

IMAGINE INTEROPERABILITY: WHAT DISTRICT CIOs CAN LEARN FROM THE SALESFORCE.COM MODEL

BY MARK RANKOVIC

Districts grapple with a proliferation of learning applications, administrative systems and online teaching tools. Beyond the numerous database and instructional apps supported by district IT, teachers are using free online applications, free and low-cost content, and a range of tools to evaluate student mastery. All these apps require—and create, themselves—a burgeoning mass of data in separate, disconnected databases: some on-premises at the district and some hosted in the cloud by application vendors.

A decade ago, before 1-to-1 initiatives, LMS and next generation assessments were commonplace, former director of Apple Classrooms of Tomorrow and current COO at KD Learning, David Dwyer, presciently quipped in *Technology & Learning*:

“Technology’s a lot like the rungs on a ladder. Once you reach one level, there’s another one higher up to aspire to.”

If a district CIO believes the pace of application adoption will abate, he or she should think again.

How will the K-12 sector integrate and connect all this data to support interoperability between this growing set of applications? How can a district use and benefit from its trove of data assets—to drive decision-making and positive student outcomes? And how can CIOs avoid reinventing the wheel?

THE SALESFORCE.COM MODEL

The commercial sector has spent 30 years working out the optimal data architecture for: (i) data

integration to support application interoperability; and (ii) data consolidation for business intelligence.

The cloud-based hub and spoke model, with a persistent data hub at the center (often called an operational data store or ODS), surrounded by integrated transactional applications, is the ideal architecture for enabling secure, bidirectional integration and application interoperability. Data warehouse and/or data mart extensions to this architecture provide robust support for reporting, analytic and decision-support applications.

Salesforce.com has perfected this architecture and associated business model. Leading the CRM market for close to 20 years, Salesforce rocketed in popularity and has continued to innovate. Evan Tarver, writing for Investopedia in his article *What Is So Hot About Salesforce?* cites three reasons for Salesforce’s success, in addition to its centralized data architecture:

Cloud: Salesforce customers gain access to a complete set of cloud-based CRM applications, a cloud platform and infrastructure—making this a highly cost-effective choice.

AppExchange: Salesforce provides a common destination for prebuilt business applications to integrate and offer a range of capabilities for Salesforce users.

Community: Salesforce nurtures a networked community of users, solicits solutions from customers, and provides online venues for customers to make themselves heard.

THE ED-FI MOVEMENT

If you’re thinking that a similar approach could benefit K-12, look no further. The Ed-Fi® suite of open-source data standards and technology has strikingly similar architectural and business attributes. Developed and supported by the Michael & Susan Dell Foundation, Ed-Fi features a centralized, standards-based operational data store (ODS), an API thorough which education data systems and applications can integrate to

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MARK RANKOVIC, PRESIDENT AND CEO OF CERTICA SOLUTIONS, DRIVES THE VISION OF THE CERTICA CONNECT™ K-12 PLATFORM-AS-A-SERVICE. CERTICA CONNECT PROVIDES SEARCH, DATA INTEGRATION, INTEROPERABILITY, CONTENT MANAGEMENT, AND COMPLIANCE ASSURANCE TO A RANGE OF EDUCATION AGENCIES, EDTECH VENDORS AND CONTENT PROVIDERS. FOR MORE THAN 25 YEARS, RANKOVIC HAS BUILT AND LED SOFTWARE COMPANIES IN THE U.S. AND AUSTRALIA. HE JOINED CERTICA IN 2006.

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the ODS, and a thriving community of technologists and thought leaders.

The Ed-Fi movement is taking hold in school districts. IT can establish a centralized hub to integrate data between myriad applications, with secure and bidirectional data sharing, thereby creating true application interoperability; as well as providing a foundation for reporting and analytics to support data-driven instruction.

DATA CONNECT

Certica Solutions has taken additional steps with the Data Connect™ interoperability platform, to provide and manage a fully hosted implementation of the Ed-Fi ODS and API, with a unique Integration Console that serves as an ecosystem for districts and application providers. Data Connect also extends the Ed-Fi foundation via the automatic generation of a longitudinal database known as the Data Vault, which can be leveraged by a range of reporting and analytic applications, to support data-driven decision making. Designed specifically for districts, Data Connect—powered by Ed-Fi—capitalizes on the Salesforce model: cloud-based, hub and spoke architecture, and application ecosystem.

The Ed-Fi approach is ready-made for districts and Ed-Fi has clearly emulated the strengths of one of the most successful business models for data integration and interoperability. To learn how a district can get started, visit CerticaSolutions.com/Data-Connect.



Photo by Michael Burbenko

CETPA ANNOUNCES
STEVE WOZNIAK AS
2018 CONFERENCE
PRESIDENT'S KEYNOTE!

Steve has been a Silicon Valley icon and philanthropist for more than 30 years. He has helped shape the computing industry with his design of Apple's first line of products, the Apple I and II, and influenced the popular Macintosh.

For his achievements at Apple, he was awarded the National Medal of Technology by the President of the United States in 1985, the highest honor bestowed on America's leading innovators. In 2000, he was inducted into the Inventors Hall of Fame and awarded the prestigious Heinz Award for Technology, The Economy and Employment for single-handedly designing the first personal computer and for then redirecting his lifelong passion for mathematics and electronics toward lighting the fires of excitement for education in grade school students and their teachers.

He is a published author with the release of his New York Times best-selling autobiography, *iWoz: From Computer Geek to Cult Icon*, in September 2006 by Norton Publishing. In 2014, he was awarded the Hoover Medal, a prestigious honor given for "outstanding extra-career services by engineers to humanity," and was inducted into the Industry Week Manufacturing Hall of Fame.

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We would love to put our extensive experience to work for you, too.

*Please call us for a list of references in your area.

Infinitiy Communications and Consulting, Inc.
Be sure to stop by our booth #401 at CETPA 2018 to get your Infinitiy coffee mug and more!!

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