7 things for effective Big Data Training
By Chris Pehura

Sitting at the front of the room, I see people pouring inside. People exhausted with their coffees and water bottles. They're exhausted not just because it's early in the morning. They're exhausted because I'm the forth instructor they had in the last six months; the fourth attempt to make the training stick. You see, the powers that be want us to redesign our organization to be what we would call today being data-driven. Instructor one was an author that "wrote the book" on it. Instructor two was from a world renowned consulting firm. Instructor three was a university research professor. And then there was me, instructor four, another attempt to make the training stick. Having this many instructors in such a short time span is typical when training people to do new things, training people to be innovative. And with Big Data training it's no different. Our instructors are going through the same tribulations. Business people do not understand Big Data, while data people, even with the right

skills, do not understand how to best tailor and apply these skills to the business. Big Data Training is treated as standalone systems in organizations, not tied to our existing training, making Big Data irrelevant to our organization.

To make Big Data stick, to make Big Data more effective, we need to do 7 things with our Big Data Training.

1. Scaffolds. We need to understand Big Data and become skilled in Big Data approaches. We don't have time to wait for our employees to have the "ah-ha" moment. So we "consciously" build and reframe Big Data to our current understanding, approaches, and skill sets. Then we build on that. We establish Big Data relevance by building the program around the frequent conversations that cycle within our organization; conversations around our business problems, priorities, and cultural elements. We need to build our new Big Data capabilities and competencies by building on what we already know, what we already talk about, and what we're already good at.

2. Extension of Business Training. Big Data Training is not a standalone system. It needs to be an extension of our existing business training program. This re-positions Big Data away from being just a technology allowing us on the business side to transition our organization to a data-driven culture. For Big Data to work requires more than just the right skills. Big Data only works when there is a data-driven culture to support it.

3. Big Data Defined. We define Big Data according to what is best for our organization. We take definitions from consulting firms, Wikipedia, and academia, building on them to establish our Big Data definition. Our definition encapsulates our business outcomes, politics, policies, approaches, business skills, and scope. Our definition permeates throughout our Big Data Training.

4. Target Business Outcomes. We structure the core of our Big Data Training program around business outcomes that must be addressed. These outcomes can be organizational outcomes around revenue growth, efficiencies, revenue protection, regulatory, and attrition. They can be operational outcomes around business development, finance, and technologies. They can be human capital outcomes around leadership, management, Big Data algorithms and skills. They can be human performance outcomes around key behaviors, cultural elements, and key objectives. We must make our Big Data Training program be targeted and relevant.

5. Same Subject Areas. All employees, may they be business, IT, or data go through the same Big Data Training. This not only simplifies the training, it helps establish our common business language, and gives us a common point of reference catapulting our organization to a data-driven culture. Big Data Training is broken down into nine subject areas...

- Data Analysis and Group Analysis
- Algorithms and Artificial Intelligence

- Models and Statistics
- Innovation and Org Behavior
- Business, Finances and Human Resources
- Big Data Technology
- Communications, Presentations, and Visualization
- Privacy, Security, Regulatory, and Data Governance
- Leadership (Presence, Idea, Partner, Execution, and Mentoring)

Each subject area develops and targets its own set of transferable foundational skills. To further develop these skills subject areas are broken down into four segments...

- Segment A develops business capability expertise for business, IT, and data employees.
- Segment B develops data capability expertise for business, IT, and data employees.
- Segment C develops data competency expertise for IT, data, and key business employees.
- Segment D develops Big Data competency expertise for key IT, key data, and key business employees.

For Big Data we don't train our employees on mutually exclusive business skills or technical skills. We train all our employees to gain expertise in the same foundational skills.

6. Ambassador Instructors. Our Big Data Training program needs to be taught by instructors that embody Big Data, instructors that went through their journey to Big Data. Instructors that openly tell us their story; share their insights, frustrations, and why we're all are better off with Big Data. Our instructors demonstrate key behaviors and cultural elements we all want our employees to have. Our instructors are familiar with innovation, data, executive management, and if possible Big Data algorithms. Once employees complete their training we need our instructors to mentor them in the short term and coach them in the long term. We want our employees to be immersed in Big Data so we all can support our data-driven culture.

7. Role Playing Simulations. To expedite our Big Data Training, we need to rev-up our employees' engagement with collaborative workshops, simulations, role playing, and storytelling. Adding dice rolls and playing-cards increase our employees' interactivity and knowledge retention. Our training mirrors our culture and the common situations found in our organization. To further reinforce what we learned we provide mental prompts such as refresher-webinars and cheat sheets.

Overall, even if we do get the right Big Data experts and the right Data Scientists, we do not have the org structure or culture to leverage our data talent. For their success and ours we need to support them and support them in the right way. We need our Big Data Training program to make us all Big Data "ready".

About the Author

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Data-centric Business Management

Chris is a management consultant with a data emphasis helping Fortune 100/1000 companies strategically evolve and reinvent their businesses to maximize their revenue growth. Through realignment, to overhauls, to rebuilding things from the top down and ground up, he integrates and solidifies leaders, strategies, and solutions into all aspects of the organization. As practice director for C-SUITE DATA, a Canadian based consulting firm specializing in data and Big Data, Chris serves as a coach, trainer, and the voice for how data is the new capital that drives, multiplies, and maximizes revenue growth.

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