# How to Establish a CDO Office in Your Organization

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On July 24, 2014, as part of the MIT Chief Data Officer Information Quality (CDOIQ) Symposium held in MIT's East Campus, four CDOs from TD Ameritrade, Conning, Inc., Board of Governors of the Federal Reserve System and EMC were empaneled to share their views on information leaders can establish the increasingly vital role of the Chief Data Officer (CDO) in their organizations.

The panelists were:

- Derek Strauss, CDO TD Ameritrade
- Brian Baczyk, CDO Conning, Inc.
- Peta Gay Tessy, Lead Info Architect, Office of the CDO, Board of Governors of the Federal Reserve System
- John Smits, CDO for Global Business Operations, EMC

The panel was moderated by Derek Strauss.

While the information industry has recognized the need for a coordinated approach to the collection, protection, and value-adding processes necessary to ensure that organizations can generate net new value and competitive differentiations, the establishment of a CDO office is often overlooked as an extended information technology (IT) function, rather than an organization-wide optimization function. To that end, each of the panelists were asked to share their individual experiences as it relates to:

- The impetus that drove each of their organizations to establishing a CDO office;
- The first 90 days after the office was implemented; and
- The lesson learned from the establishment of a CDO office.

## The Driving Factors

For TD Ameritrade, the executive officers of the company including the CEO and COO were sponsors of the drive towards establishing a CDO office. The COO was previously a client in the late 1990s of Mr. Strauss (working in a different capacity). Through this connection, and recognition, the COO garnered the support and sponsorship of the CEO and other CxOs to establish a role that Mr. Strauss described as "a data czar".

In the case of Conning, an insurance industry asset manager, the role of the CDO is a subordinate not of the CIO, but the Chief Risk Officer (CRO). For Conning, data presented a risk, and the office of the CDO

was seen to be able to drive down risk, and improve competitiveness. Since the CDO was not part of the IT organization, Mr. Baczyk shared that there was tension between the office of the CIO (and his IT team), and the CDO – to the extent that Mr. Baczyk initial assessment of how data was managed at Conning, was seen as personal attacks at the CIO and the IT organization.

The Board of Governors of the Federal Reserve System's (the "Fed") need for a CDO office was more obvious. The Global Financial Crisis (GFC) of the late 2000s exposed the risk associated with poorly managed financial data. Additionally, the Fed also recognized that the exponential growth in the amount, and equally importantly, the complexity, of data increased the need for formal Data Management and Governance. The Fed also need to leverage its data in a more agile and flexible manner, however, it also recognized that the data management processes had remained relatively static. The office of the CDO was spawned from a strategic planning exercise of the Board of Governors, with data governance and data management being a high priority of the Board. The CDO reports to the COO.

Finally, for EMC, a leading provider of data storage, and data management, the role of the CDO was a direct result of internal "Big Data" programs successfully supporting their go-to-market analytics. These Big Data programs were able to show EMC how the integration of data from the various business functions within the company could yield tremendous financial return and improved customer satisfaction. The CDO office reports into the Office of Strategy & Analytics, a clear sign that data and information quality is strategic to the company's strategic and long-term success.

## The First 90 Days

Unanimously, the panelists expressed that the first 90 days were spent gaining "buy-in" from various stakeholders.

### TD Ameritrade

For TD Ameritrade, in addition to garnering support from the stakeholders, Mr. Strauss also had the challenge of understanding the data schemas within the organization. He, and his office, established the scope, and decided to bring data analytics into the equation. TD Ameritrade established four pillars that were separated into either generating optimal business or IT outcomes.

Data governance and analytics (including data science) were considered the two focus areas within the business domain, while data architecture optimization and data asset development were the two focus areas within the IT domain.

Mr. Strauss established an end-to-end "center of excellence" (CoE) approach and he and his team established several foundational data and analytics capabilities.

### Conning

In the case of Conning, the tension that resulted from the establishment of the CDO office meant that the first 90 days were spent in calming down the IT organization. Since much of the applications within Conning had been developed in-house, there was a lot of pride attached to these applications.

Mr. Baczyk helped the IT organization understand many of the business objectives that needed to be achieved, and how the data IT was managing could be used to achieve these objectives.

He also helped to identify data owners and data "stewards" who would be responsible for ensuring that the right data was being collected. These stewards would also help data users understand what data is available, and how they could leverage the data.

## The Fed

For the Federal Reserve Board of Governors, the office of the CDO (OCDO) was a major exercise.

During the first 90 days after the OCDO was established, the office had to develop a mission and a vision. The OCDO is responsible for the oversight of both data governance and management. Most of the first 90 days were spent engaging stakeholders across the Fed. This included educating the stakeholders in understanding the pain, culture and data landscape across the Federal Reserve Board of Governors .The OCDO established liaisons across all of the Fed's Divisions since the OCDO has full responsibility and authority over all of the Federal Reserve Board's data assets.

The OCDO established two sections: one for governance and managing the regulatory reporting clearance process, and the other for Information Architecture and Information Management Services

There were also other considerations that impacted the OCDO in the first 90 days – while the OCDO was established in May, 2013, its budget for new hires were not available until 2014. Ms. Tessy shared that to date, 30 people were transferred into the OCDO, and with the new budget, and 20 new hires were brought in to implement the necessary changes to achieve the OCDO's mission.

The OCDO is undertaking the development of a data inventory. The OCDO recognized that when there are key foundational data management components that are missing, it is not possible to work on governance. The data inventory activity will establish what data assets are available, what is missing, and subsequently allow the assignment of accountability to the appropriate stakeholder.

Of the panelists, the Fed is arguably the most mature in its implementation of a CDO office. Since the OCDO has an operational component, it has the added challenge of balancing strategic objectives with operational and tactical objectives. An advantage of this condition however is that the OCDO can use their area of operational responsibility to develop, and test governance policy and architectural practices before applying them more broadly across the organization.

## EMC

For EMC, since the office of the CDO was established as a result of previous success in leveraging and integrating disparate data sets, it was already in a position to demonstrate what the benefits that the office would bring.

That said, the primary objective in the first 90 days is to show additional value. (The EMC CDO office has been established for less than 90 days, so the experience that Mr. Smits could share is based on what he and his office expects to demonstrate in the 90 days).

To begin with, the CDO office is focused on highly visible functions within EMC. So, the office has decided to embark on demonstrating the CDO's office in enabling the sales function. In this capacity, the office will be focused on assessing critical data needs for sales forecasting, account intelligence, customer data operations and strategic planning. Additionally, securing a recognized role in influencing new platform developments with IT, while also formalizing a business governance position relative to master data management.

## The Lessons Learned

A consistent theme across all the panelists was the need to continuously "sell" to the stakeholders within their respective companies. Mr. Baczyk at Conning described his job as the CDO as essentially "a selling job".

Other lessons that the panelists have learned (or are learning) include the development of key performance indicators (KPIs), the need for continuous education, social engagement, training and collaborative innovation.

Some KPIs include adoption levels and engagement levels.

In particular, the Fed has established key priorities for each year, and has spun up a working group focused on engagement. The group brings in speakers from inside and outside the organization, encourages creativity amongst its stakeholders with a view of generating innovative approaches for the Fed.

All the panelists also expressed that a CDO office requires evolution in the corporate culture.

## Conclusion

Despite the spectrum of maturity in each of the panelists' CDO office, there were certainly consistent themes.

In order to establish a successful CDO office, organizations have to be able to meet a long list of criteria:

- Have support and sponsorship of the executives, beyond basic rhetoric.
- The executives need to feel that there is an organizational-wide benefit that can be derived (for most, this would mean material revenue growth).
- The CDO office needs to "sell" the idea to all the business functions.
- Data owners need to be identified, and responsibilities assigned to these owners.
- In some cases, data stewards will need to be appointed to oversee the coordination of multiple datasets within a given business function.
- The CDO office needs to "sell" the benefits of information quality all the way through the organization, from the business leaders to the data users.
- Establishing a CDO office is a strategic and continuing activity. It serves to support the overall strategy of the organization.
- Value needs to be shown quickly, in some cases through the development of dashboards, or other tools.
- In all cases, IT will need to be involved, but they may not be a willing participant.

Although the list of criteria is long, the process is (often) difficult, the outcome will generate significant benefits to the organization. The amount of data, the complexity of data, the interdependencies across datasets, and the speed at which data needs to be leveraged just to stay competitive has escalated dramatically to the point that those organizations that do not already have plans to establish a CDO (or CDO-like) role and/or office, and develop the necessary data analytics (read: Big Data) capabilities could be left behind.

For many organizations, the need to comply with regulations may be sufficient to start the ball rolling on the organization and development of a CDO role or office. For these four panelists, the role of the CDO did not report into the CIO or IT leader. In fact, for all these four panelists, the CDO role and the CIO roles were parallel, resulting in an interesting (but arguably, necessary) balance between the business objectives and the data/operational objectives.