



United Nations
Educational, Scientific and
Cultural Organization



IFAP

Information for All
Programme

Information Society Observatory Newsletter

Lectori salutem

Welcome to the Newsletter of the Information Society Observatory of UNESCO's Information for All Programme (IFAP). The Programme was established by UNESCO in 2001 to provide a framework for international co-operation and partnerships in "building an information society for all". IFAP's focus is on ensuring that all people have access to information they can use to enhance their lives. UNESCO has assumed the task of assisting Member States in the formulation of national information policy frameworks, and the Information for All Programme (IFAP) provides an important platform for contributing to this goal.

The IFAP Information Society Observatory, is maintained and managed by the Information Society and Trend Research Institute (ITTK) at the Budapest University of Technology and Economics in Hungary. The Observatory may be accessed through the following URL:
<http://ifap-is-observatory.ittk.hu/>

The Newsletter reports on "hot and emerging topics" as well as the new and most important documents added to the IFAP Information Society Observatory which is continuously updated with strategic documents, events, books and experiences, annotations and links) in the field of Information Society.

The contents of the Observatory can be browsed with the aid of dynamic keywords (based on the IFAP priority areas: Information for development; Information accessibility; Information literacy; Information ethics and Information preservation) or through the use of the simple or advanced search modules on the site. New items added to the Observatory can be followed by RSS-feeds. Every document has a data sheet which includes the following (where available and appropriate): title, author, number of pages, ISBN or e-ISBN, publisher, date published, date accessed, type of information, language.

Comment on the contents of the Newsletter and Observatory, are welcomed as well as information on important developments in the area of national and international information policy frameworks and their implementation. Please send your comments and reports to the editors: ifap-is-observatory@ittk.hu

Enjoy the Newsletter and feel free to send it to anyone that you think might be interested.

The Editors



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للتربية والعلم والثقافة

联合国教育、
科学及文化组织

May 2015

TABLE OF CONTENTS

In focus: Internet in Emerging and Developing Nations – an interesting survey

In the end of March, [Pew Research Center](#) published a report called „Internet Seen as Positive Influence on Education but Negative on Morality in Emerging and Developing Nations.” The report contains some really valuable information, taken into consideration that quality, reliable, recent and comparable data is not easy to find on the use of the internet, especially in developing nations. Among basic penetration data, the report also examines internet activities and public opinion regarding the internet’s impact on society. We present here some of the more interesting findings of the report.

Highlighted articles

- ✓ Cleanweb For Development - An Introduction
- ✓ Mobile for Development - mHealth Country Feasibility Report: Zambia
- ✓ Gender Issues & Information Communication Technology for Development (ICT4D): Prospects and Challenges for Women in Nigeria
- ✓ Development as Freedom in a Digital Age: Experiences from the Rural Poor in Bolivia
- ✓ Somalia Impact Report: The World Citizens Panel
- ✓ The importance of effective governance in implementing national broadband plans – Overview
- ✓ Key themes in national educational technology policies
- ✓ Call Me Educated: Evidence from a Mobile Monitoring Experiment in Niger

New documents in the Observatory

In this chapter you can find a list of every new item which has been added to the Observatory in the last period.

IN FOCUS: INTERNET IN EMERGING AND DEVELOPING NATIONS – AN INTERESTING SURVEY

In the end of March, [Pew Research Center](#) published a report called „Internet Seen as Positive Influence on Education but Negative on Morality in Emerging and Developing Nations.” The report contains some really valuable information, taken into consideration that quality, reliable, recent and comparable data is not easy to find on the use of the internet, especially in developing nations. Among basic penetration data, the report also examines internet activities and public opinion regarding the internet’s impact on society. We present here some of the more interesting findings of the report.

Pew Research Center published its “[Internet Seen as Positive Influence on Education but Negative Influence on Morality in Emerging and Developing Nations](#)” report in the end of March 2015. The report, which examines technology use in 32 emerging and developing nations, is based on 36,619 face-to-face interviews with adults 18 and older, conducted in the second quarter of 2014.

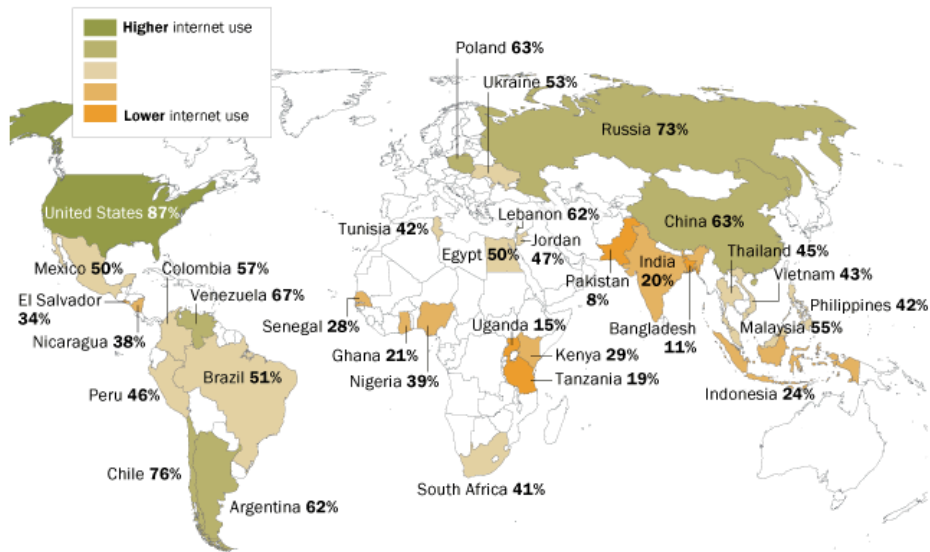
This approach makes this report a good read, because quality data, that can be compared in a country basis is hard to find, especially if it not only includes the basic access data, but also contains data on internet and mobile activities (including social, informational, commercial, and educational tasks, as well as social network usage rates) and a view on the effect of the internet on various aspects of people’s lives, including on education, politics, and morality.

Internet access

The report states that many in the examined emerging and developing nations are left out of the internet revolution. Across the surveyed 32 nations, the percentage of people who use the internet varies widely, overall, a median of 44% access the internet, including half or more in 13 countries. Chile (76%), Russia (73%) and Venezuela (67%) are on the top of the list, and Poland, China, Lebanon and Argentina is also above the 60% mark. Toward the bottom in terms of access rates are some of the world’s most heavily populated nations in South and Southeast Asia, like Indonesia (24%), India (20%), Bangladesh (11%) or Pakistan (8%). These countries represents approximately a quarter of the world’s population. Across the emerging and developing nations surveyed, internet access is closely linked to national income.

Globally, Internet Access Varies Widely

Percent who access the internet at least occasionally or own a smartphone



Note: U.S. data comes from a January 2014 Pew Research Center survey.
Source: Spring 2014 Global Attitudes survey, Q67 & Q69.

PEW RESEARCH CENTER

The authors of the report examined the most important influencing factors of internet usage. They found that computer ownership, age (e.g. in Thailand 83% of young people are online, compared with just 27% of older Thais), English language ability and education have the biggest impact on whether or not someone uses the internet. Not any of these impacting factors are new, but in this case the existence of them is backed by a reliable and well-documented database. Higher income, employment and being male also have a significant, positive impact on internet use, though to a lesser degree.

If take a look on one of the impacting factors, we can see that computer ownership also shows great variability (from 3% in Uganda to 78% in Russia). A median of 38% of the respondents has a working computer in their household, in 11 countries, half or more own computers (the ownership level is relatively high in a number of Latin American nations, and not surprisingly the lowest is in sub-Saharan African nations).

However, computer is not the only possibility to use the internet nowadays: in many nations cell phones are nearly universal, while landlines are almost nonexistent (e.g. 1% in Ghana, Nigeria, Uganda and Bangladesh), so wireless technology is crucial in these countries.

This is one of the reason behind the fact, that cell phone ownership is much more common in the emerging and developing nations surveyed. A median of 84% across the 32 nations own a cell phone (of any type). This rate ranges from 97% in China and Jordan down to 47% in Pakistan. But smartphones are not nearly as common as conventional cell phones: a median of only 24% of the respondents says they own a cell phone that can access the internet and applications. Only in two of the countries polled do more than half have a smartphone – 58% in Chile and 55% in China. The large age gap can also be observed in smartphone ownership (e.g. in Malaysia, 72% of 18- to 34-year-olds own a smartphone, while only 27% of those 35 and older own one). It reminds the reader that

development programs based only on applications and smartphone cannot reach the majority of the population in these countries at the moment.

Internet use

Regardless of what internet users choose to do online, most in these emerging and developing countries are doing it daily (66%). Half or more of internet users in 27 of 32 surveyed nations say they use the internet daily. These numbers show us that once people began to use the internet, they build it into their daily routine to manage their lives – not only in developed countries.

The report tested eight different activities on the internet (whether the user do i tor not in the past year). Out of this eight activity staying in touch with friends and family is the predominant choice in every country surveyed, so socializing is the most popular digital activity (86%). Internet is also widely used for getting information about politics (54%), health care (46%) and government services (42%). One interesting result is that getting online political news is particularly frequent in Middle Eastern countries, like Tunisia (72%), Lebanon (70%) and Egypt (68%).

A median of 82% of internet users in the surveyed countries use their internet connections to access social networking sites, such as Facebook, Twitter and/or other country-specific platforms. Among the users of social networks the most common activity is sharing views about music, movies, sports. So we can state that social networks is mostly for staying touch with friends and relatives and for entertainment.

Most Use Internet to Socialize and Get Information; Less for Career and Commerce

Adult internet users, in the past 12 months, have you used the internet to do any of the following things?

| | Socializing | Getting information | | | Career and commerce | | | |
|-----------------------------|---------------------------------------|---------------------|-----------------|---------------------------------|----------------------|--------------------------|--------------|----------------------|
| | Stay in touch with family and friends | Get political news | Get health info | Get government or services info | Look/apply for a job | Make or receive payments | Buy products | Take an online class |
| Eastern Europe | | | | | | | | |
| Ukraine | 93 | 80 | 64 | 50 | 33 | 32 | 44 | 10 |
| Russia | 85 | 68 | 63 | 55 | 37 | 41 | 43 | 13 |
| Poland | 82 | 66 | 64 | 44 | 40 | 67 | 58 | 18 |
| Middle East | | | | | | | | |
| Lebanon | 89 | 70 | 4 | 8 | 18 | 3 | 2 | 2 |
| Tunisia | 88 | 72 | 68 | 58 | 41 | 20 | 16 | 46 |
| Jordan | 87 | 44 | 41 | 23 | 32 | 30 | 27 | 5 |
| Egypt | 80 | 68 | 39 | 22 | 25 | 11 | 3 | 1 |
| Asia | | | | | | | | |
| China | 88 | 62 | 47 | 43 | 33 | 44 | 52 | 15 |
| Philippines | 88 | 44 | 54 | 44 | 39 | 8 | 7 | 8 |
| Malaysia | 86 | 43 | 42 | 44 | 40 | 27 | 22 | 13 |
| Vietnam | 84 | 80 | 71 | 47 | 22 | 15 | 26 | 9 |
| Indonesia | 83 | 43 | 44 | 41 | 37 | 6 | 9 | 3 |
| Thailand | 82 | 57 | 56 | 42 | 28 | 16 | 22 | 14 |
| Bangladesh | 69 | 56 | 28 | 26 | 62 | 13 | 23 | 7 |
| India | 63 | 38 | 31 | 43 | 55 | 23 | 22 | 22 |
| Latin America | | | | | | | | |
| Chile | 92 | 51 | 61 | 49 | 42 | 41 | 35 | 12 |
| Brazil | 89 | 58 | 58 | 47 | 40 | 26 | 31 | 21 |
| Peru | 87 | 55 | 63 | 40 | 38 | 15 | 13 | 16 |
| Colombia | 87 | 46 | 56 | 34 | 39 | 19 | 18 | 30 |
| Nicaragua | 86 | 48 | 62 | 37 | 26 | 9 | 7 | 17 |
| Venezuela | 86 | 46 | 64 | 40 | 23 | 31 | 22 | 12 |
| Mexico | 86 | 34 | 55 | 36 | 35 | 17 | 12 | 12 |
| El Salvador | 85 | 48 | 46 | 33 | 34 | 11 | 8 | 10 |
| Argentina | 81 | 42 | 44 | 39 | 32 | 22 | 26 | 15 |
| Africa | | | | | | | | |
| Senegal | 100 | 54 | 39 | 52 | 36 | 22 | 12 | 17 |
| Tanzania | 87 | 57 | 32 | 53 | 35 | 42 | 15 | 13 |
| Kenya | 80 | 62 | 40 | 49 | 53 | 39 | 16 | 11 |
| Nigeria | 76 | 55 | 44 | 52 | 29 | 19 | 11 | 12 |
| Ghana | 76 | 48 | 33 | 30 | 26 | 24 | 6 | 11 |
| South Africa | 73 | 30 | 29 | 29 | 40 | 26 | 14 | 13 |
| Uganda | 69 | 51 | 40 | 35 | 27 | 24 | 4 | 13 |
| MEDIAN ALL COUNTRIES | 86 | 54 | 46 | 42 | 35 | 22 | 16 | 13 |

Asked of those who use the internet at least occasionally or own a smartphone. Pakistan not included due to insufficient sample size.

Note: Numbers in bold and green indicate the activity with the highest percentage for each country. Numbers in orange indicate the activity with the lowest percentage for each country.

Source: Spring 2014 Global Attitudes survey. Q71a-h.

PEW RESEARCH CENTER

Commercial and career activities are less commonly used, such as searching or applying for a job, making or receiving payments, buying products and taking online classes. However, this finding is also not surprising, because usually transaction services are also less frequently used among internet users in developed countries as well. A median of only 22% conduct financial transactions online, but there is great variation on this activity: two-thirds of internet users in Poland make or receive payments online, and also in China, 44% of internet users say they use online banking in some form, and services like M-Pesa are boosting mobile banking in countries like Kenya. Online buying (16%) is also not the most frequent internet activity, however for example about half (52%) of online Chinese say they have bought a product in the last 12 months. The least common activity online among the eight tested is taking an online class or course that leads to a certificate (13%).

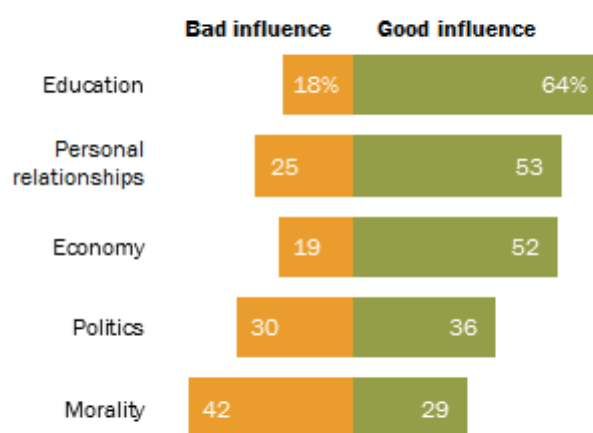
It is worth to mention that while socializing is a day-by-day activity, the use of some other service on the internet is life-situation or context-dependent, so we cannot state that 100% use of some kind of services are normatively the ideal state of development. Also, the surveyed eight activities are far from being exhaustive.

Perceptions of the influence of the internet

According to the findings the respondents say that internet use has a good influence on education (64%), as well as on personal relationships (53%) and economics (52%), but not so good influence on politics (36% positive opinion, with a nearly equal 30% saying it has a bad influence), and especially on morality where the majority thinks the internet has clearly a bad influence (good influence: 29%; bad influence: 42%).

Internet Influence Seen as Positive in Emerging and Developing Nations; Morality an Exception

Median saying increasing use of internet has had a ___ on ...



Note: Medians across 32 emerging and developing nations. Those who answered "No influence" are not shown.

Source: Spring 2014 Global Attitudes survey. Q75a-e.

PEW RESEARCH CENTER

While most people surveyed believe the internet has a good influence on many aspects of life, there are certain segments of the population that are more positive about the internet's effect. Not surprisingly, one of the major subgroup that sees the internet positively is internet users themselves. It can be stated that generally, people who have access to the internet are more positive about its societal influence. Also the highly educated and the younger respondents are more likely to say the internet's growing use is a good influence in these nations. So, there are mixed perceptions in different domains and great differences among regions and internet users and not user in relation to the impact of the internet on the society.

The full report (with country scores and historical data) can be downloaded [here](#).

HIGHLIGHTED ARTICLES

Cleanweb For Development - An Introduction

The growth of Information and Communication Technologies (ICTs) and the increased importance of clean technology has allowed for a new cleantech paradigm. Traditionally, clean technology investments in renewable energy, mobility, and water management hardware have required high upfront capital and long implementation periods. Cleanweb, a sub-category of cleantech is a rapidly deployable, relatively low-cost alternative leading to a more efficient use of re- sources and a reduced environmental impact.

Authors: Anna Lerner, Oriol Pascual, Zhenia Viatchaninova

Source: The World Bank

Type of information: research study

Language: English

<http://ifap-is-observatory.ittk.hu/node/1454>

Mobile for Development - mHealth Country Feasibility Report: Zambia

This report aims to carry out a comprehensive analysis of the current state of mHealth in Zambia. Information has been gathered and presented in the context of the GSMA Pan-African mHealth Initiative and more specifically is aligned to the aim of the 10-country GSMA nutrition initiative - to develop commercially sustainable mHealth services that meet public health needs, in the areas of demand generation, registration and data surveillance.

Type of information: research report

Language: English

<http://ifap-is-observatory.ittk.hu/node/1450>

Gender Issues & Information Communication Technology for Development (ICT4D): Prospects and Challenges for Women in Nigeria

This paper identifies and evaluates gender issues and information communication technology, with focus on the challenges and prospects for women empowerment in Nigeria. The study critically examined research literatures and conducted research survey on the prospects and challenges of promoting gender equality and women empowerment through ICTs; and identifies policy implication for Nigeria. The research survey used a random sampling technique with a target sample size of eighty respondents. Data gathered from the questionnaire was analyzed using Statistical Package for Social Science version 19, and the result was presented using ANOVA, and descriptive analysis. The study reveal gender inclusiveness in policy drafting as a key driver for socio-economic development, improved healthcare and women empowerment in Nigeria. We recommend a deliberate ICT policy that attract and encourages women participation in ICT developmental framework.

Authors: Kwetishe Joro Danjuma, Bayo Mohammed Onimode, Ochedikwu Jonah Onche
Source: IJCSI: International Journal of Computer Science Issues
Type of information: academic article
Language: English
<http://ifap-is-observatory.ittk.hu/node/1443>

Development as Freedom in a Digital Age: Experiences from the Rural Poor in Bolivia

Under what conditions can new technologies enhance the well-being of poor communities? The study designs an alternative evaluation framework (AEF) that applies Amartya Sen's capability approach to the study of information and communications technologies (ICTs) in order to place people's well-being, rather than technology, at the center of the study. The AEF develops an impact chain that examines the mechanisms by which access to, and meaningful use of, ICTs can enhance people's "informational capabilities" and improve people's human and social capabilities. This approach thus uses people's individual and collective capabilities, rather than measures of access or use, as its principal evaluative space. Based on empirical evidence from indigenous communities' use of new technologies in rural Bolivia, the study concludes that enhancing poor people's informational capabilities is the most critical factor determining the impact of ICTs on their well-being. Improved informational capabilities, like literacy, do enhance the human capabilities of poor and marginalized peoples to make strategic life choices and achieve the lifestyle they value. Evaluating the impact of ICTs in terms of capabilities thus reveals no direct relationship between improved access to, and use of, ICTs and enhanced well-being; ICTs lead to improvements in people's lives only when informational capabilities are transformed into expanded human and social capabilities in the economic, political, social, organizational, and cultural dimensions of their lives. The study concludes that intermediaries are bound to play a central, even fundamental, role in this process. They help poor communities to enact and appropriate ICTs to their local socio-cultural context so that their use becomes meaningful for people's daily lives, enhances their informational capabilities, and ultimately improves their human and social capabilities.

Authors: Björn-Sören Gigler
Source: The World Bank
Type of information: book
Language: English
<http://ifap-is-observatory.ittk.hu/node/1439>

Somalia Impact Report: The World Citizens Panel

The "World Citizens Panel" (WCP) was established by Oxfam Novib to measure the impact of its programmes among people living in poverty and injustice. The approach combines quantitative research (impact surveys) with qualitative research (stories of change) and gives participants a voice in evaluation, and the opportunity to learn how programmes can be improved and to contribute to public debate on the effectiveness of development cooperation. This impact study of the programme in Somalia was carried out by Oxfam Novib, HIRDA and partners in Somalia in 2013/2014. The study included a broad set of indicators, covering major dimensions of poverty and injustice. Data collected by partners with the help of a smart phone app was transferred into a central data base, managed and analysed by the Oxfam Novib World Citizens Panel team.

Author: Peter Huisman

Source: Oxfam GB Policy & Practice

Type of information: research report

Language: English

<http://ifap-is-observatory.ittk.hu/node/1460>

The importance of effective governance in implementing national broadband plans - Overview

Connectivity through universal broadband infrastructure is a key social enabler and a policy priority for many governments around the world. In common with all national infrastructure investment programmes, the implementation of National Broadband Plans (NBP) requires the management of significant complexity around government, technical, financial, social, private and public sector agendas and often carries a material risk of programme delay or cost overrun. Access and security regulation can create further challenges to providers working with governments, adding complexity to the programme and increasing the risk of delays in delivery.

Authors: Mark Williams, Santino Saguto, Richard Sedgwick, Emmanuel Durou, Davide Strusani, Michael Brook

Source: Deloitte

Type of information: research report

Language: English

<http://ifap-is-observatory.ittk.hu/node/1459>

Key themes in national educational technology policies

The World Bank is concluding an analysis of over 800 policy documents related to the use of information and communication technologies (ICTs) in education from high, middle and low income countries around the world in order to gain insight into key themes of common interest to policymakers. This work is part of the institution's multi-year efforts under its Systems Approach for Better Education Results (SABER) initiative to provide policy-relevant guidance for education decision makers in a number of policy 'domains' (including areas such as workforce development; school finance; teachers; management information systems; equity and inclusion; and student assessment).

Author: Michael Trucano

Source: The World Bank

Type of information: research report

Language: English

<http://ifap-is-observatory.ittk.hu/node/1458>

Call Me Educated: Evidence from a Mobile Monitoring Experiment in Niger

In rural areas of developing countries, education programs are often implemented through community teachers. While teachers are a crucial part of the education production function, observing their effort remains a challenge for the public sector. This paper tests whether a simple monitoring system, implemented via the mobile phone, can improve student learning as part of an adult education program. Using a randomized control trial in 160 villages in Niger, we randomly assigned villages to a mobile phone monitoring component, whereby teachers, students and the village chief were called on a weekly basis. There was no incentive component to the program. The monitoring intervention dramatically affected student performance: During the first year of the program, reading and math test scores were .15-.30 s.d. higher in monitoring villages than in nonmonitoring villages, with relatively stronger effects in the region where monitoring was weakest and for teachers for whom the outside option was lowest. We provide more speculative evidence on the mechanisms behind these effects, namely, teacher and student effort and motivation.

Authors: Jenny C. Aker, Christopher Ksoll

Source: Center For Global Development

Type of information: research report

Language: English

<http://ifap-is-observatory.ittk.hu/node/1457>

NEW DOCUMENTS IN THE OBSERVATORY

Lens turns smartphone into a microscope: Costs only 3 cents - blog post

<http://ifap-is-observatory.ittk.hu/node/1453>

Mobile app helps teachers to support literacy efforts - case study

<http://ifap-is-observatory.ittk.hu/node/1452>

Crowd-Sourced Flood Report App Allows Quick Evacuations in Jakarta - application

<http://ifap-is-observatory.ittk.hu/node/1451>

ICT skills set to develop with new MOU in Kenya - blog post

<http://ifap-is-observatory.ittk.hu/node/1449>

Why a mobile-technology revolution needs teachers - blog post

<http://ifap-is-observatory.ittk.hu/node/1448>

FarmDrive: A Young Woman in ICT4Ag – A Case Study - blog post

<http://ifap-is-observatory.ittk.hu/node/1447>

How Facebook helped restore family links after the Nepal earthquake - blog post

<http://ifap-is-observatory.ittk.hu/node/1445>

Helping farmers in identifying problems and improving produce - application

<http://ifap-is-observatory.ittk.hu/node/1444>

Why a mobile-technology revolution needs teachers - blog post

<http://ifap-is-observatory.ittk.hu/node/1437>

It Took India Almost 10 Years To Realise That Women Empowerment Is Possible Through ICT - blog post

<http://ifap-is-observatory.ittk.hu/node/1438>

How cellphones helped to dramatically reduce new cases of Dengue fever in Pakistan - online article

<http://ifap-is-observatory.ittk.hu/node/1440>

Using the Internet to connect students and teachers around the world for 'virtual exchanges' - blog post

<http://ifap-is-observatory.ittk.hu/node/1441>

8 Considerations for Better Mobile Learning Solutions for Women - blog post

<http://ifap-is-observatory.ittk.hu/node/1442>

How Technical Communities Are Helping Engineer Better Responses to Global Crises - blog post

<http://ifap-is-observatory.ittk.hu/node/1456>