A Supply-Demand Mismatch between Skill Acquisition and Job Prospects

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Pilot Project: Understanding Skill Acquisition Decision-Making Using an Online Platform in Saudi Arabia

KEY INSIGHTS

• There is a discrepancy between job prospects and skill acquisition of job seekers. Job seekers can use an online skills training platform, Doroob, to take a wide range of courses, but few select courses based on job prospects.

A SUPPLY-DEMAND MISMATCH

Policymakers face the significant challenge of improving the skills and career readiness of students and job seekers, and matching these skills with employer needs. With this in mind, the Human Resource Development Fund (HRDF) launched Doroob, a national e-learning platform and comprehensive skills training program, designed to enable Saudis to upgrade their skills and improve employability. Doroob offers online courses through which a subscriber can build various cognitive and non-cognitive skills, and offers certificates that help employers assess and verify worker skills.

Although the number of Doroob subscribers has reached 1.2 million, the real value of the platform will be realized once the skill acquisition of users improves their employability. Course selection plays a critical role in successful job-matching, yet there is growing evidence that individuals are not fully informed when making educational and career choices.

Researchers studied how subscribers selected courses by comparing Doroob course enrollments against net job creation data across different occupations. **They found that there is misalignment in the relative supply and demand for skills in the job market.** The share of enrollments in courses related to human resources (HR), secretarial work, customer service, and marketing is lower than the share of net jobs created in directly-related occupations, as shown in the figure below. On the other hand, the share of total enrollments in courses related to information technology (IT), photography, and ticket reservation is higher than the share of net jobs created in directly-related occupations. In occupations where jobs are not being created (i.e., professional photography, IT support, and flight ticket reservation agencies), Doroob users continue to enroll in related courses.

DOROOB IN NUMBERS

137 courses in 21 categories, spanning both **general and occupation-specific skills**

1.2 million registered users who account for **7.5 million course enrollments**

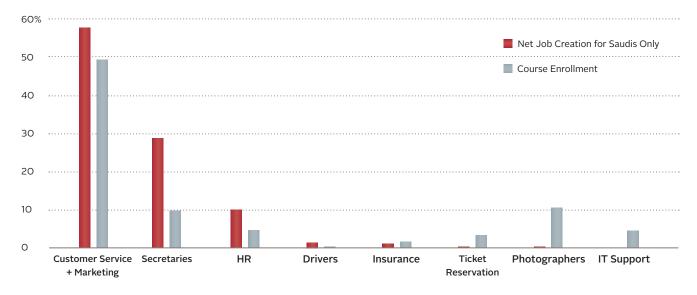
51% of users are job seekers

50% of users are 23-30 years old

70% of users are females

65% of users have a bachelor's degree





Note: Authors' calculations juxtaposing Doroob user data and Ministry of Labor and Social Development job creation data between March 2015 and April 2017.

While Doroob users represent a subset of the Saudi labor force for whom the job creation data pertains, these findings suggest that skill acquisition decisions by job seekers using Doroob are not necessarily informed by the job market realities. It is therefore crucial to understand how job seekers make skill acquisition decisions to design effective policies that produce a labor force that meets the needs of the economy.

How can policymakers effectively use this information?

Building upon the findings of the pilot study, the research team plans to provide Doroob users with different interventions, and determine which ones are most effective for enhancing the skills acquisition journey of job seekers. The interventions will include cuing individual motivations to direct job seekers to complete trainings in more employable fields, suggesting a sequence of skills that an individual may want to acquire, or simply informing Doroob users which skills/courses have the best employability prospects.

Moreover, Doroob is keen to introduce interventions that can help personalize an individual's skilling journey, and together with Doroob, the research team has discussed ways the existing platform can be enhanced to deliver a range of these interventions as part of the online platform. The team will track users from the time they register on the Doroob platform until they complete their courses and begin their job search.

Testing the effectiveness of various interventions will provide policymakers with information regarding what interventions are most effective for enhancing the skills acquisition journey of job seekers, and ultimately improve Doroob users' skilling decisions and job search outcomes. The lessons learned of which interventions work best may also be extrapolated to improve skill acquisition and job search outcomes of job seekers not on the Doroob platform.

RESEARCH TEAM

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