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SDGs a major factor for Empowerment by Generation of New Gen Technologies

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ABSTRACT

This piece shows how the SDGs are making people want new technologies to help businesses grow and make sure that entrepreneurs can keep going. Empowering women and achieving SDGs 1, 2, 3, 4, 5, and 17 will help the next generation make new technologies. It is not clear how gender problems, and gender equality in particular, are taken into account, but they can be seen as overarching issues that affect the Sustainable Development Goals (SDGs). To fill in this knowledge gap, this study looks at how gender problems are dealt with in all 16 SDGs except SDG5. To do this, it looks at existing research and case studies, which formed the basis for the new framework and spell out the exact steps that need to be taken to meet each SDG. What does digitization mean for growth and gender? It looks at which countries and, within those countries, what groups of people have benefited the most from the changes brought about by digitalization so far, especially when it comes to e-commerce and better farming technology. As a final addition, a list of suggestions is given for making gender issues more central in achieving the SDGs. In order for development projects to work well, these show that best practices need to be better understood and followed.

Design/methodology/approach: Using a survey of the literature, the paper analyzes the SDG notion. Additionally, primary data was gathered through direct discussions with SHG Heads and interactions with SHG Members. To comprehend the concept's practical implications, a critical method has been used.

Findings: The fundamental pillars of the SDGs include good governance, sustainable socio economic development, no poverty, good health and well-being, high-quality education, gender equality, clean water and sanitisation, industry, and innovations that are derived from the main SDGs.

Research limitations/implications: India has led the way in identifying the various aspects that can be addressed to create a more sincere and sustainable way of living in harmony with the environment, society, and other surrounding factors.

Practical implications: Researchers and practitioners can learn more about the fundamentals needed for the SD agenda from this paper. The study draws lessons from the SDG model that can be used to identify areas in which the seven-pillar model of development requires further improvement.

Keyword: Sustainable Development Goals, Women Empowerment, Entrepreneurship, New Gen Technology

1. Introduction

New technologies have opened up a lot of doors for people, companies, and organizations in areas like data analytics, digital agriculture and manufacturing, and mobile social and commerce. These new technologies may help people learn new things, get better at things they already know how to do, get to a bigger range of goods and services that were only close by before, connect with others at the local, state, and federal levels, and even get a job. Digitalization makes governments more accountable and connects the public and private sectors. This means that governments can now provide faster, better services to people and companies. Digitalization is good for businesses because it can lead to more environmentally friendly ways of making things, higher profits and productivity, and more competition. Because of this, more places may become available. The COVID-19 epidemic has sped up the process of turning society and the business digital. Still, there are still digital differences between rich and poor countries, and new gaps in technology for women could make the ones that are already there even

worse.

If these differences aren't fixed, the possible benefits of digitization for economic and human growth won't reach everyone equally. In fact, they will hurt countries and groups that are already struggling because of globalization and trade even more. The first part of the study gives a quick outline of the SDGs that are causing the digital economy to grow and the benefits it might bring. Then it is taken apart to see what makes it useful for people. It shows that people of different genders, in different cities and rural areas, and in different countries at different stages of SDG growth have different access to and use of digital solutions. It talks about both the specific problems women face and the bigger advantages they will get when they get past these problems and take advantage of the chances that technology brings.

How India's rural women might be empowered by creative, Sustainable Technology

About 300 million women in rural India are left to take care of their families while men move to cities to find work. A group of social scientists has now put out a study that shows how these women can support their families financially by using new technologies that are also good for the environment. The study "Appropriate Technologies for Value Addition in Rural Indian Villages" was written by Chocko Valliappa and Dr. Nirmalesh K. Sampath Kumar, two social scientists, and came out in Springer Nature Switzerland AG. "Smart Villages-Bridging the Global Urban-Rural Divide" is a 511-page book. They found that new science and technology (S&T) solutions that are tailored to the problems rural communities face can give rural women the power to stay in their communities and make money.

Diagram for 17 SDGs

Picture 1. SDGs

2.Literature Review

Some people, like Kularski and Moller, say that the digital gap is caused by not having access to technology (IT) and not knowing how to use it. These two gaps often make each other worse (2012). Without technology, it's hard to learn professional skills, but having technology is pointless if you can't use it. Thystrup (2020) says that the gender digital gap is when men and women don't have equal access to IT infrastructure and learning how to use IT.

Several countries have done a lot to close the digital gap over the last 20 years. On the other hand, technology has only made the gender gap worse, which has been there for a long time. Countries are now promising to close both the gender and technology gaps at the same time. This is because studies show that these gaps make each other worse and that closing one can help close the other.

The World Summit of the Information Society (WSIS) was a two-part UN meeting that talked about and solved problems related to how to use information and communication technologies (ICTs) for growth.2. In 2015, the UN General Assembly passed a resolution calling for the WSIS project and the 2030 Agenda for Sustainable Development to work together closely. The resolution also said that information and communication technology (ICT) could play a big role in achieving many of the SDGs.

It sets up a global structure and stresses the importance of technology in improving economic growth, women's empowerment, international cooperation, and habits that are better for the environment when it comes to production and consumption. There have been efforts to understand how important digitalization is for reducing inequality between men and women and promoting economic and human growth. Their results also show that some countries and groups of people may not be able to gain from the digital revolution if we don't solve the problems that make them unique.

Sustainable Development Goals of the United Nations

The fifth Sustainable Development Goal (SDG) is to achieve gender equality and give all girls and women more power. "Develop the use of enabling technology, specifically information and communications technology, to advance women's empowerment" is a clear and direct way for Target B to explain how ICT is linked to women's empowerment. The "Proportion of people who own a cell phone, by sex" is used to keep track of how far along it is in its finish. SDG 8 calls for steady, inclusive, and long-lasting economic growth, as well as full and useful employment and good jobs for everyone.

Innovation, technical progress, and diversification are all made possible by digitalization. These things all lead to better economic productivity. Not only that, but they can also support creators, make micro, small, and medium-sized businesses (MSMEs) official and help them grow. To reach SDG 9, people should be pushed to come up with new ideas and make things more industrial. Mikro, small, and medium-sized businesses (MSMEs) can join value chains, get access to markets, and use banking services with the help of digital technologies. So, digitalization can help poor and least-developed countries (LDCs) boost their trade, which could help them reach SDG 17: Partnership for Sustainable Development (adapted from Box 1 of UNCTAD 2023) in a big way.

The notion of resources and appropriation and its applicability to the gender digital divide

As more people use digital tools for health, schooling, social issues, and other reasons, new ways of thinking about digitalization and making rules have come about to deal with it.

There are differences in who has access to and uses the Internet, which is linked to social injustice according to the resources and appropriation theory (Van Dijk, 2005).As more people use digital tools for social, health, educational, and other reasons, different ways of thinking about technology and making policies have changed to keep up.

Two researchers who tested the theory say that differences in personal and social status make it harder to get access to many resources, such as money, social networks, and possessions (Deursen & Dijk, 2019). Individual, social, and positional factors affect "appropriation" of the Internet. The digital gap is made worse by differences in age, gender, race, job, and education level, among other things.

People thought that access and availability would help a lot to close the digital gap. From the start of the 2000s until 2015, the goal was to make sure that everyone could get and use new tools and that people would also learn how to use them. In the years since then, technology has had both good and bad effects. Haste speech, video game addiction, hacking, theft, and private data breaches are all bad results. Misleading information and "incorrect informations" can also spread through online platforms. Researchers and policymakers are working on ways to make digital technology easier for people and society to use while also reducing its bad effects (Van Dijk, 2020).

Dijk says that the focus shifted from having access to knowledge and skills to the fact that digital differences still exist even when these things are taken into account. Different levels of schooling and skill affect how people use technology, which in turn makes digital inequality worse. No one can promise that someone will use their smartphone or computer that is connected to the Internet for good or even close to it. People who aren't very educated or good with computers mostly use the Internet to talk to each other and have fun. This limits their ability to learn new things and make money. People with more education and tech skills, on the other hand, are more likely to use the web to improve their careers and personal lives, make connections, and learn new skills. It is also clear that there is a link between the amount of ICT sophistication and the size of the usage gap.

The review focuses on economic self-help groups (SHGs) that provide women with access to collective

financing, such as investment funds, advances, and protection, as well as undertaking or even vocational service. Training in basic skills, business, finance, and labour and exchange group organization creation are all possible components of occupation mediations. Participation in SHGs may lead to women's empowerment because of improvements in income, savings, advance repayments, and skills after women are introduced to group support and social capital through regular gatherings where they obtain resources in the form of capital, training, credit, or advances. Women are empowered by this process to turn their choices into desired actions, altering the norms of spending and saving, and as a result, economic, "political, social, and mental empowerment (subject to boundary, commitment, and setting) are increasing.

Technology & Skills Gaps:

1. Women remain underrepresented in STEM at 28.2% of that workforce versus 47.3% in non-STEM roles.
2. Gender gaps exist in skills like AI, big data and cybersecurity which will be crucial for the future of work.

OBJECTIVES OF THE STUDY

1. To study how SDGs are giving rise to technologies.
2. To study the level of efficiency of implemented technologies towards changes.
3. To study the need of Technology towards completion of SDGs 1, 2,3,4,5,6 and 17.

3.RESEARCH METHODOLOGY

Research Design: Exploratory study that draws off earlier reviews of the literature.

Sources of Data: Secondary sources, such as Government and Media websites, journals, books, and published research, are a major source of data. Out of the 17 SDGs, only SDG 5 is included in the study. Concerning SDG 5, the following nine things can be seen: i. The ratio of male to female births; ii. The wage gap between men and women; iii. Domestic violence; iv. The number of women in leadership positions; v. The percentage of women working; and vi. Family planning.

1. **4.Analysis**

In the analysis section we will discuss the major changes that took place with the changes with introduction of new technologies.

1. **Global number of internet users 2005-2023**

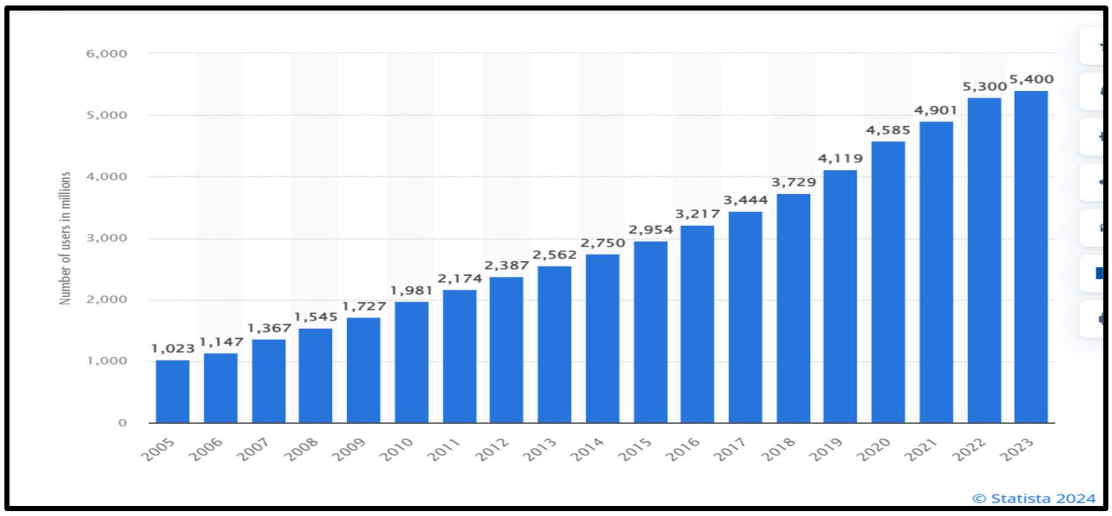
It was thought that there would be 5.4 billion internet users around the world in 2023, up from 5.3 billion the previous year. This number is equal to 67% of the world's population.

2. **Internet access around the world**

People may now use the internet more often and more easily because computers are easier to get to, the world is becoming more modern, and more people are using smartphones. Still, the level of internet penetration is often linked to the current state of communications network development. As of January 2023, there were about 1.05 billion internet users in China. In the US, there were only 692 million people online.

3. **Online activities**

Facebook is the most popular online network because so many people use it. In fact, social networking is one of the most popular things to do online all over the world. About 3.07 billion people used Facebook every month in the fourth quarter of 2023. That's more than half of all internet users in the world. The main reasons people use the internet are to have fun, shop, get help, and stay in touch with family and friends.



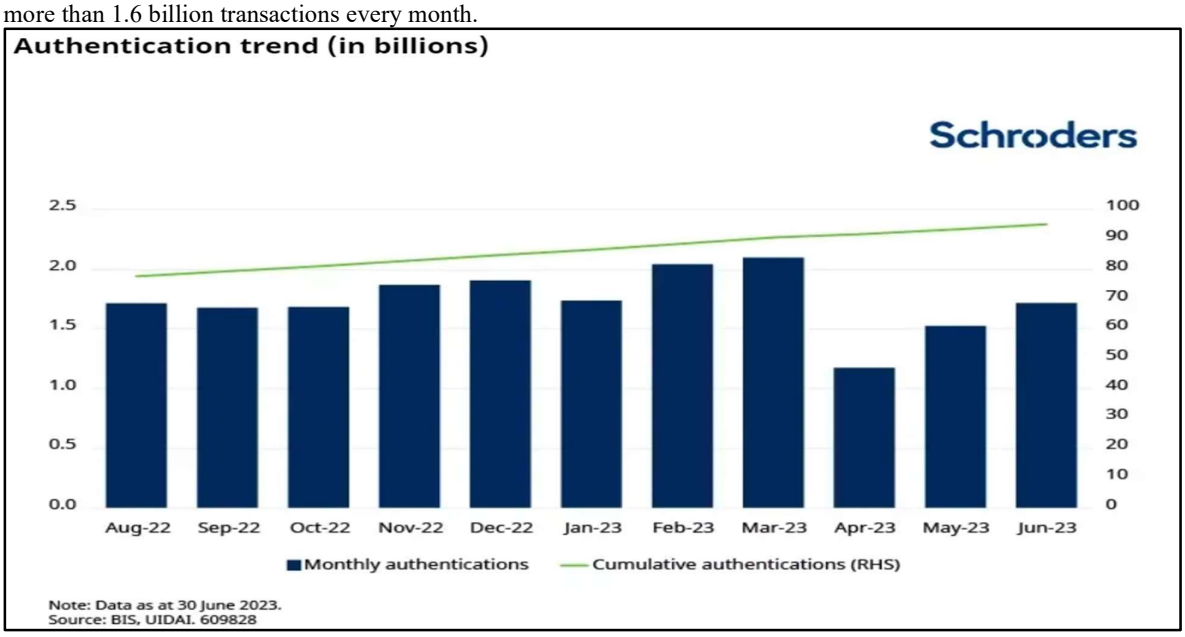
1.1 **Graph 1: Number of internet users worldwide from 2005 to 2023** ***(in millions)***

4. New Era of Indian Economy Through Increase in Technology

The Indian economy has been able to grow faster than other big economies by using technology to its advantage. Society has gotten better and pollution has gone down because of how much the country uses technology. Changes in technology have also had an effect on the capital markets and the possibilities they offer. In light of these new events, this piece looks at how they might change the future path of the Indian economy and financial markets.

5. Banking is essential to formalizing the economy and enabling financial inclusion

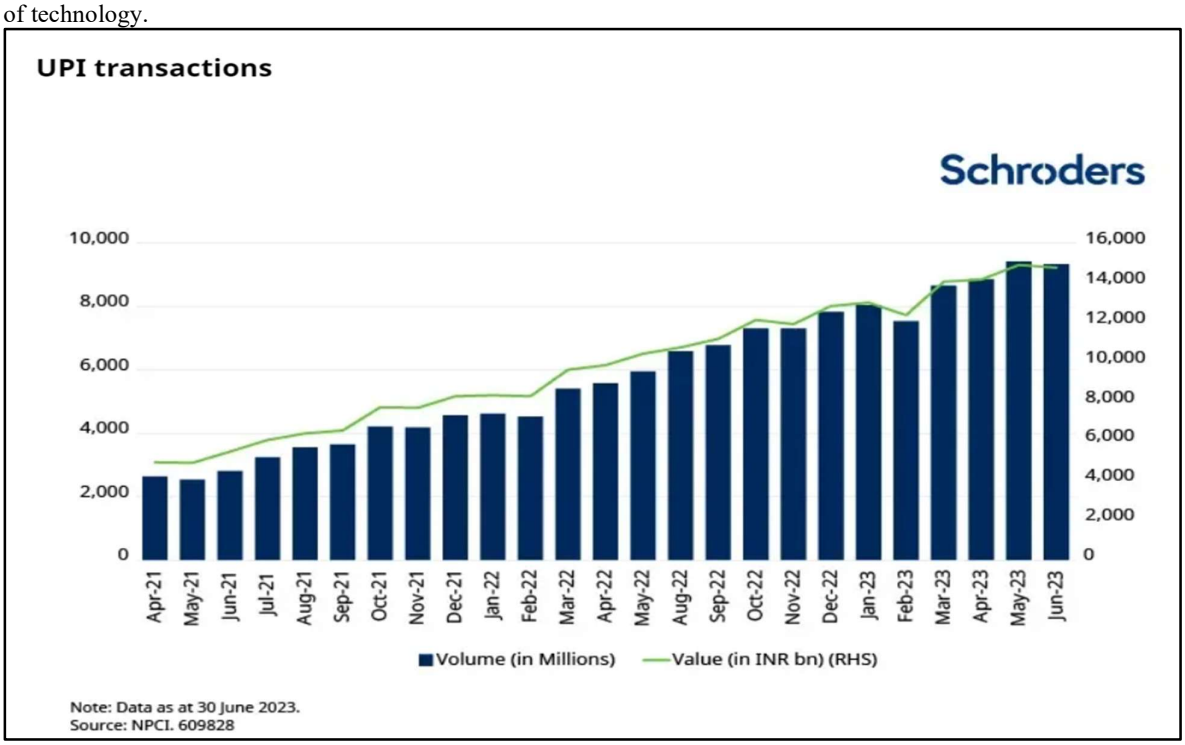
The Indian government says that in 2008, only 25% of people had valid IDs and 25% did not have bank accounts. The first digital system made to check a person's name was Aadhaar, India's one-of-a-kind biometric identification system, which came out in 2010. There are now more than 1.2 billion digital names in India. The system checks more than 1.6 billion transactions every month.



Graph 2

Along with Aadhaar, many more people now have bank accounts thanks to how quickly they are being used by the government. The Bank for International Settlements (BIS) says that over 470 million Indian people opened bank accounts between 2011 and 2017. Being open to everyone changed a lot with this rise. From 2011 to 2017, the number of men and women with bank accounts fell from 17% to 6%. The numbers of people who were working and those who were not working also went down, from 18% to 9%. Only 10% of people had at least a secondary education, down from 29%, and only 14% of people from wealthy homes, down from 14%. There are

no longer any gaps that are bigger than the average around the world.
There were 27% more Indians aged 15 and up with a bank account in 2017 than there were in 2014. That's up from 53% in 2014. The BIS says that it would have taken 47 years for 80% of adults in India to have bank accounts if the country had only used traditional growth tactics. The work was done in seven years by India with the help of technology.



Graph 3: UPI Transactions

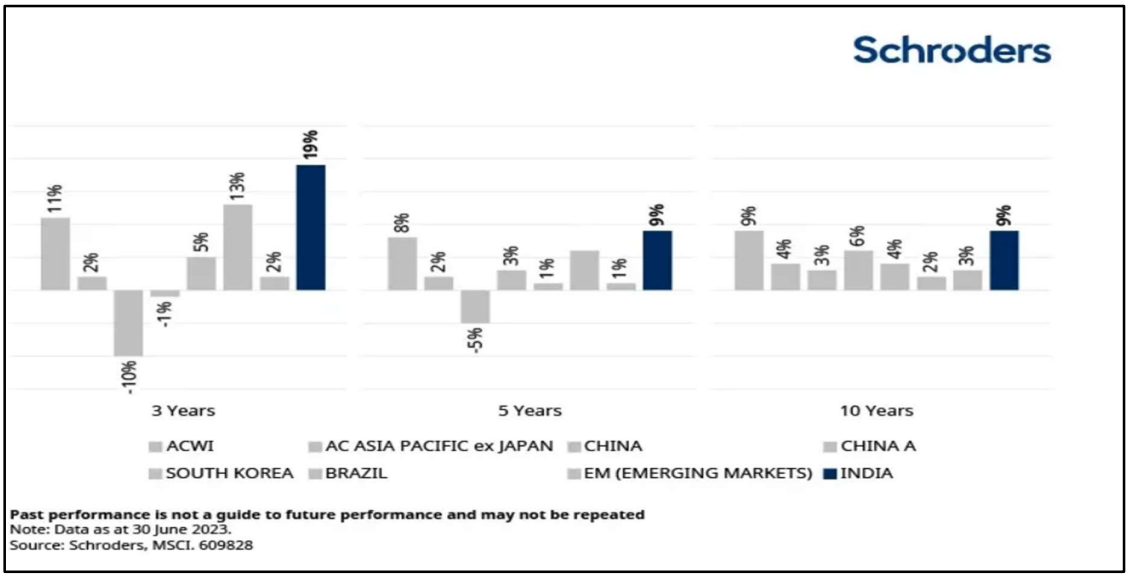
Still, making more people able to use banking services comes with some risks. The chance of fraud and how easy it is to happen are both raised by customers' lack of understanding and trust in technology. So, it's important to put both educating consumers and actively looking for scams at the top of the list. When people use digital banking services, they need to keep learning how to use and protect their personal information.

In the past few years, India's rail and road networks have gotten a lot better, which shows how technology can help improve real infrastructure. To give you an example, the roads connecting the northeastern parts of the country are being fixed up so that journey times can be cut from many days to a few hours. An industrial corridor is being built between Delhi and Mumbai to cut the journey time from twenty hours to twelve. One good thing about this road network for the environment is that it is being made in part with recycled trash.

6. Revolutionary Advances in Technology helping the stock markets

India's stock markets have grown at the same time that the country's economy has grown. It's not just new technologies that can be affected by market infrastructure. This is changing how Indians spend. Indians are less interested in fixed savings, gold, or real estate these days and more interested in stocks. Since 2016, "Systematic Investment Plans" monthly contributions to equity-oriented mutual funds have grown a lot and now amount to about $2 billion a year.

Over long periods of time, the Indian stock market has created higher returns, even though it is more volatile and seems to cost more than other markets. India's stock market is big and well-developed, and there are many types of stocks to choose from. Because of these factors, we believe that active stock picks have a great chance to find companies that can give return rates higher than the market.



Graph 4: Performance of particular MSCI indices throughout time

5.CONCLUSION

Email shopping can help small companies, many of which are run by women in developing countries, because it lowers the costs of starting up. One benefit of online dealing over traditional methods is that it gives traders, especially women, more freedom to set their own hours and work from anywhere in the world (WTO and World Bank, 2020). To fight racism, women can use digital tools that don't require them to meet in person (OECD/WTO, 2017; World Bank and WTO, 2020).

Digitalization can help women get financial services even though they might not be able to get into traditional banks. For example, mobile money can make digital transfers easier. Thanks to e-commerce, women who had lost their jobs because of the epidemic were able to start new businesses with little money and make a living in areas that had nothing to do with their old jobs. Small business owners who were women and had been in business for a while looked to online markets as a safety net during the COVID-19 pandemic. E-commerce also helped these women.

In a 2023 article released by UNCTAD, it is said that the low number of women in STEM fields (science, technology, engineering, and math) "has effects on their ability to understand digital technologies and to shape technological developments." To put it another way, women are less educated, less tech-savvy, and less able to use technology than men. But digital tools and technology don't always meet the needs of women because they aren't always made with women in mind or with their feedback. Just under one-third of the people working in technology are women (UNESCO, 2023) as an example.

This study looked at one possible benefit of digitization. Unchecked, it has shown unfair differences between and within nations, which could push even more countries and groups to the edges of society. This study looked at the good things about digitization and how technology can help women. It also looked at the problems women face because they are women.
The ability to use technology has a good effect on women's economic empowerment, access to technology, and overall growth. For economies to grow, more women need to work on making and using new technology. These wonderful things will not happen, though, until the right kind of help is given. There are some things that make it hard for women to use technology; these should be found, rated, and removed.

Many countries, especially developing ones and LDCs, don't have enough data—especially data that breaks down data by gender—on how digitalization has affected their economies overall and on the people who have benefited from new digital possibilities. From a gender point of view, policymakers need both numbers and words about how women use and access technology, as well as information about unfair laws and practices that make it harder for women to get digital technical knowledge, land, money, and credit.

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