MAKING DATA-DRIVEN CONTINUOUS IMPROVEMENT WITH MACHINE LEARNING

Over the past few years, there has been an expanding conversation around machine learning and what it means for the world. But let's think about what it means specifically for businesses.

If you don't already understand the concept, machine learning enables computing systems to identify patterns in data and continuously improve the outcomes of those patterns through "learning." Think of Netflix. It uses machine learning to predict what shows or movies you may be interested in based on your viewing history and movie attributes.

Given how pervasive machine learning is becoming—with use cases spanning data security, financial trading, healthcare and more—organizations should consider implementing this science wherever they can as a major competitive differentiator. Organizations that do can leverage machine learning and intelligent analysis for continuous improvement.

This is the future we envision for our customers, some of the largest organizations in the world that are leveraging the mainframe for mission-critical workloads and driving digital innovation by supporting engagement technologies. We're enabling it with new machine-learning software: **zAdviser**.

Learn About zAdviser

Machine Learning for Mainframe DevOps with zAdviser

We often use machine-learning powered apps like Google Maps to estimate travel time and distance. Estimated times of arrival are broadly a function of speed (limit, historical average), distance (path) and real-time traffic information. Machine learning algorithms are used to make predictions on arrival time and select the optimal path. Depending upon circumstances, sometimes we opt for the path with the shortest travel time. Other times, we go for an option to avoid traffic and have smooth driving experiences.

Similarly, DevOps teams are obsessed with establishing and measuring key performance indicators (KPIs) to continually improve outcomes on their development productivity. For our customers, zAdviser can be the guiding tool which not only helps measure those KPIs—which are based on DevOps toolchain data and Compuware product-usage data—but also helps you focus on what drives those KPIs by establishing relationships between developer behavior and the KPIs.

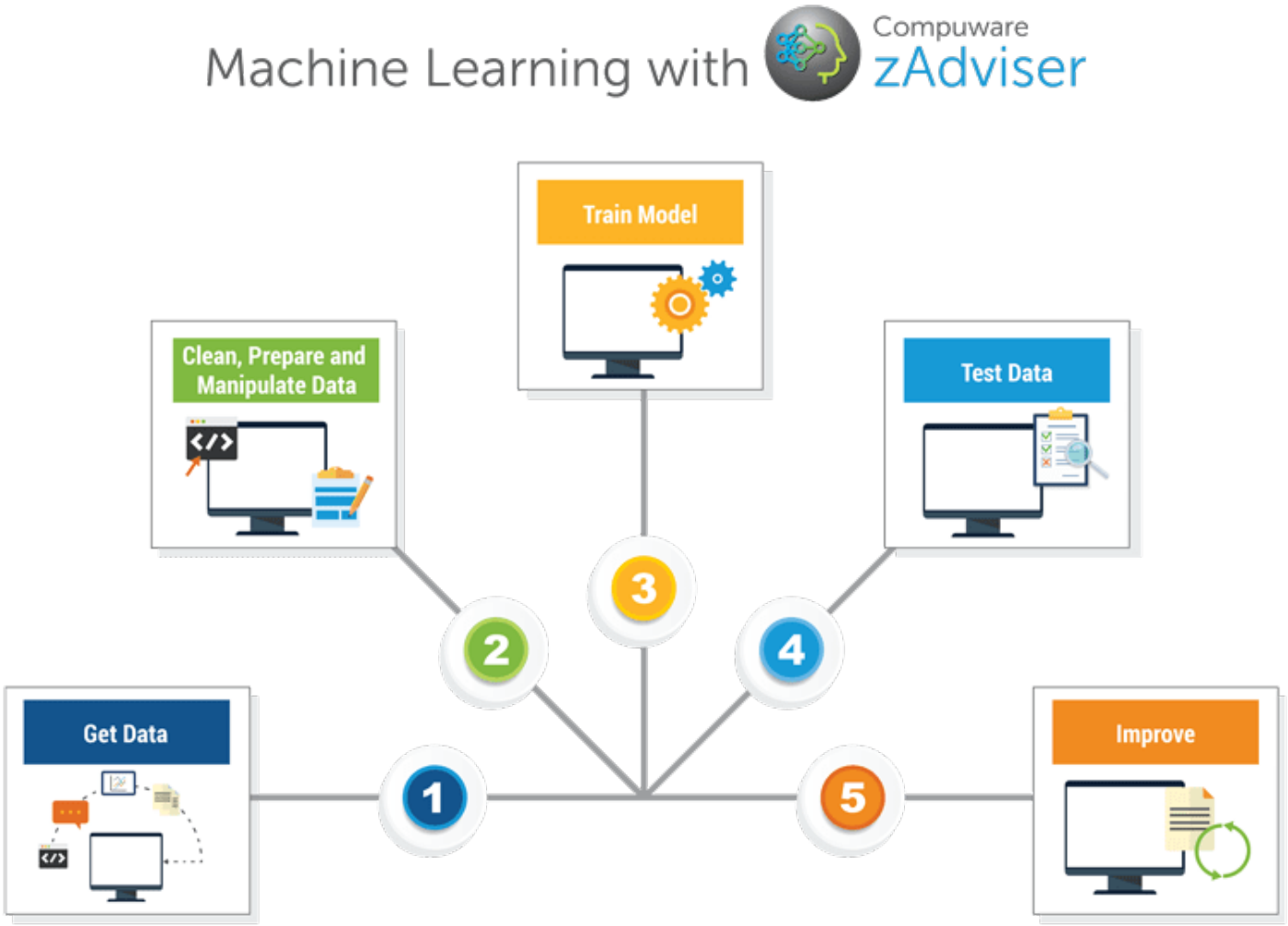
We'll be talking more about KPIs and how zAdviser uses them in **two upcoming webcasts** worth registering for:

Mainframe DevOps: Why Focusing on Quality Isn't Enough | May 15

Join Compuware Senior Product Manager Spencer Hallman and guest speaker Forrester Senior Analyst Chris Gardner to learn which KPIs and related metrics your organization should focus on to modernize your DevOps approach to increase speed to market, improve customer experience and draw new staff to the mainframe.

Discover zAdviser—Machine Learning for DevOps | May 24

Join Compuware Senior Product Manager Spencer Hallman and Director Jim Seronka to learn how zAdviser uses machine learning to identify positive and negative correlations between KPIs and developer behaviors, plus more.



Product usage analytics provide very critical insights on how efficiently the product features and functions are utilized and how can they impact the outcome of deliverables. There is obviously a vast difference in the quality, efficiency and turnaround time for an individual using more sophisticated functions in Compuware tools as opposed to one with basic function usage. Equipped with empirical data, IT leadership can identify what capabilities within the tools developers can exploit to move up the ladder.

In essence, we're bringing correlations to the table that decrease our customers' guesswork and increase measurable facts they can leverage to make continuous improvements, which are less feasible for their competitors who aren't using a machine learning solution.

What Makes a Good Machine Learning Solution?

I wrote a blog post a while back about what a good business intelligence solution should provide users. Some of the points in that blog don't apply to the context of a machine learning solution like zAdviser, but I think there are three that do:

1. Easy Interpretation of Results

zAdviser not only gives you the ability to measure performance, it gives you the ability to understand what factors are influencing it and what steps should be taken to improve it.

2. Feature Engineering

Your organization's data is unique unto itself, so you should have customized variables existing outside of raw data that are based on your experience and understanding of your business. zAdviser allows you to be more selective and flexible with what you measure over time. For example, engagement is an important variable that affects your KPIs and is something organizations can choose to measure to help determine the potential reasons for negative or positive results in quality, velocity and efficiency.

3. Visualization of Data

zAdviser is equipped with modern, intuitive, customizable dashboards that make it easy to analyze and consume data you measure, helping you focus on making meaningful decisions faster instead of digging for and parsing data.

As more organizations embrace DevOps for the mainframe, those using machine learning to automatically identify patterns of behavior that help them improve their development quality, velocity and efficiency will pull ahead of competitors that still manually compile data and manually identify trends in their development processes.

That's why, if you're a Compuware customer, I highly suggest you contact us for more information on zAdviser—especially because it's free to those that are maintenance-current.

Contact Us

As more customers participate in zAdviser, we'll start to cover key benefits of the product in future posts, from DevOps KPIs to constantly advancing machine learning algorithms. Stay tuned!