

## UNCTAD14: The Global Services Forum

Nairobi, July 21, 2016

### Questions:

1. What are the elements that could facilitate trade in services?
  2. What can be done in the WTO and regional trade agreement to facilitate trade in services?
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1. The WTO was created in an Internet-free world.
  2. No one anticipated the Tsunami of the ICT revolution. (Attachment No. 1)
  3. On the Internet: nobody knows I am a dog! (Attachment No. 2)
  4. Welcome to the Exponential Age. (Attachment No. 3)
  5. The Internet's role in propelling trade in services. ((Attachment No. 4)
  6. My estimate of the dominance of trade in services (in value added terms) is as follows:
    1. In 1980 – trade in services represented:  
30% of international trade  
70% of the GDP of countries
    2. In 2016 – it represents:  
50% of international trade  
70% of the GDP of countries
    3. In 2040 - it will represent:  
70% OF BOTH.
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7. Capturing the enabling power of ICT, Abu-Ghazaleh Intellectual Property became the leading global provider of IPR services. (www.agip.com)
  8. While serving on the panel of WTO Experts on Defining the Future of Trade, I submitted my report on the Imperative of a WTO Reform Agenda in 2013 ([http://media.tagorg.com/uploadfiles/2015/reports/wto-report-5-3-2013\\_en.pdf](http://media.tagorg.com/uploadfiles/2015/reports/wto-report-5-3-2013_en.pdf))
  9. In my report, I emphasized the need for negotiating an INTERNET ECONOMY AGREEMENT. (Attachment No. 5)
  10. We need to adapt and develop trade agreements to meet the dictates of “THE INTERNET OF ALL THINGS”. (Netherlands become first country with nationwide Internet of Things).
  11. We also need to recognize the need for a fifth mode of trade: trade in digital products (e.g. Google's products). A third party (the advertiser) pays for the goods (we) buy.
- CONCLUSION: I RECOMMEND THAT UNCTAD ESTABLISH A MULTI-STAKEHOLDER “TRADE IN SERVICES ON THE INTERNET ADVISORY BOARD”, TO ADDRESS THE TWO QUESTIONS ADDRESSED TO ME.**

Talal Abu-Ghazaleh

## **Attachment 1: The Tsunami of the ICT Revolution**

According to a Dailymail.com Article published June 27, 2016, by Stacy Liberatore

In an Internet second:

54,907 Google searches,  
7,252 tweets,  
125,406 YouTube video views  
and 2,501,018 emails sent

- About 46.1% of the world is online, which is about 3.4 billion people
- Every second 729 photos to Instagram and 2,177 calls made via Skype
- 20,000 people on Facebook and five more open an account in one second
- In 1998, Google was only serving 10,000 search queries each day.

The Internet is a hectic place and at any given moment millions of people are searching, tweeting and emailing all at once.

[Internet Live Stats](#) created a live map that shows exactly how much activity is happening around the globe –down to the second.

Every second more than 54,000 Google searches are conducted, some 7,000 Tweets are shared and more than 2 million emails are sent - 67 percent of which are deemed spam.

Although one second doesn't seem like much in the real world, it means quite a lot on the Internet.

About 46.1 percent of the world is online, which is about 3.4 billion people – although there are still 4 billion people without access to the Internet.

But compare this number to about five years ago, when there was just 31.8 percent surfing the web in the world, and we can image how much the worldwide web is growing.

About 6,000 to 7,000 tweets are shared every second which equals to more than 350,000 every minute, 500 million per day and around 200 billion tweets every year. Every 60 seconds 510 comments are posted, 293,000 statuses updated and 136,000 photos are shared.

The first tweet hit the Internet on March 21, 2006 and it wasn't until 2009 did the firm reach its billionth tweet.

Now it takes less than two days for one billion tweets to be sent.

On any given day, Google receives more than 3 billion searches, which averages to the 54,000 queries a second – that is over 90 billion each month and about 1.2 trillion a year worldwide.

When the search giant first debuted in 1998, it was only serving 10,000 search queries each day.

Flash-forward to 2006 and that was the amount it served in one second.

In addition to searching, tweeting and emailing, every second 729 photos are uploaded to Instagram, 125,406 videos are viewed on YouTube and 2,177 calls are made via Skype.

And at any given second there are 20,000 people on Facebook and during this time five more people open an account.

On Reddit, [Alexa](#) revealed that every second 286 votes are cast and 23 comments posted.

However, these numbers don't share what is happening behind the scenes.

#### WHAT ARE THE INTERNET STATS?

- About 6,000 to 7,000 tweets are shared every second, which equals more than 350,000 every minute, 500 million per day and around 200 billion tweets every year.
- Every second 729 photos are uploaded to Instagram, 125,406 videos are viewed on YouTube and 2,177 calls are made via Skype.
- And at any given second there are 20,000 people on Facebook and during this time five more people open an account.
- On Reddit, [Alexa](#) revealed that every second 286 votes are cast and 23 comments posted.
- Google receives more than 3 billion searches, which averages to the 54,000 queries a second – that is over 90 billion each month and about 1.2 trillion a year worldwide.
- Netflix reports it has 81 million users across the globe that binge some 1,450 hours of TV shows and movies each second. And about 41 percent of its members pull something up to watch on the platform every day.

### **Attachment 3: The Exponential Age**

In 1998, Kodak had 170,000 employees and sold 85% of all photo paper worldwide.

Within just a few years, their business model disappeared and they got bankrupt.

What happened to Kodak will happen in a lot of industries in the next 10 year - and most people don't see it coming. Did you think in 1998 that 3 years later you would never take pictures on paper film again?

Yet digital cameras were invented in 1975. The first ones only had 10,000 pixels, but followed Moore's law. So as with all exponential technologies, it was a disappointment for a long time, before it became way superior and got mainstream in only a few short years. It will now happen with Artificial Intelligence, health, autonomous and electric cars, education, 3D printing, agriculture and jobs. Welcome to the 4th Industrial Revolution.

Welcome to the Exponential Age.

Software will disrupt most traditional industries in the next 5-10 years.

Uber is just a software tool, they don't own any cars, and are now the biggest taxi company in the world. Airbnb is now the biggest hotel company in the world, although they don't own any properties.

Artificial Intelligence: Computers become exponentially better in understanding the world. This year, a computer beat the best Go player in the world, 10 years earlier than expected. In the US, young lawyers already don't get jobs. Because of IBM Watson, you can get legal advice (so far for more or less basic stuff) within seconds, with 90% accuracy compared with 70% accuracy when done by humans. So if you study law, stop immediately. There will be 90% fewer lawyers in the future, only specialists will remain.

Watson already helps nurses diagnosing cancer, 4 times more accurate than human nurses. Facebook now has pattern recognition software that can recognize faces better than humans. In 2030, computers will become more intelligent than humans.

Autonomous cars: In 2018 the first self-driving cars will appear for the public. Around 2020, the complete industry will start to be disrupted. You don't want to own a car anymore. You will call a car with your phone, it will show up at your location and drive you to your destination. You will not need to park it, you only pay for the driven distance and can be productive while driving. Our kids will never get a driver's licence and will never own a car. It will change the cities, because we will need 90-95% less cars for that. We can transform former parking space into parks. 1,2 million people die each year in car accidents worldwide. We now have one accident every 100,000km, with autonomous driving that will drop to one accident in 10 million km. That will save a million lives each year.

Most car companies might become bankrupt. Traditional car companies try the evolutionary approach and just build a better car, while tech companies (Tesla, Apple, Google) will do the revolutionary approach and build a computer on wheels. I spoke to a lot of engineers from Volkswagen and Audi; they are completely terrified of Tesla.

Insurance companies will have massive trouble because without accidents, the insurance will become 100 times cheaper. Their car insurance business model will disappear.

Real estate will change. Because if you can work while you commute, people will move further away to live in a more beautiful neighborhood.

Electric cars will become mainstream until 2020. Cities will be less noisy because all cars will run on electric. Electricity will become incredibly cheap and clean: Solar production has been on an exponential curve for 30 years, but you can only now see the impact. Last year, more solar energy was installed worldwide than fossil. The price for solar will drop so much that all coal companies will be out of business by 2025.

With cheap electricity comes cheap and abundant water. Desalination now only needs 2kWh per cubic meter. We don't have scarce water in most places, we only have scarce drinking water. Imagine what will be possible if anyone can have as much clean water as he wants, for nearly no cost.

Health: The Tricorder X price will be announced this year. There will be companies who will build a medical device (called the "Tricorder" from Star Trek) that works with your phone, which takes your retina scan, your blood sample and you breathe into it. It then analyses 54 biomarkers that will identify nearly any disease. It will be cheap, so in a few years everyone on this planet will have access to world class medicine, nearly for free.

3D printing: The price of the cheapest 3D printer came down from 18,000\$ to 400\$ within 10 years. In the same time, it became 100 times faster. All major shoe companies started 3D printing shoes. Spare airplane parts are already 3D printed in remote airports. The space station now has a printer that eliminates the need for the large amount of spare parts they used to have in the past.

At the end of this year, new smartphones will have 3D scanning possibilities. You can then 3D scan your feet and print your perfect shoe at home. In China, they already 3D printed a complete 6-storey office building. By 2027, 10% of everything that's being produced will be 3D printed.

Business opportunities: If you think of a niche you want to go in, ask yourself: "in the future, do you think we will have that?" and if the answer is yes, how can you make that happen sooner? If it doesn't work with your phone, forget the idea. And any idea designed for success in the 20th century is doomed in to failure in the 21st century.

Work: 70-80% of jobs will disappear in the next 20 years. There will be a lot of new jobs, but it is not clear if there will be enough new jobs in such a small time.

Agriculture: There will be a 100\$ agricultural robot in the future. Farmers in 3rd world countries can then become managers of their field instead of working all days on their fields. Aeroponics will need much less water. The first petri dish produced veal is now available and will be cheaper than cow produced veal in 2018. Right now, 30% of all agricultural surfaces is used for cows. Imagine if we don't need that space anymore. There are several startups who will bring insect protein to the market shortly. It contains more protein than meat. It will be labeled as "alternative protein source" (because most people still reject the idea of eating insects).

There is an app called "moodies" which can already tell in which mood you are. Until 2020 there will be apps that can tell by your facial expressions if you are lying. Imagine a political debate where it's being displayed when they are telling the truth and when not.

Bitcoin will become mainstream this year and might even become the default reserve currency.

Longevity: Right now, the average life span increases by 3 months per year. Four years ago, the life span used to be 79 years, now it's 80 years. The increase itself is increasing and by 2036, there will be more than one year increase per year. So we all might live for a long long time, probably way more than 100.

Education: The cheapest smartphones are already at 10\$ in Africa and Asia. Until 2020, 70% of all humans will own a smartphone. That means, everyone has the same access to world class education. Every child can use Khan academy for everything a child learns at school in First World countries. We have already released our software in Indonesia and will release it in Arabic, Suaheli and Chinese this summer, because I see an enormous potential. We will give the English app for free, so that children in Africa can become fluent in English within half a year.

## **Attachment 5: THE NEED FOR AN INTERNET ECONOMY AGREEMENT**

A Draft Proposal by Talal Abu-Ghazaleh

### **Overview**

This document explores in draft form the provisions that could be a part of an agreement to achieve Internet services trade liberalization, with the goal of creating a Free Trade Zone of the Internet. The significance of the Internet to global trade cannot be understated. The Internet accounted for 21 percent of the GDP growth in mature economies over the past 5 years, with 75 percent of the benefits captured by companies in more traditional industries. In a survey of 30 countries with a collective 2010 GDP of \$19 trillion, Internet penetration was found to be growing at 25% per year over the past five years, and contributing an average of 1.9% to GDP. If one considers that information flows constitute trade in knowledge services, then the volume of information relayed by online platforms such as Google, Yahoo, Facebook, Tuenti, Baidu, Yandex, Microsoft Bing, the Internet is home to some of the largest traders in the global economy. This is reinforced when you consider the opportunities that Internet services create for more traditional businesses that would otherwise not exist. Online marketplaces like eBay, Rakuten and Mercado Libre, for example underpin of SME trade internationally every year, and that trade is growing. In addition to these platforms, the Internet enables numerous knowledge enhancing services that we now largely take for granted, such as email and GPS positioning, whose consumer application largely post-date the Uruguay Round. A Developing Countries Perspective Full and effective participation in the emerging global information network is crucial for a country to benefit from globalization and to avoid being marginalized. At present, most developing countries are lagging far behind in this respect. With the current explosive pace of information technology development, this gap is rapidly becoming more and more difficult to bridge. While several developing countries do have high potential in relevant human capital, in particular in software development, and/or in existing manufacturing facilities, however the absolute majority of the South indigenous efforts have no chance of reversing this trend. We need a comprehensive international cooperation effort that would transcend traditional frameworks of technical assistance in a number of ways.

### **WTO's Remit**

It has long been acknowledged that e-commerce and Internet services are within the remit of WTO's liberalizing mandate. The WTO's Work Programme on Ecommerce began in 1998 but has been eclipsed by the focus on Doha round issues. Nevertheless, there appears to be renewed interest in e-commerce as part of a GATS+ initiative. Most WTO members appear to agree that the majority of electronically delivered services are services governed by GATS. However, there remains disagreement over whether digital products that have traditionally been traded on a physical carrier medium (e.g. books, software on disks, music on tapes, etc.) are governed by the GATT and GATS, or are unique and deserve their own classification. Whether services provided over the Internet should be classified as mode 1 (cross border provision) or mode 2 (consumption abroad) remains an open question to be considered.

## Proposed Scope

The proposed Internet agreement would cover goods and services for which the Internet is essential to access or to use the given products and/or services, for or by customers, whether the product is tangible or intangible (it being understood that tangible products' delivery, and tariffs, are governed by other agreements). Such an agreement could be a part of a larger services agreement, such as the International Services Agreement ("ISA"), which is under discussion in Geneva now.

A Trade Framework for the Knowledge Economy While existing WTO agreements do not exclude the Internet, they preceded it in time and thus are not fully optimized to accommodate the needs of trade in the digital environment. One example is the disagreement over the status of digital goods that also have physical forms, such as books. The international trade framework must be adapted to better respond to the needs of this component of the international economy, so as to better facilitate global trade and growth. This modernization would not compete with other efforts, such as ITA expansion.

Both activities are important to the continued sound operation of the global trade system.

All WTO Members are interested in incentivizing the growth of the domestic Internet economy due to its high development and export-enhancing potential, and in adopting measures that increase the attractiveness of their countries to foreign direct investment in the local Internet economy, and in supporting the potential of local entrepreneurs to compete globally. Updating the international trade framework to better accommodate trade in Internet services can foster all these objectives.

The following obligations may be considered towards that objective:

An Internet economy agreement should oblige contracting parties to eliminate direct or indirect tariffs, fees, or duties on any of the covered area or on payments made by, through or for covered transmissions or activities. The envisioned agreement would circumscribe the cases in which a party could limit Internet trade. Under an Internet trade agreement, information service restrictions would have to comply with WTO principles of being transparent, necessary, and as least restrictive as possible. Affected parties must be provided due process. The agreement would specify that such restrictions need to be narrowly tailored, and confined to certain special cases, and do not unreasonably prejudice the legitimate interests of parties engaged in lawful trade.

The agreement should specify that contracting parties agree not to impose, as a condition of market access, any local content requirements nor that Internet activity be provided through locally hosted data. As platforms for extensive third-party commerce, online intermediaries provide platforms and conduits for an extraordinary amount of international trade. Providing minimum standards for the protection of online providers from liability on account of the data transmitted by third parties is an essential foundation to a healthy online trade environment.



An Internet services agreement should mandate minimum protections for online services in these circumstances. Meeting the Internet stakeholders Ultimately, the international trade regime should extend protections to knowledge goods and of services in a manner that fully recognizes their status as equal to that of physical goods and services. To that end, the possibility of a joint meeting with the Internet and knowledge stakeholders to explore the needs of the digital environment and Internet economy should be seriously considered.