

Krzysztof Rybiński: A day in the life of *Homo Sapiens Globalus*

Address by Mr Krzysztof Rybiński, Deputy President of the National Bank of Poland, at the 11th Teleinformatics Forum, Legionowo, 21 September 2006.

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Ladies and Gentlemen,

Today, I would like to present a vision of the citizen of the world in the year 2026. *Homo sapiens globalus* will be found almost everywhere on the globe, and his traits will be identified by his ability to capture the benefits brought by the global financial market, global labour market, and global knowledge market. He will work, obtain information, establish and foster his professional relations as well as arrange his leisure activities primarily with the aid of the Internet. *Homo sapiens globalus* has mastered the fine art of capturing the benefits of the (continuously improved) functions available on the Internet. He is able to absorb frequent changes, and he turns them to his advantage. This makes him increasingly effective, knowledgeable, and capable of pursuing activities he finds interesting.

Let us now consider a typical example of *homo sapiens globalus*, namely John Global. I would like to introduce him to you, but in order to do so, I have to take you on a short journey. This will be time and space travel. Just imagine that by the time I will have finished the previous sentence, twenty years have passed. This means that we are now in the year 2026. In order to prepare for the meeting with John Global, I suggest that we take a closer look at his daily routine.

Let us take a sunny day of September 2026.

Time: 5 a.m. Place: somewhere in the city of Poznan.

John Global is still asleep, but the world is already getting ready to wake him up. The news aggregator is ready to provide him with a set of most recent news in line with his interests. As John Global tends to look through newspapers before 07:00 CET when he is in Poznan, and before 16:00 CET when he is in Hong Kong, the aggregator is already preparing a 'special edition'. And Global always begins his day with looking through online newspapers and drinking well-brewed coffee. Coffee is one of his indulgences, a look back to recall past events, as coffee has been his morning ritual for more than 20 years. As far as other things are concerned, our Global tries to be more flexible and not to fall into any habits.

It's 6:30 a.m.

John Global wakes up. He enjoys the view from the window – the forest and lake. It is indeed different from the one he saw two days ago in Hong Kong – skyscrapers and smog blotting out the sun. He left Warsaw for Poznan 20 years ago, in 2006, when he realized that administrative issues are too time-consuming and generate negative emotions. It was at that time – as early as in August 2006 – that Poland's first fully electronic public service was launched in Poznan. This service helps make transactions via the Internet. This means that it is possible to download and fill in an electronic form, authorize it (for instance with electronic signature), make a payment (including stamp duty) and receive confirmation that a given service has been provided by the e-authority – and all this takes place via the Internet. If a physical document is necessary (extremely rarely though it happens in 2026), the relevant document is delivered to the indicated address by courier within 24 hours. When Global was moving to Poznan, he was hoping that e-government would grow fast here, and that it will be possible to set up a company via the Internet within several minutes or to file a passport application from any photographer's shop immediately after the photo has been taken, etc. He knew that things already looked like this in many places around the globe, but not yet in Poland. He analyzed strategic documents of local authorities in Poznan, took a closer look at their aims and methods to measure the results, and decided that Poznan was very likely to meet his expectations. He knew that government bodies were frequently inefficient only because they did not know or employ modern yet already proven methods of administration. Poznan, however, was different. Here, everything was well thought-out, consistent and done so as to fulfil a clear vision of e-government that was supposed to be citizen-friendly and to make their life easier. And Global was not in the wrong. He is still satisfied with his choice. It is worth mentioning that he hesitated over the decision to move. The final straw was an argument at Warsaw district office where Global had gone to in order to obtain some certificate. The certificate was ready, but Global – who had paid the stamp duty by an online transfer – had no proof of

payment. Without such confirmation the officer would not issue the certificate. The argument reached its climax when the officer shouted out his anger: 'If only you had paid in cash at the counter here, there would be no problem now!'

Today, in September 2026, John Global recalls this situation with a tint of amusement. How things have changed since that day, and how much easier life is now. Today, administrative issues take him only several minutes monthly, because all these are handled via the Internet, regardless whether located in Asia or Europe. And officers are doing their utmost to provide services to John Global efficiently, as the contract for these services will only be renewed when customers are satisfied with them. Needless to say, customer satisfaction surveys take place via the Internet.

As for Global's satisfaction with his metabolism, he can measure it himself. He steps onto e-scales and it only takes him seconds to get feedback from the e-dietician. Things look good. Besides, he knows that his e-dietician has delivered relevant guidance to the restaurant where Global is going to have lunch with one of his friends.

Now it's time for his favourite coffee and online newspapers, that is a special edition of news, commentaries, lists, reports, quotes, similarities, differences etc. related to our Global's interests. News aggregator turns out to be very helpful in getting access to useful information, filtered from noise and randomness. While at home, Global looks through the newspapers using his TV-set. When he is out, he uses his communicator to do this (the name 'mobile phone' fell into disuse in 2015). Sipping his coffee, he starts reading. After a while, his wife joins in. They both use the aggregator, but they have different interests and different news search criteria. John Global's wife comes from Scotland. She is much attached to the Global Scott Network. She believes that the Scottish population is shrinking, so in order to sustain growth in Scotland it is necessary to employ the Scottish intellectual capital spread all around the world. The Global Scott Network is so efficient, that it has been outpacing large competitive consulting companies for more than twenty years, by receiving orders related for example to biotechnological clusters. The Global Scott Network is an example of a diaspora understood as an ethnic or a religious community living in a foreign country or environment (e.g. the Chinese in the US, Jews in different countries or the Portuguese in France). A diaspora is characterized by an internal need to integrate, act together, help one another and to share one vision of the future. This internal motivation has been recognized as a fundamental factor behind the success of a community. It has been observed that talks, discussions and attempts to convince one another will never lead to the level of involvement and commitment present in diasporas, where participation and activities are voluntary. 'Death of distance' causes diasporas to be increasingly extensive. One example is the Mexican diaspora where the distance between two members was "up to two phone calls" already 20 years ago. This means that a person in need who has called up the diaspora for help had to wait only two phone calls to find somebody who would be able to help.

As a matter of fact, this very topic is already known to us, Poles. I am quite sure that you are familiar with the articles in the Polish press in the period from Poland's accession to the EU to the mid-2006. These articles lamented the fact that during this period more than a million people, mainly young Poles from the so-called PLN 1,200-gross-pay-generation, left Poland for other EU countries in search for work. It was not until 2007 that it became self-evident that this was not a tragedy but an opportunity for Poland, which got a million 'ambassadors' in Europe, who were hardworking, acquired new experience and spoke foreign languages. Similarly to the Global Scott Network, the Polish diaspora emerged in the European Union. Over time, this diaspora turned into the Global Polish Network. Therefore, we were successful in turning the brain drain into brain gain. Obviously, the Global Polish Network would not have been possible without the E-Ambassador Internet System, which was set up in 2007.

Whenever the Globals want to look together through the world news on issues they are interested in, they sit down so as to see the screen from different angles and each of them, holding their respective coffee cups and remote controls, looks through the Internet special edition produced by the aggregator. If they want to hear the sound, they just put on earphones.

7:00 a.m. After breakfast. Lucky. He can always get what he wants.

Lucky is a Bavarian Mountain Hound. He loves long walks, freedom and, above all, he adores roaming the neighbourhood. Obviously, Lucky has a microchip implanted behind his ear, and John Global's bicycle is equipped with a GPS, which keeps track of Lucky's every move. The system protects Lucky from getting into trouble, as it has been configured to send a message to the communicators of every member of the Global family if the dog strays more than 200 metres away from the house (or the bicycle, depending on the circumstances) for more than 10 minutes.

8:00 a.m. After the walk.

John Global finds his son sitting in front of a computer, learning Mandarin Chinese. He is preparing for the Global Baccalaureate and has chosen Chinese as his foreign language because that is the most widely used language in the world.

The education system is becoming increasingly refined globally. This enables young people to have equal chances regardless of their country of origin. Every family that has a child of school age, has also a computer. The first country to put this goal into its development strategy was Singapore, which announced the iN2015 program – Intelligent Nation 2015. Singapore's success was a milestone in many countries' development. This is one of the reasons why computers are now treated by schoolchildren the way pens were some 20 years ago. Most of the classes John Global's son attends are videoconferences, and materials can be obtained from vast online encyclopedia, which is constantly being updated by experts from all around the world and is available in any language. However, this afternoon he has got a real meeting in the Warsaw Rising Museum in Warsaw. He is going to meet with an international team working on an essay about Warsaw Rising for a global writing contest, which they are going to place online. A journey from Poznan to Warsaw takes now only 45 minutes (compared with 150 minutes 20 years ago), so he doesn't need to hurry. And a return ticket costs as much as a cinema ticket, so he can pay for it from his own pocket money that his father transfers every month to his RFID payment card in his watch. He pays for the ticket by simply placing his wrist in front of the ticket terminal.

Travelling has become so inexpensive as new cheap fuel was invented. John Global had the opportunity to work on this project ten years ago. At that time, he used to spend quite a lot of time in Hong Kong in the laboratory of a global fuel baron. Ever since, he has been frequently receiving lucrative job offers from Hong Kong (due to environmental pollution Hong Kong is becoming less attractive and Hong Kong-based companies try to compensate for this by offering higher pay). He occasionally accepts such offers, but he still spends most of his time working with experts in global networks. As a knowledge worker, he has no permanent job. He takes part in different projects on the basis of networking. These projects are implemented not by specific companies (as was the case some 20 or 30 years ago), but by self-organizing networks of knowledge experts. Do you recall how innovative topical communities of practice seemed as they emerged at the turn of the 20th and 21st century? They gained momentum at the end of the first decade of our era, when it became self-evident that most innovations are developed outside organizations. For that very reason, it became necessary to develop relations between practitioners in a given field. As a consequence, self-organizing networks of knowledge experts were first formed. As a matter of fact, this was roughly how Web 3.0 was developed, a fact described in a book written by Thomas Friedman in 2005 and entitled *The World is Flat: A Brief History of the Globalised World in the 21st Century*.

One of the underlying principles operating in networks of experts is voluntary participation and the willingness to cooperate, just as is the case with diasporas. There are no geographic limitations, as they have been eliminated by the Internet. There are no language barriers, either, as Web 3.0 offers automatic translation live among several dozen world languages. There are no constraints in expert knowledge, as specialists in a given field provide inspiration for one another – ornithologists, chemists, biologists, engineers, economists and IT specialists can work on one project. This fosters creativity and innovation.

Currently, John Global is working on a number of projects, including organization of expert networks in public government bodies. These networks could operate effectively in the global market of public services. Little wonder that after his already mentioned experience with 'paying cash at the counter' Global was keen to join the team introducing innovative thinking and acting into public administration.

And how does e-government work in 2026?

There are no traditional buildings, long queues or problems with solving intricacies related to taxes or administration. Today, Global reaches the authorities through the global network from anywhere in the world by submitting documents signed with his own electronic signature. He does not have to carry a briefcase filled with documents, as was the case 20 years ago. Now, Global's unique ID allows to validate his authorization whenever necessary. An e-officer makes sure that Global is notified in advance of his civic duties by delivering him already prepared documents for approval via electronic mail.

Tax returns are a trifle, too. Global's employers transfer his remuneration to indicated bank account numbers, and details of his salary reach the relevant revenue office. Each year, he receives tax return from the revenue office, accepts it and sends it back to the office.

The current project's innovativeness consists in establishing specialized centres that would provide public services of highest quality, not only in terms of the country but also the entire world. Currently, the project of a global revenue service is being developed.

The project schedule is as important as the plan of project communication. It has long been known that projects usually end in failure not because they are bad but because somebody does not understand what his or her role in the process involves, or even why this process exists. Communication improves the level of understanding and acceptance on the part of all stakeholders. It helps create commitment observed in diasporas, and also creates room for internal motivation. It was as early as at the beginning of the 21 century that public administration in Singapore knew the art of project implementation, which institutionalised the role of communication in project planning.

1 p.m.

Lunch with a friend. Global brought him a small gift from his weekend family trip to an exotic country. It was a real bargain, and it only took a few minutes to arrange for the trip on the way home from the Friday visit to a modern art gallery. Both Global and his wife are lovers of modern art. All they had to do was to get in touch with their virtual travel agent and they could both go through the offers displayed on the screen in his car, consulting an e-expert. They decided to go for the most exotic trip, which was also quite affordable. Global competition does its job. Their only concern was not to miss the plane.

Global and his friend do not waste their time ordering meals, as an e-waiter has already sent suggested menu to their communicators (in Global's case, consulted with his e-dietician). The lunch was excellent, and the ambience was fostered by a holographic show of pictures from the trip that Global stores on a photo server accessible via the Internet. They were watching the pictures on a display fixed in the restaurant. Global is a regular here, so his bank will take care of the bill.

On his way home, Global buys flowers paying e-money by accepting the receipt in his communicator. As the weather is stunning, he takes a walk home. Passing by a sweet shop, he gives in to temptation and indulges in a big portion of ice-cream. He pays by his communicator, which includes a RFID payment card. (It is worth pointing out that the communicator is one of the most useful gadgets, as it plays many roles, e.g. that of electronic signature, ID card, driving license, passport, global tax ID, social security ID, season ticket in domestic and international transport, to name just a few. It is biometrically protected. This means that in order to activate it, Global touches a scanner which needs only a fraction of a second to read his papillary ridges).

Afternoon

At home, Global finds his son in front of the computer. He is preparing to go to Warsaw to take part in a workshop. Moving and communicating is easy, so Global has more time to spend with his son than his parents had for him. Even during his business trips, he can have eye contact with his child. This is possible thanks to the communicator he keeps wearing, which is equipped with a video camera. One of their common passions is building a wooden boat in which they hope to go to the lake. They spend most of their time working on details and learning the wood processing technology by chatting through their communicators with other amateur boat builders from England, Canada and China, among other countries.

Sailing is one of Global's favourite sports, but not the only one he does. Global takes care of his health, which is under constant surveillance of an e-doctor. Global rarely falls ill, because he takes preventive measures displayed on his communicator in accordance with his preferences twice a month. Today, he got a text message reminding him that two months had elapsed since he last took his blood pressure. He confirms his willingness to be re-examined, and his watch takes his blood pressure and sends the result to the communicator, which automatically transmits the data to his e-doctor. Everything is OK, but Global does not even notice this, because he is already engrossed in working on another issue – reducing the costs of building a city that 25 years ago was referred to as the knowledge city or intelligent city. It is simply a city that is comfortable for its citizens, a city where beauty and functionality go hand in hand, where life is easier and architecture fosters social life, a city where innovations are born and a city that attracts visitors. Obviously, Global works in an international group of experts brought together through the global network of experts. His participation in the project

is highly welcome, even though he is not an urban planner or sociologist. He has been included in the project team because of his valuable experience won during his participation in numerous already completed projects. Problems they are dealing with include optimal location of a sewage treatment plant and usage of treated water in public lavatories, sending waste via pneumatic mail at 100 km/h directly from a rubbish chute to a waste incineration facility and using the heat from their incineration to generate power and produce heating for the neighbouring area, or the arrangement of car parks in central city districts in the form of a remotely controlled warehouse (no room for people means much more room for cars and no more problems with battered doors). Perhaps you recall that such solutions existed in Tokyo Teleport Town, the Japanese town of future, already in 2006.

Evening

Global takes his wife to the theatre. Two days ago, when he was in Hong Kong, during a video-conversation they decided that they would love to spend an evening together in a theatre. They both approved the idea and could simultaneously see the repertoire, and were assisted in making their choice by an e-reviewer. They chose to see Shakespeare – his plays will never grow old. Global's wife can listen to this play in English via her own mini communicator earphone.

During the interval they have an encounter with Global's friend from the time he was a student. It turns out that he recently got married and his wife used to work with Global on a project several years ago. They decide to go for a drink together. Using their communicators they choose a cosy restaurant next to the theatre and book a table. After the performance they are all in great mood, and recall the beginning of the 21st century with amusement.

The waiter discreetly charges Global's non-contact e-wallet for actually ordered dishes. John can easily accept the payments after he comes back home.

Global registers all transaction details in his financial organizer build into the communicator. Thanks to it he can track and analyze his transactions and schedule expenses. He is fully in control of his finances. His personal communicator receives financial operations on an ongoing basis, and confirms or accepts them. Once a week it receives a financial e-analysis drawing Global's attention to offers better tailored to his appetite for risk and lifestyle.

Small hours.

Mr. and Mrs. Global are coming back home.

Why have I told you this story? Why does a central banker tell stories about future instead of delivering a 30-minute speech of the success achieved by the National Bank of Poland and its partners in building a safe, efficient and modern payment infrastructure in Poland? The reason for this is that we have to prepare for the future. And the best prepared people are those who know what they want to achieve, in other words people who have a vision of a certain state in future they are pursuing. Lack of vision poses a risk of discrepancies in understanding the goal, pursuit of inconsistent goals and in consequence leads to wavering and wasting time and money. Lack of vision almost certainly leads to failure, as today everything happens very fast. And sharing one vision does make a difference. First of all, we are all moving in the same direction. And we are likely to accelerate the pace. A clearly defined vision allows – after reviewing what we have now – choose suitable methods and means to achieve a desired state, that is to set indirect goals.

The vision of John Global may seem a distant future, but in fact it can come true faster than it is currently believed. The majority of examples from John Global's life in 2026 are already a reality, not a figment of my imagination. That is how life is in Asia now, and with increasing frequency in Europe too.

I do not know your morning routine, but in my case it is not significantly different from John Global's. True, while driving to work I still scan papers (I completed a course in speed-reading). When I am at work, though, I start my day with reading an e-newspaper I designed myself by using the features offered by Web 2.0. Thanks to specialized software, every morning I receive information from the web that has tags I am interested in (for instance in the Technorati service), along with information about the blogs I am interested in (for example from bloglines) and search results on .gov and .edu domains for the entries I am interested in. I get RSS messages from the selected newspapers from several continents containing information I am interested in. Moreover, I have a number of favourite websites with articles by outstanding economists or columnists. Specialized software informs me once a day when there have been any changes to these websites, that is when these people publish something new. As you can see, my problem today – and simultaneously John Global's problem in 20 years' time

– is not lack of information but its abundance, and the ability to smartly select important and useful information. Today, I use a program that summarizes texts in English. I use 25% compression. It is sufficient and allows to make reading 4 times more efficient. What is more, I occasionally visit the website of the People’s Bank of China translated live into English by specialized software. Soon, I will start my own blog on economics, which will allow me to use the emerging global networks of experts to solve problematic issues, exchange views and create knowledge along with other experts.

That was about our Global and a bit about me, too. And what can be said about e-government in today’s Poland? Not much.

In a Capgemini’s survey covering e-government in the European Union¹ and published in June 2006, Poland ranks third from the bottom in the EU, in terms of advancement of online public services. We only managed to outpace Slovakia and Lithuania. Even though we made large progress measuring in per cent in 2005, we are still below EU(10) and EU(28) average.

When set against the world findings, Poland ranks somewhere before the fortieth place, outpaced by Estonia, Hungary, the Czech Republic and Mexico.

Table 1. UN Index of E-Government Readiness, 2005

Pos.	Country	Index
1	USA	0.9062
2	Denmark	0.9058
3	Sweden	0.8983
4	United Kingdom	0.8777
5	South Korea	0.8727
6	Australia	0.8679
7	Singapore	0.8503
8	Canada	0.8425
9	Finland	0.8231
10	Norway	0.8228
11	Germany	0.8050
12	Netherlands	0.8021
13	New Zealand	0.7987
14	Japan	0.7801
15	Iceland	0.7794
19	Estonia	0.7347
27	Hungary	0.6536
29	Czech Republic	0.6396
31	Mexico	0.6061
36	Slovakia	0.5887
37	Cyprus	0.5872
38	Poland	0.5872
39	Spain	0.5847

Source: *Global E-Government Readiness Report 2005. From E-Government to E-Inclusion*, United Nations, 2005

¹ Capgemini *Online Availability of Public Services: How Is Europe Progressing? Web Based Survey on Electronic Public Services. Report of the 6th Measurement*, June 2006

When compared against other EU countries, we rank very poorly² in such categories as the ability to file tax returns online (submit tax forms and make payments), obtaining a driving license online or registering a car. We ranked last in the EU for the lack of online company registration, as it is not possible to download forms to fill in, whereas in as much as 7 EU countries it is possible to register a company online without the necessity of filling in any paper forms. The only area where Poland meets all requirements to join the group of leaders is online submission of customs declarations. It is a rare example of an area whose development proceeded in line with a daring and clearly defined vision.

WE NEED TO HAVE A VISION, SHARE A VISION, a well-defined vision that will help us take advantage of emerging opportunities and will allow us to prepare for possible dangers associated with *homo sapiens globalus* society.

Please, take a look around you... I can assure you that there is more than one John Global in this room... I suggest that after leaving the room each one of us should take a moment to think what you yourself, as an individual, can do to start preparing today for a meeting with John Global in 20 years. And what can each of us individually do to make us share a vision so that we can become citizens of the world and master the fine art of capturing the benefits brought by the *homo sapiens globalus* society.

Thank you very much for your kind attention and I announce the topic open for discussion.

² Methods employed in European Commission's survey to assess the services provided involve defining a five-stage framework to determine the level of services provided. STAGE 0 – Total absence of any publicly accessible website or lack of possibility to qualify the existing website to any of levels 1 to 4 (0% – 24% in the figure). STAGE 1 – INFORMATION – The information necessary to start the procedure to obtain this public service is available on-line (25% – 49% in the figure). STAGE 2 – ONE-WAY INTERACTION – The publicly accessible website offers the possibility to obtain in a non-electronic way (by downloading forms) the paper form to start the procedure to obtain this service (50% – 74% in the figure). STAGE 3 – TWO-WAY INTERACTION The publicly accessible website offers the possibility of an electronic intake with an official electronic form to start the procedure to obtain this service. This implies that there must be a form of authentication of the person requesting the services (75% – 99% in the figure). Stage 4 – Full electronic case handling: The publicly accessible website offers the possibility to completely treat the public service via the website, including decision and delivery. No other formal procedure is necessary for the applicant via "paperwork" (100% in the figure). More information available in Online Availability of Public Services: How is Europe Progressing? Web Based Survey on Electronic Public Services. Report of the Fifth Measurement, Capgemini for European Commission, October 2004.