

Group7

・クラーク記念国際高等学校秋葉原ITキャンパス

◆発表者

○長野陽太○武井一星○足立陽紀○中村侑○中島大空

◆教員

○藤野裕之○横山博淳○高貴香織

◆19日のみ出席

○滝川智弘○釜谷大輝○遠山直毅○浜野航輔○市川友紀也

○今村円香○入澤アリー○鹿沼颯○鈴木天音○西田律哉

○橋本航祐



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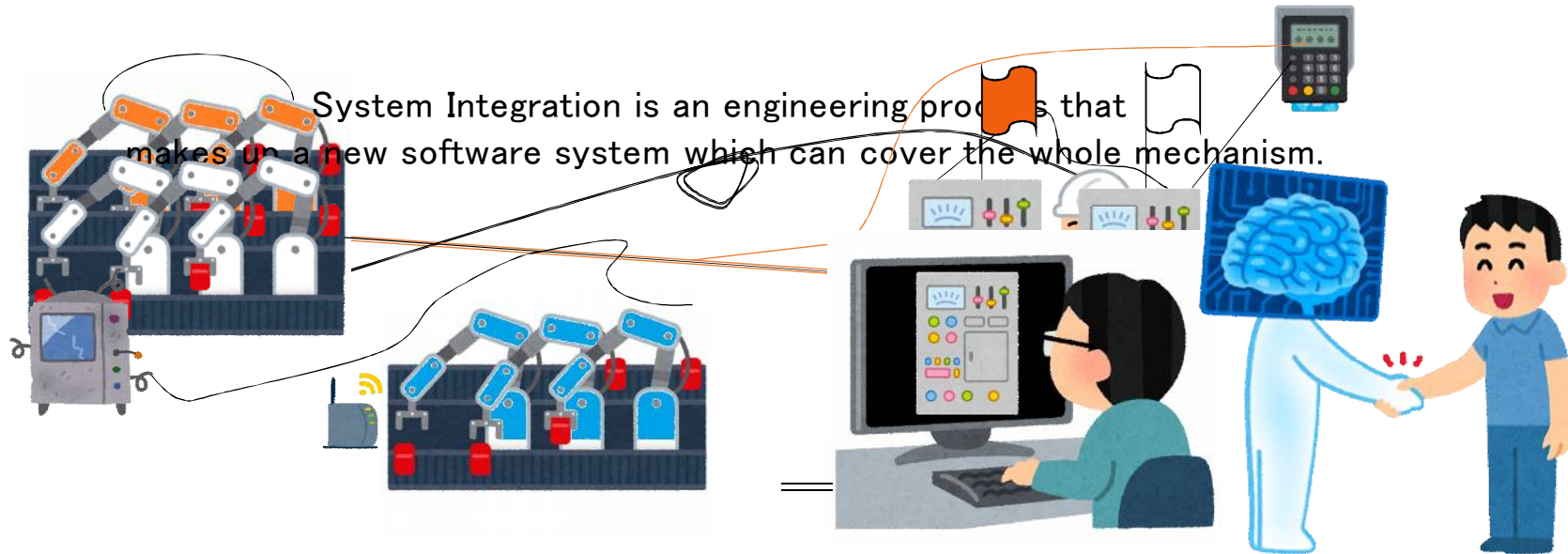
CLARK Memorial International High School

Benefits for introducing system integration to newly countries

Producer : Haruki A, Issei T, Youta N, Yu N, Oozora N

1. System integration

(画像:<https://www.irasutoya.com/>)



As the time goes on, the variety of machineries increases as the technology advances. As for the illustration, there were many cables on the floor scattered, and the workers constructing systems by owners themselves found it difficult. But after a new system was installed, the cables were replaced into a wireless device, and the both software and hardware layouts were simplified.

As a result, machines and robots can now have prompt response from the computer, and the workers are now able to control their machineries more safer.

2. Association's Thai school

As was introduced by the FA Integration Association, Thai-German Institute, Electrical and Electronics Institute, King Mongkuts University, Chulalongkorn University, and so on 8 institution was join and do strengthening research and development of robots, accelerating human resource development, and setting goals to increase system integrator to 1,400 companies.

参照元(<http://u-machine.net/sp/feature/article/516>)



Thai-German Institute



Electrical and
Electronics Institute



Chulalongkorn
University



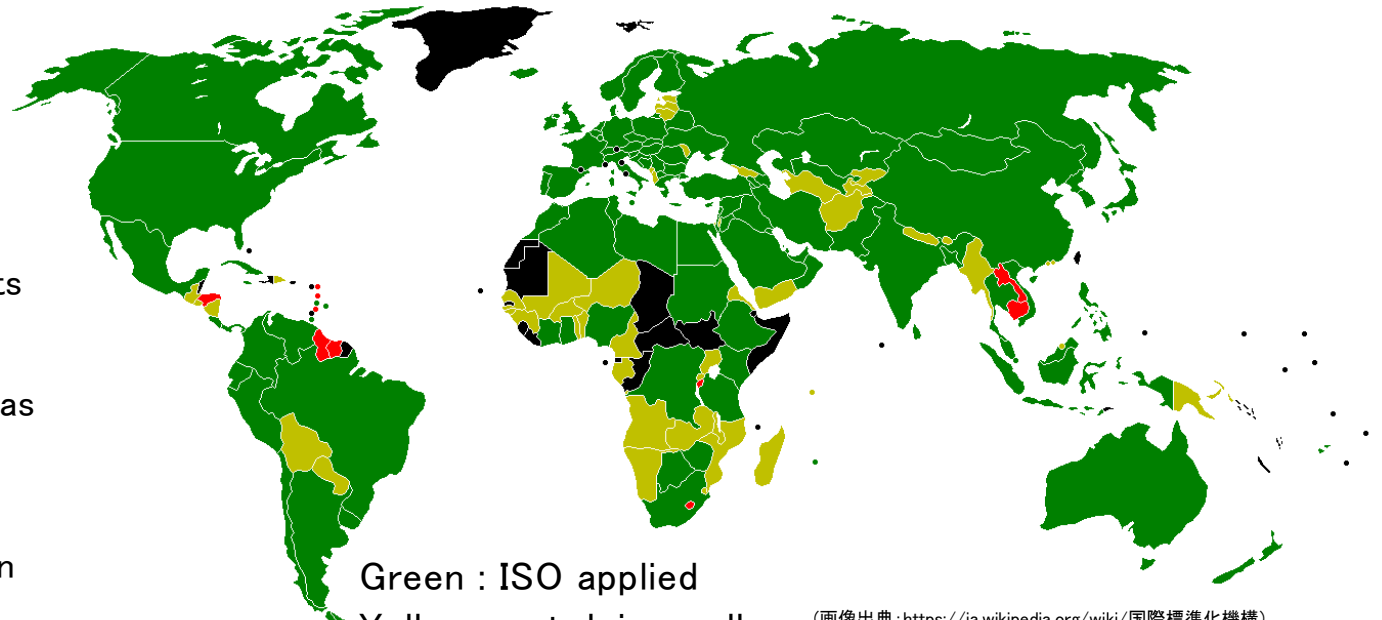
King Mongkuts
University other × 4



参照元(http://www.tgi.or.th/about.php?tr_id=1)

3. Safety Technology

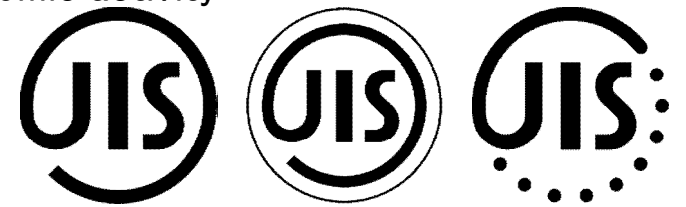
Initially, there weren't any world wide safety standards for the robots it self. The robots were included in the group of industrial machinery. But as the robots become popular as one of household equipment, the usual standards became unable to secure safety. These are the reasons why ISO10218 was made in 2006. At the same time, JIS B8433 was also made in 2007 to apply ISO10218 in Japan. JIS B8433 is a standard which adds some restrictions to ISO10218 and only be effected in Japan.



Green : ISO applied
Yellow : not doing well
Black : ISO not applied
Red : little economic activity

(画像出典: <https://ja.wikipedia.org/wiki/国際標準化機構>)
2011年

There are many types of JIS marks.

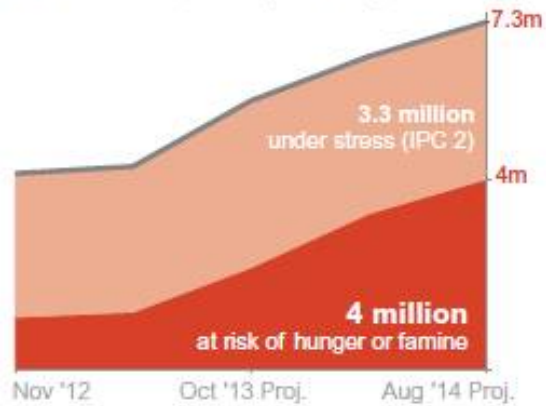


South Sudan

(画像出典: <https://ja.wikipedia.org/wiki/>)



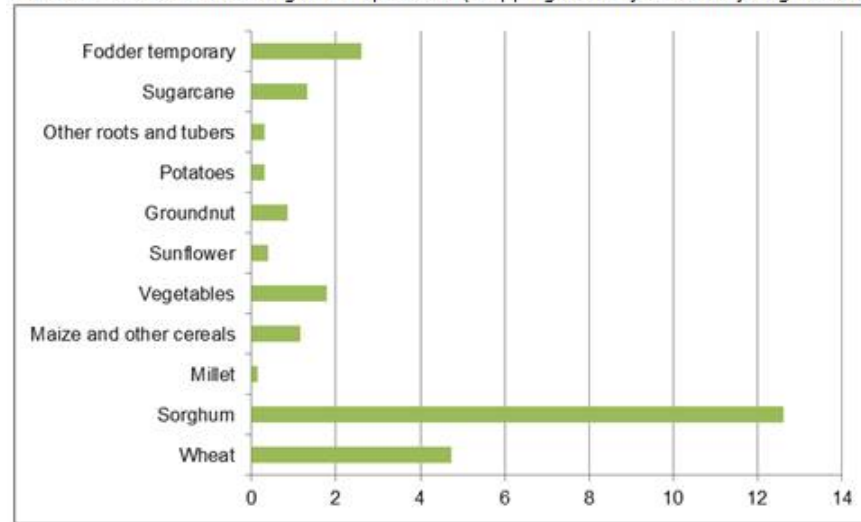
FIGURE 2
FOOD INSECURE PEOPLE¹
In IPC Phases 2, 3 and 4 (in millions)



(画像出典: <https://reliefweb.int/>)

FIGURE 3
Main irrigated crops in 2011 (画像出典: <http://www.fao.org/>)

Total 29 070 ha harvested irrigated crop in 2011 (cropping intensity on actually irrigated area: 157 percent)

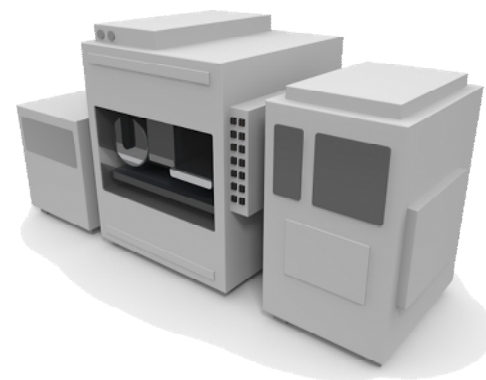


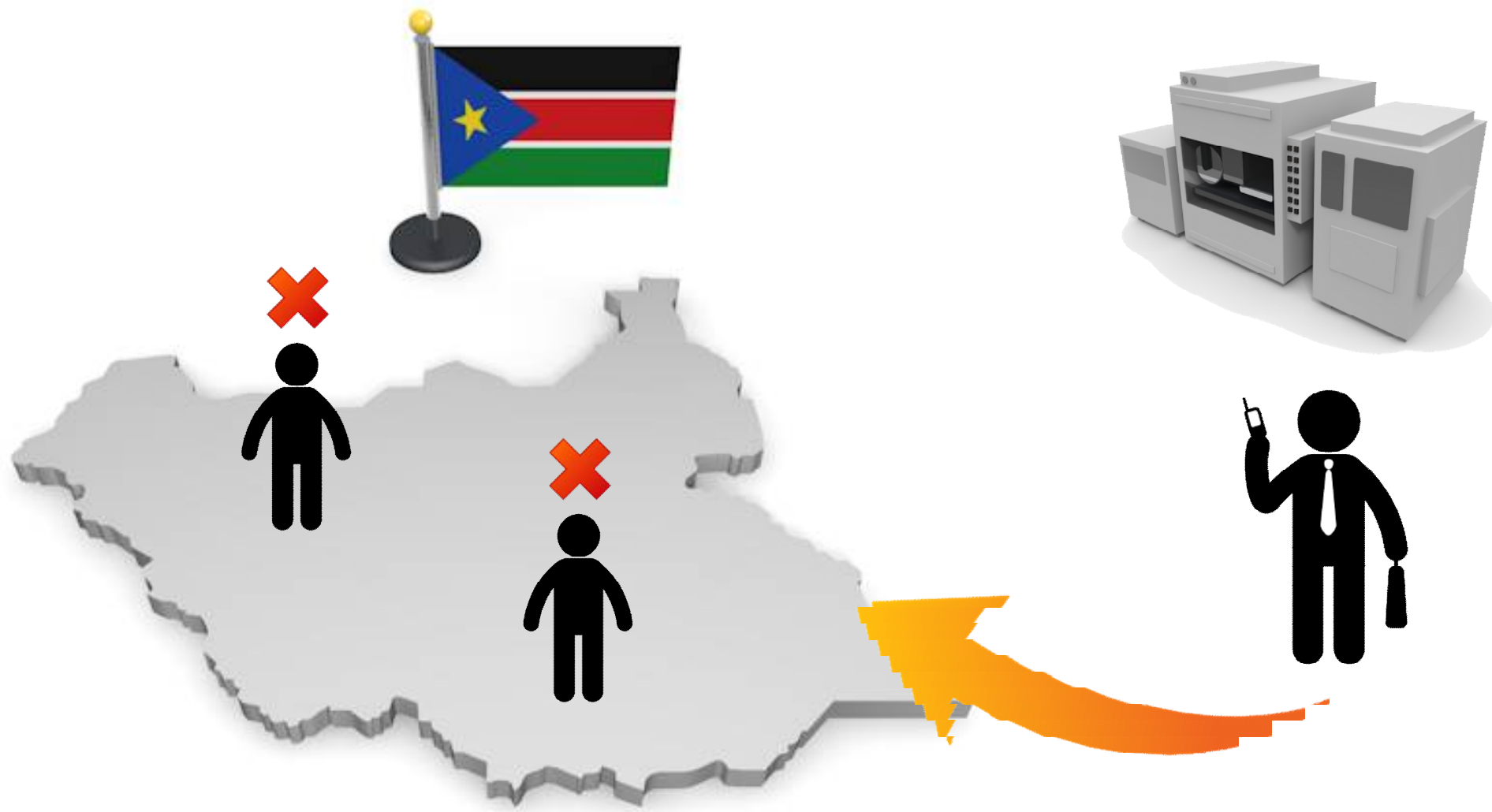
In figure 2, you can see that in South Sudan, the number of people in hunger is increasing. While they are starving, there is no way they can grow manufacturing industry.

Figure 3 shows the amount and varieties of crops people grow in South Sudan. They grow crops which are also popular in the world. We expect that there are many experiences that can be brought from other countries and make use of in South Sudan.

What the Ministry of Foreign Affairs has done for South Sudan

- Since 2012, grant aid cooperation such as Nile cross-linking construction plan (project cost 3454 million yen), Juba city water supply improvement plan (project cost 4.402 billion yen)
- Since the deterioration of the situation since December 2013, Japan has so far carried out humanitarian, reconstruction, and development assistance to Southern Sudan, totaling about 200 million dollars through international organizations (approximately \$ 25 million in January 2014, February 2015 To about \$ 88 million, about 31 million dollars in February 2016, about 22.4 million dollars in February 2017 and about 34 million dollars in February 2018.)





国内総生産・国際競争力

G D P

International competitiveness

UP 

国内総生産・国際競争力

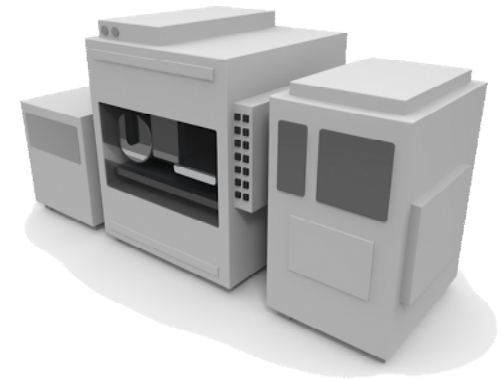
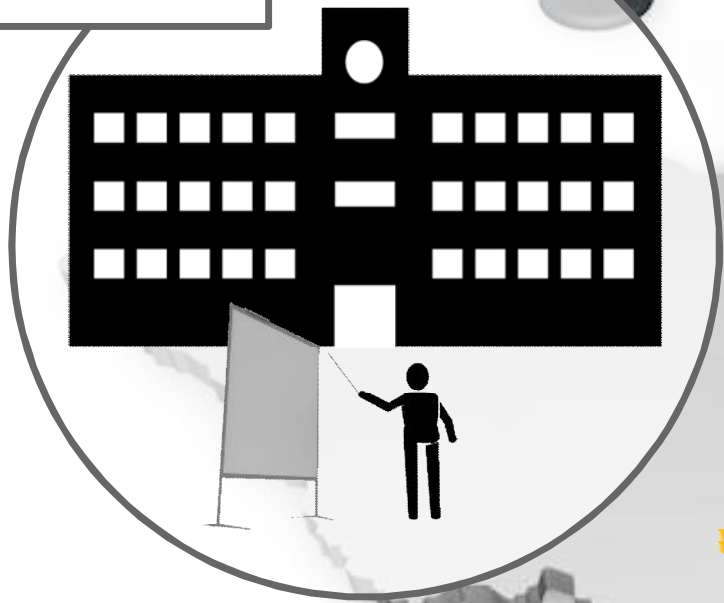
G D P

International competitiveness

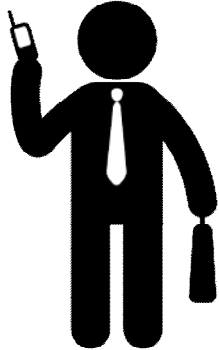
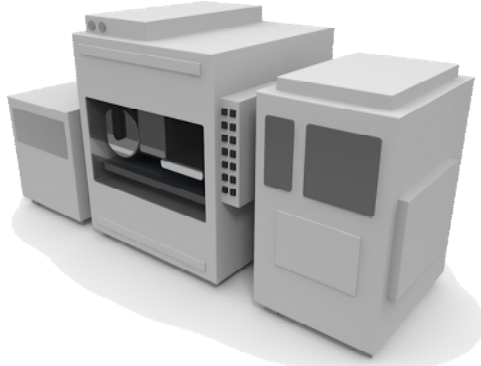
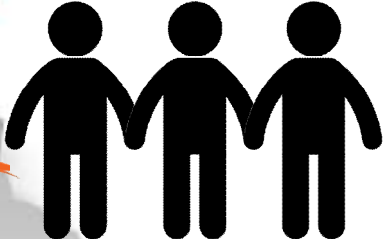


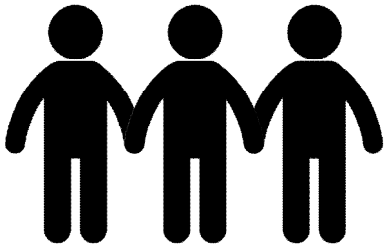


ISO



ISO



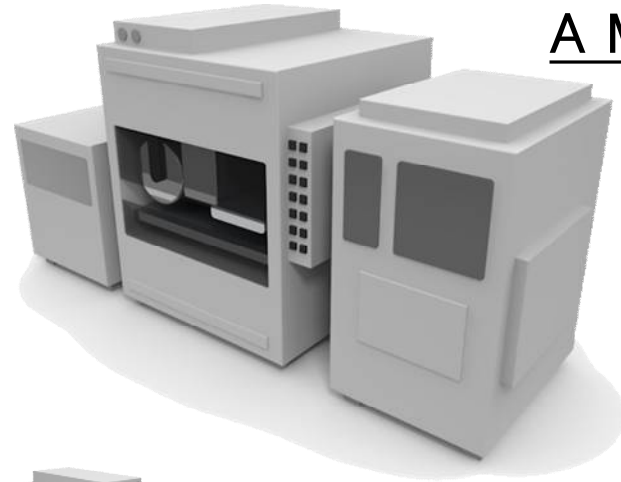


ISO

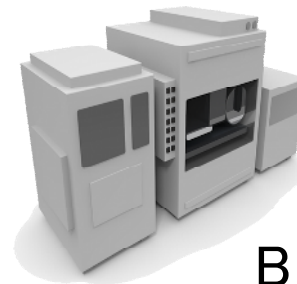
Operation



A Machine



B Machine



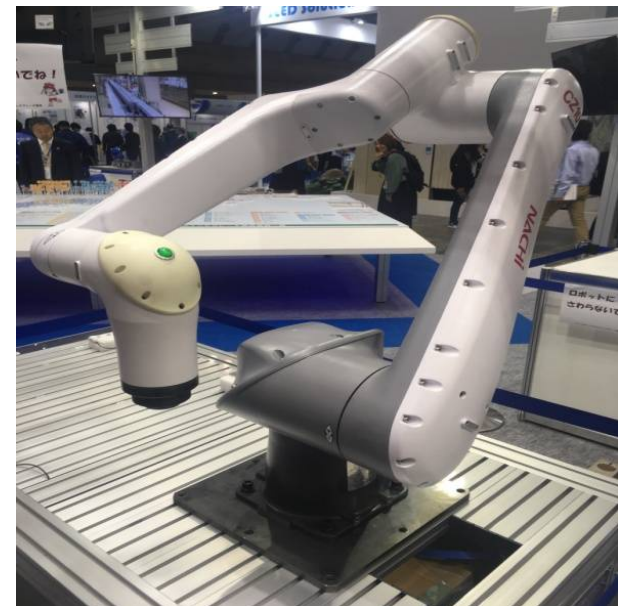
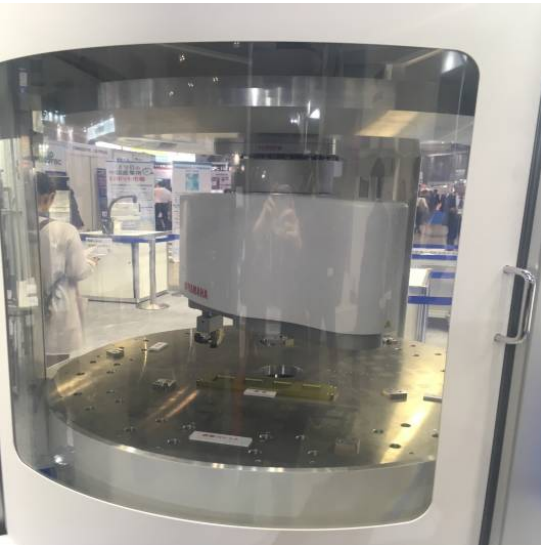
Choosing robots aiming their own purpose considering their own culture and customs

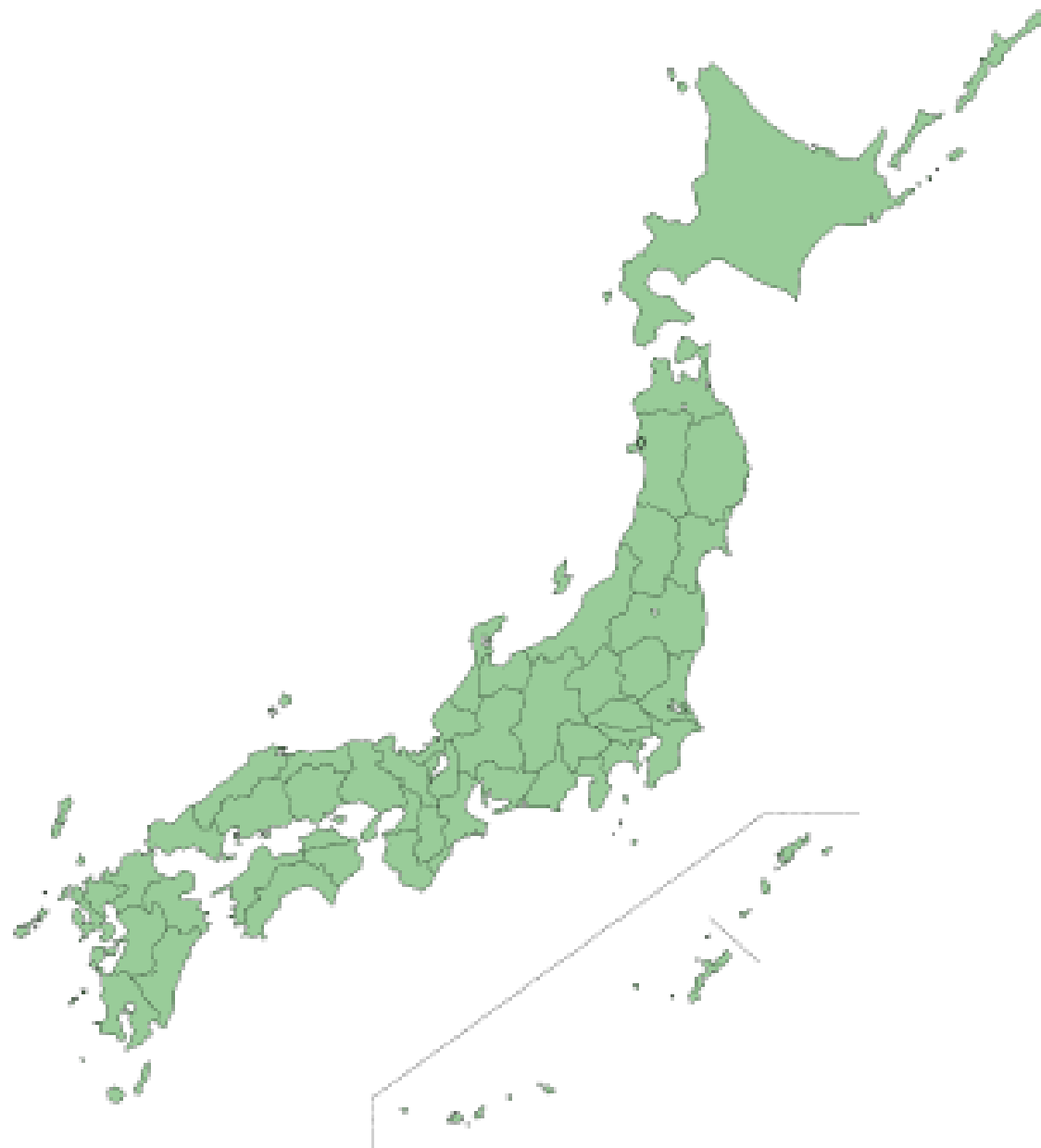


To be able to do it, getting rid of walls between standards is necessary.



Finally, all makers can work on their business equally







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