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Generation Evaluation in India and Kenya: Phase II Report

An Outcome Evaluation of Six Generation Programs

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Executive Summary

Generation is partnering with Mathematica to conduct an independent evaluation of Generation programs in India and Kenya. The evaluation is guided by the following research questions:

RQ.1   What outcomes do we find, corresponding to metrics outlined in Generation's logic model (with a specific focus on learners)? What other metrics might augment our view of impact, especially related to employers and society?

RQ.2   To what extent does Generation provide employers with talent with alternative profiles (marginalized and/or non-traditional backgrounds versus their job peers)?

RQ.3   How do the labor market outcomes of Generation learners compare to those of applicants who were not selected for the Generation program?

We are conducting a two-phase evaluation to answer these questions; this report presents the findings from Phase II of the evaluation, which focuses on long-term outcomes of learners in four Generation programs in India (Retail Sales Associate [RSA], Customer Care Executive [CCE], Amazon Web Services [AWS] Cloud Support Practitioner, and Junior Full Stack Java Developer [JFSJD]) and two programs in Kenya (Sewing Machine Operator [SMO] and Digital Customer Service [DCS]). In India, the Generation programs included in the Phase II evaluation were implemented under project AMBER (Accelerated Mission for Better Employment and Retention), a joint initiative of Generation India Foundation and the National Skill Development Corporation (NSDC) in collaboration with the Ministry of Skill Development and Entrepreneurship, under the World Bank-supported Sankalp Program.

A.   Evaluation methodology

The Phase II evaluation has three main components:

- **Description of long-term employment outcomes for Generation learners.** We independently measure the labor market outcomes of Generation learners in both countries about 15 months after they completed their Generation programs, on average. (For the more recently introduced AWS and JFSD "technology programs" in India, we measure outcomes 11 months after completion, on average.) These outcomes are measured through a survey of 560 learners from 47 cohorts in India and 300 learners from 15 cohorts in Kenya.

- **Benchmarking of long-term employment outcomes with a comparison group.** In India, we compare the long-term outcomes of Generation learners in the "non-technology" RSA and CCE programs to those of learners from similar publicly funded programs using the standard, non-Generation methodology, which we refer to as comparison cohorts. More specifically, learners in comparison cohorts were enrolled in programs provided by official training partners under the *Pradhan Mantri Kaushal Vikas Yojana* (PMKVY) 3.0 scheme. This approach enables us to estimate the difference in outcomes achieved by Generation programs against those of business-as-usual training programs in the public Indian training system. We measure the outcomes of comparison cohorts through a survey of 509 learners in 115 cohorts. In Kenya, we compare the long-term outcomes of Generation learners to those of individuals who applied to the DCS and SMO programs around the same time as those learners and made it through the early stages of the application process but were ultimately not accepted. The non-selected applicants provide an indication of how the

Generation learners might have fared without the Generation program. We measure these outcomes through a survey of 201 non-selected applicants.

- **Process evaluation (India only).** The process evaluation seeks to identify the successes and challenges of Generation's approach, qualitatively assess long-term outcomes for employers and society, explain how and why differences in outcomes between Generation and comparison learners measured in the benchmarking approach arise (or do not arise), and describe whether and how the characteristics of Generation learners differ from those of their job peers. The data for the process evaluation are from semi-structured interviews with Generation India staff and purposefully selected employers, training providers, instructors, and Generation learners. We did not collect equivalent data for Phase II in Kenya; however, for completeness we include Phase I findings from interviews with employers of Generation learners from the SMO and DCS programs.

B. Findings from India

1.   Non-technology programs

In India, socio-demographic characteristics were broadly similar for Generation and comparison learners in non-technology programs. An exception was that Generation learners had higher average education levels, possibly due to Generation's additional skills screening requirements for admission to its programs. Qualitative data suggest that **Generation learners in non-technology programs typically have a similar socio-economic profile relative to entry-level hires from similar non-Generation programs**, given that training providers mobilize learners in similar communities for both types of programs.

At the survey date, 44 percent of Generation learners from non-technology programs were employed (Figure ES.1); this employment rate is 19 percentage points higher than that for comparison learners in similar non-Generation programs. Our analysis controls for differences in education levels using a regression framework; further, the Generation-comparison differences in employment outcomes are similar if we compare outcomes for learners with similar education levels, where sample sizes allow. Overall, this suggests that the findings on employment outcomes are not driven by the higher educational attainment of Generation learners. Rather, **we can conclude with reasonable confidence that these positive results are attributable to Generation's methodology**, owing to Generation's selection of learners who are highly motivated and committed to the job role, high-quality instruction, and intensive efforts to identify potential job opportunities (accompanied by strong incentives for training providers to focus on job placement and retention).
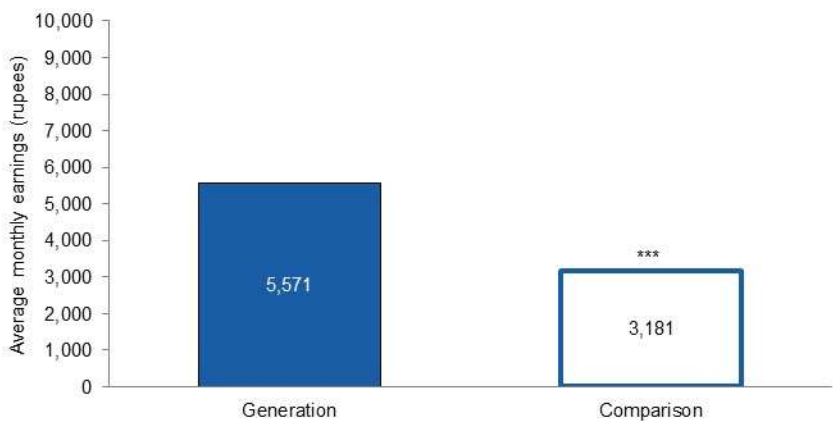
Average monthly wages in the current or most recent job for employed Generation learners from non-technology programs were 11,818 rupees (143 dollars). About one-fifth of employed Generation learners from these programs were able to all their basic expenses from their earnings, one-third were able to save, and more than three-quarters of employed female learners provided input into most or all household decisions about how to spend their earnings (a measure of female economic empowerment). For these programs, **average wages for employed learners were similar for Generation and comparison learners**. However, considering that those who were not employed had zero earnings, among the full sample **Generation learners were earning about 75 percent more than comparison learners at the survey date (Figure ES.2)**.

Figure ES.1. Employment at the survey date, non-technology programs, India
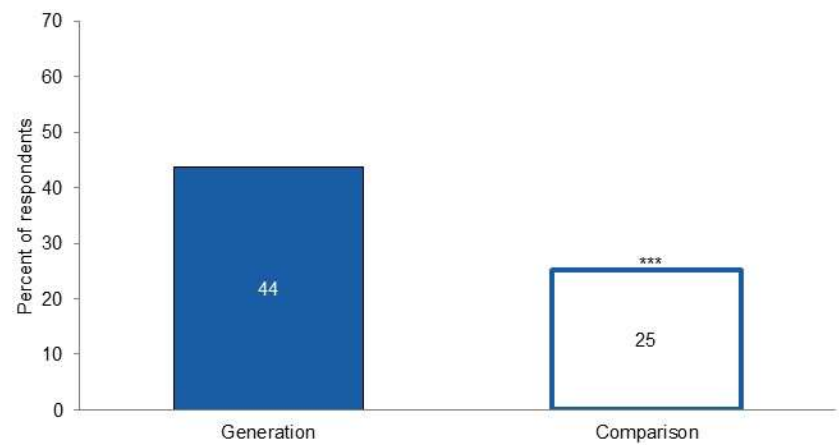
*/**/*** Statistically significant difference between Generation and comparison learners at the .10/.05/.01 level

Figure ES.2. Average monthly earnings at the survey date in the full sample, non-technology programs, India

Notes: Earnings are zero for those not employed at the survey date.

*/**/*** Statistically significant difference between Generation and comparison learners at the .10/.05/.01 level

In terms of the characteristics of learners' current or most recent job, **almost all employed Generation learners from non-technology programs held full time jobs, about one-third held a permanent job contract, and about 7 in 10 were satisfied with their job. About one-half of Generation learners' current or most recent jobs were very or somewhat relevant to their training,** substantially higher than the proportion for comparison learners. Almost all Generation learners felt a strong sense of workplace belongingness and support, although these rates were similarly high for comparison learners.

Generation learners only modestly improved their broader financial well-being relative to comparison learners, and there were no differences in measures of physical or mental well-being. It may have been too soon to observe some of these potential effects in the timeframe of the evaluation. The

vast majority of Generation and comparison learners had a positive mindset (for example, sense of purpose, confidence, and optimism) using standard survey measures, leaving little room for improvement.

From the perspective of employers of learners from non-technology programs, **the higher quality of Generation learners in terms of job performance is the primary advantage** of working with Generation. This is supported by Generation's rigorous screening of potential learners as part of its mobilization process, which identifies highly motivated individuals who are committed to the job role. High-quality standardized instruction during the training itself—including a rigorous screening process for instructors, regular oversight of instructors, a low learner to instructor ratio, and strong program curricula—contributes to strong acquisition of relevant technical and soft skills by learners. Adopting a more learner-friendly training schedule, improving the clarity and consistency of mentorship services, and adding an on-the-job training component were some common ideas that emerged from the process study that might further improve Generation's results across its programs.

2. Technology programs

Generation's **technology programs may offer new opportunities in the information technology field to learners with a less privileged socio-economic background**, as these Generation programs are heavily subsidized and hence much less costly to learners relative to other similar upskilling programs. Further, Generation seeks out graduates from less selective ("tier 2 and 3") colleges.

At the survey date, 66 percent of Generation learners from technology programs were employed (Figure ES.3). Average monthly wages in the current or most recent job for employed Generation learners from these programs were 30,397 rupees (369 dollars). More than one-half of employed learners were able to meet all their basic expenses from these earnings, and almost one-half were able to save. **Almost all jobs were full time, about two-thirds of employed learners held a permanent job contract and about 8 in 10 were satisfied with their job.**

**Figure ES.3. Outcomes for learners from technology programs, India**
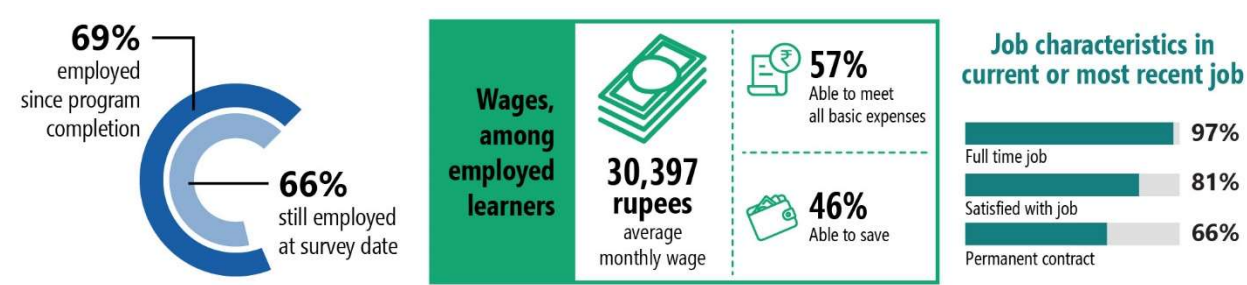
Like for non-technology programs, employers of learners from technology programs emphasized **Generation hires' typically greater motivation, eagerness to learn and advance, and job commitment relative to other entry-level hires**. This is associated with **strong job performance and retention for Generation learners**. Employers also greatly value Generation's tailoring of the training curriculum to their skills needs; some employers perceive that, as a result, Generation learners having better technical skills and requiring less onboarding training than other entry level hires.

C. Findings from Kenya

In Kenya, 55 percent of Generation learners were employed at the survey date, compared to 34 percent of non-selected applicants (Figure ES.4). Long-term job retention is also substantially higher for Generation learners than non-selected applicants, with almost two-thirds of Generation learners who entered employment since program completion still employed at the survey date compared to only one-half of non-selected applicants who entered employment since application. Differences in employment rates between Generation learners and non-selected applicants are **primarily driven by the SMO program**. This might be because SMO non-selected applicants have lower educational attainment and less prior work experience than DCS non-selected applicants, and are typically located in more rural areas, and therefore have more limited employment options absent Generation training.
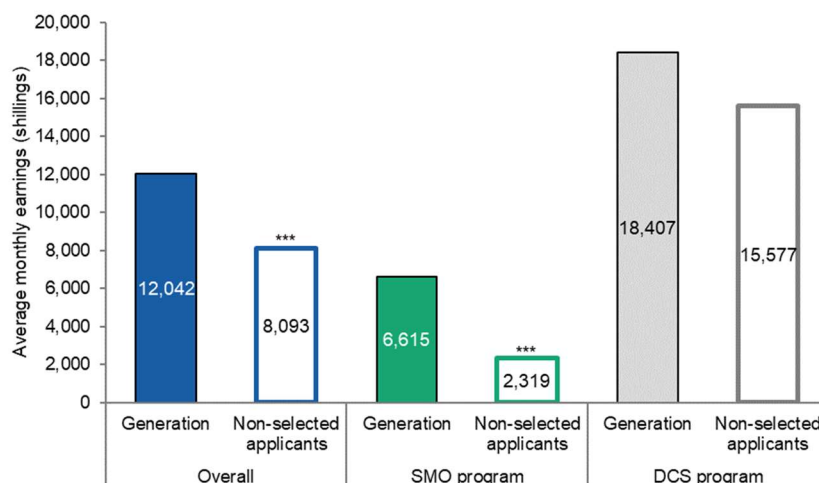
Figure ES.4. Employment at the survey date, Kenya
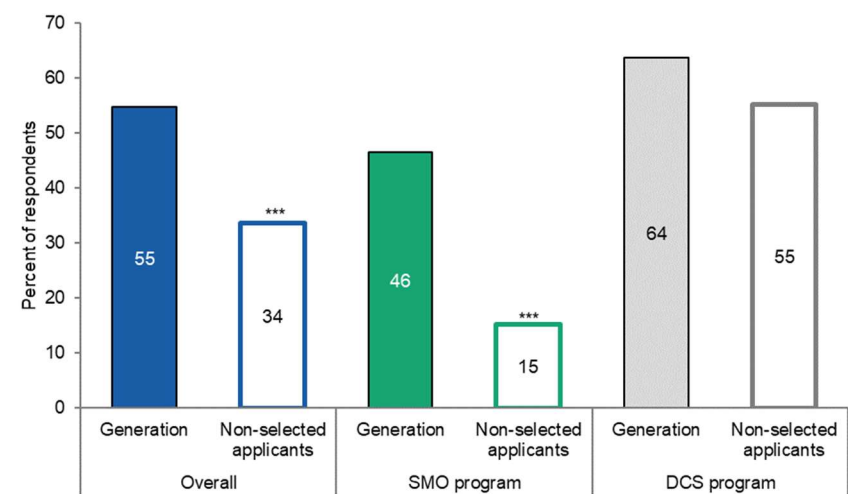
*/**/*** Statistically significant difference between Generation learners and non-selected applicants at the .10/.05/.01 level

Across both Kenya programs, **average monthly wages in the current or most recent job were similar for Generation learners and non-selected applicants.** Average monthly wages for Generation learners in the DCS program (29,000 shillings [208 dollars]) were more than double those for Generation learners in the SMO program (13,400 shillings [96 dollars]). About 8 in 10 employed Generation learners reported being able to meet some but not all of their basic expenses with these wages and 6 in 10 reported being able to save; these rates are very similar for non-selected applicants. Overall, considering that those who were not employed had zero earnings, in the full sample **Generation learners were earning almost 50 percent more than non-selected applicants at the survey date (Figure ES.5).**

Figure ES.5. Average monthly earnings at the survey date in the full sample, Kenya

Notes: Earnings are zero for those not employed at the survey date.

*/**/*** Statistically significant difference between Generation learners and non-selected applicants at the .10/.05/.01 level

About **two-thirds of Generation learners who had found a job since completing the program reported that their current or most recent job was very or somewhat related to their training.** Although most employed Generation learners reported that their current or most recent job was full time, **permanent job contracts were only common for Generation learners from the DCS program (about 3 in 10 jobs),** who were more likely to hold them than non-selected applicants. About **two-thirds of employed Generation learners were satisfied with their current or most recent job,** somewhat higher than the rate among non-selected applicants.

Across both Kenya programs, there is **little evidence of differences between Generation learners and non-selected applicants in broader measures of financial, physical, or mental well-being.** Like in India, it may have been challenging to observe some of these potential effects in the timeframe of the evaluation, and standard survey measures of mindsets were uniformly high and left little room for improvement.

For SMO employers, the Phase I evaluation findings suggested that the major benefit of access to Generation learners **is the ability to obtain large volumes of workers more easily**. However, two of the three SMO employers we interviewed reported that the **technical skills and productivity of Generation SMO learners fell short of their standards when they started the job**, although they tended to improve over time.

For two of the three DCS employers we interviewed in Phase I of the evaluation, access to Generation DCS learners has **reduced employers' onerous hiring costs**. All employers interviewed concurred that **Generation DCS learners are more skilled and perform better on the job than their job peers,** and two out of three suggested that this has reduced their internal training costs and increased firm profitability.

D. Lessons

The Phase II findings suggest the following lessons for Generation's future work:

- **Tailored, context-specific strategies will be needed to further improve long-term employment outcomes.** In both India and Kenya, the long-term employment outcomes of Generation learners were superior to those of the comparison group. However, there is still substantial room for improvement given that about half of Generation learners in both countries were not employed at the survey date. To generate these improvements, different factors will have to be addressed in each context. For example, in Kenya, identifying opportunities for longer-term employment arrangements, if feasible, could help to address a key challenge of placed learners losing their jobs when their short-term contract ends. In India, further efforts to encourage and smooth the migration of amenable learners to locations where jobs are more plentiful might help boost placement rates, while further communicating the realities of the job role to prospective learners might reduce the number of learners leaving their jobs after placement because they are unhappy with job conditions.

- **To measure long-term learner outcomes more accurately, it will be important to improve response rates for long term surveys.** Assessments of long-term labor market outcomes are critical to assessing Generation's success, but obtaining high response rates can be challenging—both for Generation's internal monitoring efforts and for external evaluations. In terms of monitoring efforts, Generation already has a process of contacting learners at 3-6-month intervals to collect information on long-term outcomes. Response rates for these long-term surveys could be improved by contacting respondents between survey rounds to update contact information, maintain rapport, and remind respondents of the upcoming survey round. Collecting more extensive secondary contact information can also help find respondents who become uncontactable between tracking rounds. In terms of external evaluations, identifying the Generation cohorts and comparison group earlier and tracking them regularly using a similar approach to that described above would likely improve response rates for long-term evaluation surveys and thereby reduce the potential for non-response bias.

- **In India, a formal long-term cost-benefit analysis would be valuable to help NSDC and state governments make better informed decisions about funding training programs in the future.** Available aggregate data on per-trainee costs suggest that Generation's approach is likely to be cost effective. Specifically, the evaluation findings imply that the cost per percentage point of long-term employment achieved and per rupee of average learner earnings generated are both about 30 percent lower for Generation programs than business-as-usual programs. A formal cost-benefit analysis would enable stakeholders to better quantify the net monetary value of investing in Generation's approach relative to the business-as-usual approach, generating metrics such as the internal rate of return, net present value, and benefit-cost ratio. This would enable NSDC and state governments to make better-informed budgetary decisions about their investments in training programs in the future. In addition to the relative economic benefits, which can be estimated based on the findings in this report, this analysis would require updated cost information for Generation and comparison programs at the program level, as well as the expected number of learners to be trained in each period.