

E-BUSINESS SKILLS GAP

THREATENS SUSTAINABLE GROWTH

———— 2017 ————

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BUSINESS INTELLIGENCE

FOREWORD

The twenty-first century brought with it unforeseen technological advancements, increasing business demands, and massive economic crises that have forced many professions to be reinvented over and over again. Employers all around the world are demanding greater levels of skills from their employees to underpin their competitive position in the market, and this trend did not forgo companies in the Middle East and North African region. Organizations are placing increasing emphasis on hiring candidates who have the right skill sets from the start, even if the skills required are job-specific. However, this strategy is proving to be extremely challenging and is creating a widening gap between the skills employers demand and the skills their employees possess, further straining employment and economic conditions.

Despite these growing challenges, the future looks very promising. Governments across the MENA region are seeking to build innovative and dynamic knowledge-based economies by placing digital businesses at the forefront of innovation. ArabNet's latest report on the state of digital investments in the MENA shows that there has never been a more opportune time to focus on developing the necessary human capital and closing the skills gap to unlock the full potential of the region's organic growth.

In this report, ArabNet and Notre Dame University investigate the extent of the skills gap affecting digital business in the MENA region, with a special focus on Saudi Arabia, United Arab Emirates, and Lebanon—the three countries constituting the hub of the digital growth in the region. The skills gap is examined for senior positions, which have the most significant effect on the growth of a company. The research identifies the top skills needed by employers and examines where the skills gap is most severe in senior positions, from the perspective of both employers and employees.

Interestingly, the findings reveal that the widest skills gap is found in soft skills, most notably in decision-making and leadership, rather than in digital or job-specific skills. The results also show that employers place a high priority on soft skills when hiring for senior positions, which are the most difficult skills to teach or train. This report highlights the need for the industry to train and prepare entry-level employees for senior positions. There is also a need for educational reform in soft skill education in universities and colleges.

We hope that this report will act like a blueprint for business owners, managers, employees, job-seekers, and educational institutions to approach the skills gap crisis in the most effective way.

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INTRODUCTION

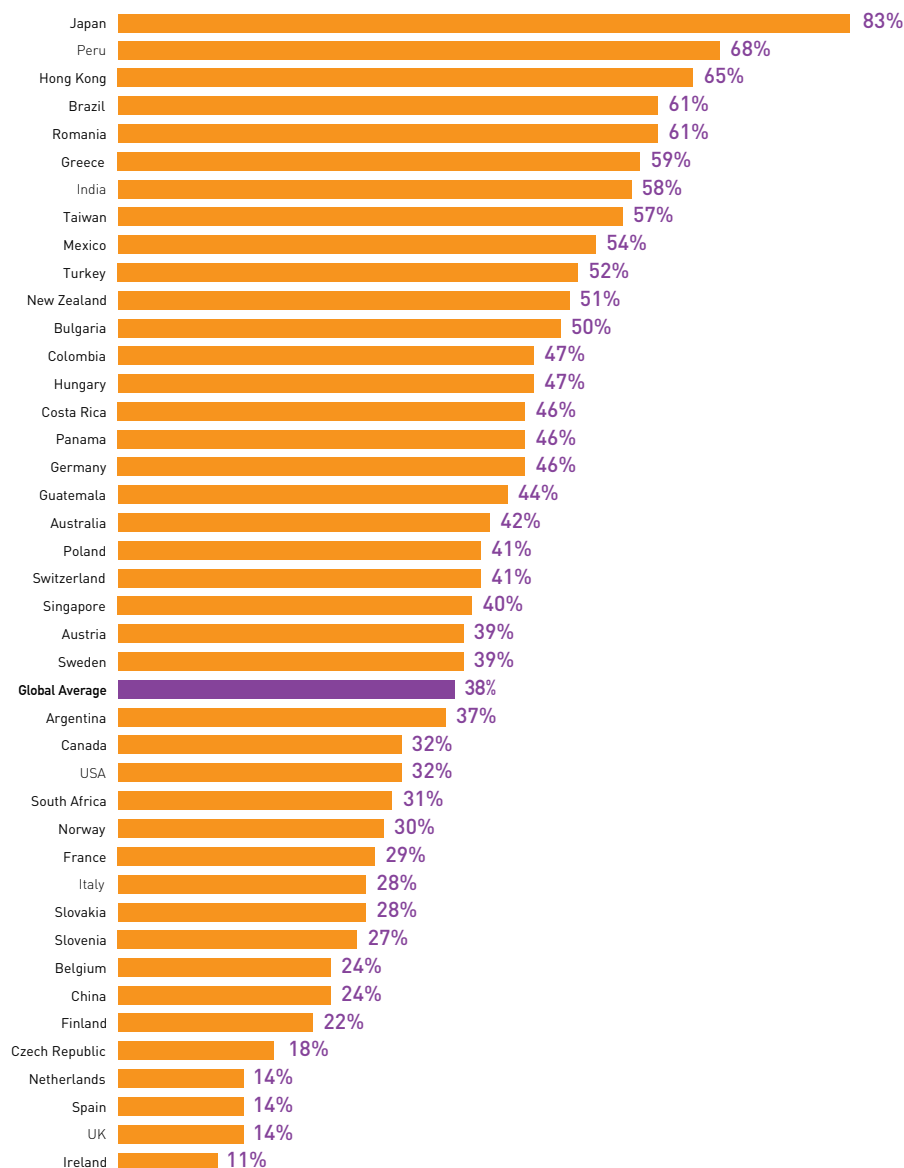
BACKGROUND INFO: A GLOBAL OVERVIEW

ArabNet and Notre Dame University examine the nature and extent of the skills gap in the MENA digital sector and outline strategies for mitigating the impact of the gap

AN ISSUE OF GLOBAL CONCERN

It is not the political crisis, the looming threat of a recession, or the overall state of the economy that keeps business owners around the world awake at night. It is the challenge of finding employees with key skills. In fact, employers in the world's largest economies, including the United States, Japan, India, Germany, and China, are all struggling to fill jobs with the necessary skilled workers, with the global figure at 38% (Figure A).

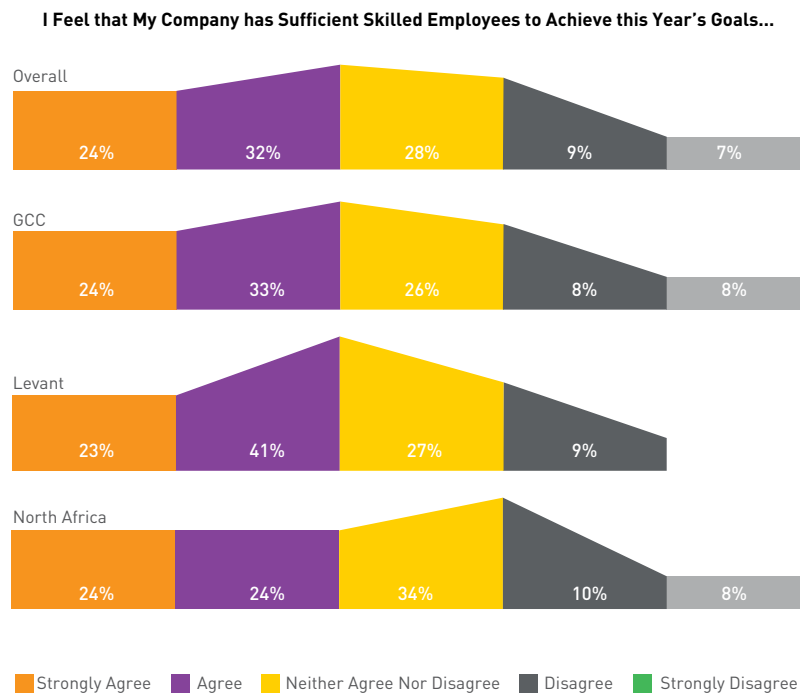
FIGURE A. SHARE OF GLOBAL EMPLOYERS WITH DIFFICULTY IN FILLING POSITIONS ¹.



¹ Manpower Group. (2015). Talent Shortage Survey.

The challenge of filling job vacancies with the required level of skills is an issue that did not leave the Arab region unscathed. This may seem strange, knowing that the Arab region has one of the highest unemployment rate in the world at 28%², yet according to Bayt's 2016 report³, more than 40% of employers in the region claim that the skills their employees possess are not adequate to achieve business goals (Figure A), which is higher than the global average at 38% (Figure B).

FIGURE B. MENA EMPLOYERS' PERCEPTION ON EMPLOYEE SKILLS⁴.



²Arab Monetary Fund. (2015). Youth Unemployment in Arab Countries.

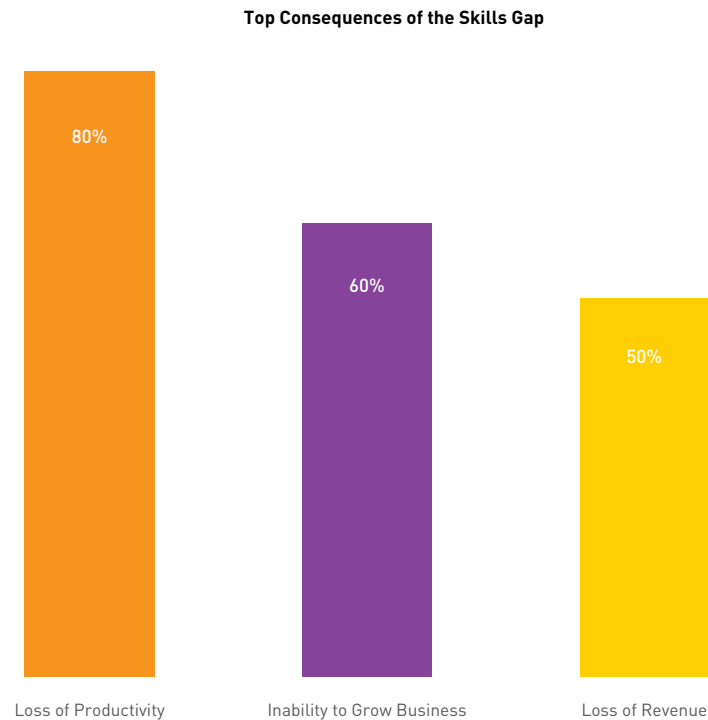
³Bayt.com and YouGov. (2016). The Skills Gap in the Middle East and North Africa: A Real Problem or a Mere Trifle?

⁴Bayt.com and YouGov. (2016). The Skills Gap in the Middle East and North Africa: A Real Problem or a Mere Trifle?

THE DAMAGE CAUSED BY THE SKILLS GAP

A mismatch between the skills required by employers and those possessed by employees can be detrimental to both the organization and the employee. What is even more alarming is that the hardest jobs to fill are those with the biggest impact on business performance. Global companies who are facing difficulty in locating the right talent have cited three major setbacks: loss of productivity, inability to grow the business, and loss of revenue.

FIGURE C. THE THREE MAIN CONSEQUENCES OF THE SKILLS GAP⁵.



⁵Careerbuilder. (2013). How The Skills Gap Affects the Global Economy.

THE STUDY: OBJECTIVES AND METHODOLOGY

Given the critical status of the skills gap in the global market and its effect on the growth and success of organizations, this research report aims to study the gap between the skills needed by e-businesses operating in the MENA and those possessed by senior-level employees. The reason the study focuses on senior-level positions rather than mid- or entry-level positions is that they are directly involved in strategic planning and have a more pronounced effect on the growth and expansion of organizations.

A skills gap analysis investigating the skills that are in most demand was conducted in a variety of regions throughout the world, including USA, Latin America, New Zealand, and others. These studies showed that employees' skill sets require improvement worldwide and across industries. However, a study of this type focused on the digital sector is yet to be carried out in the MENA. Knowing that the digital sector offers promising opportunities for the regional economy⁶, there is a need to identify the skills that are lacking and necessary to the future performance of the sector.

This study adopts a mixed-method approach; qualitative and quantitative data is collected from employers and employees working in e-businesses across the region, specifically in Saudi Arabia, Lebanon, and the United Arab Emirates. Seven high-profile MENA employers working in digital businesses undertook one-on-one semi-structured interviews. Most of the interviews lasted between 20 and 45 minutes and took place between mid-April and early May in 2017.

Online surveys collected from 197 respondents in April, 2017, verified the findings of the qualitative interviews. The survey examines 20 skills. Survey respondents rated the importance of skills and their satisfaction with senior-level employee's skill levels using a 5-point Likert scale, where 1 meant 'least important' or 'least satisfied' and 5 meant 'most important' or 'most satisfied.' The importance and satisfaction levels of skills are calculated at a 90% confidence interval.

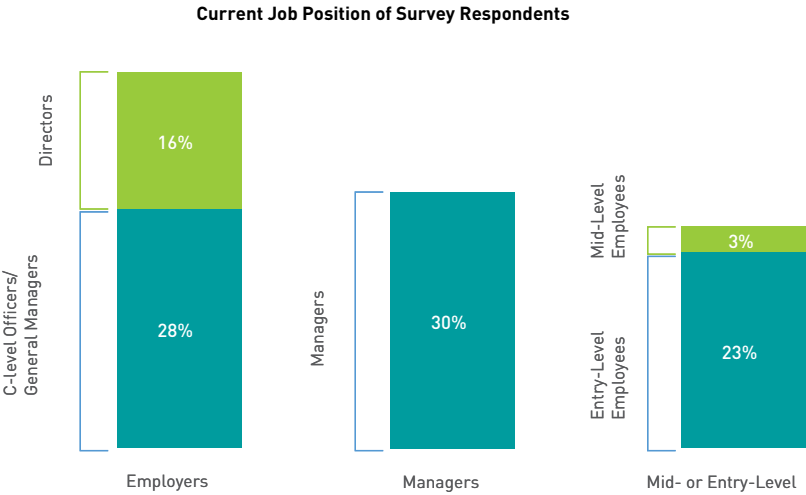
Respondent profiles reveal that the majority of the surveyed are males (69%) signifying that digital companies are male dominated. Most of the survey respondents work in Lebanon (35.4%), UAE (34%), and Saudi Arabia (17%), which are the three countries at the heart of the digital growth in the region, according to ArabNet's report⁷. The other respondents are scattered in various countries across the MENA region, such as Egypt, Jordan, Kuwait, Qatar, etc.

⁶ArabNet Business Intelligence. (2017). The State of Digital Investments in MENA 2013-2016.

⁷ArabNet Business Intelligence. (2017). The State of Digital Investments in MENA 2013-2016.

FIGURE D. THE DISTRIBUTION OF RESPONDENTS BY SENIORITY LEVELS.

Most of the survey respondents (44 %) have job positions equivalent to directors, general managers, or C-level officers such as COO or CEO. Senior-level employees with job positions equivalent to managers constituted 30% of the survey respondents while 26% were mid- or entry-level employees.



WHAT DOES THE DIGITAL INDUSTRY EXPECT FROM SENIOR-LEVEL EMPLOYEES?

DIGITAL INDUSTRY EXPECTATIONS ON THE NON-TECHNICAL COMPETENCIES OF SENIOR-LEVEL EMPLOYEES

Skills—or competencies—are broken down into two broad categories: hard skills, referred to as technical skills, and soft skills, referred to as non-technical skills. Soft skills are the combination of interpersonal skills and personal attributes that a person can apply in the workplace regardless of the profession. One of the most notable observations of this study is the value that the industry places on the soft skills of senior-level employees, especially cognitive skills (problem solving, critical thinking, and decision making), leadership skills, and self-management skills (personal and work ethics and accountability). These skills are not acquired through education or training, but are rather character qualities, attitudes, and behaviors possessed by the individual from an early age.

THE INDUSTRY REQUIRES NON-TECHNICAL JOB SKILLS THAT ARE DIFFICULT TO ACQUIRE THROUGH EDUCATION AND TRAINING. PRIMARILY, THEY ARE COGNITIVE, SELF-MANAGEMENT, AND LEADERSHIP SKILLS.

FIGURE E: DIGITAL INDUSTRY EXPECTATION ON NON-TECHNICAL COMPETENCIES OF SENIOR-LEVEL EMPLOYEES.

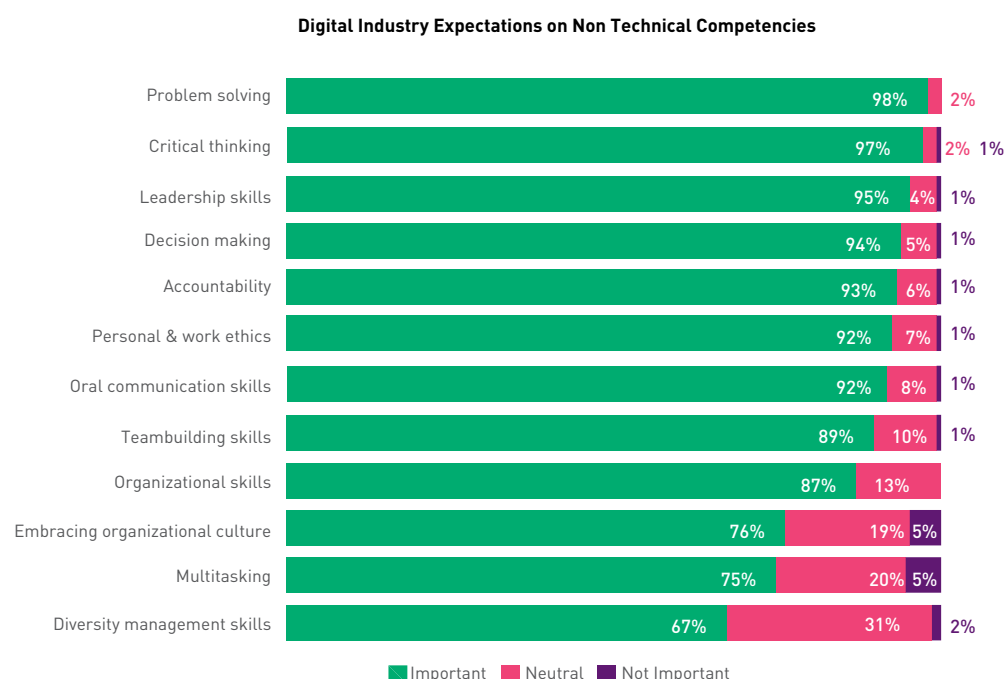
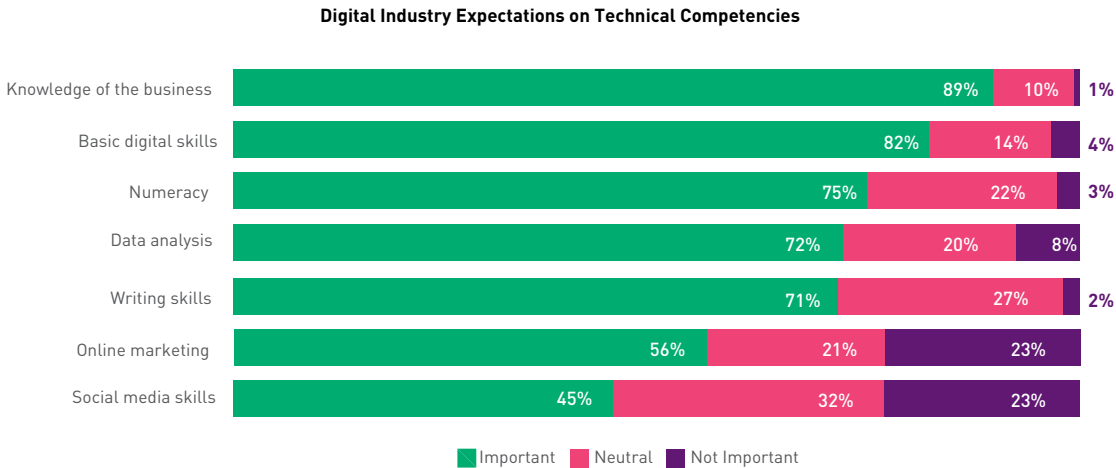


FIGURE F: DIGITAL INDUSTRY EXPECTATION ON TECHNICAL COMPETENCIES OF SENIOR-LEVEL EMPLOYEES.

Unlike soft skills, hard skills—or technical competencies—refer to a person’s ability to perform definite tasks that can easily be defined and measured with respect to a particular profession. In the digital sector, the technical competency most required by the industry is knowledge of the business (89%), and the least demanded is social media skills (45%).



THE TOP 10 COMPETENCIES EXPECTED OF SENIOR-LEVEL EMPLOYEES ARE NON-TECHNICAL

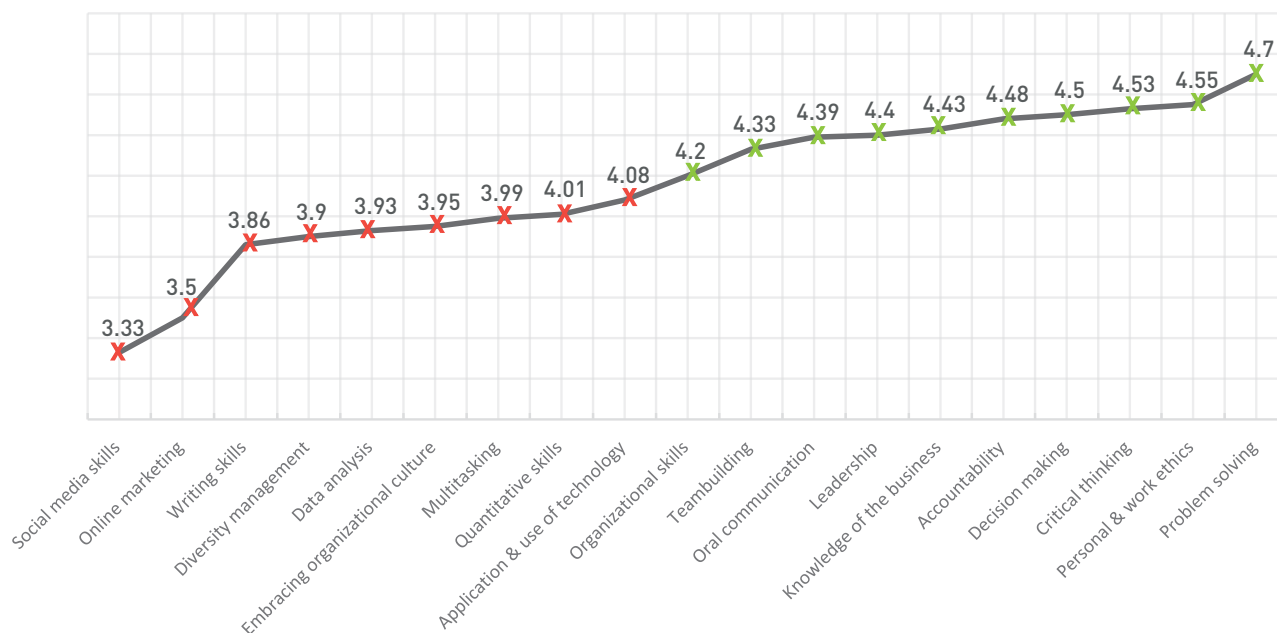
Out of the all the skills examined in this research, the top 10 most valued competencies are comprehensively non-technical soft skills.

Historically, technical skills were the main skills needed for a person to succeed in the workplace. As the economy shifted from an industrial to a service-driven economy and became more dependent on knowledge-based services, it is no longer sufficient to only have a technically competent workforce. Employees now need to be well equipped with soft skills to find a job and maintain a successful career. Today, organizations are increasingly seeking to hire people who not only can do basic tasks, but also interact well with others and display effective interpersonal skills, because these individuals can greatly impact the bottom line of the business and uphold the company’s competitive edge.

THE DIGITAL INDUSTRY VALUES NON-TECHNICAL COMPETENCIES MUCH MORE THAN TECHNICAL COMPETENCIES FOR SENIOR-LEVEL EMPLOYEES.

FIGURE G: RANKING COMPETENCIES ACCORDING TO THEIR VALUE TO THE INDUSTRY

Mean Ranking of Expected Competencies



“[Leadership and accountability] are the two things that I care about. Everything else you can learn. You might not have the experience, but you can gain that experience. It is acquired knowledge. But leadership, accountability, and ethics are not things you can acquire.”

Ahmed Khatib, MarkaVIP.

“[Non-technical skills] are the differentiators between two people who have almost the same knowledge. These would be the key factors to recruiting someone or not.”

Michel Malkoum, Digital Media Services.

“If you bring someone who has all the leadership skills, then you can train them quickly about the business.”

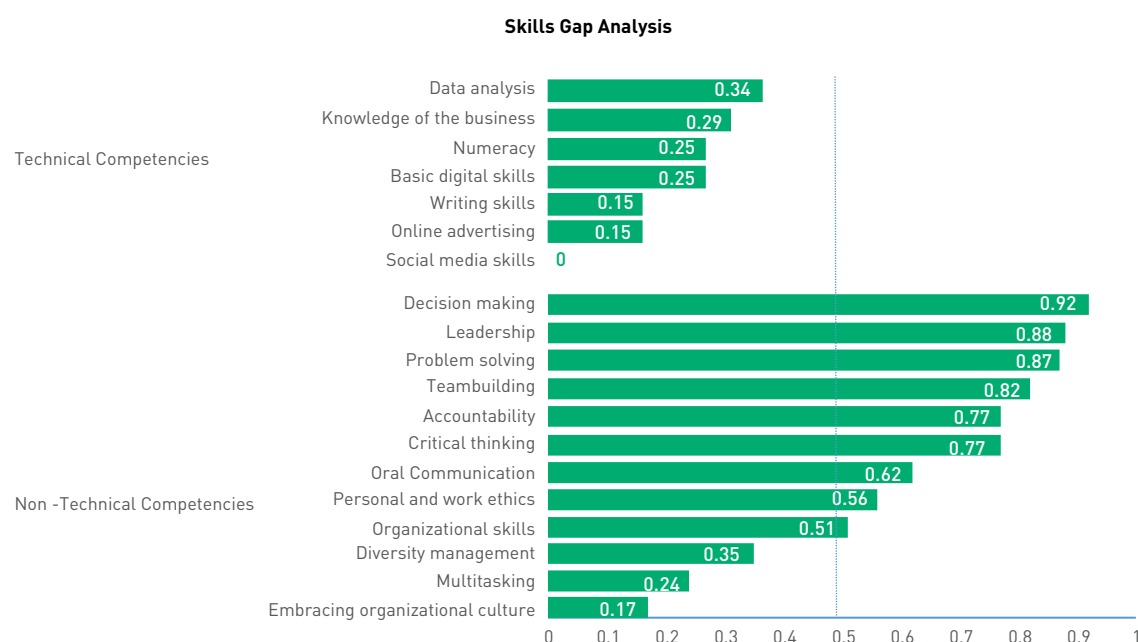
Saleem Hamad, Souq.com.

DIGITAL SKILLS NOT AN ISSUE AMONG SENIOR EMPLOYEES, BUT WHAT IS?

FIGURE H: THE SKILLS GAP ANALYSIS OF THE COMPETENCIES OF SENIOR-LEVEL EMPLOYEES.

The skill gap analysis showed that the competencies with a significant gap are all non-technical, with the highest gap observed in cognitive skills (decision-making, problem solving, and critical thinking) and leadership skills, which are also the most valued skills. The value of soft skills lies in the fact that they are very difficult to learn, hence making them a rare commodity in the workforce.

It is also interesting to note that social media skills, which are the least valued skill for senior-level employees, are the only skills showing no gap, followed by online marketing skills.



THE LARGEST SKILL GAP OCCURS IN THE SKILLS MOST VALUED BY THE DIGITAL INDUSTRY: COGNITIVE SKILLS.

REASONS AGGRAVATING THE SKILLS GAP



Tracing the root causes of the skills gap is not easy. Many factors, both external and internal, have contributed to its formation.

A FAST-CHANGING ECONOMY

The digital industry is changing at an accelerating pace in the face of technological and economic disruptions, and with it comes radical business model changes that shorten the shelf life of the workforce's existing skill sets. The fast-changing nature of the digital industry makes it difficult for people, especially senior employees, to keep up pace with the increasing demands of the market.

“There is a gap because our industry is moving fast. With what's happening in the digital world, you always feel like you are running behind the next skill. And it is really difficult to ask someone who is used to plan offline to suddenly become able to plan digitally.”

Faisal Shams, OMD.

BRAIN DRAIN

With the digital industry in the MENA being in its nascent years, the talented people are more attracted to the developed industries abroad which are producing the pioneers of the digital revolution. This brain drain is enlarging the skills gap and causing a lot of strain on the local digital companies.

“It is not easy to find good senior people in our market. Most of them, unfortunately, leave the market and go to Germany, or the Netherlands, or somewhere—sucking all the talent from our market.”

Ahmad Saad, Crowdanalyzer.

HIGH COST OF ATTRACTING AND RETAINING TALENT

What is making the situation more dire is that the talent living abroad are not easily allured to moving back to their local countries, forcing digital companies to create more attractive incentives for the talent to join them. One can deduce that small digital startups, whose resources do not match those of large companies, find it difficult to offer attractive salary packages that compete with the packages of larger companies, leaving the smaller companies to suffer more severely from the skills gap.

“The very talented people don't come here because there isn't enough exciting reasons for them to leave whatever company or startup or organization that they are working for abroad.”

Ahmad El Khatib, MarkaVIP.

FEMALES IN THE DIGITAL SECTOR



FIGURE I: PERCENTAGE DISTRIBUTION OF MALES VERSUS FEMALES BY GEOGRAPHY.

Gender diversity in the digital sector has been a topic of great interest regionally and globally; hence, this report examines the statistical data to extract the gender distribution in the top three e-business countries, Lebanon, Saudi Arabia, and UAE. As shown in Figure I, females constitute the minority at a mere 30% - which is roughly 3 in 10 employees.

The highest ratio of females to males working in the digital sector is in the United Arab Emirates at 44%, followed by Saudi Arabia at 24%, and Lebanon at 23%. The reason behind the female percentages being concentrated in these three countries is that the sample population is largely distributed among those markets.

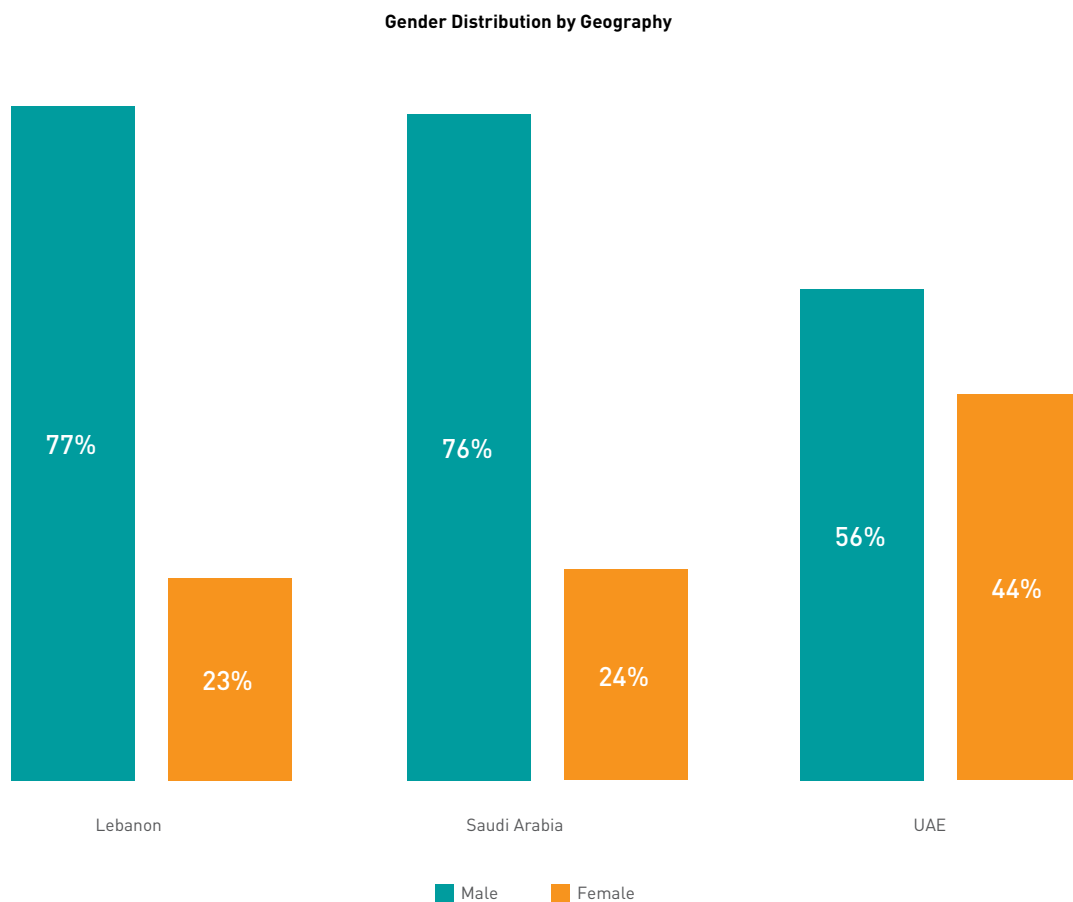


FIGURE J: HISTOGRAM - GENDER VERSUS YEARS OF WORK EXPERIENCE.

An analysis of the gender distribution by years of work experience shows that the majority of both females and males have between 5 and 11 years of experience; however, with the exception of one female, all participants with more than 15 years of experience are males. This implies that males occupy almost all senior-level positions.

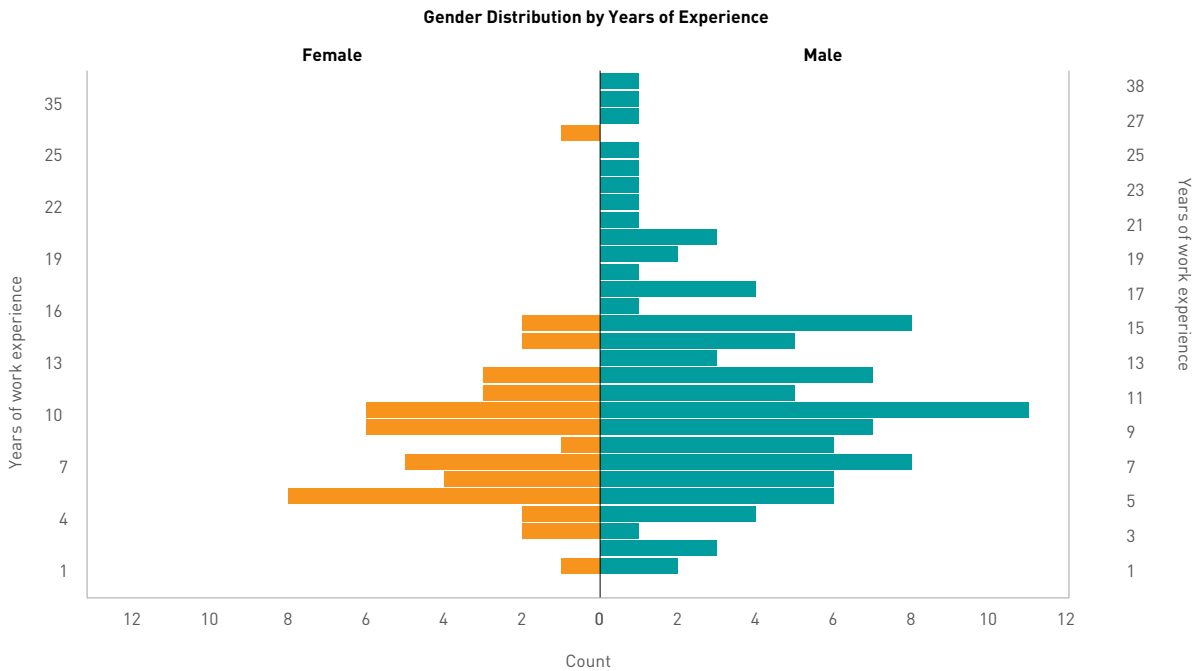
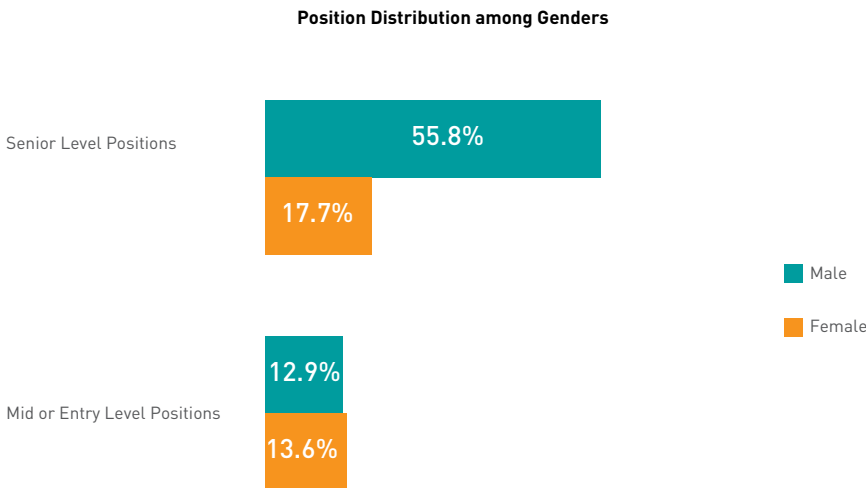


FIGURE K: PERCENTAGE DISTRIBUTION OF JOB POSITIONS AMONG GENDER.



CLOSING THE GAP: RECOMMENDATIONS AND CONCLUSIONS



The skills gap is a complex issue with underlying social and economic causes, and devising a one-size-fits-all solution will not be efficient. The need for a multifaceted solution that involves several stakeholders cannot be overlooked, and organizations should look into collaborating and coordinating with educational institutions to equip future employees with the relevant set of skills.

HIRE YOUNG, TRAIN UP

E-businesses in the MENA are choosing training as their immediate solution for closing their internal skill gap. However, there is a catch: senior-level employees are expected to be the experts in the field and to train and mentor their departments and teams. Hiring less-than-competent senior-level employees poses challenges from a managerial perspective. Therefore, many companies have chosen a different strategy to overcome the skills gap; they are hiring fresh graduates and are training them in the areas that the company is in most need. Eventually, the fresh graduates become more experienced and skilled, and in time, they are promoted to senior-level positions.

This implies that e-business employers could look into potential training and mentorship programs aimed at entry-level employees with the long-term goal of nurturing these young learners to become effective senior-level employees.

“We usually hire entry-level people, train them a lot, and then eventually they get promoted to senior positions.”

Saleem Hamad, Souq.com.

“We decided to recruit youth straight from university, put them in programs to educate them the way we want and mold them the way we want in order to become managers.”

Michel Malkoum, Digital Media Services.

THE ROLE OF ACADEMIA

The findings of this research showed that the most critical skills for senior-level employees are soft skills rather than technical skills. While training programs could be more efficient in improving and developing the technical skills of senior-level employees, soft skills are more difficult to acquire, especially at a late stage in one's career. This implies that soft skills should be learned early on, preferably during a person's undergraduate studies. Educational institutions could create a positive change in the workforce by creating new curricula that integrate the anticipated business requirements with the development of essential critical skills such as cognitive skills, the importance of self-management skills, and leadership skills.

FACING THE WAGE GAP

The apparent skills gap that currently exists in the e-business sector implies that having senior-level employees with the key skills is a competitive advantage for the business; hence, employers could use this insight to create attractive retention programs to decrease the risk of other competitors snatching key employees with alluring benefits. Likewise, employers need to get into the mindset that hiring key employees is an expensive investment and they should be willing to pay the price of acquiring key skills that are rare in the workforce.

INVESTING IN CONTINUOUS SELF-LEARNING

This report has identified the top 10 skills in most demand. Employees should find ways to cultivate and demonstrate these skills for better job placements. They must also invest time and resources in continuous self-learning to refine their skill sets according to changing business needs.

SUMMARY

The skills gap is a real and growing crisis threatening the sustainable growth of the digital sector. Forces outside the organization and within are widening the gap.

The fast-changing nature of the economy is shortening the shelf life of the workforce's existing skill sets. The nascent digital sector in the region is not lucrative enough to retain key talent, and employers are reluctant or unable to pay the high price of attracting and retaining talent.

The gap is most severe in soft skills, or non-technical competencies, which are the most difficult to approach because they cannot be taught through training or education, thus making them a rare commodity in the workforce. While training senior-level employees is often used as a quick fix for the problem, it has shown to backfire on the overall productivity of the department, especially when the team is reluctant to be led by a member that they have trained.

Closing the skills gap requires a multifaceted solution that involves all stakeholders. Employers must invest in the skills of their workforce from an early stage, starting with their entry-level employees and mentoring them to reach senior-level positions. Educational institutions should keep updated curricula that focus on the most needed qualities by the industry, while job seekers should strive to continuously develop their soft skills and showcase them on their resumes.

With all stakeholders working together, closing the skills gap becomes more of an achievable goal and the growth of the digital sector will not lose momentum.

APPENDIX

DEFINITIONS

- **Critical thinking:** Distinguish relevant facts from irrelevant facts, understand the “bigger” picture, analyze the strengths and weaknesses of an argument, and express a well-reasoned point of view.
- **Problem solving:** Analyze facts and data to develop appropriate solutions to practical problems.
- **Decision-making:** Make appropriate and timely decisions in light of available information, in sensitive and complex situations.
- **Oral communication skills:** Communicate orally in a clear and sensitive manner, and give and receive feedback constructively.
- **Leadership:** Motivate and manage others.
- **Teambuilding skills:** Operate within, and contribute to, a respectful, supportive, and cooperative group climate.
- **Diversity management skills:** Work productively with people from diverse cultures, races, ages, gender, religions, and lifestyles.
- **Multitasking:** Multitask and achieve goals in a timely, effective, and self-directed manner.
- **Organizational skills:** Manage time effectively, set realistic timelines, remain goal-focused, set, and maintain priorities.
- **Accountability:** Accept responsibility for own decisions and work outcomes.
- **Personal and work ethics:** Exhibit ethical and professional behavior, focusing on honesty and integrity.
- **Knowledge of the business:** Industry and technical knowledge, product knowledge, understanding clients’ needs, and technical and practical knowledge.
- **Numeracy:** Ability to use numbers at an appropriate level of accuracy.
- **Basic digital skills:** Use technology to address diverse tasks, and familiarity with word processing, spreadsheets, file management, and use of internet search engines.
- **Writing skills:** Writes in a clear and structured manner, and exhibits effective presentation skills.
- **Adapting to change:** Manage and be comfortable with change, demonstrate flexibility, and adaptability.
- **Embracing organizational culture:** The ability to fit in with corporate culture and to understand workplace relationships and dynamics.
- **Social media skills:** Build a brand, encourage community participation, apply online etiquette and front-end engagement such as social media outreach and community management, etc.
- **Big data analytics:** Use analytics tools and examine large data sets containing a variety of data types to uncover hidden patterns, unknown correlations, market trends, customer preferences, and other useful business information.
- **Online advertising:** The ability to conduct different forms of online marketing, including email marketing, social media marketing, search engine marketing, display advertising (such as web banner advertising), and mobile advertising.

QUALITATIVE INTERVIEW QUESTIONS

- **Your profile and role in hiring senior-level employees in the e-business organization.**
 - o Demographics: gender, education, professional experience, current status in the company.
 - o What is your role in the hiring process of senior-level employees?
 - o What is your company's demand rate for senior-level employees? That is, how many senior employees do you hire per quarter and/or year?
 - o Which senior position(s) is/are your company in most demand and why?
 - o What criteria do you look for to choose a candidate for a senior position?
 - o What is your recruitment strategy for senior-level employees?
- **Identifying the critical skills that managers require their senior-level employees to possess.**
 - o What skills are very critical in the job of your average senior-level employee? You can refer to the handout for a list of the skills and their description.
 - o Can you explain how the skills you mentioned (in question 7) are important and how they affect the success of your organization?
- **Exploring the skills gap in senior-level positions from the perspective of the manager.**
 - o Have you hired a senior-level employee who does not meet your requirements 100%? Can you elaborate on how and why?
 - o How do you rate the competence level of your current senior-level employees in each of the skills you listed in question 7?
 - o Why are you finding it difficult to find people with the right skill set?
- **Addressing the skills gap issue.**
 - o What do you think are the most effective strategies for improving the skills of senior-level employees?
 - o What strategies are you currently using to address the skills gap and get the needed skills for the business?
 - o How effective are these strategies in reducing the impact of the skills gap in your organization?
 - o What is your strategy to retain key senior-level employees who have the skills you need?

QUANTITATIVE MENA SKILLS GAP SURVEY

- **1. What is your gender?**
 - o Male
 - o Female
- **What is your age?**
 - o 19 or younger
 - o 20-29
 - o 30-40
 - o 41-49
 - o 50 or above
- **What is the highest level of education you attained?**
 - o High school
 - o Bachelor
 - o Masters
 - o Doctorate
 - o Other

Please specify your major:

Please specify your major:

Please specify your major:
- **What is your current job title:**
- **What is your current company's name (optional):**
- **What is your nationality:**
- **How many years of work experience do you have?**
- **What is your level of experience at your current position?**
 - o Entry-level
 - o Mid-level executive
 - o Manager
 - o Director
 - o C-level officer or general manager
- **Please rate the degree of importance of the below competencies that you think are important for the successful performance of senior-level employees in your company on a scale of 5 (extremely important) to 1 (extremely unimportant).**
 - o Critical thinking
 - o Problem solving
 - o Decision-making
 - o Oral Communication
 - o Leadership
 - o Teambuilding
 - o Diversity management
 - o Multitasking
 - o Organizational skills
 - o Accountability
 - o Personal and work ethics
 - o Knowledge of the business
 - o Quantitative skills (ability to use numbers appropriately)
 - o Application and use of technology
 - o Writing skills
 - o Resistance to change
 - o Embracing organizational culture

- o Social media skills
 - o Big data analytics (Use analytics tools and examine large data sets containing a variety of data types to uncover hidden patterns)
 - o Online advertising
- **Please rate your satisfaction with your senior-level employee's performance in each of the below stated skills on a scale of 5 (extremely satisfied) to 1 (extremely unsatisfied).**
- Critical thinking**
- o Problem solving
 - o Decision-making
 - o Oral Communication
 - o Leadership
 - o Teambuilding
 - o Diversity management
 - o Multitasking
 - o Organizational skills
 - o Accountability
 - o Personal and work ethics
 - o Knowledge of the business
 - o Quantitative skills (ability to use numbers appropriately)
 - o Application and use of technology
 - o Writing skills
 - o Adapting to change
 - o Embracing organizational culture
 - o Social media skills
 - o Big data analytics (Use analytics tools and examine large data sets containing a variety of data types to uncover hidden patterns)
 - o Online advertising

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