

The History and Opportunities for Women in Technology in South Korea

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My children's great grandmother on their father's side lived to be 103. She was considered the original "tiger lady" by many, as her story of survival as a young mother escaping North Korea with little more than the clothes on her back just as the Korean War began, to subsequently become a millionaire businesswoman, was legendary. She told me the story of her life once, revealing that she had "walked to South Korea with my son on my back from the North. Started selling food from a street cart. Made some money, saved a lot, loaned the money to others, earned interest on the money loaned, made more money, saved more money, bought some land, then some buildings, became a landlord, sold the buildings, put the money in the bank. Then the country went bankrupt and the International Monetary Fund came in. I don't have as much as before but that's okay, the country recovered." Being a young, single mother during the 1950s in a war-torn country was difficult enough. However, she did not shrink in the face of that adversity. Instead, it made her stronger and she learned to not just survive but thrive. She was incredibly shrewd with her finances and understood how to leverage them, loaning money to would-be starlets and other entertainers, backing them in their careers when others would not, and charging a premium interest rate for that support. Her grit, sheer tenacity, and fearlessness to hold her own is something I will always respect. She was one of the smartest and most business-savvy women I have ever known, and until the time of her death, she still held a tight rein on all of her finances.

Women have often upheld the economy through micro-businesses and makeshift markets in most developing countries, and that is what Korea was just 70 years ago. A comparison point in today's world would be Cambodia in the late 1990s and early 2000s with their street-food vendor carts, primarily operated by women and clothing stalls, à la "the Russian Market" in Phnom Penh. The Korean equivalent would also be the street-cart vendors that I remember, selling ppobki (뽑기), a sugar-and-baking-soda concoction that you would take the shape out of . . . if you took it out in one piece, you would get a free sweet. Others were the sora (소라), a small sea snail steamed to perfection, and bundegi (뽕데기), fried pupa that which vendors would hawk

as they went down the street for kids and adults to come out for the treats. The not-so-pleasant vendor service I remember was the latrine-contents collector. It was the late 1960s, and we still had outhouses then, actually in some homes, well into the 1970s and 1980s, and I remember as they came down the street, more because of the stench than anything else. The women worked beside the men. Silently and quickly.

My maternal grandfather was a textile manufacturer and owned his business which he had had taken from him twice, once during the Japanese annexation of Korea and the second time by the North Koreans when they had pushed their way into Seoul. My father was a serial entrepreneur, born in Japan (his mom and dad had followed the opportunities of work and immigrated to Japan from Korea during the 1930s), but he was raised in Korea.

These are just the stories of my family, and yet I am positive that these are also the stories of many South Koreans born in the 1930s and 40s. My parents' generation are witnesses to the tremendous transformation the country has undergone in the last 70 years, from war-torn country to developing nation, to thriving first-world country.

The Rise of an Economic Powerhouse

South Korea in 1960 was one of the poorest and most underdeveloped countries in the world, with a gross domestic product (GDP) equivalent to that of Ghana (Campbell, 2012, p. 2):¹ only \$155.60 per capita in comparison to Japan's \$479 (World Development Indicators - Google Public Data Explorer).² However by the mid-1990s it was Asia's fourth-largest economy and the twelfth-largest in the world (Campbell, 2012, p. 2).³ In 2015, South Korea's GDP per capita was about USD 27,500, and astonishing figure that means it is the eleventh-largest economy in the world (World GDP Ranking 2015 | Data and Charts - knoema.com).⁴ The country's meteoric economic rise within that 35-year period is often attributed by its people to their focus on and investment in education, scientific research, infrastructure and the government subsidized *chaebols*—public-private family-owned, industrial conglomerations such as Samsung, LG and Lotte. All of this has been maintained and strategically grown through policy and active future visioning (Campbell, 2012).⁵

South Korea's intentional focus on creating overall capacity on the frontiers of science and technology beginning in the 1960s was almost prescient, and has been critical to its current success. It approached the development of science and technology from two perspectives—one led by the government via public institutions of higher education and state-run research facilities,

and the second via the research and development efforts of the *chaebols* and other medium-sized companies (Campbell, 2012, p. 2).⁶ This combination proved to be highly effective. While there are a variety of theories regarding why Korean *chaebols* have been successful while other countries' efforts in this area have failed, there seems to be some agreement amongst scholars that the primary reason is that in Korea, to this day, these are tightly held, family-owned businesses at their core (Cho, 2015).⁷

While there is no doubting that *chaebols* played a critical role in South Korea's development, appropriate credit also needs to be given to the government in its strategic policy-making and investments in developing the technology and science sector. Between 1961 and 1993, the state created two pivotal ministries, the Ministry of Science and Technology and the Korean Institute of Science and Technology, as well as a university, the Korean Advanced Institute of Science, the first institutions in South Korea⁸ to focus primarily on science and engineering (Campbell, 2012, p. 3).⁹ Beginning in 1999, the government made heavy investments, to the tune of \$3.5 billion, in just 23 projects concentrating on fields such as bioscience, nanotechnology, and space technology (Campbell, 2015).¹⁰ The resulting yield on these investments has made Korea one of the leading IT nations in the world for the past 17 years, and number one among 152 countries on the ICT Development Index in 2011 (Campbell, 2012, p. 4).¹¹ Although monetary investment has been critical, the government also understood the value of human capital and has steadily recruited foreign IT researchers to work in Korea since 2001 via a "Gold Visa" (Campbell, 2012, p. 5).¹² These types of efforts have diversified not only the industries and business, but also the country itself.

South Korea's rise to economic success has not been without its financial challenges. However, it has risen above them, and quickly. The 1997 Asian financial crisis spiraled South Korea into national bankruptcy and the South Korean people reacted with a personal "deep sense of failure, anger, and disgust" (Lee, 2011, p. xiii).¹³ Their response was "The Gold Collection Campaign" amongst its citizens, which called for national unity and personal involvement in bailing the country out of debt by collecting gold and jewelry to be donated to the national bank to alleviate some of the financial pressures in the country (Lee, 2011, p. 114).¹⁴ The campaign was launched by the Korean Broadcasting System and the Housing & Commercial Bank of Korea on January 5, 1998, with six finance companies participating. The outcome: **3.5 million Korean citizens**, representing 23% of the 15 million total households at the time **donated** an astounding **226 tons of gold and jewelry valued at**

US\$2.2 billion by March 14 of that same year (Lee, 2011, p. 115).¹⁵ Approximately three tons of gold, valued at \$29 million, was bought by the central bank to add to its reserves, and the remainder was exported to pay off debt (Lee, 2011).¹⁶

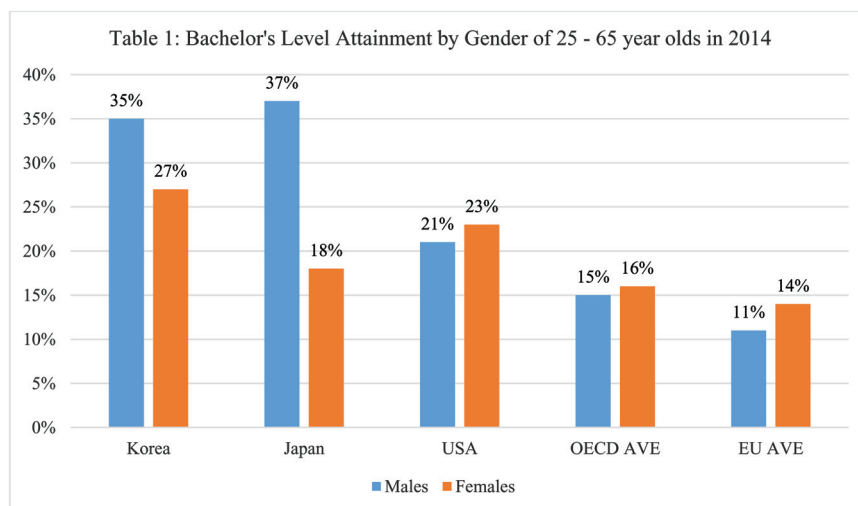
Educated, Digitally Connected, and Entrepreneurial

South Korea today has 50.8 million people occupying approximately 100,000 square kilometers or 38,623 square miles, and thus ranks as the 23rd most densely populated country in the world (“Population density - Country Comparison,” 2014).¹⁷ It is a very small country geographically, but its people are driven, tenacious and entrepreneurial.

The country has one of the most educated societies in the OECD, with 98% of 25- to 34-year-olds in the country graduating from high school. As Table 1 shows, it is also one of the best-educated countries in the number of 25- to 64-year-olds who hold a bachelor’s degree (OECD, 2015).¹⁸

Its GDP is currently \$1.8 trillion, with 3.3% growth, and it is ranked 27th in the world for economic freedom (71.7) in comparison to the 75.4 and 11th-place ranking for the United States (Heritage Foundation, 2016).¹⁹

South Korea is also one of the most digitally connected societies in the world (Jack, Cho, Yang, Jeon, & Ryu, 2015)²⁰ and boasts over 5.56 million businesses, 37.6% of which were led by women in 2014 (“KOSIS KOREAN Statistical Information Service,” n.d.).²¹



Despite the progress and the changes, one can still see the remnants of years past: the small corner markets, stores, eateries, restaurants, all individually owned and operated, most often by women. While much of this is now disappearing as a result of the big-box department stores, vestiges still remain, in subway stations and suburbs.

As in decades past, necessity has pushed women to become entrepreneurs (Jiang & Wang, 2014).²² The traditional cultural context which has often relegated women to duties of house and home are being challenged. However, South Korea is still a country of contradictions. Despite the fact it elected a female president in 2012, even before the United States, and though women are now an integral part of many businesses, the country has the largest gender wage gap of any OECD nation, at 36.6% in comparison to Japan's 26.6% and 17.9% for the United States (OECD, 2015).²³ Additionally, while 55.1% of all Korean women work, it is still far fewer than Japan's 63.8% and 62.9% in the United States. The OECD average is 57.9% (OECD, 2015).²⁴ Further the working conditions are a constant challenge, given that South Korea has the longest working day of any OECD country. That means that young women are often forced to choose whether they will stay in the business world or stay at home with their children (Song, 2013).²⁵



Conditions for Success

It is clear that, as South Korea continues to develop, women will become more dominant in every arena. In cultural terms, it is said that, these days, parents prefer to have daughters rather than sons. It was once believed that you would give your daughters away to the husband's family, and certainly this was the practice just 50 years ago; but these days, this is said of the boys, not the girls. Parents are finding that daughters are the ones keeping the sanctity of family ties and taking care of them in their old age. Sons are now believed to be absorbed into the wife's family and the wife is the dictator of all things within the home especially as more women contribute financially to the household.

The land of the morning calm has certainly come a long ways. But then again, the 5,000-year history of its people and institutions surviving amidst giant countries such as China, Mongolia, and Japan speaks volumes about the tenacity of its people and their ability to survive and thrive through adversity. And, while much credit has traditionally been given to men, I believe the instinct for survival and perseverance has been passed on through the women who have often persisted quietly and consistently, whispering into the ears of their children, just as my mother did with us. Her message was always the same, whether it was to her sons or her daughter: "You can fail only if you have not tried to do your very best and have not given it everything you have to give." She had an additional message for me, which was also in sync with my father's belief. That was unusual for a man of his generation: "Girls can do anything boys can do; *you* were the primary reason why I worked so hard to come to the United States. Here, there is the opportunity to become whatever it is you want to be, even though you are a girl."

My mother will be 78 years old this year. To look at her, most would never believe that she's just two years shy of 80. Despite, or maybe because of, the era in which she was born, she sought an education, knowing this was the only way to make her dream of coming to the United States a reality. She did realize that dream, coming to the United States in 1971 as part of the United States program to bring nurses over. She raised three children on a nurse's salary while my father continued his serial entrepreneurial ventures from selling pens with clocks in them to owning a liquor store and drive-thru dairy to finally becoming a dry cleaner and president of the National Korean-American Dry-Cleaners Association. Working the night shift, she took care of and was available to us by day. And somehow she managed to raise three relatively well-adjusted adults, all of whom are feminists like her, even though

we are two boys and a girl. Again, this is just one story, but I know there are thousands of others, for there were thousands of young women who embarked on this venture as nurses and came to the United States, with young families in tow. They started new lives in a new land without knowing the language or the culture. They were fierce and unafraid. They were unapologetic for not fitting the traditional mold and certainly not afraid to break it. This is who we are descended from. This is why South Korea will continue to thrive and adapt in this world of ever-changing economies. Women are nothing if not adaptable and collaborative.

References

- ¹ http://www.brookings.edu/~media/research/files/papers/2012/9/12%20korean%20technology%20campbell/cti_19%20_korea_tech_paper_formatted.pdf
- ² <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?end=1960&locations=KR-GH-JP&start=1960&view=bar>
- ³ http://www.brookings.edu/~media/research/files/papers/2012/9/12%20korean%20technology%20campbell/cti_19%20_korea_tech_paper_formatted.pdf
- ⁴ <https://knoema.com/sijweyg/gdp-per-capita-ranking-2015-data-and-charts>
- ⁵ http://www.brookings.edu/~media/research/files/papers/2012/9/12%20korean%20technology%20campbell/cti_19%20_korea_tech_paper_formatted.pdf
- ⁶ http://www.brookings.edu/~media/research/files/papers/2012/9/12%20korean%20technology%20campbell/cti_19%20_korea_tech_paper_formatted.pdf
- ⁷ <http://www.cnet.com/news/the-chaebols-the-rise-of-south-koreas-mighty-conglomerates/>
- ⁸ <http://www.topuniversities.com/universities/kaist-korea-advanced-institute-science-technology/undergrad>
- ⁹ http://www.brookings.edu/~media/research/files/papers/2012/9/12%20korean%20technology%20campbell/cti_19%20_korea_tech_paper_formatted.pdf
- ¹⁰ http://www.brookings.edu/~media/research/files/papers/2012/9/12%20korean%20technology%20campbell/cti_19%20_korea_tech_paper_formatted.pdf

- ¹¹ http://www.brookings.edu/~media/research/files/papers/2012/9/12%20korean%20technology%20campbell/cti_19%20_korea_tech_paper_formatted.pdf
- ¹² http://www.brookings.edu/~media/research/files/papers/2012/9/12%20korean%20technology%20campbell/cti_19%20_korea_tech_paper_formatted.pdf
- ¹³ <https://www.openknowledge.worldbank.org/bitstream/handle/10986/2280/594620PUB0REPL10Box358282B01PUBLIC1.pdf?sequence=1>
- ¹⁴ <https://www.openknowledge.worldbank.org/bitstream/handle/10986/2280/594620PUB0REPL10Box358282B01PUBLIC1.pdf?sequence=1>
- ¹⁵ <https://www.openknowledge.worldbank.org/bitstream/handle/10986/2280/594620PUB0REPL10Box358282B01PUBLIC1.pdf?sequence=1>
- ¹⁶ <https://www.openknowledge.worldbank.org/bitstream/handle/10986/2280/594620PUB0REPL10Box358282B01PUBLIC1.pdf?sequence=1>
- ¹⁷ <http://www.indexmundi.com/g/r.aspx?v=21000>
- ¹⁸ Education at a Glance 2015: OECD Indicators, OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/eag-2015-en>
- ¹⁹ <http://www.heritage.org/index/country/southkorea>
- ²⁰ ASEAN CHI Symposium' 15, April 19–19 2015, Seoul, Republic of Korea ACM 978-1-4503-3625-3/15/04. <http://dx.doi.org/10.1145/2776888.2780365>
- ²¹ http://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1BD0004&conn_path=I2&language=en
- ²² “Entrepreneurial Intention and Outcome Expectancy: Evidence from South Korea and China”, Contemporary Management Research, Vol. 10, No. 3, pp. 251–270, 2014. Permanent link to this document: <http://dx.doi.org/10.7903/cmr.12012>
- ²³ <https://www.oecd.org/gender/data/genderwagegap.htm>
- ²⁴ <https://data.oecd.org/chart/4A8o>
- ²⁵ <https://next.ft.com/content/046499dc-341f-11e5-b05b-b01debd57852>

Biography



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