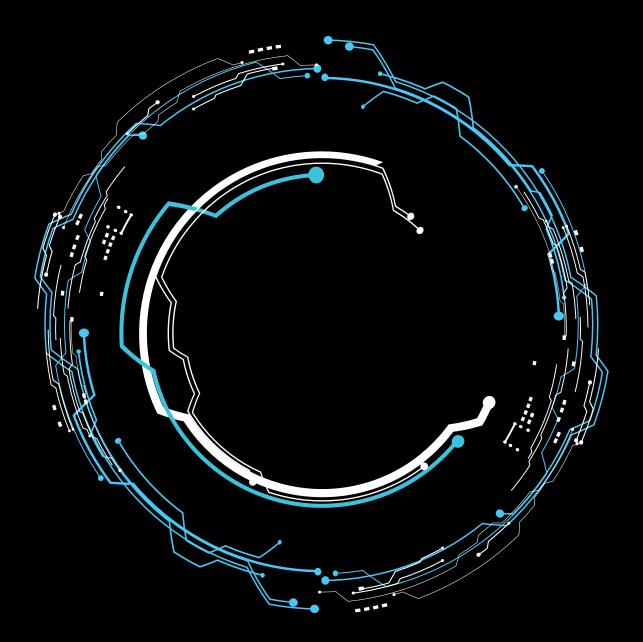
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The 3 Cs of IT Talent Management



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In the 2015 edition of the Deloitte Technology Trends report we spoke about the "IT Worker of the Future" as a key trend and consideration for Chief Information Officers (CIOs) across the globe for the next 18-24 months, at least. In fact, our trends report asserts that if you asked any CIO in the world today what his or her major "stay awake" issues are, they are bound to name "IT Talent" as one of them - right next to cyber security. The report goes on to provide compelling data on the growing skills deficit in hard skill areas such as cyber security, data science as well as the more proven domains such as project management and testing. The following paper serves to provide a structure for CIOs to evaluate and strategise the future of their IT talent by combining what's known as the BHS model and the 3 Cs of IT talent management, to be explored in more detail below.

From STEM to STEAM

The trends report presents powerful evidence that supports the movement from STEM (Science, Technology, Engineering, Mathematics) to STEAM, where the 'A' must include softer skills such as art, anthropology and architecture. This emphasises the need for user-centric design and the ever-growing emphasis on user experience rather than system efficiency alone.

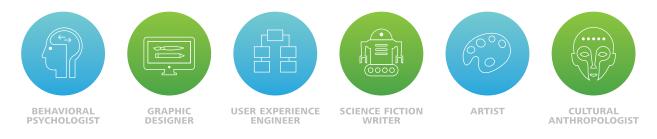
STEM occupations in high demand: 2012–2022 projected growth^a

The increasing demand for science, technology, engineering, and math (STEM) workers underlines their growing importance for the business – between 2009 and 2012, the ratio of general job seekers to online job postings was 3.8 to 1; for STEM workers, it was 1 to 1.9.^b In addition, the Bureau of Labor Statistics projected STEM jobs would grow at a rate of 17 percent between 2008–2018, with non-STEM jobs at 9.8 percent.^c



STEAM: Adding arts skill sets to the IT team

The new IT worker is technical, functional, client-ready, and creative, and may have non-traditional skills.



Sources: ^a Dennis Vilorio, "STEM 101: Intro to tomorrow's jobs," *Occupational Outlook Quarterly*, spring 2014, http://www.bls.gov/careeroutlook/ 2014/spring/art01.pdf, accessed January 13, 2015. ^b Change the Equation, "What are your state's STEM vital signs?," July 2013, http://changetheequation.org/sites/default/files/About%20Vital%20Signs.pdf, accessed January 13, 2015. ^c United States Department of Commerce, "The state of our union's 21st century workforce," February 6, 2012, http://www.commerce.gov/blog/2012/02/06/ state-our-union%E2%80%99s-21st-century-workforce, accessed January 13, 2015.

Future Proofing IT Talent Management

CIOs are advised to consider skills as a portfolio that supports the strategic intent of the IT organisation as it executes on its mandate to better enable business. Much like investment portfolio management, CIOs must consider a combination of talent strategies that will include skills classified as:

- "BUY": more of these skills are needed as the business has too few or none at all. This may well include business analysis, data scientists and user experience specialists.
- "HOLD": these skills must be maintained both in level and quantum, as the organisation will either continue to use the relevant applications and technologies for the foreseeable future. Classic examples of these skills include program and project management as well as testing and enterprise architects.
- "SELL": the IT organisation will need to re-train and re-deploy these skills to other areas of the business. These skills will originate in the areas where the CIO focuses efforts on reducing Technical Debt e.g. legacy replacement and infrastructure consolidation.

This is an effective model to adopt and should represent one of the first filters that all CIOs apply to their IT strategy, by asking "Does the organisation have the appropriate mix of skills to execute the intended strategy over the planning horizon of the strategy?" The buy-Hold-Sell (BHS) rationale is becoming very critical to the CIO.

This model remains relevant for African CIOs. However, African IT operations are noticeably smaller than that of US and European corporations and more importantly, there is an absolute scarcity of technology skills in most African countries. National priorities remain focused on more basic citizen needs, making the educational institutions less focused on building volumes of skills in new technology domains. The African CIO will largely be challenged to apply the Buy-Hold-Sell model for maximum gain as demand far outstrips supply for the most basic of technology skills.

The 3 Cs of IT Talent Management

African businesses and governments are probably best positioned to benefit from innovative technology deployments – be it from more integrated systems of record or more interactive systems of engagement. How should the African CIO respond? This paper suggests that the answer lies in combining the BHS approach with the "3 Cs of IT Talent Management", namely: Cloud, Crowd and Collaboration.

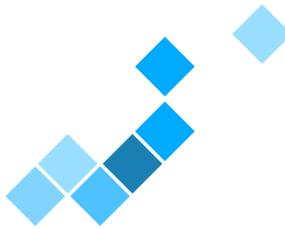
CIOs need to factor these dimensions into their assessment of how to prepare their talent pool to execute against their mandate.

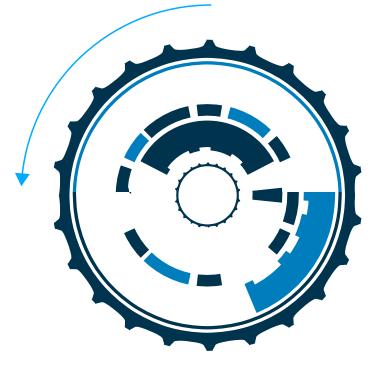
- Cloud: Regardless of whether cloud is used as a means to procure infrastructure, platforms or software as a service, a well-defined cloud strategy can move several key talent dependencies to the cloud service providers. If cloud platforms represent a migration from current on-premise solutions, then care will need to be taken to manage the related transition of talent in line with the BHS plan.
- Crowd: It is our contention that all IT delivery organisations must have a healthy (but managed) dose of crowdsourcing-enabled service delivery in order to remain both agile and cost effective to end-users. In fact, we remain firmly of the view that crowdsourcing represents the most significant disruption of the decade to both systems integration and professional services businesses.
- **Collaboration:** IT organisations need to move from being transactional buyers of services and technologies to embarking on strategic partnerships with key suppliers. This will allow IT resource plans to include the specialist skill of the partner or supplier and therefore reduce the cost and risk of the organisation building these skills internally.



Having considered all of the above, you might be asking yourself what steps you, as a CIO in Africa, need to take next. Here's my view:

- 1. Take an inventory of your organisation's current IT Talent: Like any other form of asset, you will need an inventory of talent that is currently deployed by the IT organisation. Include independent contractors, consultants and other 3rd parties in this inventory. Document the cost, role and perceived business criticality as a minimum.
- 2. Project the future skill sets you'll require: This should be based on your (business aligned) IT strategy and won't be a perfect exercise on the first attempt. However, the CIO will need to have a sense of the movement in the current IT landscape e.g. more mobile and cloud may mean more app developers and less ERP specialists.
- **3. Apply the Buy-Hold-Sell rationale to your current skills base:** Based on the above, the CIO will need to identify the portfolio strategy for current skills base.
- 4. Apply the 3 Cs filter (cloud, crowd and collaboration): If not already articulated in your IT strategy, consider the impact of cloud, crowd and collaboration strategies on the talent portfolio. Talent in the "buy" and "sell" categories could well be candidates for these strategies.
- **5. Build tactical strategies to execute on each of the areas (3 Cs):** This may well be a multi-year plan as talent may need to be re-skilled and IT budgets will need to allow for some of the new technologies to be deployed.
- 6. Develop a KPI dashboard and governance for ongoing monitoring: Ideally, the execution of the above will need to become part of the standard management agenda of the IT organisation.





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