

CDO SCORECARD

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Introduction

This document provides a CDO framework to execute on existing, emerging, or potentially new objectives relevant to the digital transformation of the organization. Executives can use the scorecard to evaluate which KPIs deserve to be prioritized and assessed in order to help realize organizational or digital goals. This document is part of an IDC Report Series which also includes a CIO Scorecard, Digital Recipes for Success InfoBrief, Leading in digital InfoBrief, and an Information Transformation Workbook sponsored by SAP.

The CDO Scorecard for Digital Transformation

The chief digital officer (CDO) is a role that has emerged to accelerate digital transformation initiatives across all industries. However, it has been a challenge for organizations to clearly define the role of the CDO — especially in terms of its relationship with the CIO. One area that can help to reduce this tension is the alignment of incentives and targets for these roles. IDC has therefore developed a framework to guide the CDO’s digital ambitions in a scorecard across five different dimensions to help assess which new types of KPIs might be relevant for their respective organizations. The scorecard should ultimately form the basis for the review of the CDO’s ongoing performance.

The CDO Dashboard for Digital Transformation – What Type of CDO Are You?

If you do not know which CDO you are, please refer to the three CDO archetypes defined below.

 Vision	Digital Evangelist	Digital Champion	Digital GM
Creating a digital agenda linked to the broader company mission	Focus on creating new capabilities at individual product or service level	Focus on “awareness” and evangelism	Focus on a full-blown business running as a separate P&L
% of revenue derived from digitally enhanced products, services, and experiences*	The target here should be 3%-8%	The target here should be 8%-20%	The target here should be more than 20%
Delivering a digital innovation structure	Isolated functional attempts to innovate business models. Resistance and lack of ability.	Digital innovation creates and uses new business models to influence customers and markets for competitive advantage.	Digital innovation is aggressively disruptive through new digital tech. and business models to affect markets.

 Ecosystem Centricity	Digital Evangelist	Digital Champion	Digital GM
Net promotor score (NPS)*	Focus on NPS >50 No link to NPS  Measured on NPS >50		
New customer touchpoints driven by the CDO*	Regular – 20%–50% Ad hoc – 0%–20%  High – more than 50%		
Delivering the API strategy	Active use of external APIs as well as the development of an API library for internal digital services Raising awareness of API benefits and identifying external APIs to extend current digital capabilities  Active contribution of APIs to the API economy with ecosystem impact in terms of business outcomes		
Driving ecosystem experience	Digital champions understand and exploit synergies between the CMO and CIO office to drive their digital ambitions and continuously identify new opportunities to create business value from the ecosystem. Raising awareness of API benefits and identifying external APIs to extend current digital capabilities  Active contribution of APIs to the API economy with ecosystem impact in terms of business outcomes		

 Data-Driven Business	Digital Evangelist	Digital Champion	Digital GM
New revenue-generating information-based services launched in the last quarter*	Limited revenue-generating capabilities from information-based services No focus on monetizing data  Growing revenue-generating capabilities from info-based services		
% of revenue derived from digitally enhanced products, services, and experiences*	Enterprisewide Limited  Advanced		
Data privacy and security approach*	Integrated Add-on  Embedded (data privacy by design)		

 Profitable Digital Capabilities	Digital Evangelist	Digital Champion	Digital GM
Frequency of releases of digital capabilities	Daily Weekly or less  Continuous		
Time to ROI for new digital capabilities	Average payback period for digital projects between 12-24 months Average payback period for digital projects >24 months  Average payback period for digital projects <12 months		
IT-business-digital structure	Integrated Silo  Optimized		

 Talent Recruitment	Digital Evangelist	Digital Champion	Digital GM
Best place to work ranking*	Top 100 industry segment Top 500 within industry segment  Top 100 across all industries		
Running of digital bootcamps*	Regular Ad hoc  Recurring program		
Recruiting "A+" digital talent *	Joint HR strategy in place High priority but no program in place  Strategic pillar for organization		

Read on to get a comprehensive description of each CDO type
 For more information on how the new digital KPIs are defined, please see the description of metrics below.

The CDO Scorecard for Digital Transformation

68%
of European organizations have appointed a CDO (or plan to do so over the next 12 months), but they are leading enterprisewide digital transformation initiatives in only 25% of organizations.

Source: IDC EMEA, DX Survey, SAP, May 2016; n = 1,008

The chief digital officer (CDO) is the key “new” role that organizations have appointed (often driven by the CEO) to raise awareness of digital initiatives (both internally and externally). And a recent survey of more than a 1,000 IT, digital, and business executives in Europe, the Middle East, and Africa shows that 68% of organizations have appointed a CDO (or head of digital) or plan to do so in the next 12 months. However, in only 25% of these organizations is the CDO leading enterprisewide digital transformation initiatives. This points to the fact that the CDO is a “change agent” in many organizations — and therefore creates a lot of internal friction (particularly where organizations’ readiness for DX is not very mature). So, many CDOs move from one organization to another in a transient manner. This is becoming increasingly difficult to manage as we move into the next phase of digital transformation initiatives — which is all about “execution.” Organizations therefore need to put in place key performance indicators (KPIs) and incentives to drive the digital transformation of the business. Many organizations have now moved beyond a stage of exploration where it is all about driving and generating returns on the digital investments. This is going beyond the

marketing showcases and proof-of-concepts — KPIs and incentives need to be put in place that help executives focus on generating new revenue streams based on digitally enhanced products, services, and experiences

Furthermore, many CDOs view traditional IT as being too slow and cumbersome. And as they started to deliver some quick wins, they have been awarded more responsibility — taking on the role of partially “owning” certain digital products and services in conjunction with the line-of-business (LOB) executives. In some cases, they are running full business units with significant P&L responsibility and competing directly for IT budgets. Because projects, technology landscapes, and skills are so different in the traditional IT organization compared with the digital one, organizational boundaries can start to develop. And as friction points worsen, potential conflicts start to emerge — especially given that some CTOs have also started to throw their hats into the ring. As a result, it becomes more about internal competition than the broader objective of accelerating the digital transformation of the organization, which not only creates conflict but also slows projects and initiatives down. IDC’s research shows that the more mature organizations in terms of digital transformation efforts are, the more they forge fresh partnerships between new and existing roles and structures. Therefore it should not be about the CIO versus the CDO, but more about how they work together to deliver the required business outcomes, as both roles can potentially bring unique and critical capabilities to the table to help accelerate the journey — ultimately complementing each other. The CDO needs to focus on creating digital products, services, and experiences, and building the most profitable customer propositions for them. The CIO and IT need to focus on building out the right platforms and capabilities to deliver on those propositions.

One example of a chief digital officer’s viewpoint:
“The IT guys are the people who get the blame for everything.”

Chief digital officer (CDO) of a large U.K.-based enterprise

In this respect IDC sees three broad categories of CDOs in place across various organizations along the following lines:

- 1. The digital evangelist** – Reports a level or two down and is often part of the CMO or CIO office, but is highly visible to the executive level. Sometimes there are multiple digital evangelists federated across the organization. The digital evangelist is typically part of, or leads, a small team designed to raise digital IQ. Often these executives focus on transforming marketing and communications to improve the customer experience, but beyond that also look to help support or build an enterprise digital platform.
- 2. The digital champion** – Reports to the CEO (occasionally reports into business functions) and leads a dynamic team charged with driving product and service innovation and cultural transformation. Organizations may have multiple digital champions in place. These executives usually have a strong technology background.
- 3. The digital GM** – Reports to the CEO and leads the creation and/or transformation of a significant business or business unit. These executives focus on the growth of digital within the company and the transition of major businesses into digital.



Scorecard Dimensions

IDC believes that CDOs will increasingly be assessed on the following five dimensions:



1. Vision (Links to Leadership Mastery)

This involves creating an innovation-oriented culture focused on generating multitier digital revenue streams while identifying new use cases linked to emerging technologies with clear risk management approaches in place. (IDC believes that this is an incentive that should be shared with the CIO.)



2. Ecosystem Centrality (Links to Relationship Mastery)

This involves building an external customer focus for the entire IT organization and developing consumer engagement expertise to support discussions with the CDO and the business. (IDC believes that this is an incentive that should be partially shared with the CIO.)



3. Data-Driven Business (Links to Information Mastery)

Digital transformation requires organizations to look at data in an entirely different way. Digital leaders have already managed to take advantage of this opportunity by monetizing data assets and reinventing business models to create new revenue streams. Ultimately, information can be used to introduce new revenue streams for the organization. (IDC believes that this is an incentive that should be shared with the CIO.)



4. Profitable Digital Capabilities (Links to Operations Mastery)

This involves putting in place a digital platform architecture with aggressive modernization of enterprise applications on standard platforms and modernizing infrastructure to support digital organization. (IDC believes that this KPI is unique to the CDO, while the CIO and the IT department should deliver the right digital platform architecture to support these profitable digital capabilities.)



5. Talent Management (Links to WorkSource Mastery)

This is attracting new types of top digital talent (e.g., developers, data scientists, UX experts, design thinking consultants) that will effectively turn digital use cases into a profitable digital capability in a short timeframe.

Based on these dimensions, the next step is to think about the different types of KPIs that need to be put in place. And more importantly, how these KPIs map to the CDO types mentioned previously. The following table provides a comprehensive description of the different KPIs that include a set of actions for the CDO that IDC believes need to be put in place to ensure alignment between the CIO and the CDO.

Description of CDO Scorecard Metrics



Vision

New Digital KPIs	Description / explanation
Creating a digital agenda linked to the broader company mission	The is about the ability to create a digital “vision” and conceive and forge new business ecosystems by using digital technologies and disruptive business models.
% of Revenue derived from digitally enhanced products, services, and experiences*	IDC predicts that by 2020, 40% of the European FT500 will see the majority of their business depend on their ability to create digitally enhanced products, services, and experiences. This should be focused on using 3rd Platform technologies to create value and competitive advantage through new digitally enhanced offerings and creating new relationships in the ecosystem based on these.
Delivering a digital innovation structure	These are the disciplines that create organizations that can continually adapt and change to meet changing ecosystem needs and opportunities.



Ecosystem Centricity

New Digital KPIs	Description / explanation
Net Promotor Score (NPS)*	NPS is a metric that allows business leaders to gauge the general satisfaction of customers or client relationships. It serves as an alternative to traditional customer satisfaction research (e.g., customer tickets, social media following, customer reviews) and claims to be correlated with revenue growth. NPS has been widely adopted. NPS is typically calculated based on responses to a single question: “How likely is it that you would recommend our company/product/service to a friend or colleague?” The scoring for this answer is most often based on a 0 to 10 scale. Organizations should strive for a mean score of >7.
New customer touchpoints driven by the CDO*	Examples of measures could be the number of API calls, mobile app usage, website usage, downloads, or new “subscriptions” from the ecosystem. Ratings of customer-facing apps in App Stores could also be a measure.
Delivering the API strategy	As the organization develops a platform and connects with the ecosystem, it will require a clear API strategy that allows the use and delivery of services to third parties. The API strategy can form a basis for the creation of value for internal organizations as well as the users on the platform, whether they are customers, partners, or suppliers.
Driving ecosystem experience	A set of disciplines that enable leaders to continually gather and process ecosystem intelligence; distill that intelligence into new products, services, and business models; and build collaborative relationships to disrupt ecosystems. CDOs will need to work closely with the CMO and CIO office in order to drive relevance internally as well as externally.



Data-Driven Business

New Digital KPIs	Description / explanation
New revenue-generating information-based services launched in the last quarter*	Digital transformation requires organizations to look at data in an entirely different way. Digital leaders have already managed to take advantage of this opportunity by monetizing data assets and reinventing business models to create new revenue streams. Ultimately, information can be used to introduce new revenue streams for the organization.
Use of advanced analytics and visualization technologies*	Analytics is not only important for the discovery of meaningful patterns in data, but also for the communication of knowledge. An organization driven by data needs to prepare itself by extracting information where it can and applying statistics to derive information, develop knowledge, and create predictive models.
Data privacy and security approach*	Data privacy and security relates to forms of data and information security and implies that it is not just about protecting data from breaches and ensuring data integrity, but also being compliant with industry regulations. At a time when multiple apps and systems access the same data, it is necessary to design new digital products or services in a “privacy-by-design” fashion.



Profitable Digital Capabilities

New Digital KPIs	Description / explanation
Frequency of releases of digital capabilities	The ability to get new digital capabilities of all types — including new features, configuration changes, bug fixes, and experiments — into production or into the hands of users, safely and quickly in a sustainable way. This is should also track the number of new use cases generated on a monthly and quarterly basis.
Time to ROI for new digital capabilities	Clear payback period metrics for every digital project once it passes the minimum viable product (MVP) stage of the digital project life cycle (from generate idea => use case => business case => proof of concept => rapid prototyping => fail fast OR => digital capability delivery)
IT-business-digital structure	The most successful digital transformation initiatives enjoy close alignment between IT, business, and digital functions. As teams are formed to execute on digital objectives organization should strive to include relevant stakeholders from IT, business, and potentially digital units. Communication should address digital project management, as well as ideation exercises, sharing opportunities, identifying barriers, and overcoming obstacles.



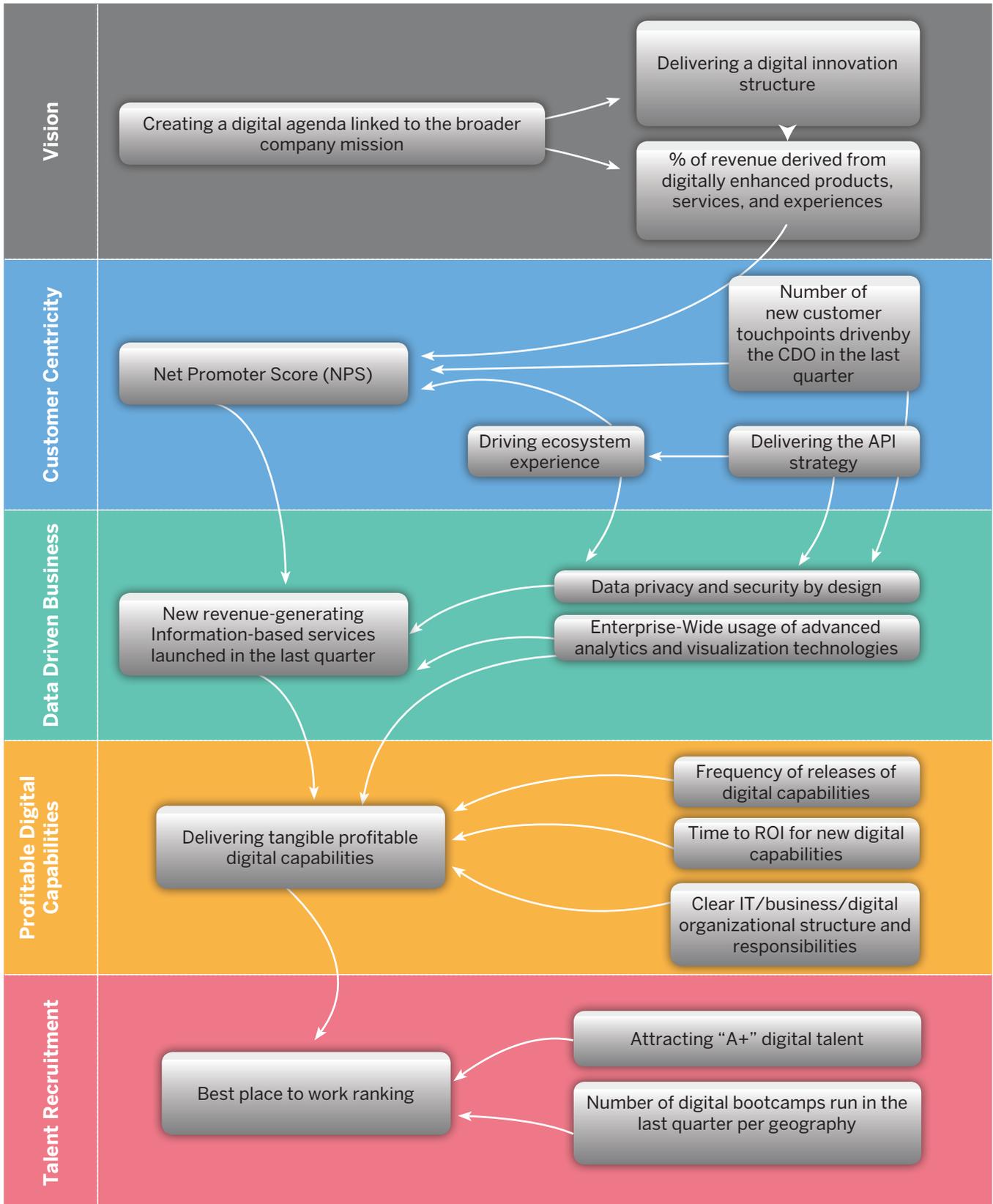
Talent Recruitment

New Digital KPIs	Description / explanation
Best place to work ranking	The objective should be to have this in the top 100 at a minimum, but with a metric in place to improve it on a year-to-year basis.
Running of digital bootcamps	Running digital bootcamps is critical for the growth of the "digital IQ" (or awareness) within an organization, in addition to the collection and development of talent required to drive digital capabilities. Organizations should aim to run tracks that address or articulate the corporate digital strategy, familiarize employees to new digital offerings, and expose digital talent to people outside their environment.
Recruiting "A+" digital talent	This is attracting new types of top digital talent (developers, data scientists, UX experts, design thinking consultants, etc.) that will effectively turn digital use cases into a digital capability in a short timeframe.



The CDO Scorecard framework

Using the scorecard and KPIs provided above, IDC believes CDOs should review their activities along a CDO Scorecard framework which highlights the interdependencies between objectives and across dimensions. The framework below provides a reference point on how a CDO can start charting and connecting KPIs across the five scorecard dimensions.





IDC believes that measuring the CDO should not just be about creating new digitally enhanced products, services, and experiences — there should also be a focus on forging partnerships with the CIO (and the line of business)

Below are a set of actions that IDC believes need to be put in place across the five key dimensions (vision, customer centricity, data-driven business, simplification and integration, talent management) that CDOs should focus on as opposed to traditional technical service-level KPIs that determined the success of the IT department in the past. To drive improvements across these five dimensions, IDC recommends that the various CDO types look at their respective next steps along the following lines:

DIGITAL EVANGELIST	DIGITAL CHAMPION	DIGITAL GM
<ul style="list-style-type: none"> • Deliver the digital vision for the company and raise awareness to the senior leadership team. • Create innovation awareness by setting up regular digital bootcamps jointly with the IT department. • Identify key use cases that reflect an “outside-in” approach to how the business should be run. • Align efforts with IT and LOB units and agree on measures and incentives. • Use program/project-level DX to create centers of excellence that seed enterprise processes. 	<ul style="list-style-type: none"> • Seek operational excellence and standardization in digital transformation. • Create a multitier digital revenue strategy. • Create a pan-enterprise information and data management strategy. • Implement a cross-functional program management office for digital transformation initiatives. • Use program/project-level DX to create centers of excellence that seed enterprise processes. • Adopt a startup-like, all-or-nothing mentality for new DX initiatives. 	<ul style="list-style-type: none"> • Ensure a digital P&L is in place with clear payback period timescales. • Broker high-value multithread DX programs. • Use ecosystem awareness and feedback as constant inputs to business driving organizational culture, goals, and projects. • Implement cognitive systems, augmented reality, and smart products to create enhanced customer and partner experience. • Adopt a process-driven approach to the continuous creation of new business models. • Empower cross-functional agile PMOs to lead disruptive initiatives.

CDO – Key Questions to Answer

The questions below highlight the areas that should be top of mind for the CIO as part of charting this digital journey. In fact, these are critical questions that the CIO will need to answer to deal with broader business expectations (increasingly from the CEO) as part of the company transformation.

- **How to ensure relevance in the external ecosystem?**
- **What new and emerging technology platforms to use?**
- **How to identify and prioritize use cases?**
- **Which advisors to use and who to partner with?**
- **How to use the external disruption to educate key internal stakeholders?**
- **Create an innovation culture that can generate digital revenue streams**



Conclusion



IDC believes that the CDO role is an important one to accelerate digital transformation efforts. However, in many organizations it could well be a transient one. Part of the challenge is that the role often lacks clear definition and can reside within various functions across the organization. And because he or she generally has the mandate to drive change, there tends to be “organizational friction” associated with the role.

To execute on your digital ambitions, IDC believes that CDOs will need to be able to balance multiple IT and business dimensions in harmony during and beyond the journey. It is critical that the CDO plays a role to aggressively modernize technologies, processes, and methodologies to enable the transformation of the enterprise. More importantly they champion change management, manage risk, and support the IT department in creating a strategic platform architecture that will provide a foundation for future innovations.

Finally, IDC recently investigated how most successful digital strategies are formed and executed, and created a series of “Recipes for Success.” Though primarily written for the CIO audience, these show that that CDOs need to build a special partnership with the CIO and should play a leading role in the transformation journey. Together, finding and developing relevant use cases, defining and charting the digital vision of the company using an outside-in approach, and ultimately helping to launch a platform-driven business model will lead to success for the organization. To start, IDC believes CDOs and CIOs need to work together along the following three-step process:

- 1. Identifying and prioritizing relevant use cases (by industry and domain) linked to emerging technologies (IoT, artificial intelligence, robotics, blockchain, etc.)**
- 2. Building out the business case for prioritized use cases across the digital leadership team**
- 3. Charting out the use case journey over a 6-, 12-, and 24-month timeframe**

For CDOs to drive change within their respected organizations, IDC believes that it will be critical to keep an open mindset, collaborate across all business functions, and find the right balance between long- and short-term objectives across different dimensions. CDOs should not take the KPIs listed in this document at face value, but should use them as guiding principles for how they can evaluate their position and assess their contribution to the organization.

Besides this CDO Scorecard, IDC has also developed an overview of KPIs and scorecards for the CIO which should be taken into consideration. This new set of digital leadership KPIs together with the learnings from IDC’s Recipes for Success should give CDOs the right tools and framework for their digital transformation journey.



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