Activity Spotlight and Lessons Learned: 
Ringier One Africa Media (ROAM) 
Measuring African Workers’ and Industries Digital Readiness

Program: Workforce digital capabilities  
Participants: 25,000 Nigerian youth

Dates: 2020 – 2021  
Alliance Series: MSME capacity-building and workforce development

**Description:**
- This project piloted a methodology to measure the cognitive abilities and skills of 27,216 Nigerian students and employees for thriving in the digital economy across sectors.
- The purpose was to identify skills in the labor market and how well they service employees’ current and future needs.
- The respondents self-selected into five groups based on their use of digital technologies and e-commerce, such as whether they identify and develop ecommerce strategies or support customers in onboarding to a digital environment.
- The survey was based on a template from PeopleTree and fielded on 1 March-30 September 2021, resulting in ranking of 60 competencies per survey taker, grouped in 18 major characteristics or archetypes

**Skills gaps and labor mismatches**
Most developing country workers have limited technical skills, which arrests their incomes and adaptability to employees’ rapidly changing needs in the digital economy.

Developing country workers’ returns to education and work are low – an additional year of schooling or working increases developing country workers’ incomes less than it would in advanced nations.

There are severe labor market mismatches in developing countries, such that human capital is not sorted optimally into jobs where it provides the highest return.

This project sought to pilot a method for generating better data on these patterns to optimize workforce development policies.

**Results and use cases for data:**
- Inform the individuals taking the assessment about their aptitudes and work environments for which they are suited.
- Enable employers in the Nigerian ecommerce sector to understand and visualize the skills and aptitudes of that exist in their own organizations and identify mismatches between individuals and their jobs.
- Inform Nigerian policymakers about the aptitudes to be cultivated to enable firms and sectors’ digital transformation.
- Enable public and private sector stakeholders learn about the potential of scalable online platforms to capture policy-relevant data on an ongoing basis to help shape and monitor training, learning, and educational policies around the country.

**Keys for impact:**
- Adequate time to recruit respondents and deliver a sample.
- Assessment of the usefulness of the data vis-à-vis alternatives.
I. Activity highlights

The goal of this project was to explore the usefulness of the approach and database for understanding the skills gaps and mismatches and skills needs in the Nigerian workforce for the digital era.

The pilot involved an online, 60-question of a 30-minute survey, TalentPrint’s Talent Genome© competency model, developed by PeopleTree Group.

The survey sought to answer:

- Whether there are empirical regularities between the skills and characteristics and observable variables such as occupations (such as technology-intensive jobs), sectors (such as ecommerce-related sectors), regions, and firm size;
- Which sectors are susceptible to a successful digital transformation – is there a set of skills and characteristics required for digital transformation across sectors; and
- How prepared are young workers and students for jobs in the digital economy – do young professional students have the skills and characteristics that professionals thriving in the digital economy and companies have?

The survey captured each individual’s age, gender, sector, occupation, geolocation, educational attainment, and income level, and 18 characteristics or archetypes developed by PeopleTree (Appendix table 1); these characteristics come together from a forced ranking of 60 competencies for each survey taker. The full analysis is here.

The respondents assigned themselves into groups that capture their engagement with digital technologies and in ecommerce.

II. Key impacts and findings

The pilot gave a sense of the usefulness of the data and approach for a number of audiences:

- The individuals sorted themselves into four groups by their use of ecommerce in their jobs (table 1). On average, respondents that support ecommerce customers are younger and work in larger firms that respondents that use ecommerce tools or help people understand ecommerce. Respondents that use ecommerce tool to get their jobs done are likelier than the others to work in micro enterprises and be located outside major metropolitan regions, and be women. They also have certain characteristics in common (table 2).

- The surveyed economic sectors vary quite widely by their use of employees with different ecommerce-related roles. For example, automotive and aviation and construction sectors have in the dataset a substantive share of individuals (29 percent) that identify ecommerce strategies but relatively few individuals (18 percent) that identify as supporting ecommerce customers or using ecommerce tools to get their jobs done (12 percent); the IT and telecom and retail and consumer goods sectors are the opposite, likely due to high levels of customers that require assistance.
### Table 1 – Profiles of the respondents by engagement in ecommerce and digital economy

<table>
<thead>
<tr>
<th>Archetype</th>
<th>% of sample</th>
<th>% of people below 25 years</th>
<th>Firm size: micro</th>
<th>Firm size: small</th>
<th>Firm size: medium and large</th>
<th>Located in Lagos, Imo or Akwa-Ibom</th>
<th>% income &gt;150,000</th>
<th>% of women educated abroad</th>
<th>% with Master's, MBA, PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Identify and develop ecommerce strategies</td>
<td>1%</td>
<td>38%</td>
<td>47%</td>
<td>45%</td>
<td>8%</td>
<td>91%</td>
<td>9%</td>
<td>36%</td>
<td>16%</td>
</tr>
<tr>
<td>2 Help people understand and use ecommerce</td>
<td>5%</td>
<td>44%</td>
<td>49%</td>
<td>41%</td>
<td>11%</td>
<td>94%</td>
<td>10%</td>
<td>35%</td>
<td>13%</td>
</tr>
<tr>
<td>3 Support ecommerce customers</td>
<td>2%</td>
<td>53%</td>
<td>33%</td>
<td>48%</td>
<td>20%</td>
<td>88%</td>
<td>10%</td>
<td>38%</td>
<td>9%</td>
</tr>
<tr>
<td>4 Use ecommerce tools</td>
<td>1%</td>
<td>40%</td>
<td>54%</td>
<td>33%</td>
<td>14%</td>
<td>80%</td>
<td>16%</td>
<td>40%</td>
<td>8%</td>
</tr>
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Table 2 – Summary of top-3 PeopleTree characteristics by engagement in ecommerce and digital economy

<table>
<thead>
<tr>
<th>Archetype</th>
<th>Top-3 Characteristics</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Imaginative minds:</strong> Create many new ideas by seeing new connections between different concepts</td>
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<tr>
<td></td>
<td><strong>Methodical organizers:</strong> Are well-organized and methodical, set definite milestones</td>
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<td></td>
<td><strong>Practical fixers:</strong> Continuously look for ways to improve or re-engineer processes</td>
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<tr>
<td>2</td>
<td><strong>Constant learners:</strong> Continuously develop new skills and stay up to date</td>
</tr>
<tr>
<td></td>
<td><strong>Flexible characters:</strong> Adjust behavior to others’ interpersonal style and communication</td>
</tr>
<tr>
<td></td>
<td><strong>Energetic drivers:</strong> Take initiatives and demonstrate positive can-do attitude</td>
</tr>
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<td><strong>Constant learners:</strong> Continuously develop new skills and stay up to date</td>
</tr>
<tr>
<td></td>
<td><strong>Sound decision-makers:</strong> Exercise good judgement when making decisions, accurately identify strengths in others</td>
</tr>
<tr>
<td></td>
<td><strong>Responsible citizens:</strong> Accept accountability for all areas of responsibility, act in line with dominant values</td>
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</tbody>
</table>
III. Implementation analysis

Usefulness of the output for ecommerce ecosystem players and policy makers:

The data are a pioneering attempt to go beyond standard ways, such as years of schooling, of measuring workforce development and capabilities to capture the softer skills, attitudes and behaviors associated with excelling in digital business. The data have useful use cases:

- The data are especially useful for business leaders to assess the human capital in their organizations and improve matches between talent and occupations – for example, to enable young professionals with characteristics associated with “ecommerce champions” to drive ecommerce strategies.

- The data can also be useful for young professionals and students choosing career paths – to understand their own characteristics and how those characteristics are associated with certain functions in organizations in the digital era.

- The data are also policy-relevant – help identify the potential role of an organization or a sector’s prominent characteristics or a mix of characteristics in shaping digital transformation processes.

- The data suggest that the matching of people to occupations may improve with experience – as their skills and abilities have been honed and more readily discernable than they are in a young employee.

- The data provide useful insight into sectoral talent profiles. In such large sectors as healthcare, energy, and agriculture, there are still few people that would champion digital transformation, as opposed to automotive, aviation or retail sectors.

- With a larger sample, the data can also be useful for policymakers to track emerging supply of talent in labor markets in real-time and assess the readiness of youth for employment in the digital economy.

Methodological challenges:

- Securing the full sample took much longer than expected.

- The survey template is useful for businesses seeking to match talent to jobs but it has limitations when used for policy purposes, for example to readily translate into reskilling programs that promote the characteristics key for the digital economy.

- Candidates self-selected into taking the survey, which means that the dataset is not necessarily generalizable – it may be composed more heavily than the general population of people with certain attributes, such as high curiosity, digital aptitude, tenacity to complete the assignment, and professional ambition.
• Data are static, providing a snapshot of the skills and aptitudes of individuals in the various ecommerce-related job categories and in the broader economy. We however do not know whether the employees that took the survey are “perfect matches” for their occupations, ecommerce roles, and sectors or whether they are mismatched for the jobs they do.

**Recommendations and activities to overcome challenges:**

• Incentivize respondents to take the survey and ensure a random sample.

• Add readily policy-relevant questions to the survey template.

• More work would have to be carried out to match the data on the supply side of labor markets to the skills and attributes demanded in these occupations.

• Compare the characteristics of the employee pool in two companies, one that has succeeded at digital transformation and other that has not, in the same sector, and explore associations between employees’ skills and aptitudes in these two firms to the differences between their performance.

• A similar analysis could be done in two large sectors that difference in digitization – to what extent do the sectors differ in their digital transformation because of differences in the types and mixes of workers they have attracted and employed?

• Pair the data on data on demand for talent – to show how the talent supplied in the labor market matches future demand. Grated, job posting data used can account for shifts in the demand for occupations profiles in labor markets, but they do not readily capture the skills, behaviors or aptitudes that are needed for persons in different occupations to excel in certain functions.

• Understanding how well workers can “leap” to new roles and settings in important: the Nigeria economy will evolve with technology and business models, and workers need to continually adjust. What is likely true is that workers that are able to adjust, learn, and interact with others – perhaps precisely the “constant learners” that many Nigerians are – will likely be in great demand in labor markets.
Appendix Table 1 – PeopleTree Profiles

01 - The energetic driver
Consistently achieves results and meets goals and targets
Is motivated to achieve career advancement
Sticks to a course of action despite obstacles and sees things through to the end
Takes initiative and demonstrates a positive can-do attitude

02 - The flexible character
Adapts behavior to the interpersonal style and needs of others
Is open to feedback and aware of strengths and weaknesses

03 - The imaginative mind
Creates many new ideas by seeing new connections between different and sometimes unrelated concepts
Is open to different and sometimes conflicting ideas or concepts and willing to change accordingly

04 - The constant learner
Continuously develops new skills and enhances existing capabilities
Has a good general knowledge and makes an effort to stay up to date with current affairs.
Has the functional and technical knowledge and skills to get the job done

05 - The willing risk taker
Enjoys trying new things and is willing to experiment and take calculated risks
Is comfortable working in a changing and uncertain environment

06 - The big picture thinker
Can deal with complex intellectual and cognitive concepts
Can shift focus away from the details and gain a broader perspective
Can envision future scenarios based on a combination of intuition, trends and data

07 - The conflict confronter
Challenges the status quo and is willing to speak out, even at great personal risk
Recognizes, handles and resolves conflict promptly
Confronts underperformance quickly when individuals fail to meet expectations and takes corrective action

08 - The methodical organizer
Is well organized and methodical, and pays attention to detail
Has a high level of productivity and uses time well to get work done
Sets definite milestones and actions for achieving goals

09 - The sound decision maker
Makes decisions quickly, even in the absence of complete data
Exercises good judgment when making decisions and takes into account both facts and personal experience
Differentiates between critical and less important priorities
Accurately identifies strengths, weaknesses and potential in people with relatively short exposure to them
10 - The people manager

Provides clear objectives and instructions to others
Assigns meaningful and important tasks and responsibilities to others and gives them authority to act
Puts useful and meaningful measures in place to monitor work processes

11 - The social networker

Is cooperative and handles collaboration well
Builds relationships with and delivers services to both internal and external customers, with a focus on their needs
Actively builds and manages social networks both inside and outside the organization
Shares an appropriate amount of personal information so that others can get to know them
Respectful towards authority, and open to corrective feedback

12 - The motivational cheerleader

Develops others and provides an opportunity for them to practice new skills or improve existing ones
Gets others to accept and trust a vision of the future and inspires them
Creates an environment that brings out the best in others and knows what motivates different types of people
Recognizes the value of teamwork and can pull people together for a common purpose

13 - The effective negotiator

Is confident when interacting with others, even those with greater authority
Is tactful and can communicate in a non-confrontational and polite manner
Achieves a win-win outcome even when there are conflicting interests and limited resources
Is aware of and can manage the dynamics of power within an organization

14 - The skilled communicator

Clearly explains a point of view and its reasoning in both one-on-one and large audience situations
Writes accurately and professionally in multiple formats, with the correct amount of detail
Keeps people informed with relevant and well-timed information

15 - The practical fixer

Continuously looks for ways to improve or re-engineer processes
Takes new ideas from conception to fruition by managing the innovation process
Solves challenging problems by using a combination of intuition and analytical thinking
Quickly realizes the impact if new technology and finds opportunities to integrate it into the business to create competitive advantage

16 - The considerate carer

Is friendly and easy to approach
Demonstrates a genuine concern for and interest in others
Listens with the intention of genuinely understanding others' thoughts and feelings

17 - The calming presence

Balances the need to meet work responsibilities with factors that ensure a quality life
Remains calm under pressure
Recognizes the contribution of others and acts humbly about strengths and achievements
Is tolerant with others and knows when to slow down to let them catch up

18 - The responsible citizen

Acts in line with the dominant values of the organization
Treats people fairly regardless of race, gender, cultural differences or personal styles
Accepts accountability for all areas of responsibility, even the unpopular or tough ones
Is trusted by others and can be relied on to keep promises and protect confidential information