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Significant shifts in skill sets for top IT roles in Life Sciences

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More than 80 percent of leading life sciences companies have created new digital and innovation leadership roles to capitalize on the information technology transformation in healthcare, with nearly half hiring new chief information officers during the past three years, according to new research by the IMS Institute for Healthcare Informatics.

The rise of mobile, cloud, predictive analytics and other digital innovations offers new opportunities for advancing patient care as companies launch innovative products at a more rapid pace and in more therapy areas.

These dynamics, along with spending and operational constraints, require life sciences CIOs to expand specialized IT knowledge and skills within their organizations, and to play a more strategic role in driving commercial success through digital transformation.

The study, New Strategic Information and Technology Roles in Life Sciences Companies, includes a proprietary Information and Technology Transformation Scoring framework (ITTS) to assess progress among the top 50 global life sciences companies.

ITTS tracks five areas of technology conversion: Innovation/Disruption, Organizational Transformation, Big Data/Analytics, Infrastructure, and Future of Work.

The study was produced independently in collaboration with Egon Zehnder, a leading global executive search and talent management firm.

"While most life sciences companies have centralized their IT functions to drive operational gains, they have been slow to achieve the breakthrough transformation that's possible by capitalizing on today's technologies," said Mr Murray Aitken, IMS Health senior vice president and executive director of the IMS Institute for Healthcare Informatics. "Of the companies we assessed using our ITTS framework, just 15 percent are fully capturing the value of the digital revolution."

"Tech and digital innovations are becoming a core part of the value proposition for life sciences. And yet, unlike many other industries, the skills required to fully deliver on those innovations are not native within this sector. There is a unique opportunity for CIOs to fill the missing skill gap and become core enablers of their respective companies' strategies," said Mr Alain Serhan, co-leader of Egon Zehnder's global Digital Health Initiative.
Highlights of the study include:

â€¢ Technology transformation is underway within all life sciences companies, across varying strategic and operational areas, and at different rates.

Large companies outperform their medium-sized competitors on average across all elements of the ITTS assessment. Of the companies surveyed, 15 percent are considered market leaders, demonstrating significant progress on both strategic and operational dimensions.

On average, 85 percent of companies with centralized IT functions have achieved a higher level of technology transformation- as have companies that use cloud-based technologies for more than 25 percent of their software needs.

â€¢ While IT departments are embracing analytic tools that reduce complexity, advanced predictive and prescriptive capabilities remain underused.

Within sales and marketing functions, 80 percent of companies assessed now have systems in place that leverage visualization tools, and more than half have a multichannel marketing strategy in place for their North America and Europe operations.

However, fewer than 10 percent of life sciences companies deploy systems that apply both predictive and prescriptive capabilities to guide decisions.

â€¢ As leadership in new IT functional areas is recognized as increasingly critical to success, CEOs are hiring new CIOs and establishing digital and innovation roles.

Nearly half of the life sciences companies assessed have CIOs who have been in place less than three years, and 70 percent in place fewer than five years.

In small companies, more than 40 percent of all CIOs were hired within the past year. Companies with CIOs having a tenure of less than five years outperform on the ITTS framework overall, especially in the key areas of Innovation/Disruption and Big Data/Analytics.

More than two-thirds of today's CIOs were hired from outside the company, with external hires ranging from 82 percent for small companies to 52 percent for larger organizations.

Despite the critical role of the CIO in business transformation, less than one in four are part of their company's executive team. Within large life sciences companies, just one in seven CIOs serves on the executive team.

â€¢ CIOs remain in the best position to lead technological innovation, but require new digital competencies. The CIO role has narrowed in scope in most life sciences companies as responsibility for areas such as R&D bioinformatics, genomics and Real-World Evidence have moved to other parts of the organization.

And, more than 80 percent of companies have established new digital data and innovation positions that challenge the traditional CIO role.

With new "digital" competencies viewed as key for success, assessments by CEOs of CIO candidates focus on a

combination of both core and digital competencies.

The core competencies of strategic orientation, results orientation, team leadership and collaboration/ influence remain essential.

In pursuit of future digital leaders, CEOs also are seeking candidates with strengths in consumer centricity, digital fluency, data orientation, adaptability and change leadership.