.

Learning analytics providers

Who are some of the providers of learning analytics tools? At some level, many organizations are using standard off-the-shelf data and reporting tools, married with corporate or organizational data to create learning metrics reports. At the base level, spreadsheet tools, basic Web survey tools, bubble sheets, and other

Ten Tips for Learning Analytics

1. Don't measure everything. Measure what really matters.
2. Make the learning analytics tools as accessible and easy to use as possible.
3. Develop a marketing plan for your learning analytics tool so that you can get people to use it.
4. Use a cross-functional team when selecting or developing a learning analytics tool.
5. When possible, measure data that can be tied directly to the business.
6. Prioritize your functional requirements for the tool so that you can help manage project scope when selecting or developing a learning analytics tool.
7. Assess the data-entry methodologies for accuracy.
8. Ask peers how they are gathering learning analytics.
9. Try demos from several providers of learning analytics tools.
10. Periodically query your business leadership to ensure that you're gathering the appropriate learning analytics data and reports.

data-collection tools are used to gather some level of learning analytics data.

Several companies in particular have focused on learning analytics and have some very interesting tools.

KnowledgeAdvisors has a methodology called Metrics that Matter that provides its clients with a holistic way to gather key learning data through a central tool. Data can be gathered for multiple end-users in a variety of ways: tactical reports, aggregate managers' reports, executive

DIGITAL BEAT

reports, and ROI analysis reports. Reports can be generated in multiple ways to meet the requestor's needs; customized reports can be created based on the data sets that exist in the tool.

Thing has a toolset called Thing Analytics that helps people manage learning delivery, increase learner satisfaction, identify effective learning interventions, assess business impact, and reveal ROI.

SumTotal Systems, formerly Docent and Click2Learn, has a learning analytics package called TotalDashboard that integrates business data and learning information to provide interactive role-based dashboards to help end-users measure and manage their investments in training and learning.

Saba has a learning analytics system called Saba Analytics, designed to facilitate information gathering and assessment for learning systems in multiple ways. Learning managers and business managers can run a multitude of standard and custom reports configured to get the most appropriate information needed.

You might be wondering whether you have to purchase an off-the-shelf learning analytics package. You don't. It's possible to create a custom learning analytics tool using your organizational databases and a reporting tool (such as Business Objects) to gather the data. If you're planning on developing a custom application, there are several activities you'll need to complete beforehand.

- Determine what is on the IT roadmap for your organization. That's important because if you're trying to implement a new custom IT application, there might not be resources available for you to do it.

- Identify the funding source for this development. The IT organization and your leadership team will want to know.

- If you have the project supported by IT (have it on the IT roadmap and have it funded), you can assemble a project team for the tool.

- Develop the functional requirements for the tool so that the IT team can build it to those specifications. That's actually one of the most difficult parts of the project and a place where scope can explode if not managed well.

- IT will then develop the tool and allow you to pilot it for functionality, graphic user interface, and so forth.

- Once the tool is piloted and changes are made based on the recommendations from the pilot, then the tool can be put into service.

- Monitor the tool for bugs and additional functionality to add and create a maintenance-upgrade schedule.

Homegrown tools can be powerful when developed using a systematic team-based software development approach. Integrated cross-functional teamwork is key to project success.

The beat goes on

Learning analytics tools can be powerful for business and learning management in organizations when

- the data underneath the reports is accurate
- the right data is being measured
- the reports being pulled reflect business and organizational needs.

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