

Session 2: The importance of institutions and standards for soft connectivity

How is digital connectivity important between Asia and Europe and what are challenges of it?

1. The nature of ASEM

O Highly diverse in terms of sizes of population, geography and economy; level of economy, culture and language, regulation (including those on finance, IPR and cyber security).

- Especially within Asia, the internal diversity is even bigger than that in Europe.

O Europe and Asia are geographically far from each other.

- Time and cost of transportation makes it harder to build highly efficient value chains.
- For the EU, Asia accounts for 45.2% of imports, 35.5% of exports and 40.3% of total trade.
- (Asia countries: Afghanistan, Armenia, Azerbaijan, Bahrain, Bangladesh, Bhutan, Brunei, Cambodia, China, Georgia,

Hong Kong, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyz Republic, Laos, Lebanon, Macao, Malaysia, Maldives, Mongolia, Myanmar, Nepal, North Korea, Occupied Palestinian Territory, Oman, Pakistan, Philippines, Qatar, Saudi Arabia, Singapore, South Korea, Sri Lanka, Syria, Tadjikistan, Taiwan, Thailand, Timor-Leste, Turkmenistan, United Arab Emirates, Uzbekistan, Vietnam, Yemen)

- For Asia, the EU accounts for 30.3% of imports, 32% of exports, 31.2% of total trade.

2. Role of digital connectivity for the relationship between Asia and Europe

O DC (digital connectivity) for trade makes it easier to overcome geographical distance by reducing costs caused by it.

- In transportation and communication, digital connectivity helps to increase efficiency at any connecting points.
- Global value chains are the reality of today's trading environment, with inputs sourced worldwide and stages of production shifting from location to location to complete a final product. Trans-border data flows over the Internet enable firms to co-ordinate their participation in global value chains and have empowered even tiny firms to enter the trade arena.
- DC underpins the ability of the Internet to act as a connector on a massive scale. This is what provides opportunities to share, access and co-ordinate knowledge, leverage platforms for new ventures, and source inputs ranging from finance to professional services.
- DC Internet openness is crucial for supporting the enhanced knowledge diffusion needed to help innovations spread through economies and close the productivity gap between leading and lagging firms.

O DC helps Asia and Europe understand each other better and more easily

- The communication channels created and the open exchange of ideas, knowledge, creativity and opinions spurred by DC can enable more educational opportunities and skill development. They can also allow better tracking of epidemics/disease outbreaks and other improvements in public health functions, as well as underpin more transparent governance, civic engagement, self-expression and consumer empowerment. Together, these and the many other social benefits of DC can lead to more democratic, creative, and innovative societies.

3. Challenges of DC between Asia and Europe

O DC cannot achieve the benefits mentioned above if the information on internet is restricted.

- It can be restricted by three obstacles: technical, economic and social.

O I will focus on social ones here.

- First of all, there is a language barrier.
- Secondly, the data openness varies significantly over Asia and Europe.
- Thirdly, concerns of cyber security and data protection are a serious barrier for digital economy especially.

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O In fact, although internet is global in nature, most of users mostly use local contents.

- For instance, the Google search information shows that Internet users differ widely in the extent to which they select results in their own country's domain. For instance, in 2014, 67% of Google search clicks by users in Poland led to .pl domains, whereas only 13% of search clicks by users in Korea led to .kr domains. The United States is an exceptional case; for historical reasons gTLDs such as .com were preferred to the .us domain, which was commercially marketed at a later stage, and just 0.66% of US users' Google search clicks went to .us websites in 2014.
- The importance of language/culture and geographic proximity can be observed in the search information. Proximate countries and those with a common language are typically amongst the top ten ccTLDs in a country's search result clicks. For example, Chilean users click on results in the Spanish, Argentinian, Mexican, Colombian, Peruvian, and American ccTLD spaces, while Swiss users click on results in the German, French, Italian, United Kingdom and Austrian ccTLD spaces. This behaviour is consistent with international trade models for goods and services that show "gravity" as measured by proximity, common language and so on, is an important factor driving trade links, although there may also be an algorithm effect in operation.
- The Google search information suggests that most website ccTLDs have a highly concentrated user base, accompanied by a long tail of user countries with tiny shares of total search result clicks. Taking the full sample of ccTLDs included in the table (excluding those that are clearly used in practice as gTLD), 41 of 75 ccTLD received 95% of search result clicks from 4 or fewer user countries in 2014. These were

typically the country of the ccTLD plus proximate countries (either geographically or via cultural/language similarities) – for instance, users from Israel and the United States accounted for over 95% of search result clicks to websites with Israel’s ccTLD (.il), while users from South Africa, the United States and the Netherlands accounted for over 95% of search result clicks to websites with South Africa’s ccTLD (.za). Most OECD countries received 95% of search result clicks from 6 or fewer user countries.

- YouTube is another example. In 2014 for instance, 85% of the watch hours for videos uploaded by users in Japan were from users located in Japan. Towards the other end of the scale, just 8% of the watch hours for videos uploaded by users in Australia and Canada were from users located in those countries. For both Australia and Canada, users in the United States accounted for the largest share of watch hours for Australian and Canadian-uploaded content (27% and 37%, respectively). United States users were the second-largest viewers of Japanese YouTube content, with a share of almost 3% of watch hours.
- The range of countries amongst watchers of a country’s content sometimes points to the importance of a common language. For instance, YouTube content uploaded by Spanish users in 2014 obtained its highest share of watch hours from local viewers (23.4%), followed by Mexico (18.2%), Argentina (9.1%), the United States (6.1%), Chile (5.6%), Colombia (5.3%), Peru (3.6%), Venezuela (2.5%) and Ecuador (2.4%). Proximity and historical links can also be observed – in France for instance, the highest share of watch hours of content uploaded by French users in 2014 came from France (50.5%), followed by the United States (5.1%), Belgium (4.3%), Canada (3%), Morocco (2.6%) and Algeria (2%).
- On Wikipedia there are huge asymmetries in the volume of online content in different language editions. Out of the 288 official language editions, English is by some distance the largest edition in terms of users, followed by German and then French. On the other side of the spectrum, there is a near absence of any content in many African and Asian languages.
- This statistics shows that Asia and Europe are not close to each other on internet.

O First of all, internet is dominated with English, which means that one’s English proficiency

significantly affects their range of internet access and that the availability and quality of English version is critical for foreign users.

- English's relative share of cyberspace has shrunk to around 30%, while French, German, Spanish and Chinese have all pushed into the top 10 languages online. Some of these have ballooned at great speed: Chinese, for example, grew by 1277.4% between 2000 and 2010. Out of a roughly 6,000 languages in use today, this top 10 make up 82% of the total of the content on the internet. However, English is still dominant language for communication between Asia and Europe.
- According to English Proficiency Index, English proficiency in Asia is highly diverse. The average English proficiency of adults in Asia is the second highest in the world, only behind Europe. A closer look at the data, however, reveals that Asia has wider proficiency disparities than any other region. Malaysia, the Philippines, and Singapore all rank in the upper quartile of this year's index, while Cambodia and Laos rank in the lowest 10%. As a result, while some of our findings may apply across Asia, the majority of trends and recommendations will only be relevant to a subset of this diverse, populous region.
- On the other hand, Europe has the highest English proficiency of any region in the world. This makes sense: cosmopolitanism and international collaboration are the defining features of modern Europe, and today's globalized world requires this collaboration to be in English. Of the five regions profiled, Europe has the highest levels of tertiary education exchange, the most cross-border movement of professionals, and the most complete economic integration.

O Also the level of cyber security capability and data protection varies significantly between Asia and Europe as well as within Asia.

O Data openness is another challenge. Even without language barriers, data openness varies a lot between Asia and Europe as well as within Asia and Europe.