Economic and Social Commission for Western Asia

Digital Technologies and Employment

Ministry of Labor, Beirut- Lebanon, 14-16 October 2020

Digital Technologies and Women Economic Participation: Current Status and Future Opportunities

UNITED NATIONS
الاسكوا
ESCWA

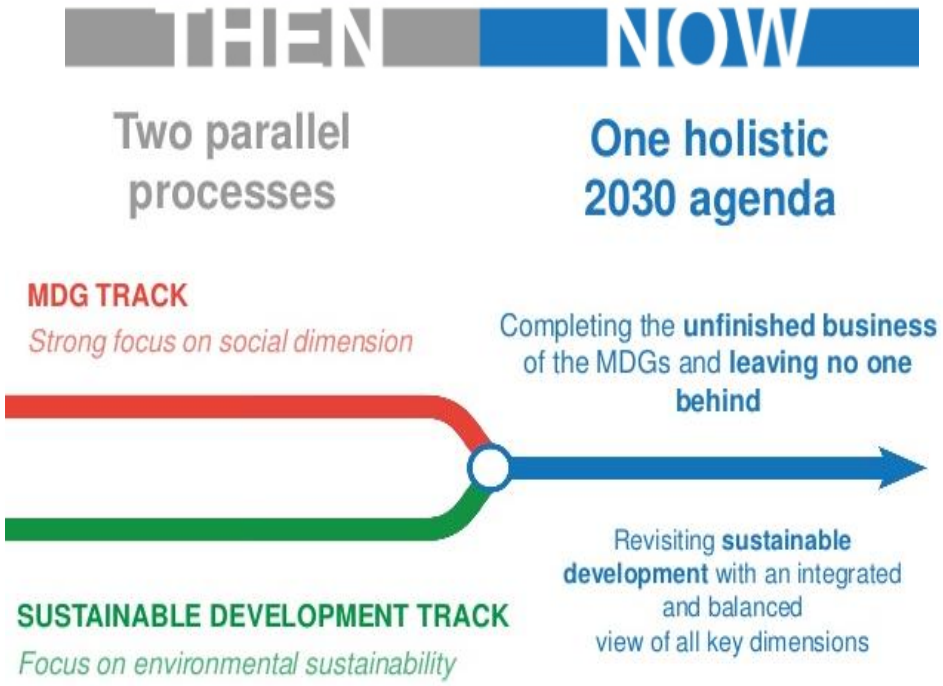
Shared Prosperity Dignified Life

Sukaina Al-Nasrawi, PhD
Social Affairs Officer,
Smart, Safe and Resilient Arab Cities Project Lead
Gender Justice, Population and Inclusive Development
al-nasrawi@un.org

Outline

- **Gender and ICT:** International Frameworks
- **Gender Gap**: Global, Regional and National
- **Women Economic Participation:** Regional Observations
- **Digital Gender Gap:** Status and Observations
- **Women Economic Participation Opportunities and ICTs**
- **Recommendations**

Gender and ICT: International Frameworks

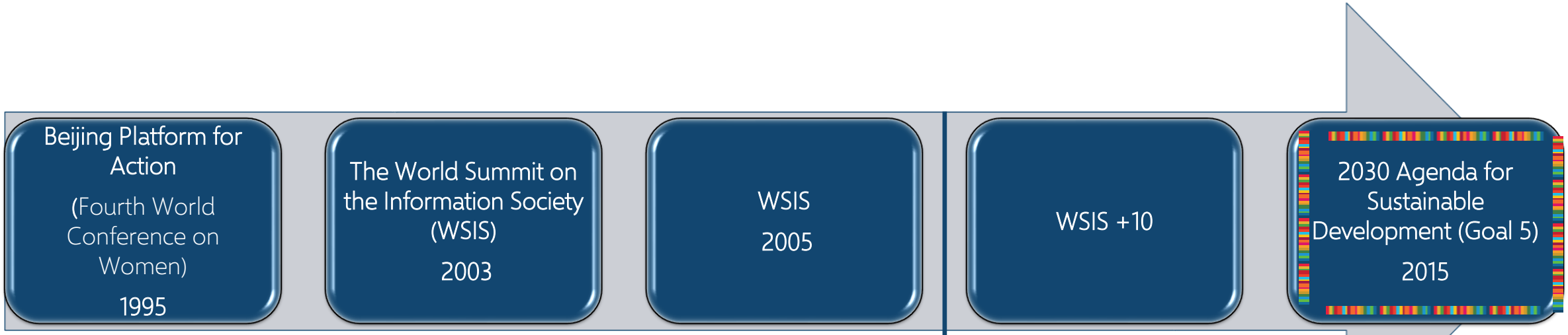


September 25th 2015

2030 Agenda for Sustainable Development

Declaration Vision, shared principles and commitments, a call for action to change the World	Sustainable Development Goals 17 Goals and 169 Targets
Follow-Up and Review National, Regional and Global	Implementation Means of implementation and Global Partnership

Gender and ICT: International Frameworks



- **'full and equal participation of women' in and through media and new technologies of communication, as well as in all areas of science and technology**

- **Affirmation that ICT development provides enormous opportunities for women, as an integral part of, and key actors, in the Information Society**

- **ICT provides empowerment opportunities for women, as an integral part of, and key actors, in the Information Society (IS).**
- **Mainstreaming a gender equality perspective and using ICTs as a tool.**
- **Governments called for removing the gender barriers to ICT education and training,**

- **Recognition of the potential of ICTs as a tool for promoting gender equality and women's empowerment as well as the gender divide in ICTs**

- **Gender Mainstreaming across all 17 Goals and a dedicated Goal to Gender Equality with ICT as 1 out of 3 suggested means of implementation**

UN Commission on the Status of Women CSW 55, 2011:

"Access and participation of women and girls in education, training and science and technology, including for the promotion of women's equal access to full employment and decent work"

Gender and ICT: International Frameworks (SDGs)

Goal 5 Means of Implementation

When compared to the emphasis on legal and policy development and reforms, despite the existence of numerous ICT-related initiatives in the region, the focus of Arab countries on technology and particularly ICTs as a means of implementation of Goal 5 has been relatively limited so far

Gender and ICT: International Frameworks (SDGs)

Global goals	Arab region major issues with respect to the concerned goal and evolution between the 1990-1995 and 2010-2015 periods	Potential contributions of digital technologies and ICTs to fulfilling the targets of this goal
Goal 1. End poverty in all its forms everywhere 	Percentage of population living with less than $1.25/day stands at 7.4 per cent below global average of 14.5 per cent. Over the period, however, it increased by 34.5 per cent due to, among other things, recent conflict and political instability in many countries.	By making communications more affordable, digital technologies help multiply development opportunities for the poor and empower women and marginalized communities. The deployment of broadband can have an appreciable effect on GDP growth, thereby creating new markets, encouraging innovation and supporting conditions of economies of scale, and by extension, contributing to job creation and poverty eradication.
Goal 5. Achieve gender equality and empower all women and girls 	Despite improvements in female enrolment in education over the period, particularly at tertiary level where they now surpass males, the female employment-to-population rate of 19 per cent is way below the global average of 47 per cent. Despite some discrepancies among Arab countries, the female share of gross national income (GNI) per capita in the region stands at 30 per cent, much below the world average of 49 per cent. Childbirth complications are the second most common cause of death among adolescent girls (15-19).[a] Violence against women, such as intimate partner violence and public harassment, is prevalent across the region, with low levels of legal protection for victims, as well as few programmes and services.[b]	Access to ICT can enhance gender equality and women's empowerment, allowing women and girls to access information and technologies of importance to their economic productivity, reproductive health and rights, social well-being and decision-making, as well as involving women in urban planning. Women's sustainable livelihoods can be enhanced through expanded access to markets, education, training and employment.
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all 	Oil, gas, and mining – a dominant sector in oil-rich countries, representing 41 per cent of their GDP in 2012 – accounts for little employment and jobs. The service sector in the region is dominated by low-skills, low-pay jobs. Productivity – key for growth and job creation – is low in the region; its growth rate in the period 1991-2010, at only 0.9 per cent, was the lowest among the world's regions. Employment is one area where the gap between men and women is most visible. Countries have begun to put measures in place to increase the employment of women, as well as award them certain rights, but employment rates among women in the region remain very low. People with disabilities also struggle to access job opportunities, even though countries have put measures in place, such as quotas, to provide better access. In many Arab countries, only a small percentage of people with disabilities are employed, with men being more likely to be employed than women.	Digital technologies can aid educated young people in identifying economic opportunities, given that technological innovation, combined with a sense of initiative, enables bright local people to engage in teleworking and contributes to the global value chain. Technology and ICT offers great opportunities for entrepreneurship and the creation of start-ups, and helps to attract investment, especially in areas of ICT innovation linked to other SDGs. Technologies and ICT offer new ways of work, enhancing employment opportunities for all people.
Goal 10. Reduce inequality within and among countries 	Inequality is relatively moderate in the Arab region and has changed little over the past two decades. Gini Index estimates in the 2000s for the Arab region (about 34.3) compare favourably with other regions. Another recent study suggests, however, that in the period up to 2030, economic growth paths are likely to be associated with higher inequality and a shrinking middle class in Arab countries.	Digital technologies can help reduce inequality within and between countries, especially when used to help deliver information and knowledge, and therefore, social and economic progress to disadvantaged segments of society, including those living with disabilities, as well as women and girls.

Gender and ICT: International Frameworks (WSIS - SDG) Matrix

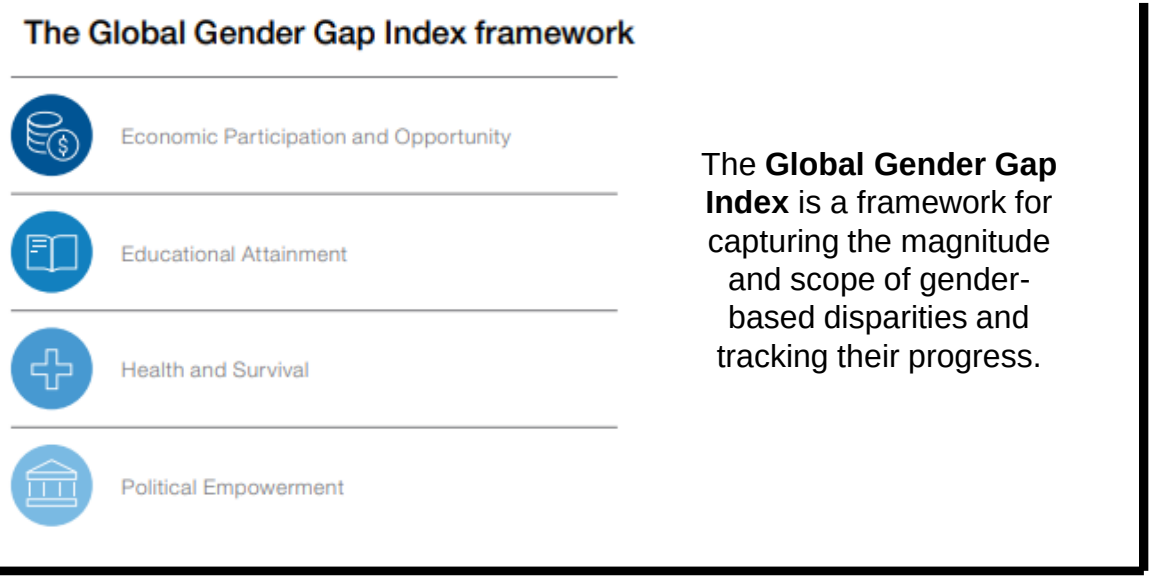
Detailed ALs

One of the 1st conventions and summits that began shedding light on the issues of technology and gender as well as using ICTs as a tool for women empowerment and gender equality

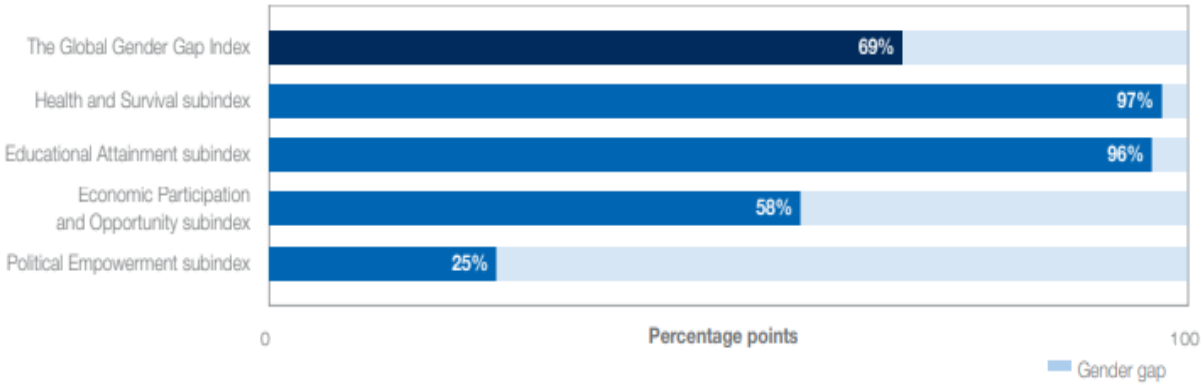
Outline

- **Gender and ICT:** International Frameworks
- **Gender Gap**: Global, Regional and National
- **Women Economic Participation:** Regional Observations
- **Digital Gender Gap:** Status and Observations
- **Women Economic Participation Opportunities and ICTs**
- **Recommendations**

Gender Gap – Global and Regional



The **Global Gender Gap Index** is a framework for capturing the magnitude and scope of gender-based disparities and tracking their progress.

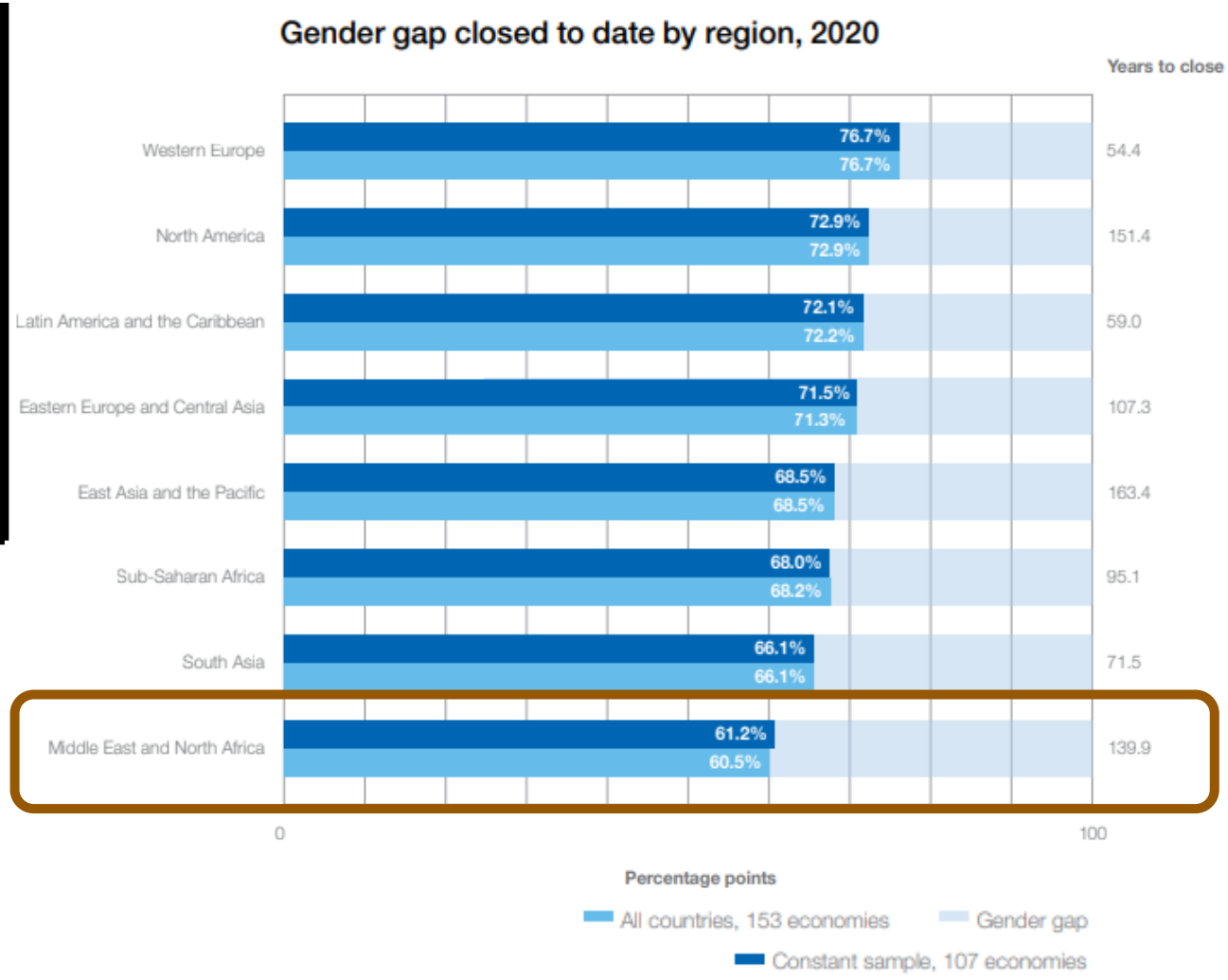


Sources

World Economic Forum, Global Gender Gap Index, 2020.

Notes

Population-weighted averages, including the 153 economies featured in the Global Gender Gap Index 2020.



Sources

World Economic Forum, Global Gender Gap Index, 2020.

Notes

Population-weighted averages, including the 153 economies featured

Gender Gap – Regional and National

Regional performance 2020, by subindex

	Overall Index	Subindexes: Economic Participation and Opportunity	Educational Attainment	Health and Survival	Political Empowerment
Western Europe	0.767	0.693	0.993	0.972	0.409
North America	0.729	0.756	1.000	0.975	0.184
Latin American and the Caribbean	0.721	0.642	0.996	0.979	0.269
Eastern Europe and Central Asia	0.715	0.732	0.998	0.979	0.150
East Asia and the Pacific	0.685	0.663	0.976	0.943	0.159
Sub-Saharan Africa	0.680	0.666	0.872	0.972	0.211
South Asia	0.661	0.365	0.943	0.947	0.387
Middle East and North Africa	0.611	0.425	0.950	0.969	0.102
Global average	0.685	0.582	0.957	0.958	0.241

0 1

Sources

World Economic Forum, Global Gender Gap Index, 2020.

Notes

Population-weighted averages, including the 153 economies featured in the Global Gender Gap Index 2020.

Outline

- **Gender and ICT:** International Frameworks
- **Gender Gap**: Global, Regional and National
- **Women Economic Participation:** Regional Observations
- **Digital Gender Gap:** Status and Observations
- **Women Economic Participation Opportunities and ICTs**
- **Recommendations**

Women Economic Participation – Regional Observations

- Despite the difference between several Arab States, common patterns of women's labour force participation and employment are observed throughout the region namely:

Low participation rates

Concentration of women in occupations and job fields that confirm the prevailing gender norms, especially in social and public services;

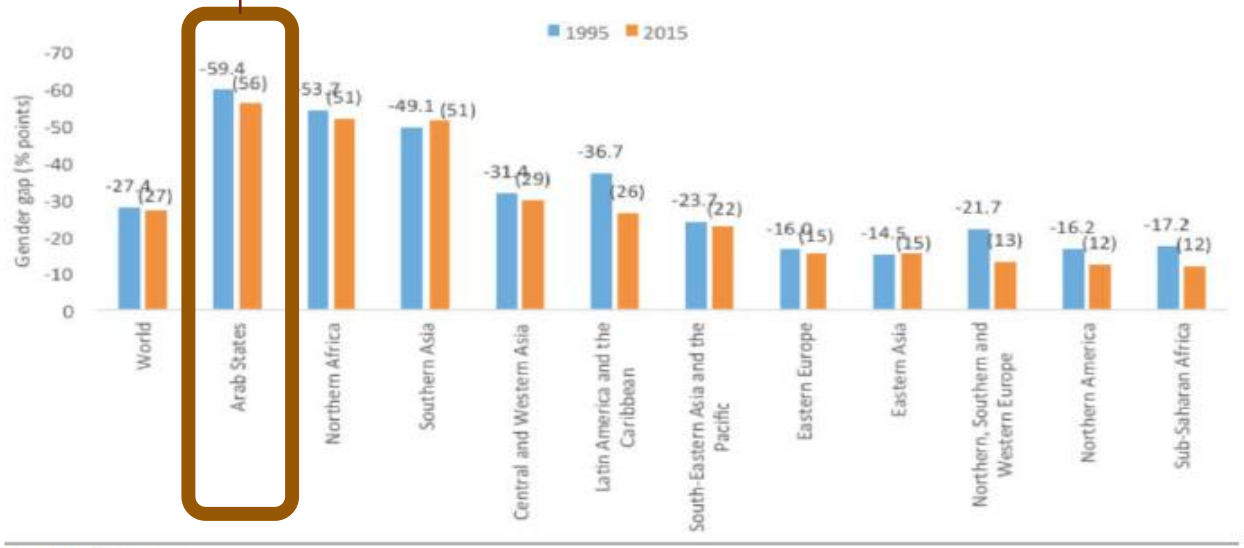
Minimal participation of women in managerial positions

Age, marital status and household headship being significant barriers to women's participation in the labour force

The persistence of high unemployment rates among women since the mid-1990s

Women Economic Participation – Regional Observations

Regional gender gaps in labour force participation



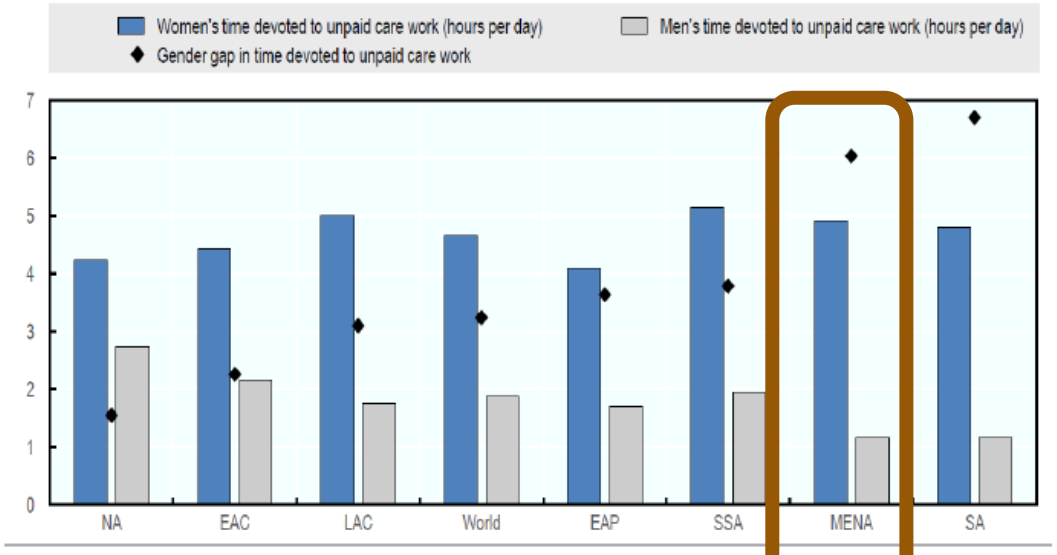
Source: ILO, 2017.

Arab countries have the highest labour force gender gap

- **Globally, the lowest employment rate is registered by mothers of children aged 0-5 years compared with fathers, non-fathers and non-mothers of young children.**
- **Women in the Arab region spend 5 hours 48 minutes per day on unpaid care work compared to 1 hour 10 minutes for men**
- **In 2018, this rate was 47.6% globally compared with just 9.3% for mothers of children aged 0-5 years in the Arab region – the lowest employment rate in the world**

A major issue that directly impacts women's socioeconomic empowerment is the unpaid care work that impedes their participation in the paid labour market

Regional gender gaps in unpaid care work



Source: OECD Gender Institutions and Development Database (GID-DB), 2019, oecd.stat.org
Note: This graph shows regional gender gaps in time devoted in unpaid care work. NA stands [illegible] America, ECA for Europe and Central Asia, LAC for Latin America and the Caribbean, EAP for East Asia and the Pacific, SSA for Sub-Saharan Africa, MENA for Middle East and North Africa, SA for South Asia.

Outline

- **Gender and ICT:** International Frameworks
- **Gender Gap**: Global, Regional and National
- **Women Economic Participation:** Regional Observations
- **Digital Gender Gap:** Status and Observations
- **Women Economic Participation Opportunities and ICTs**
- **Recommendations**

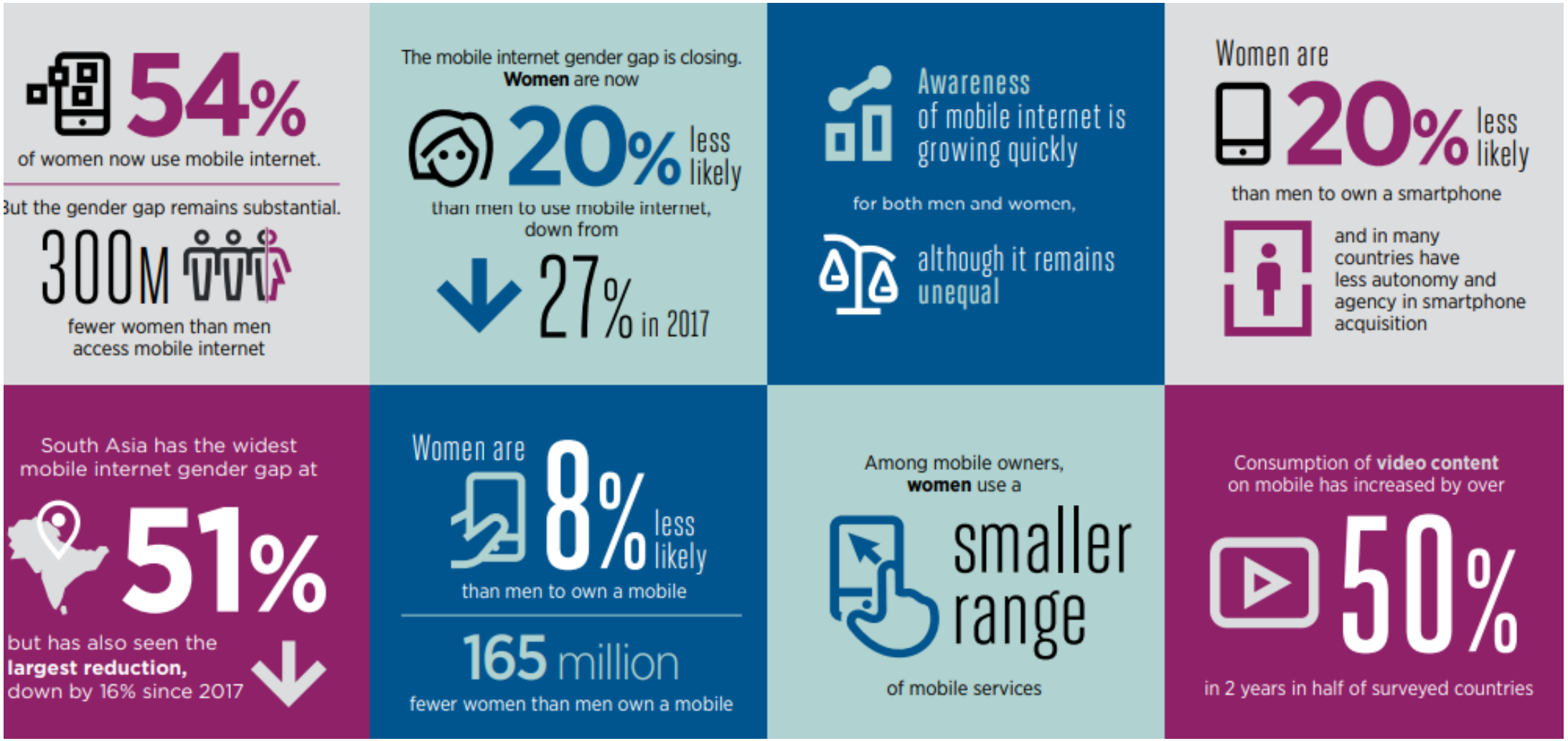
Digital Gender Gap – Leaving NO ONE Behind

The 2030 Agenda embodies core principles:

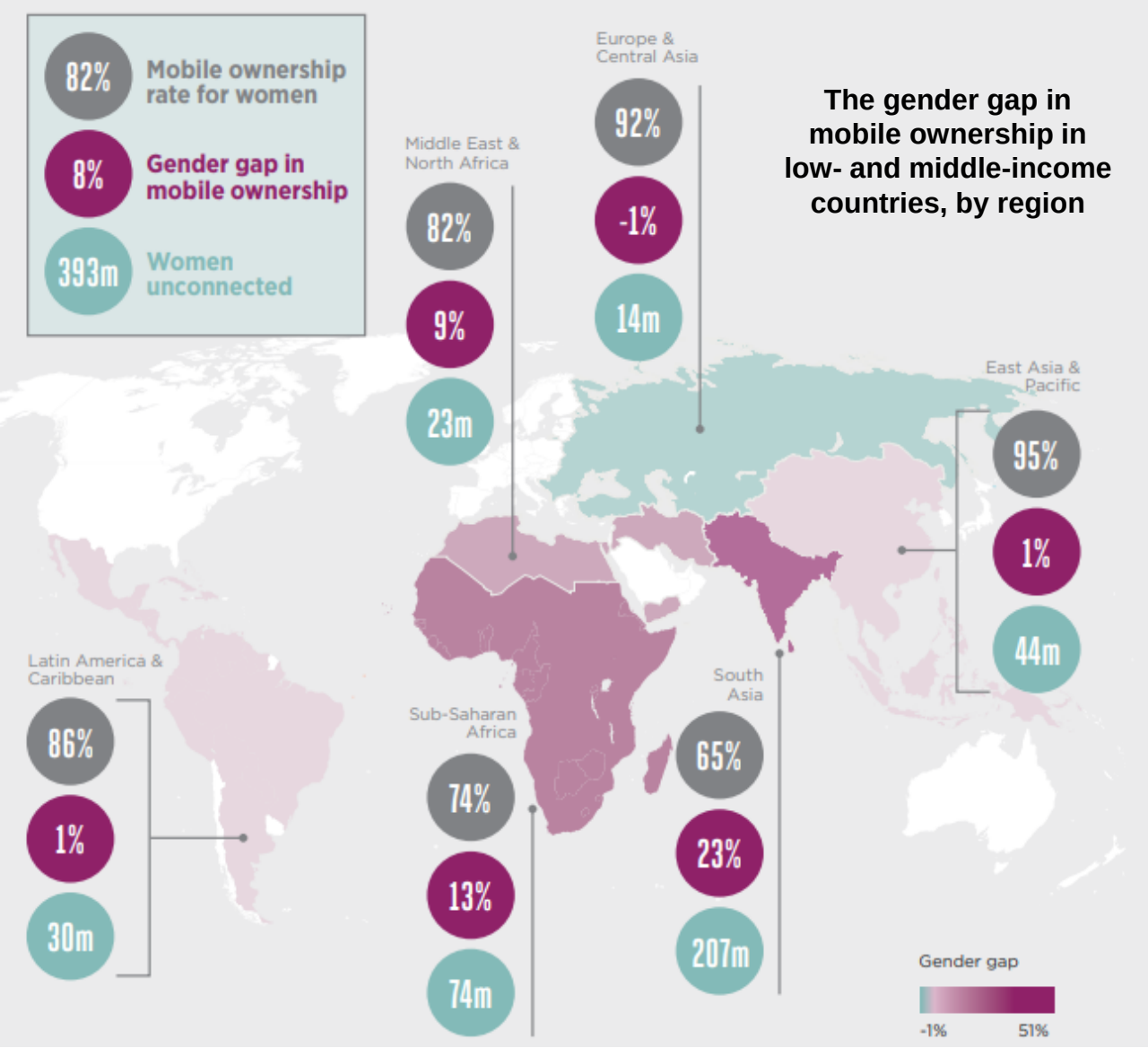
- In today's increasingly **CONNECTED WORLD, women are being left behind as** mobile connectivity is spreading **quickly but** not **equally**.
- Unequal access to mobile technology threatens to exacerbate the inequalities women already experience
- ICT have become central to every economy and to people's quality of life in every society
- Concerns are being raised that the **digital divide** is leaving behind those most in need of assistance
- digital inequalities can reinforce and exacerbate existing social inequalities
- Further interventions are needed to ensure that the unqualified, the low skilled, the long-term unemployed and those on low incomes are enabled to reap the benefits of new services and opportunities for job seeking through ICT

Gender and ICT in Numbers: Global

IN LOW- AND MIDDLE-INCOME COUNTRIES:



Digital Gender Gap – Mobile Ownership



The gender gap in mobile ownership in low- and middle-income countries, by region

Top barriers to mobile ownership for men and women in surveyed countries, by region

Ranking	Total		Africa		Asia		Latin America	
	Women	Men	Women	Men	Women	Men	Women	Men
1	Affordability	Affordability	Affordability	Affordability	Literacy and skills	Literacy and skills	Affordability	Safety and security ▲
2	Literacy and skills	Literacy and skills	Literacy and skills	Literacy and skills	Affordability	Affordability	Safety and security	Affordability ▼
3	Safety and security	Safety and security	Family does not approve ▲	Safety and security	Relevance	Relevance	Literacy and skills	Literacy and skills
4	Family does not approve ▲	Relevance	Safety and security ▼	Network coverage ▲	Family does not approve ▲	Safety and security	Relevance	Relevance

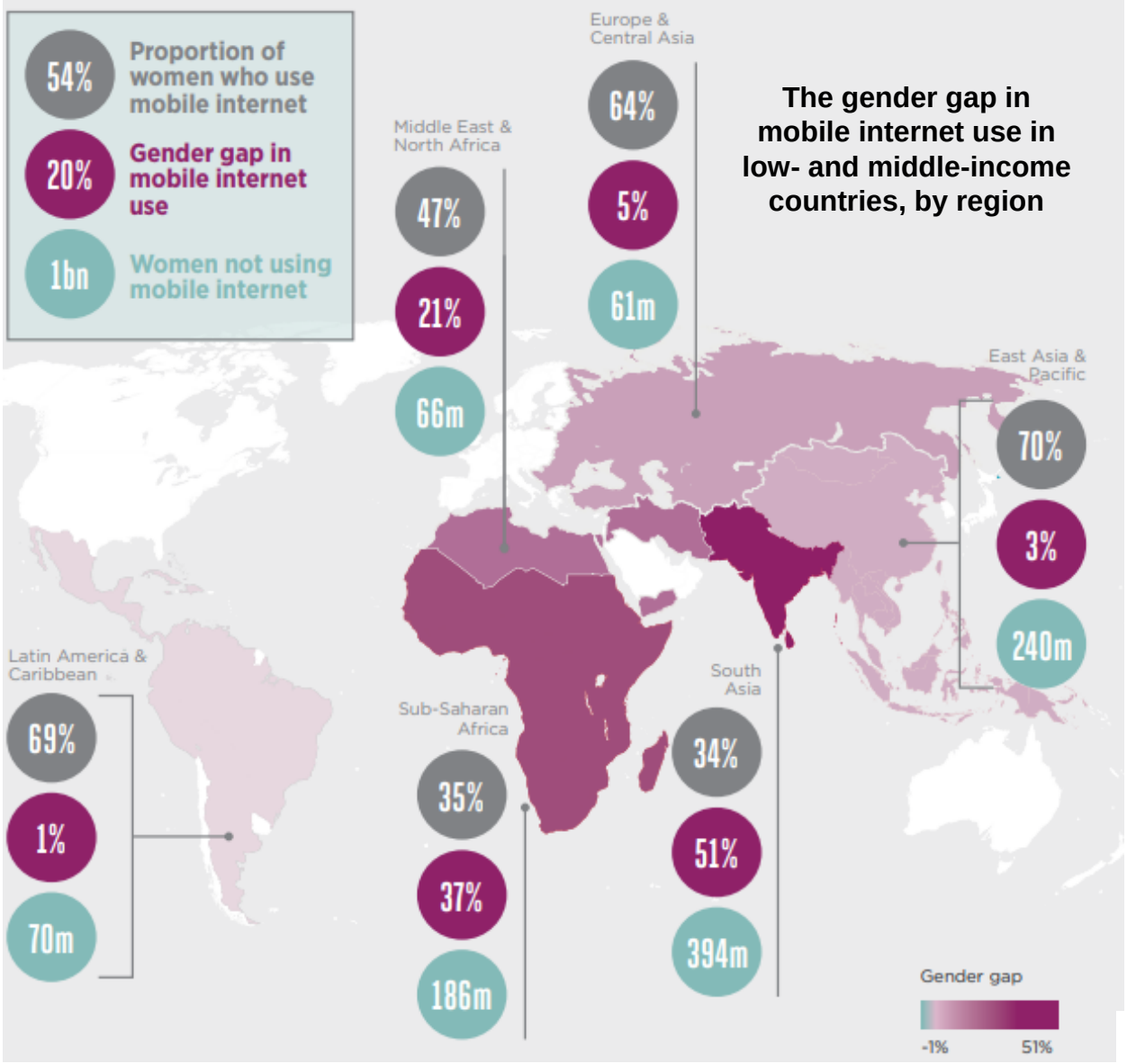
Key:
- ▲ Barrier importance has increased since 2018
- ▼ Barrier importance has decreased since 2018

Based on the single most important barrier to mobile phone ownership identified by non-mobile owners, averaged across surveyed markets

The Global System for Mobile Communications Association estimates that closing the gender gap in mobile phone ownership can open a $170 billion worldwide market by

Source: GSMA Intelligence 2019

Digital Gender Gap – Mobile Internet Use



The gender gap in mobile internet use in low- and middle-income countries, by region

Top barriers to mobile internet use for men and women in surveyed countries among mobile users who are aware of the internet

Ranking	All countries		Africa		Asia		Latin America	
	Women	Men	Women	Men	Women	Men	Women	Men
1	Literacy and skills	Literacy and skills	Literacy and skills	Affordability ▲	Literacy and skills	Literacy and skills	Safety and security	Safety and security ▲
2	Affordability	Affordability	Affordability	Literacy and skills ▼	Affordability ▲	Affordability	Literacy and skills	Literacy and skills ▼
3	Safety and security ▲	Safety and security ▲	Safety and security ▲	Relevance	Relevance ▼	Relevance	Affordability	Affordability ▼
4	Relevance ▼	Relevance ▼	Relevance ▼	Safety and security	Family does not approve	Safety and security	Network ▲	Relevance

Key:
- ▲ Barrier importance has increased since 2018
- ▼ Barrier importance has decreased since 2018

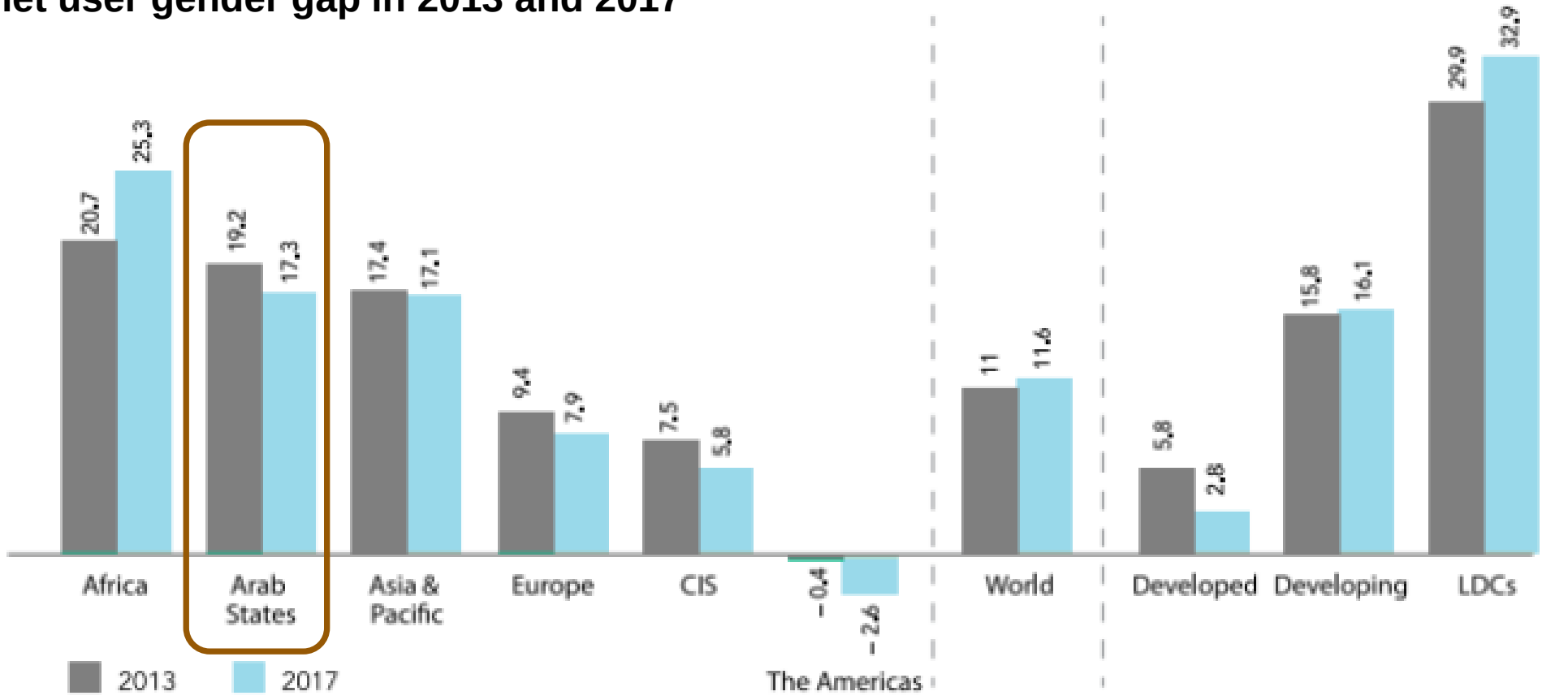
Based on the single most important barrier to using mobile internet identified by mobile users who are aware of mobile internet but do not use it, averaged across surveyed markets

By 2021, over 90 percent of the world's population will be covered by mobile broadband networks.
(Ericsson Mobility Report 2015)

Source: GSMA Intelligence 2019

Digital Gender Gap – Internet Penetration

Internet user gender gap in 2013 and 2017

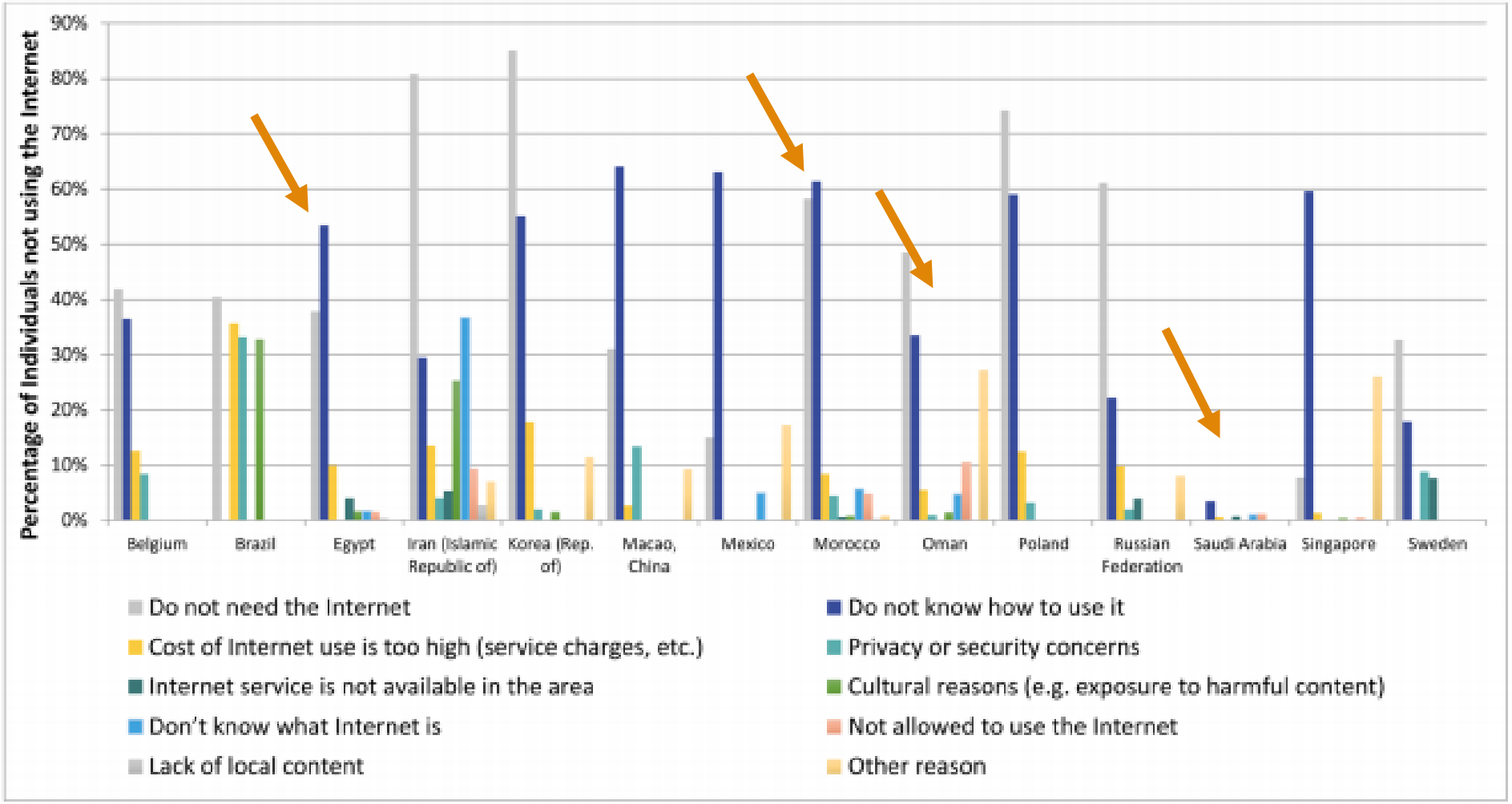


Source: ITU, 2017b, p. 19.

Note: Estimates. The gender gap represents the difference between the internet user penetration rates in for male and female relative to the internet user penetration rate for males, expressed as a percentage. CIS refers to the commonwealth of independent States.

Digital Gender Gap – Regional Observations

Proportion of individuals not using the Internet, by type of reason, 2016



Note: Data for Iran (Islamic Republic of) and Singapore refer to 2015 and 2017, respectively.
Source: ITU.

Digital Gender Gap – Regional Observations

Availability of the cost of accessing and using ICTs and the women's limited income;

lower levels of technical literacy and digital skills

Scarcity of relevant content; illiteracy and language barriers;

Lower levels of education

Socio-cultural norms

Lack of time as a result of women double workload of domestic and productive activities and

Lower rates of participation in technology education and professions

Others

Gender Gap – National

Arab Countries

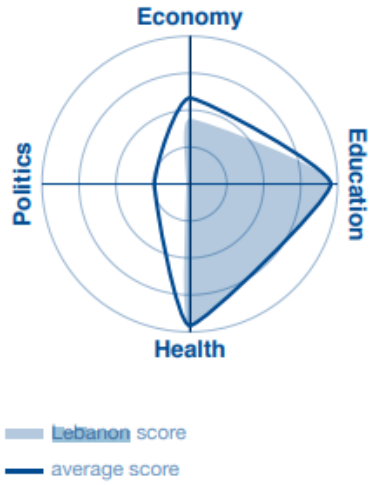
Country	Rank		Score
	Regional	Global	
United Arab Emirates	2	120	0.655
Kuwait	3	122	0.650
Tunisia	4	124	0.644
Algeria	6	132	0.634
Bahrain	7	133	0.629
Egypt	8	134	0.629
Qatar	9	135	0.629
Jordan	10	138	0.623
Mauritania	11	141	0.614
Morocco	12	143	0.605
Oman	13	144	0.602
Lebanon	14	145	0.599
Saudi Arabia	15	146	0.599
Syria	17	150	0.567
Iraq	18	152	0.530
Yemen	19	153	0.494

Lebanon ranks 12th among the reported Arab countries (16) and 14th among the reported countries in the MENA region

Lebanon

rank
out of 153 countries **145**

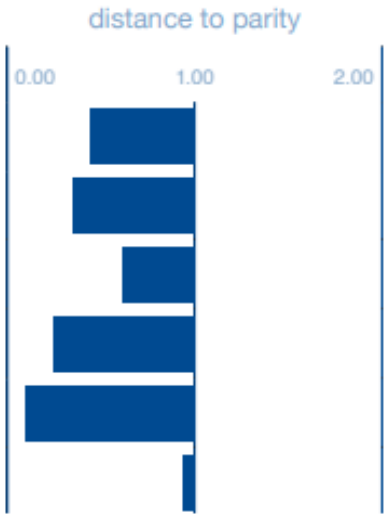
score
0.00 = imparity
1.00 = parity **0.599**



	2006 score		2020 score	
Global Gender Gap Index	**n/a**	**-**	**145**	**0.599**
Economic participation and opportunity	n/a	-	139	0.442
Educational attainment	n/a	-	111	0.964
Health and survival	n/a	-	124	0.967
Political empowerment	n/a	-	149	0.024

Gender Gap – National

	rank	score	avg	female	male	f/m
Economic participation and opportunity	**139**	**0.442**	**0.582**			
Labour force participation rate, %	142	0.345	0.661	26.3	76.3	0.34
Wage equality for similar work, 1-7 (best)	90	0.619	0.613	–	–	4.33
Estimated earned income, int'l $ 1,000	140	0.250	0.499	4.6	18.5	0.25
Legislators, senior officials and managers, %	144	0.092	0.356	8.4	91.6	0.09
Professional and technical workers, %	86	0.933	0.756	48.3	51.7	0.93



Educational attainment	**111**	**0.964**	**0.954**			
Literacy rate, %	94	0.963	0.899	93.3	96.9	0.96
Enrolment in primary education, %	133	0.938	0.757	–	–	-
Enrolment in secondary education, %	1	1.000	0.954	51.2	48.8	1.05
Enrolment in tertiary education, %	1	1.000	0.931	–	–	-

Estimates show that women's employment in Lebanon was set to fall by 14-19% as a result of current economic contraction rates. These numbers will deepen as a result of the August blast. *(UN-Women, June 2019)*

Gender Gap – National

SELECTED CONTEXTUAL DATA

General Indicators	female	male	value
GDP, US$ billions	–	–	56.37
GDP per capita, constant '11, intl. $ 1000	–	–	13.05
Total population, million people	3.41	3.45	6.90
Population growth rate, %	-0.09	-0.02	-0.05
Population sex ratio (female/male), female/male ratio	50.29	49.71	1.01

Work participation and leadership	female	male	value
Labour force, million people	0.30	0.87	0.26
Unemployed adults, % of labour force (15-64)	10.23	8.80	1.16
Workers employed part-time, % of employed people	n/a	n/a	n/a
Gender pay gap (OECD only), %	–	–	n/a
Proportion of unpaid work per day, female/male ratio	n/a	n/a	n/a
Advancement of women to leadership roles, 1-7 (best)	–	–	4.13
Gender parity in tech roles, 1-7 (best)	–	–	3.71
Boards of listed companies,% board members	n/a	n/a	n/a
Firms with female majority ownership, % firms	5.30	94.70	0.06
Firms with female top managers, % firms	4.40	95.60	0.05

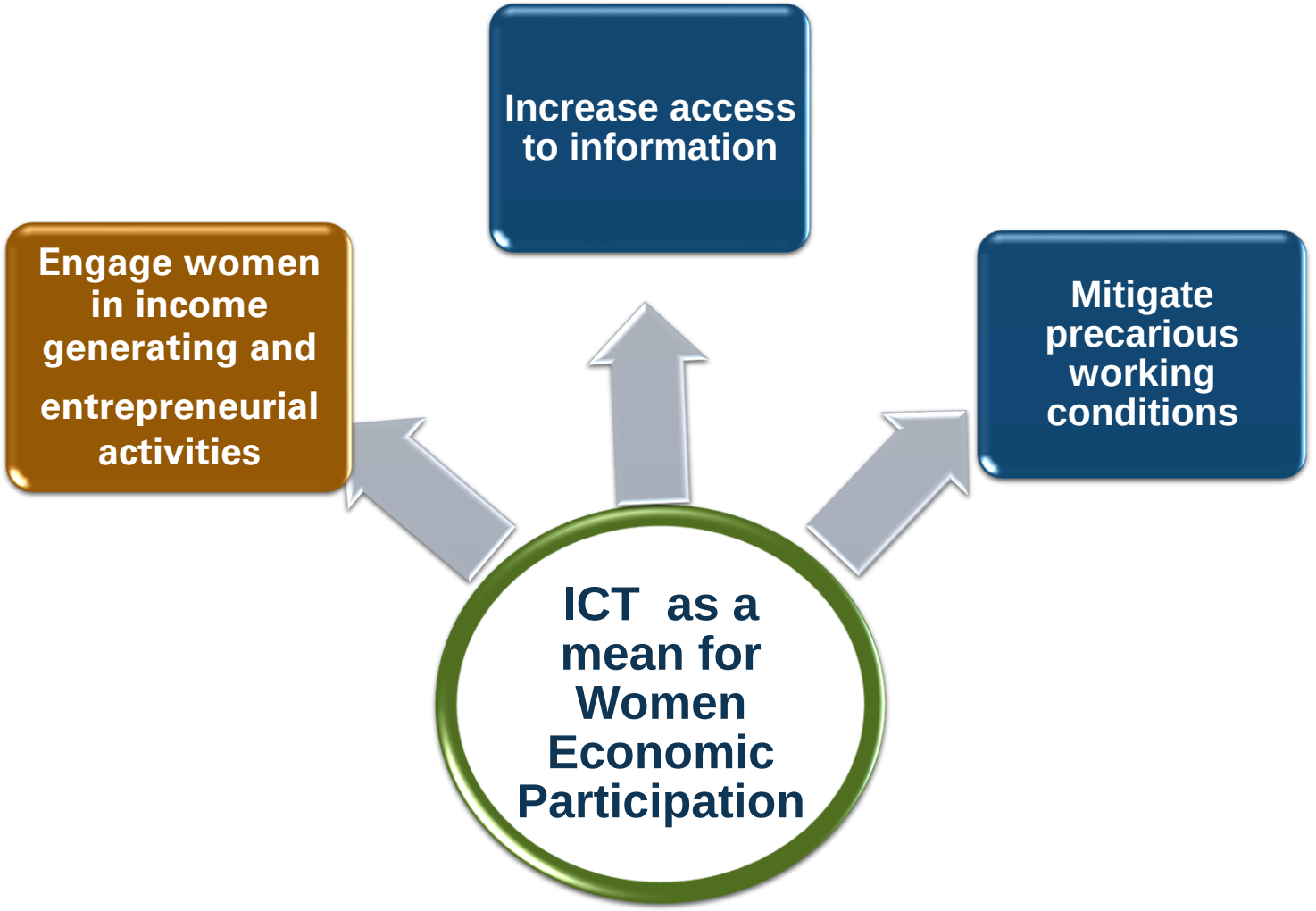
Access to finance	female	male	value
Right to hold a bank account & get credit, 0-1 (worst)	–	–	0.25
Inheritance rights for daughters, 0-1 (worst)	–	–	0.75
Women's access to land use, control & ownership, 0-1 (worst)	–	–	0.50
Women's access to non-land assets use, control & ownership, 0-1 (worst)	–	–	0.25

Education and skills	female	male	value
STEMS, attainment %	18.03	30.34	0.59
Agri., Forestry, Fisheries & Veterinary, attainment %	0.52	0.46	1.12
Arts & Humanities, attainment %	16.10	8.16	1.97
Business, Admin. & Law, attainment %	30.81	44.82	0.69
Education, attainment %	7.59	1.71	4.45
Engineering, Manuf. & Construction, attainment %	5.99	20.68	0.29
Health & Welfare, attainment %	14.31	7.19	1.99
Information & Comm. Technologies, attainment %	1.12	3.25	0.34
Natural Sci., Mathematics & Statistics, attainment %	10.92	6.41	1.70
Services, attainment %	0.86	0.60	1.44
Social Sci., Journalism & Information, attainment %	11.77	6.69	1.76
Vocational training, attainment %	n/a	n/a	n/a
PhD graduates, attainment %	n/a	n/a	n/a

Outline

- **Gender and ICT:** International Frameworks
- **Gender Gap**: Global, Regional and National
- **Women Economic Participation:** Regional Observations
- **Digital Gender Gap:** Status and Observations
- **Women Economic Participation Opportunities and ICTs**
- **Recommendations**

Women Economic Participation **Opportunities** and ICTs



Women Economic Participation **Opportunities** and ICTs

Engage women in income generating and entrepreneurial activities

- **Bangladesh**
  - **Plant Doctor programme**, started by a housewife who established a business advising Bangladeshi farmers over a mobile phone on their crop production.

- **Southeast Asia**
  - Virtual network "**www.ehomemakers.net**" which promotes work from home, telework and the running of Small Office-Home Office (SOHO) businesses.
    - It supports more than 10,000 women in Southeast Asia to work from home, hosting an e-community of homemakers and "homepreneurs"
    - Raises the profile of unpaid and home-based work in Malaysia by advocating for reduction of exploitation in the homeworking sector and the inclusion of homeworking in the formal sector

- **Indonesia**
  - Ministry of Women's Empowerment and Child Protection for Gender Mainstreaming in the Economy is promoting **entrepreneurship for mothers and housewives** through use of the internet to increase household income. Platforms such as Facebook are viewed as more efficient and effective for microenterprise development than traditional media

Women Economic Participation **Opportunities** and ICTs

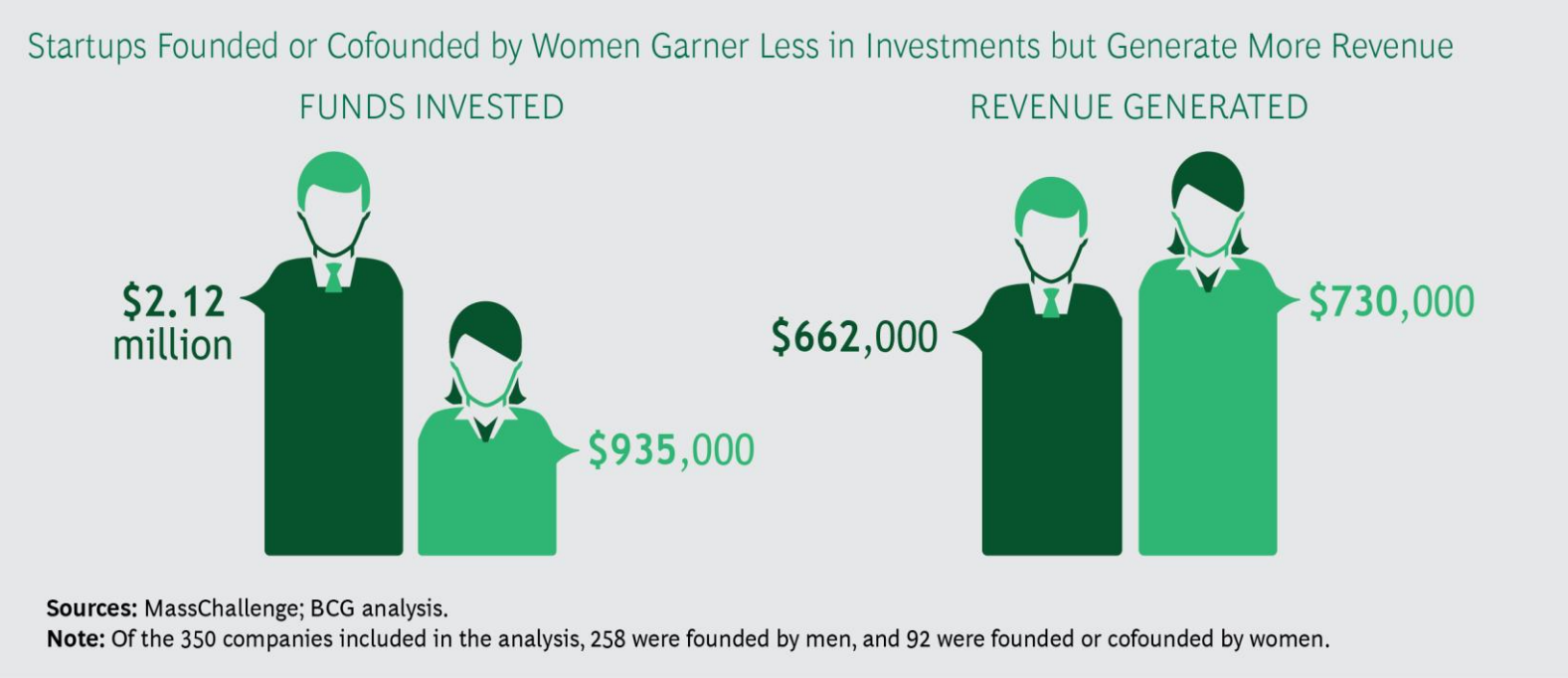
Engage women in income generating and entrepreneurial activities

- **Libya**
  - the "**Yummy" food delivery application** in Libya delivers homemade meals cooked by women in their own kitchens.
    - It connects women who cook at home with customers wanting to order food. It offers anonymity options for the cooks and allows women to take food orders from men without having to speak to them.
    - Over 300 cooks participated at the time of start-up in late 2018
- **Morocco**
  - **Women Weavers in Morocco**" project enables women weavers from rural Moroccan villages to sell hand-made rugs directly over the internet, thus maximizing profits.
    - About 50 women of all ages participate in the project and determine their own prices for the rugs, pillows, and wall hangings in traditional local designs.
- **Bahrain (Entrepreneurship)**
  - the Ministry of Industry, Trade and Tourism launched a new initiative in 2017 called "**SIJILI**" to register establishments that do not have a fixed address and legalize their presence. The owners of these establishments function remotely from different locations without a specific address using ICTs.
  - The most important added value is that this initiative provides flexibility to the entrepreneurs, legalizing the business' status and allowing it to sign contracts with companies that require a commercial record. By the end of 2017, 238 women had benefited from this programme and registered virtual establishments.

Women Economic Participation **Opportunities** and ICTs

Engage women in income generating and entrepreneurial activities

Entrepreneurship – Global Observation



However….In the Arab region, recent statistics show that **1 in 3 start-ups is founded or led by women** – a higher percentage than in Silicon Valley.

- While men were almost twice as likely as women to be starting or running a new business in Lebanon in 2018, **Lebanon had by far the highest level of women-led start-ups in the MENA region. More than 1 in 6 women in Lebanon were starting or running a new business**

Women Economic Participation **Opportunities** and ICTs

Engage women in income generating and entrepreneurial activities

Gender and Entrepreneurship: Levels of Male and Female TEA (%) across MENA countries in 2018

	MALE TEA(TM)	FEMALE TEA (TF)	MALE OPPORTUNITY (%TEA)	MALE NECESSITY (%TEA)	FEMALE OPPORTUNITY (%TEA)	FEMALE NECESSITY (%TEA)	TM-TF	TF/TM
EGYPT	14.12	5.35	48.4	47.2	45.0	48.6	8.77	0.38
TURKEY	20.00	8.39	73.6	18.3	76.7	11.4	11.61	0.42
IRAN	12.94	6.45	59.0	39.6	65.0	29.9	6.49	0.50
MOROCCO	9.16	4.26	62.7	32.9	68.3	27.7	4.90	0.47
LEBANON	31.28	17.44	63.3	36.4	64.3	35.7	13.84	0.56
SAUDI	14.75	8.50	73.6	26.0	59.6	39.1	6.25	0.58
UAE	10.97	10.14	73.9	20.3	73.9	21.4	0.83	0.92
QATAR	8.56	8.36	73.1	16.7	78.7	15.8	0.20	0.98

Venture capital is still nascent in most Arab countries, where there is a notable lack of sizeable innovation ecosystems. Relative to GDP, **Lebanon** and, to a lesser extent, the UAE and Tunisia **are the three regional leaders in venture capital.**

Gender and Entrepreneurship Levels of Male and Female Total early stage Entrepreneurial Activity (% of adults), Lebanon 2015-2018

	TEAM%	TEAF%	TEAM - TEAF	TEAF/TEAM
2018	31.3	17.4	13.8	0.56
2017	28.8	19.8	9.0	0.69
2016	26.2	16.1	10.2	0.61
2015	35.7	24.6	11.0	0.69

Source: GEM National Report for Lebanon, 2015-2018

Women Economic Participation **Opportunities** and ICTs

Engage women in income generating and entrepreneurial activities

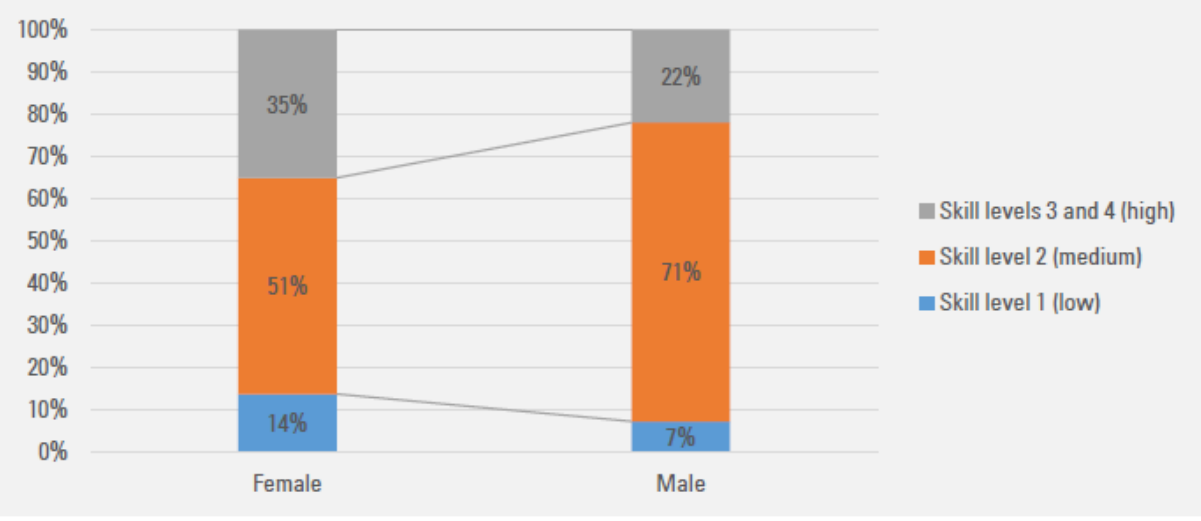
- This is a critical resource for regional growth when the skills needed in future jobs are considered. Social interaction, communication and empathy are all social skills at which women excel and can lead the **region's workforce towards closing the gender gap, especially when coupled with required technical skills**.

- This can be accelerated if the proper support systems are in place locally. One such example is :
  - **the All Girls Code initiative in Lebanon, providing mentorship and networking opportunities.**
  - **Another larger initiative is the Women in Technology for the Middle East and North Africa.**

- If this trend continues, ICTs may contribute to women's economic empowerment, through online platforms that can increase their income and reach new markets both within and outside of their countries.

Women Economic Participation **Opportunities** and ICTs – Future Impact

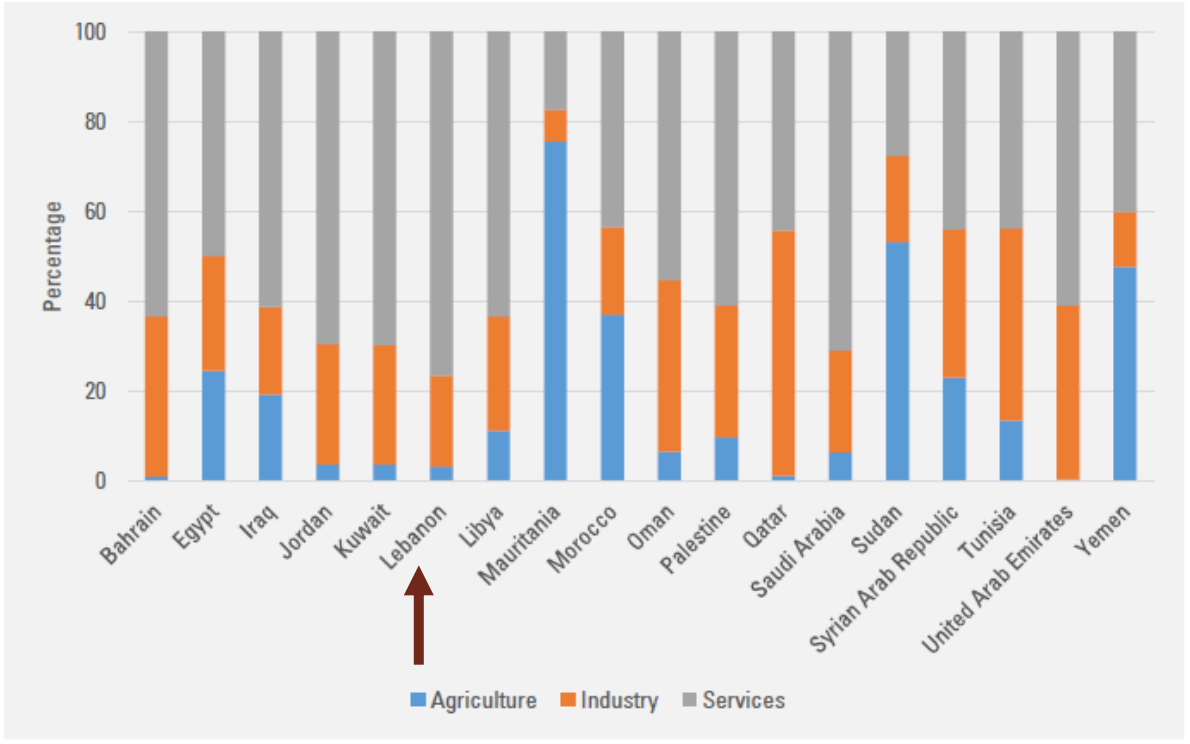
Distribution of Arab jobs per skill level per sex



Source: International Labour Organizations, ILOSTAT database.

(a) Low skill: lower secondary or primary education;
(b) Medium skill: post or upper secondary education;
(c) High skill: first or second stage tertiary education.

Percentage of employment per sector, 2018



Source: UNdata.

- One regional study estimates that the potential for automation to replace activities is 55% for jobs held by high school graduates, and 50% for workers without high school certificates. **This potential replacement drops to 22% for jobs held by graduates with bachelor degrees or higher.**

- New jobs require skills in perception and manipulation, creative intelligence, and social intelligence

Outline

- **Gender and ICT:** International Frameworks
- **Gender Gap**: Global, Regional and National
- **Women Economic Participation:** Regional Observations
- **Digital Gender Gap:** Status and Observations
- **Women Economic Participation Opportunities and ICTs**
- **Recommendations**

Recommendations…

- Improve affordability of digital technologies in the Arab region and promote gender-inclusive digital access (mainstream ICT literacy, capacity development programmes,
- Overcome normative barriers and increase online safety of women and girls in the Arab region (STEM education and ICT related jobs)
- Build an enabling and conducive environment to advance women's empowerment in the Arab region
- Universities must put more effort into actively recruiting women to STEM fields, both as students and faculty members. Closing the gap at the faculty level is key to the success of recruitment and retention of women students because of the need for role models.
- Enhance entrepreneurial activity and ensure equal access to opportunities and government support.
- Remove obstacles to women in leading 4IR applications and development: Future skills are natural strengths that women possess. This might be an opportunity to close the gender gap in the region economically and socially

Economic and Social Commission for Western Asia

Thank You

UNITED NATIONS
الاسكوا
ESCWA

Shared Prosperity **Dignified Life**

Sukaina Al-Nasrawi, PhD
Social Affairs Officer,
Smart, Safe and Resilient Arab Cities Project Lead
Gender Justice, Population and Inclusive Development
al-nasrawi@un.org