

# DIGITAL DIASPORA

How Immigrants Are Capitalizing on  
Today's Technology



Welcoming Center for New Pennsylvanians

[www.welcomingcenter.org](http://www.welcomingcenter.org)

*November 2012*

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Dear Friends and Colleagues:

*Digital Diaspora* marks an important milestone in the work of the Welcoming Center for New Pennsylvanians.

Our previous reports have detailed the opportunities and challenges faced by immigrant professionals; the economic impact of immigrant entrepreneurs; and the significant contributions possible when qualified immigrant jobseekers become integrated into our economy.

In this report, we combine our ongoing commitment to rigorous original research with deep knowledge of immigrant communities. The result: A first-of-its kind portrait about mobile technology usage among immigrants – and surprising predictions about the future of this powerful consumer bloc.

We anticipate that our findings will startle some and inspire others. Regardless of your reaction, we look forward to hearing your thoughts. Please don't hesitate to contact me at (215) 557-2626 or [peter@welcomingcenter.org](mailto:peter@welcomingcenter.org)

Finally, this report would not have been possible without the thoughtful and timely assistance of Allison Karpyn and Candace Young. Their generous willingness to provide technical assistance with our data analysis is deeply appreciated. Needless to say, any mistakes that remain are entirely our own.



Peter Gonzales  
President and CEO

*The Welcoming Center for New Pennsylvanians is a nonprofit economic development organization based in Philadelphia, PA. Founded in 2003, the Welcoming Center provides a wide range of services, including job placement for work-authorized immigrants, small business development for immigrant and American-born entrepreneurs, and adult education and training services. In addition, the Center provides consulting services to assist business, philanthropic, and public partners in more effectively incorporating their immigrant constituents.*



# Introduction: Shaping the New American Story

A new generation of immigrants is forming a “Digital Diaspora” that is shaping the United States in unprecedented and intriguing ways. Arriving in the US more technologically fluent than ever before, these individuals’ creative flexibility and growing purchasing power are driving a dynamic international exchange that to date has been largely unrecognized.

Corporate and political leaders who can successfully engage these hidden innovators may profit from an early advantage. And in the long run, effective incorporation of immigrant talent can lead to economic and social benefits for all.

Those are the key findings of this report, which draws on the results of a first-ever survey of immigrant technology usage conducted by the nonprofit Welcoming Center for New Pennsylvanians. Based on a mixture of in-person and online interviews, the results present an in-depth snapshot of select Philadelphia-area immigrants and suggest intriguing potential for further research at the regional and national level.



As detailed below, immigrant survey respondents are wired, connected, and fearlessly inventive – perhaps to a surprising degree. Risk-takers by nature, these men and women have already moved across the globe and are quick to seize other new opportunities. Their rich store of social capital and global connections are combining to drive an enthusiastic embrace of new communications tools.

Immigrants are also functioning as intermediaries for rapid dissemination of technology overseas, via their home-country social ties. As one respondent told us, “Every time I get a new iPhone, I send my old one to relatives in Ukraine. It’s the same for all my friends. Our grandparents are learning to use smart phones and tablets because that’s how you stay in touch today.”

Dozens of other respondents shared stories of entrepreneurial ventures made stronger by their use of mobile technology, professional skills shaped by new tools, and more.

Perhaps most remarkably, these attitudes and usage held steady across an extraordinary diversity of ethnic, linguistic, educational, and socioeconomic backgrounds. We interviewed a man in his 20s from the tiny Southeast Asian nation of Bhutan and a woman in her 50s from Colombia. These individuals and more than a hundred others shared their experience and knowledge with us to help create this portrait of a *Digital Diaspora*. We are very grateful for their assistance.

As the United States welcomes its largest and most diverse pool of immigrants in generations, the twin trends of global migration and technological adaptation are interacting in unforeseen and often exciting ways. ***People scattered by migration are reuniting themselves via mobile technology, and their rapid re-connection is reshaping our world.*** We hope that this report will be a first step in understanding the impact of these remarkable changes.

*Digital Diaspora: How Immigrants are Capitalizing on Today’s Technology*

## Setting the Stage

Recent reports on Americans' technology usage have largely focused on comparisons between genders, across age groups, or among racial, ethnic, or socioeconomic groups. To the best of our knowledge, no major reports have focused on *immigrants'* technology usage.

The time is ripe for such an examination. The United States is in the midst of its second-largest wave of immigration, the largest having come between roughly 1890-1910. Today, more than 12% of Americans, totaling nearly 40 million people, were born in another country.

Unlike the immigrants of a hundred years ago, today's immigrants are in constant contact with friends and family around the world. Far from having to await a letter or telegram, today's immigrants can often receive real-time updates from home in a matter of seconds.

Often, they bring technological skills and experience *with* them to the United States. Forty percent of today's Latino immigrants, for example, are arriving from countries where mobile phones are more broadly used than landlines.<sup>1</sup>

As an economic development organization that serves over 1,000 immigrants each year, the Welcoming Center is well positioned to study this emerging phenomenon. Thus, in the summer of 2012, we undertook the task of designing and administering what to our knowledge is the first survey to specifically focus on immigrant technology usage.

While our survey respondents *cannot* be considered a nationally representative sample of immigrants (*see "How Representative is This Data?" sidebar and Methodology section*), their experience provides a unique window into mobile technology usage among a broad range of Philadelphia-area immigrants.

The high levels of mobile connectivity documented in this report also suggest important considerations for public officials, entrepreneurs and business leaders, and advocates seeking to successfully engage an increasingly diverse American audience.

**Our immigrant respondents' robust utilization of mobile technology has broad implications** for goals as diverse as:

- Identifying markets among "hidden" consumers and product innovators
- Mobilizing constituencies via citizen engagement and voting
- Reducing health disparities
- Improving parental involvement in K-12 education

Perhaps most important, the data overall suggests a previously undocumented level of technological fluency and activity among today's immigrants. We look forward to future exploration of these emerging phenomena.

*Today's immigrants often bring technological skills and experience with them to the United States.*

## *How Representative Is This Data?*

The data collected for the *Digital Divide* report represent an initial foray into gathering information about immigrants' technology usage.

Our rigorous interview process and careful statistical analysis provide clear and compelling data about a *select subgroup* of immigrants. All findings are statistically significant at a level of  $p < .05$ .

The 118 men and women who shared their stories and experiences with us represent a broad range of ethnicities, nationalities, language groups, educational backgrounds, and income levels. (For more on their characteristics, see the Methodology section of this report.)

**Nevertheless, this report is *not* a randomized or representative sample of all immigrants in the Philadelphia region or nationally.**

Our results point to potentially fruitful avenues for additional research, including:

- Types of technology utilized by immigrants
- Frequency and duration of mobile and other technology usage
- Activities undertaken via mobile technology
- Mechanisms through which technological literacy is disseminated
- Innovative use of mobile products



We very much hope to be able to expand this research in the future, both through our own efforts and those of colleagues. To that end, a copy of our survey protocol is included as an appendix to this report.

**We urge anyone interested in supporting the future stages of this research** to contact the Welcoming Center's President and CEO, Peter Gonzales, at 215-557-2626 or [peter@welcomingcenter.org](mailto:peter@welcomingcenter.org).

## Findings: Well-Connected, Highly Engaged Users

Immigrant respondents to our survey have embraced mobile technology to an extraordinary degree. Their utilization is:

- I. Personal and social
- II. Global and interactive
- III. Inventive and entrepreneurial

Below, we explore the details of immigrants' usage and engagement across each of these categories.

In the first section, we explore personal and social usage, including text messaging, international calling, social media, email, and GPS/navigation. We document the degree to which immigrant consumers are paying bills by mobile and purchasing new items via their phones. We also explore the degree to which immigrants are purchasing smart phones and unlimited calling plans.

In the next section, we take a broader look at immigrant respondents' global and interactive connections, including their enthusiastic participation in multimedia creation and sharing, their frequent communication with international contacts, and the surprising range of sources from which they obtain home-country news.

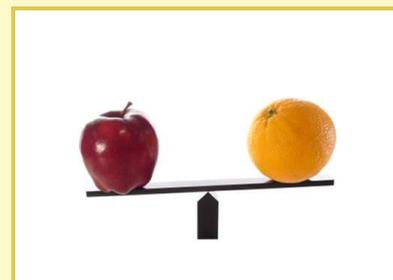
Finally, we explore immigrant respondents' creative, entrepreneurial approach to mobile innovation, including small-business services, community radio, and more. *Please note: Throughout this report, we use the terms "immigrant" and "foreign-born" interchangeably.*



### Comparing Immigrant Respondents to the US Public

Throughout this report, we reference data about the immigrant respondents to our survey as compared to the broader American public.

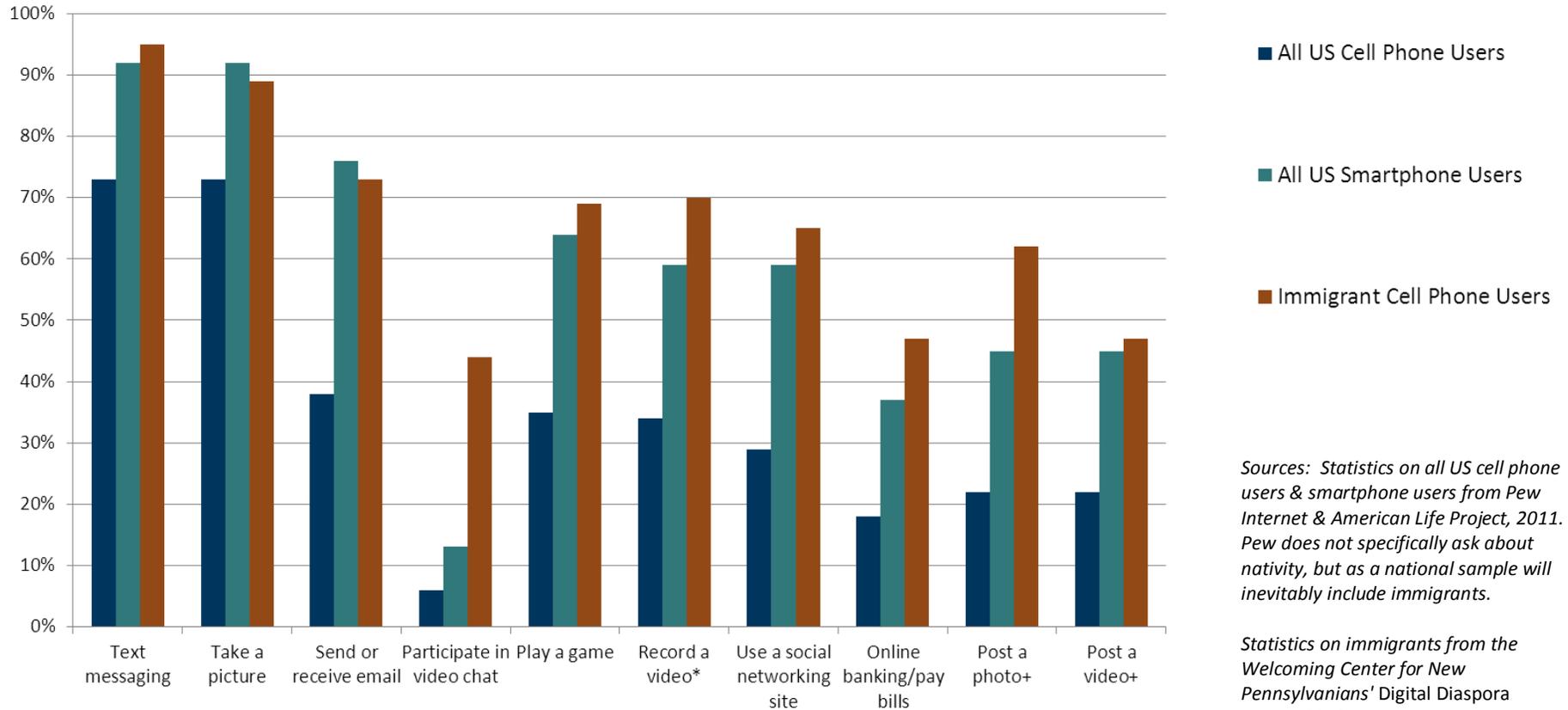
Except where noted, data on the US public comes from the Pew Internet & American Life Project. Pew's data includes information on US adults overall, US cell phone users, and US *smart phone* users.



In comparison, all of our immigrant respondents are cell phone users, and more than two-thirds (68%) of them are smart phone users. Because a portion of our survey respondents replied to an online survey (rather than our in-person interviews), it is possible that our respondents are more likely than the average immigrant to have a smart phone.

For that reason, we have primarily used comparison data for *US smart phone owners*. It is notable that even given this stringent criteria, our immigrant respondents – who include both smart phone owners and regular cell phone owners – outrank the US public on a number of dimensions.

## Immigrants Are More Robust, Interactive Users of Mobile Technology than Overall US Population



Sources: Statistics on all US cell phone users & smartphone users from Pew Internet & American Life Project, 2011. Pew does not specifically ask about nativity, but as a national sample will inevitably include immigrants.

Statistics on immigrants from the Welcoming Center for New Pennsylvanians' Digital Diaspora report, 2012.

\*Welcoming Center survey combined video & audio recordings

+Pew data combined photos & videos

## Part I: Immigrants' Personal and Social Use of Mobile Technology

### Texting

The overwhelming majority of immigrant respondents (95%) report using their mobile phones to send text messages, and more than half (58%) say they do so “often.” This number is significantly higher than the percentage of U.S. adult cell phone users overall who text (73%).<sup>ii</sup>

Among our survey respondents, there was a clear demarcation by age: Of those who said they “never” send text messages, all were age 40 or older. There were no statistically significant differences among our respondents for text message use by gender, region of origin, or length of time in the US.

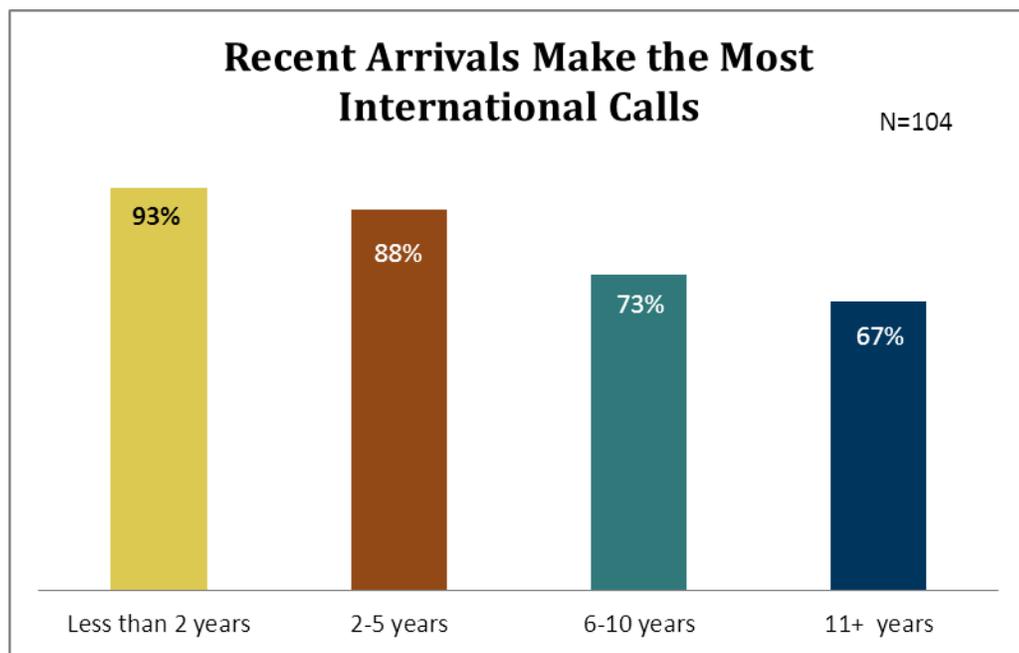
### International calling

Unsurprisingly, a large percentage of immigrant respondents report using their mobile phones to make calls to other countries. Overall, 81% of respondents said that they make international calls, including 27% who do so “often.”

While it may seem surprising that nearly 1 in 5 respondents (19%) do *not* make calls internationally, it is highly likely that these respondents are utilizing other means, such as Skype, to speak with friends and family abroad. *See additional data on Skype usage below.*

There was a clear correlation between the amount of time a respondent had been in the United States and his or her likelihood of making international calls. Ninety-three percent (93%) of the most recent arrivals did so, compared to 88% of those who had been in the US 2-5 years, 73% of those here 6-10 years, and 67% of those here for 11 or more years.

There are two potential explanations for this trend. First, the design of the US immigration system often means that family members do not immigrate at the same time. Therefore, the newest immigrants are also the most likely to have immediate family members still living abroad. A strong urge to talk with their spouses and children is likely to drive their international calling patterns.



Second, it is likely that immigrants who have been in the US for a longer period of time are

older, on average, than recent arrivals.<sup>iii</sup> As a result, their children may be grown and there may be less urgency to speak regularly with them or with other relatives still in the home country.

There were no statistically significant differences in international calling by gender, region of origin, or age range.

### **Video chat**

Almost half (44%) of immigrant respondents report that they use their mobile phones for video chat, such as Skype or Facetime. Remarkably, this percentage is three times higher than the percentage of overall U.S. *smart phone* owners who report using video chat (13%).<sup>iv</sup>

For many respondents, video chat provides a vital way to stay up-to-date with far-flung family members. (See sidebar.) Beyond individual conversations, video chat can also facilitate immigrants' long-distance participation in rites of passage such as graduations, funerals, and even religious festivals. (See "When Migration Jump-Starts Technological Literacy.")

There were no statistically significant differences in video chat usage by gender, age, region of origin or length of time in the US.



### ***A Child Grows in Kiev....and Philadelphia***

“When I moved to the U.S. in 1993, my grandmother used to trace my little cousin’s foot on a piece of paper and mail it to me,” remembers Olga Chernov-Gitin. “It took four months for her letter to arrive from Ukraine. She would write, ‘By the time you get this, he will have grown again.’ But it was all we had.”

By contrast, Olga says, her two-year-old son is growing up in regular contact with friends across the ocean. “We have family friends with a daughter the same age, and so we’ll put them on Skype together so they can talk,” she says. “The other day, I told Will it was Maria’s birthday and he immediately pointed to the phone. He gets the concept completely.”

There is another purpose to the calls, she adds. “This way, when Maria’s family comes to the US, or we visit Kiev, it won’t be one of those awkward situations where the parents are pushing together kids who have never met and telling them to be friends.”

Will and Maria will be the third generation of their families to share a connection, says Olga. “My mom was Maria’s father’s teacher in Kiev in the 1980s. Today he’s in his 40s and now our children will grow up friends, even though they are thousands of miles apart.”

### **Paying bills**

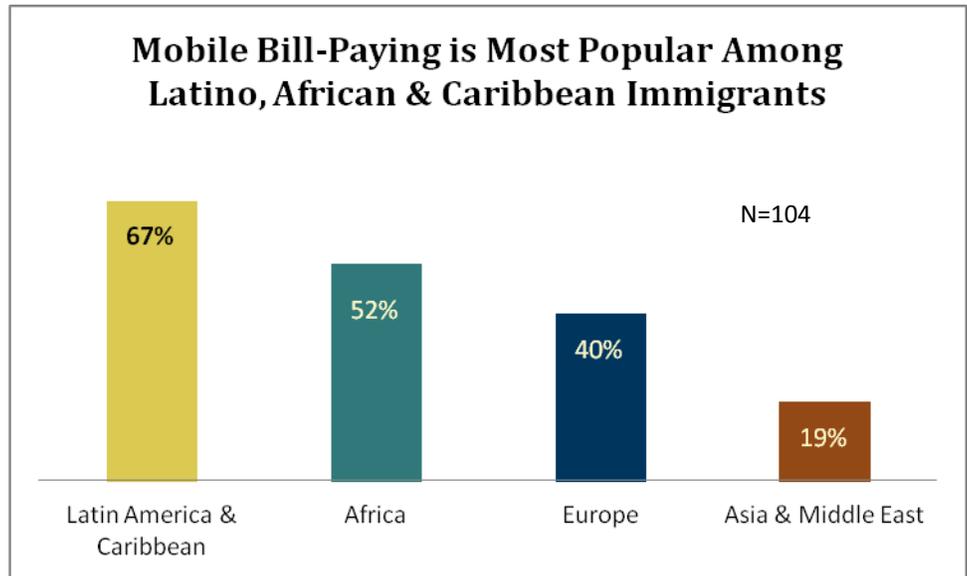
Just under half (47%) of respondents report using their mobile phone to pay bills, including 17% who say they do so “often.” (We did not specify what kind of bill-paying, so some respondents

may be paying through a bank account while others may be using PayPal or other means.)<sup>v</sup> There were notable differences in the frequency of mobile bill-paying by region of origin.

Immigrants from Latin America and the Caribbean were the most likely (67%) to report paying bills by mobile phone, followed by those from Africa (52%), Europe (40%), and finally Asia and the Middle East (19%).

Though it is impossible to say with certainty what is driving these results, there are several factors to take into consideration.

First, while it might seem that people are more likely to pay bills by mobile phone because they lack other options for online bill-paying, this does not appear to be the case. Respondents from both Latin America and the Caribbean and from Africa were at least as likely as other respondents to report having a home computer.



Other factors that may be at work include the convenience of just-in-time mobile payment, especially for those on tight budgets; the widespread use of apps to facilitate online payments; and US companies' implementation of online resources for Spanish-speaking customers.

It is also likely that parents are being influenced by the digital literacy of their teen and young adult children. This possibility was raised by one Latin American community leader, who emphasized the relative youth of the Hispanic immigrant community.

Finally, as mentioned above, national research indicates that 40% of Latino immigrants are coming from countries where mobile phone usage is more widely available than landlines.<sup>vi</sup> As a result, they arrive in the United States *already* fluent in mobile technologies and thus may be quicker to adapt to additional features.

Our survey found no statistically significant differences in the use of mobile phones for bill-paying by gender, age, or length of time in the US.

## Transferring money

While “mobile money” use is not common in the US, such transactions are far more common in parts of the developing world. For that reason, we asked respondents if they use their phones to transfer money using services such as M-Pesa (popular in East Africa). Approximately 13% of respondents said yes.

There were no statistically significant differences in mobile-money usage by gender, age, region of origin or length of time in the US. However, it should be noted that virtually all of the respondents who *did* report using mobile money were from Africa, Latin America, and the Caribbean.

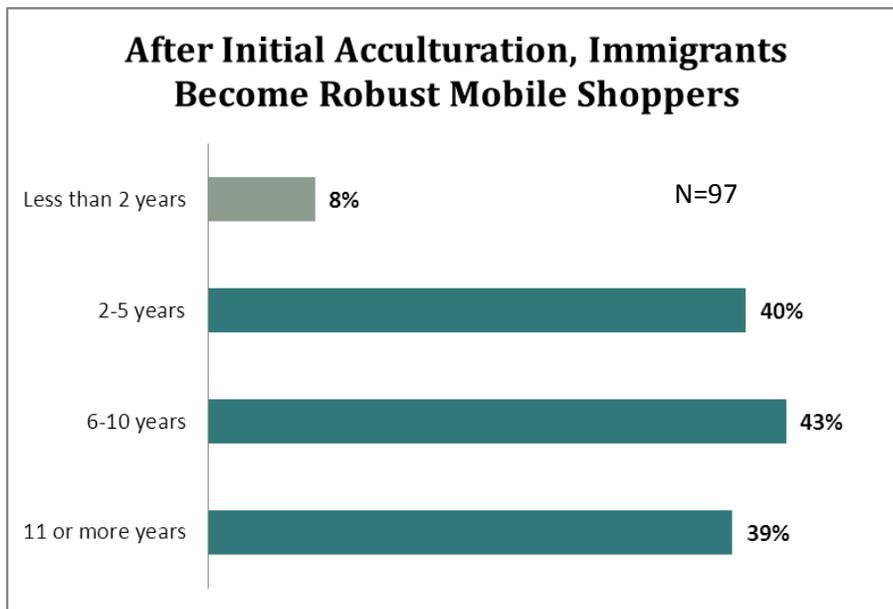


## Making purchases

Just over 1 in 3 immigrant respondents (35%) report that they use their mobile phones to buy items. (During our in-person interviews, a number of other respondents stated that they prefer to buy things via a computer instead because it has a bigger screen.)

This percentage is substantially higher than the number of overall US cell phone owners who have made mobile purchases (20%), and is also higher than the number of US *smart phone* users who report having made a purchase using their phone (29-34%).<sup>vii</sup>

There was a distinct difference between new arrivals to the US and longer-term residents. Just 8% of the most recent arrivals (those who had been in this country for less than two years) report using their mobile phone to make purchases, compared to 40% of those here 2-5 years, 43% of those here 6-10 years, and 39% of those here 11 or more years.



It is likely that acculturation plays a major role in online purchasing, as those who are the newest arrivals may not yet be familiar with US practices, shipping procedures, and even vendors. Lack of English language fluency may also have an effect.

In addition, post-September 11 banking regulations have

lengthened the time needed for new arrivals to obtain US credit or debit cards, which are often needed for online shopping.

## Sending e-mail

Nearly three-quarters of respondents (73%) report using their mobile phones to send e-mail, including 43% who do so “often.” Remarkably, even though not all of our respondents were smart-phone users, this number is comparable to the overall national percentage of smart-phone

users who send e-mail (76%), and far higher than the overall national percentage of cell phone owners (38%).<sup>viii</sup>

Women were substantially more likely to report using their phones to send e-mail (79% compared to 58% of men). This is broadly consistent with older research findings showing that women are enthusiastic online communicators, especially with regard to personal contacts.<sup>ix</sup> In addition, there was some suggestion among our respondents that women are more likely to send e-mail “often,” but our sample was not large enough to be certain.

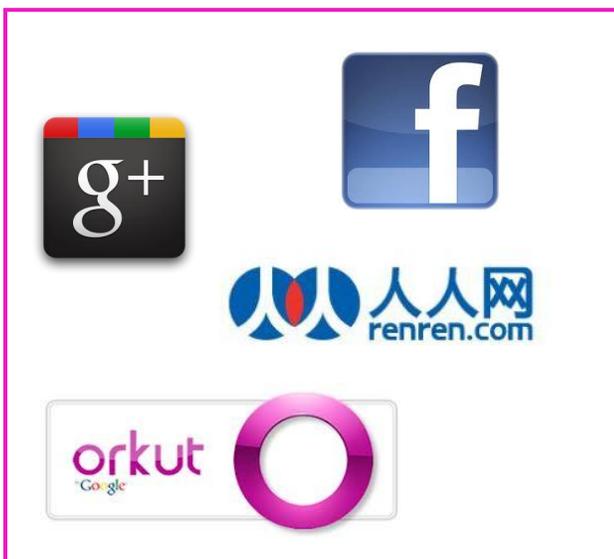
There was a somewhat uneven relationship between length of time in the United States and mobile e-mail usage. Fewer than half (44%) of new arrivals report sending e-mail via their phones. The percentage jumps to 73% for people here 2-5 years, then 60% for those here 6-10 years, and finally rises again to 83% for those here 11 or more years.

We do not have sufficient information to fully assess these results. It is possible they are influenced by age and/or English fluency. However, we did not ask users what language they were using to send e-mail, and of course there are an enormous number of web-based e-mail programs available to users who speak languages other than English.

There were no statistically significant differences in mobile e-mail use by region of origin or by age.

### Updating social media

Nearly 2 out of 3 immigrants (65%) report using their mobile phone to update social media accounts such as Facebook. This is higher than the nationwide percentage of *smart phone* users (59%) who report using their mobile to access social media, and far higher than the nationwide percentage of cell phone users who do so (29%).<sup>x</sup>



Women were significantly more likely to report using their phones to make social media updates (72% versus 50% of men).

In addition, women social media users appear more likely to update their accounts “often,” although the size of our sample was not large enough to test for statistical significance.

There were no statistically significant differences in mobile social media usage by age, length of time in US, or region of origin.

## Obtaining Directions / Using GPS

Nearly 3 in 4 respondents (73%) report using their mobile phones to obtain directions or for GPS. Interestingly, this question was not on the original version of our survey. However, during beta testing of the survey tool, so many people volunteered this as an answer that we added the question to our protocol.

Women were substantially more likely to use GPS (77%) than men (57%). Length of time in the US was also correlated with GPS usage, with likelihood rising over time from 48% for the newest arrivals (those living here for less than 2 years) to 88% for the longest-term residents (those living here 11 years or more). *See chart.*

There were no statistically significant results for age or region of origin.

### Playing games

More than 2 in 3 respondents (69%) report using their mobile phone to play games. This number trumps the 64% of overall *smart phone* users nationwide who report using their phones for games, and far outstrips the 35% of all cell phone users nationwide who play games on their phones.<sup>xi</sup>

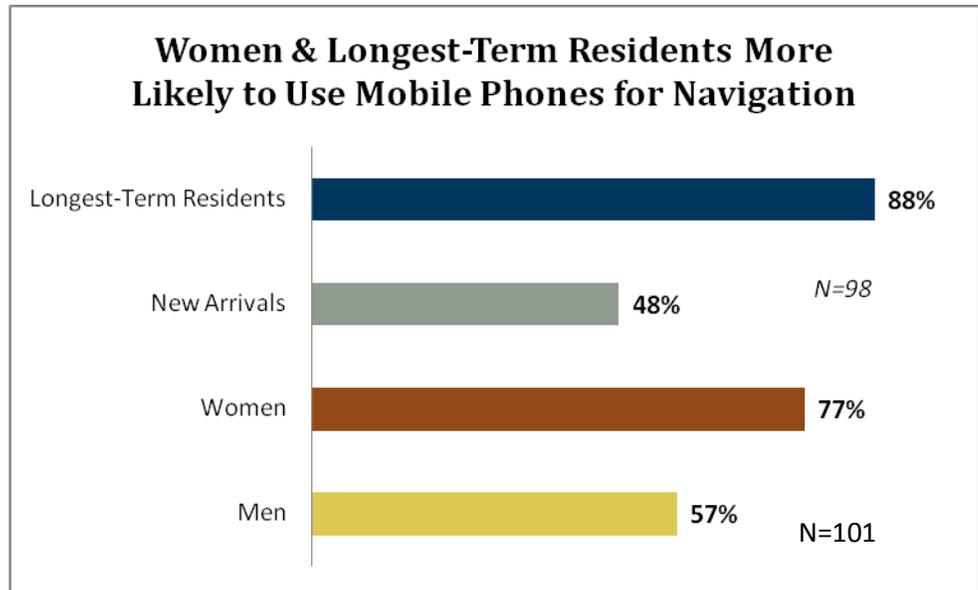
There were significant differences in use of mobile phones for game-playing by region of origin. Latin American and Caribbean immigrants were the most likely to report using mobile phones for games (79%), followed closely by African immigrants (78%) and then Asian and Middle Eastern immigrants (70%). Europeans trailed at just 42%.

There were no statistically significant results for age, gender, or length of time in the US.

## Investing in Smart Phones & Unlimited Plans

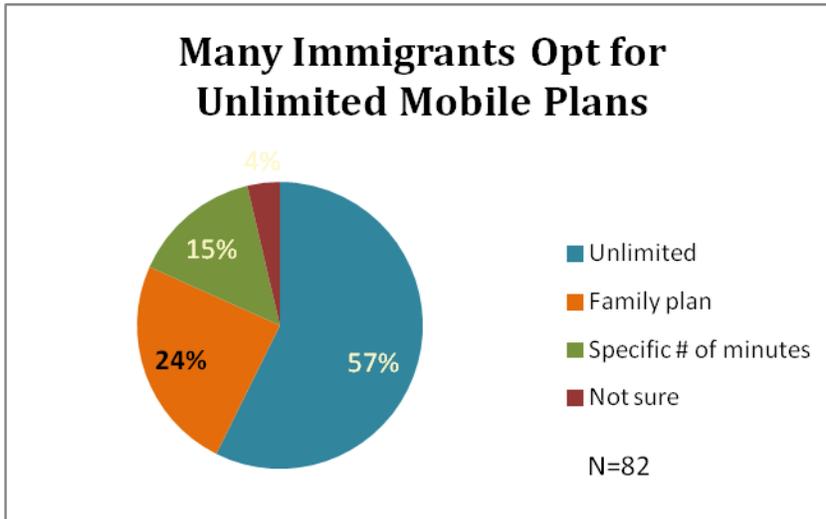
As mentioned above, a robust 68% of our respondents report owning a smart phone such as an iPhone or Android. This compares to 45% of US adults nationwide, though again it should be noted that our survey respondents do not constitute a representative sample of all immigrants and a portion of our surveys were conducted online (thus increasingly the likelihood of tech-savvy respondents).

Nevertheless, even among our *in-person* survey respondents there was widespread adoption of smart phones. While our dataset is not large or detailed enough to be certain, this appears to hold



true even for those with low to moderate incomes and even for those with limited education and/or limited English proficiency.

Our survey also asked about the type of mobile plans that immigrants use. Just over one in five respondents (21%) report using a prepaid phone, which can include a set number of minutes or an unlimited amount. Of the remainder, well over half (57%) opt for unlimited talk time, and another 24% use family plans.



There were significant differences by region of origin. Latin American and Caribbean immigrants were by far the most likely, at 73%, to report having an unlimited plan.

(See chart.)

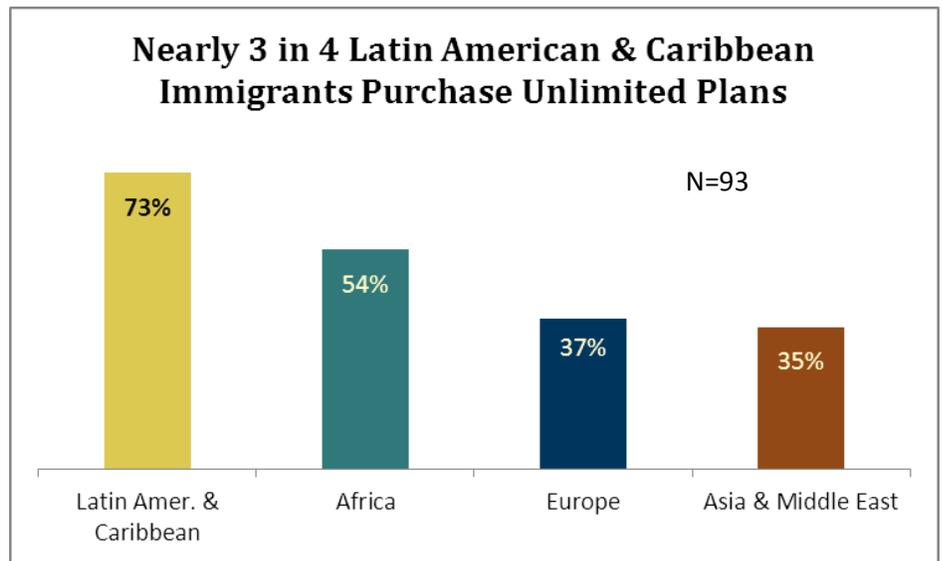
More than half of African immigrants (54%) also report having unlimited minutes. And approximately 1 in 3 European, Asian, and

Middle Eastern immigrants also report having unlimited minutes.

There were no statistically significant findings by age, gender, or length of time in the US.

There is some suggestion that men may be more likely to use prepaid phones than women, but our sample size was not large enough to be certain.

We did not gather detailed information on immigrants' purchase of text messaging plans or data plans in general. This is a fruitful avenue for additional research.



## Part II: Global and Interactive Mobile Usage

Immigrant survey respondents are actively creating and sharing original content via their mobile phones. Their activity goes beyond taking photos to include creating video and audio content, and sharing that content with an international audience.

Immigrant content creators are shaping perceptions across the globe, as they use mobile technology to tell stories and disseminate knowledge to fellow migrants and potential migrants alike.

Immigrants are also pioneering creative techniques that build on existing media sources and technology practices to launch new streams of information.

Below, we examine these phenomena in more detail.

Activity	Immigrant Respondents	Overall US Cell Phone Users
Record video or audio	70%	34%*
Upload video or audio	47%	22%**
Take photos	89%	73%
Upload photos	62%	22%**

*Sources: Welcoming Center for New Pennsylvanians, Pew Internet & American Life Project.*

\*Pew survey looked at video production only

\*\* Pew survey combined photo & video into one category.

### Taking photos

The overwhelming majority (89%) of respondents to our survey report using their mobile phones to take photos. Notably, this percentage is comparable to the percentage of US *smart phone* users overall who take photos (92%) and substantially higher than the percentage of all US cell phone users who take photos (73%).

Because such a large majority of all users report taking photos, there are no statistically significant differences by age, gender, region of origin, or length of time in the US.



### Uploading photos

Well over half (62%) of immigrant respondents report using their mobile phones to *upload* photos for sharing on sites such as Instagram or Flickr. This substantially exceeds the percentage of *smart-phone* users nationwide who report posting a photo or video online (45%).<sup>xii</sup>

There are no statistically significant differences by age, gender, region of origin, or length of time in the US.

There is some suggestion that women who upload photos are more likely to do so “often” than men who do so, but our sample size is not large enough to confirm this.

## Making video/audio recordings

More than 2 out of 3 immigrant respondents (70%) report using their mobile phone to make audio or video recordings. This is higher than the proportion of *smart-phone* users nationwide who report recording a video (59%).<sup>xiii</sup>

While some of these recordings are doubtless personal communications to share with friends and family, we did also hear numerous stories of immigrants creating materials to share more broadly.

Some religious groups make videos of festivals to share on YouTube with far-flung congregants, while immigrant journalists, both professional and amateur, often document their fellow immigrants' stories to share with aspiring immigrants and entrepreneurs worldwide. (See Sidebar: *The Diaspora Voice*.)

There are no statistically significant differences by age, gender, region of origin, or length of time in the US.

## Uploading video/audio

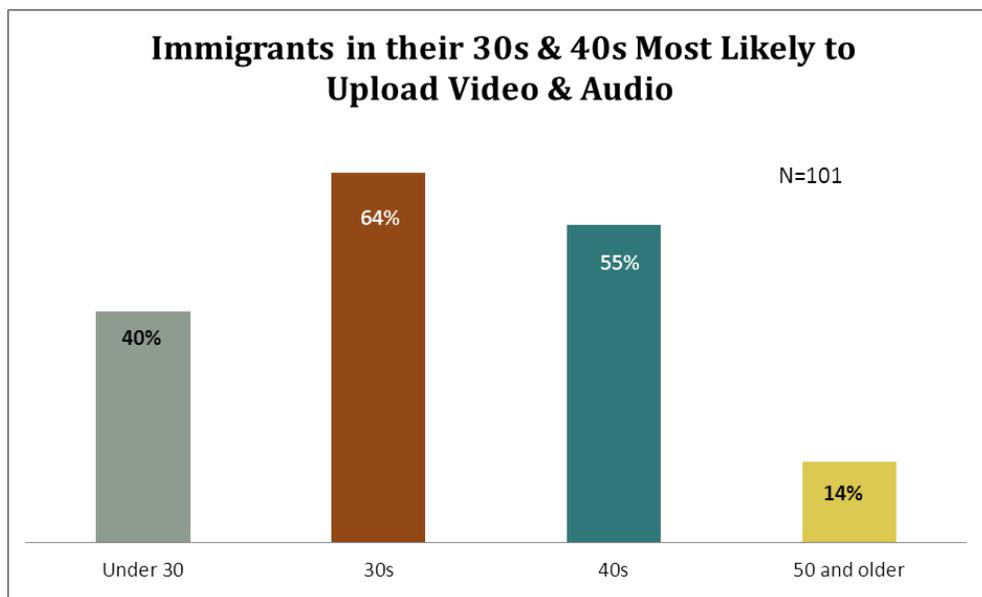
Just under half (47%) of respondents report using their mobile phones to *upload* audio or video recordings.

While we were unable to find exact comparison data for US users overall, the portion of *smart-phone* users nationwide who report *posting a photo or video* is 45%.<sup>xiv</sup>

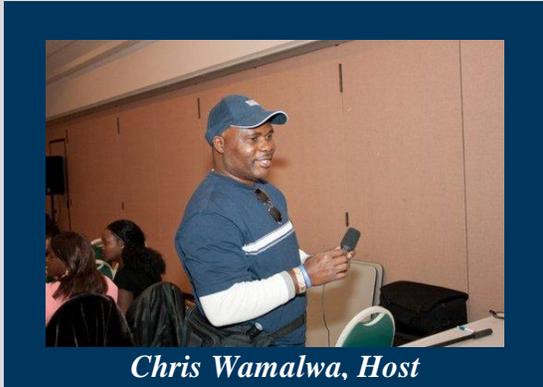
This suggests that immigrant cell phone users are more likely than the general public to share multimedia content online.

Immigrant survey respondents in their 30s were the most likely to report uploading video or audio files (64%), followed by those in their 40s (55%) and then those under 30 (40%). Immigrants age 50 or older were the least likely to do so (14%).

There were no statistically significant findings for gender, region of origin, or length of time in the United States.



## ***Kenyan Television Network: The Diaspora Voice***



***Chris Wamalwa, Host***

Home-country news sites aren't just about domestic news. Often, stories profile individuals living abroad.

One Kenyan station airs a weekly show titled *The Diaspora Voice*. Hosted by a US-based correspondent, the show profiles immigrants living in the United States.

Episodes are aired online via the station's website, and are then made available in archive form for viewers to watch on demand.

Individuals featured include successful businesspeople, faith leaders, and more. Topics vary from home-country politics to American issues, including commentary on US immigration policies. One hard-hitting recent segment focused on the U.S. REAL ID Act, legislation that was passed by Congress to heighten driver's license security in the wake of September 11 but only now taking full effect.

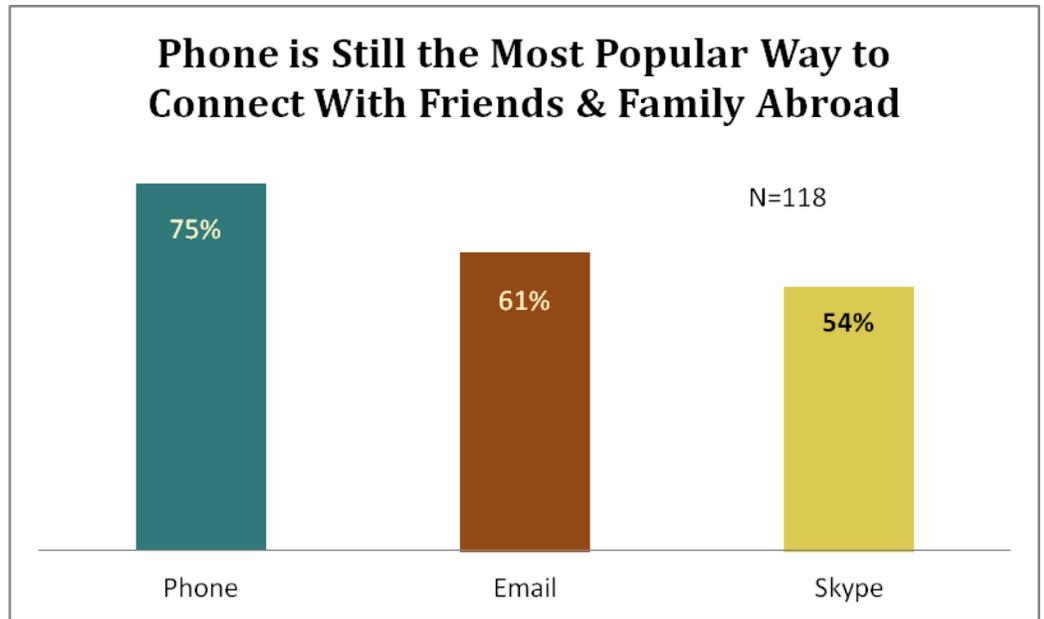
Behind the personal stories is a potent economic reality: Remittances from Kenyans living abroad total \$1.8 billion annually, accounting for more than 5% of the country's Gross Domestic Product.\*

\*Source: World Bank, *Migration and Remittances Factbook 2011*. Viewable at: <http://siteresources.worldbank.org/INTLAC/Resources/Factbook2011-Ebook.pdf>

## **Keeping Close Ties with International Contacts**

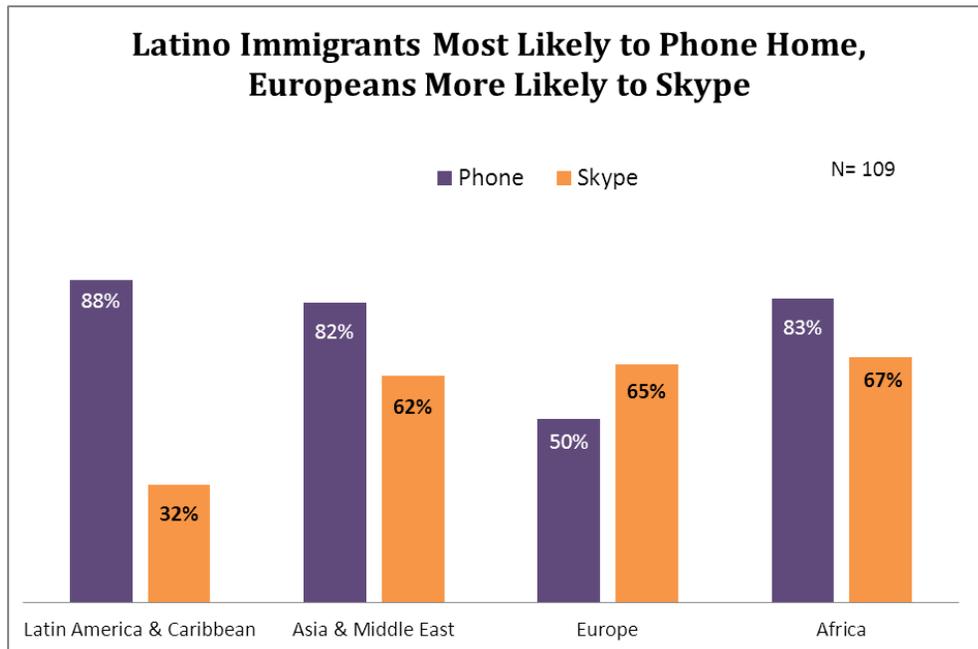
We also asked specific questions about how respondents communicate with family or friends in their home countries. Respondents were asked to indicate all of the avenues that applied. Three-quarters of respondents (75%) say they do so by phone, 61% say they use e-mail, and 54% report using Skype.<sup>xv</sup>

Several respondents volunteered that a limiting factor was the accessibility of various communications mechanisms in their home countries. For example, one Syrian respondent told us that she had previously used Skype to communicate with her family, but now that they are living in a refugee camp they are unable to receive Skype calls.



While there are statistically significant differences in Skype usage by length of time in the US, the implications of these differences are unclear. More than two-thirds (70%) of recent arrivals report using Skype to contact people in their home countries, but the percentage dips to 52% for those in the US for 2-5 years, then rises to 80% for those here 6-10 years, and goes down to 42% for those here 11 years or more.

There are also significant differences by region of origin. Latin American and Caribbean immigrants are the most likely to report using the phone (88%), and the *least* likely to use Skype (32%). African immigrants are the second-most-likely to use the phone (83%) and the *most* likely to use Skype (67%).



Asian immigrants are extremely likely to use the phone (82%) and somewhat less likely to use Skype (61%).

European immigrants are the least likely to

report using the phone (50%) but as likely as most others (65%) to use Skype. Significantly, European respondents were the only group to indicate that they are *more* likely to use Skype for

international calls than to use traditional phone services.

There were no statistically significant differences in how respondents communicate with people in their home countries by age or by gender. However, there is a suggestion that people under 30 may be less likely to communicate via e-mail. It is possible that e-mail has become a slightly old-fashioned medium.

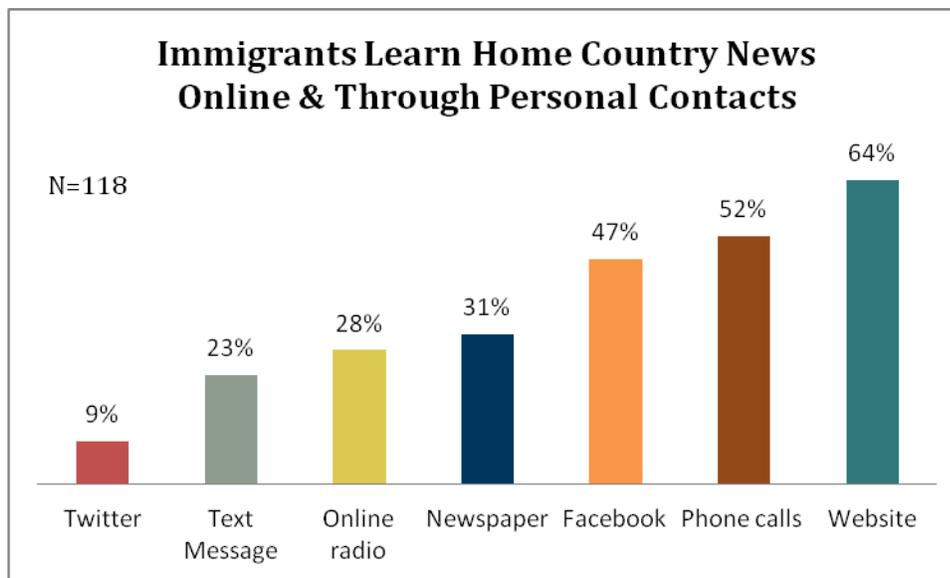
### Staying Up-to-Date with Home Country News

From elections to sporting events to natural disasters, events abroad can have a significant effect on immigrants' personal and economic interests. As a result, many immigrants place a premium on staying up-to-date with developments in their home countries.

Other factors that can heighten immigrants' attentiveness to international news include their investments and property ownership abroad and concerns about family members' health and safety.

In addition, immigrant entrepreneurs who are importing or exporting goods pay close attention to newsworthy developments, as their businesses can be significantly affected by hiccups in the global supply chain, and even by smaller-scale localized disruptions.

Our survey asked respondents to list *all* of the ways that they obtain news pertaining to their home countries. Respondents could name as many avenues as applied.



The top source of international news was via the web, with 64% of respondents mentioning websites as one of their sources for international news.

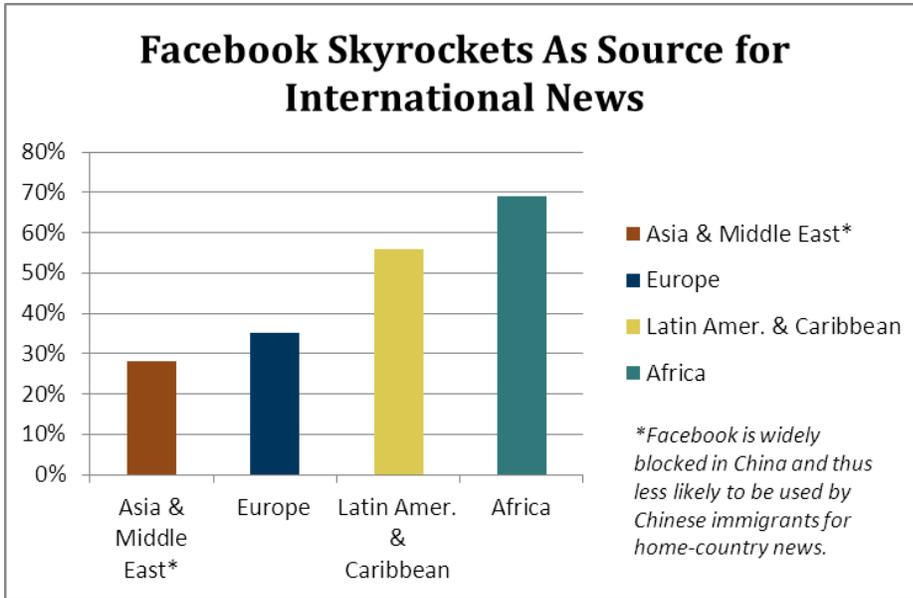
Remarkably, almost as many respondents learn about news via Facebook (47%) as via phone calls (52%). This finding

coincides with other reports suggesting that Facebook's high usage rate in the US is matched by skyrocketing adoption abroad.<sup>xvi</sup>

Just under 1 in 3 respondents (31%) report that they obtain international news from a newspaper.

More than 1 in 4 respondents report that they receive news from their home countries via online radio. In some cases these are stations broadcasting from abroad, and in other cases they are run by expatriates living in the US or another nation. Often these shows do double- or triple-duty in providing news, entertainment, and religious broadcasts to their listeners.

Our respondents reported listening to stations as varied as the Haitian Gospel Music Association, the Syrian station ShamFM, the East African news broadcast Kameme, a Puerto Rican station dedicated to love songs, and more.



(It should be noted that a number of the online news portals mentioned by our respondents under the separate “website” category also feature multimedia content, including video or audio stories available on-demand or as part of a live stream.)

Just under a quarter of respondents (23%) reported hearing about home-country news

through text messages, and fewer than 1 in 10 (9%) find out about news via Twitter.

There were some significant differences by region of origin in how immigrant respondents obtain home-country news. African immigrants were the most likely to report getting news by phone (72%), Facebook (69%), or text message (47%).

Asian and Middle Eastern immigrants were the most likely to learn of news by Twitter, although the percentage was still limited (21%).

More notably, *none* of the European, Latin American, or Caribbean respondents reported obtaining home-country news via Twitter.

There were relatively few generational differences in how respondents learn about home-country news. Immigrants of all ages get information from overseas through a variety of mechanisms.

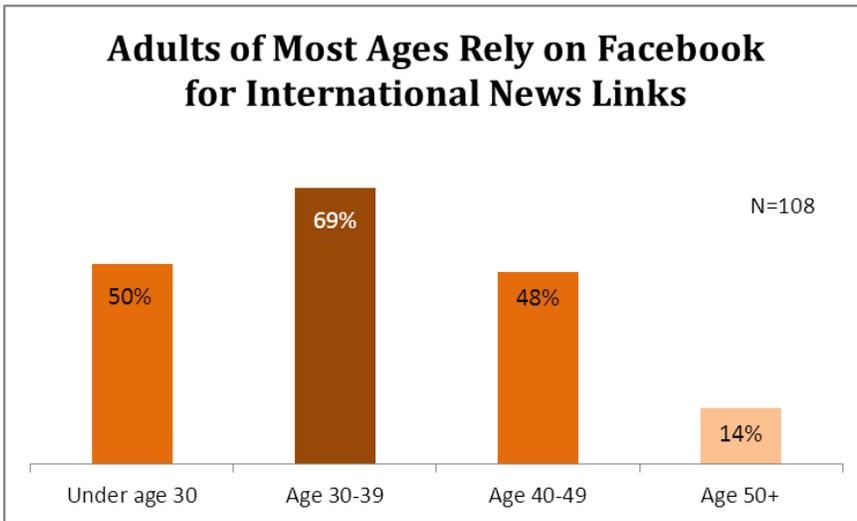
The breakout story here again is Facebook. Half (50%) of those under age 30 report obtaining international news via Facebook. The percentage leaps to an astonishing **69%** for those ages 30-39, then drops to 48% for those age 40-49, and slips all the way to 14% for those over 50. It is likely that network effects play a strong role here.

*“Of all the newspapers in my home country, only one has a website viewable by mobile.*

*So if I want news links, I go on Facebook. There are people who almost live on Facebook, and they post links all the time.*

*In two minutes, I can be watching a video news story from my country.”*

*--African immigrant*



There were no statistically significant differences in how immigrants learn about international news by length of time in the US or gender.

However, there is a suggestion that women may be more likely to listen to satellite radio (as opposed to online radio) compared to men. More research is needed on this intriguing question.

### Part III: Inventive and Entrepreneurial Mobile Adopters

Numerous immigrant survey respondents shared examples of how they are using mobile technology to bolster their existing entrepreneurial ventures, launch new ones, and even create new forms of information-sharing to educate their communities.

English immigrant Foulis Peacock recently launched the website *Immpreneur*, designed to aid immigrant entrepreneurs in pursuing their dreams. In a nod to the increasingly mobile nature of entrepreneurship, Peacock has made much of his content available in multimedia form. (See sidebar *Immpreneur*.)



Indian immigrant Balu Chandrasekaran has gone a step farther. His business, *Lokalty*, draws on the popularity of smart phones to offer a rewards program for local, independently-owned small businesses. A high percentage of the business owners his company serves are immigrants, says Chandrasekaran. (See sidebar *Lokalty*.)



It's not only tech-savvy Ivy League grads like Chandrasekaran who are capitalizing on mobile technology, however. Abu, a West African street vendor, uses his smart phone to facilitate purchases. Regular customers at his cart, where he sells personal items and fashion accessories, are given his phone number. Since many customers live outside his neighborhood, having a direct connection is useful. The next time they want to make a purchase, they call.

Abu then snaps a photo of the requested merchandise and e-mails it to the customer along with a price. If she accepts, she'll drive up a little while later. Her purchase will be bagged and waiting.

It's not just about convenience. Abu speaks Fulani and French, but has only a basic command of English. His knowledge doesn't extend to the detailed vocabulary needed to describe women's fashion. By sending a photo of his merchandise, he ensures that his customer has an accurate idea of what she's getting – and he'll be more likely to earn repeat business.

Food vendors also take advantage of mobile technology. One Mexican entrepreneur fields customer calls via his Bluetooth, taking new orders for tacos and tostadas even as he cooks.

Running a lunch truck might seem like a low-tech operation, but mobile technology has become a cornerstone of his business. Taking orders by mobile helps him smooth out the flow of orders between rush periods and slack time. It ensures that fickle customers don't give up and turn elsewhere to find their food, while also accommodating more faithful patrons, who often walk for blocks to reach his truck.

In some cases, entrepreneurs drew on the power of the web to provide services to long-distance customers. Jeffy Thomas, an Indian immigrant, took advantage of technological connections to lend his graphic design skills to a client in the tiny Middle Eastern country of Bahrain.

“He's starting a consulting business, and he needed a logo and website,” explains Jeffy. “I was able to design the logo, send him proofs, and then give him an assortment of web templates to review. After he chose the one he wanted, I designed his website and incorporated the new logo as well.”

All of the work was done long-distance. And while the original project came about because of a personal connection, Jeffy points out, the result is an international calling card of sorts. “Most of my client's own customers come from his country,” he says. “That means every visitor to his website is seeing my work – and becomes a potential customer for me.”

Similarly, a Nigerian entrepreneur told us that his magazine's web presence is a critical component of business development. (See sidebar, *Fun Times Magazine*.)

## IMMPRENEUR

Helping immigrants build their American dream

When Foulis Peacock came to the US from England two decades ago, he didn't know that he would one day *become* the type of business phenomenon he was writing about.

Today, Peacock heads **Immpreneur**, a web-based publication devoted to fostering immigrant entrepreneurship.

Relying heavily on multimedia to spread its message, Immpreneur posts **a steady stream of video interviews** and tutorials.

Recent topics have included:

- ◆ Franchising
- ◆ Microfinance
- ◆ Maximizing retail sales

Peacock's shoe-leather approach takes him across the US, as he personally interviews successful entrepreneurs and distills their secrets into succinct web videos.

“Immpreneur offers four channels of material,” explains Peacock.

“*Get Inspired* helps aspiring entrepreneurs learn about others' success. *Building Your Business* focuses on just that. And our *Franchising* and *Resources* channels offer specialized content for specific needs.”

# Lokalty

Smart-phone owners are a prime market for Lokalty, a Philadelphia-area startup launched last year by three young entrepreneurs.

A rewards program for locally owned businesses, Lokalty is targeted to savvy shoppers who download its app, make purchases at area stores, and earn points that can be spent at any participating location. (Those without smart phones can obtain a small tag instead.)

“The difference with Lokalty is that you’re supporting local, independent businesses while also earning rewards,” says co-founder Balu Chandrasekaran. “It’s a win-win.”



For example, he says, a shopper could visit the popular Manakeesh Bakery for a Lebanese pastry, then stop in for a bicycle repair at nearby Keswick Cycle.

The rewards points earned from those purchases could then be used at a third location – perhaps to pick up some light reading at Locust Moon Comics.

The youthful Chandrasekaran, 26, grew up in India but attended college in the US. A Wharton graduate, he joined forces with two fellow alums to launch Lokalty in 2011.

While the fast-growing startup isn’t specifically targeted to immigrants, its hottest locations are Center City and West Philadelphia, both home to growing international populations.

The founders themselves epitomize the city’s global growth: In addition to Chandrasekaran, another was born in Dubai and a third is Argentinian-American.

## Ingenious Improvisation

Immigrants often combine technologies in innovative ways. One respondent told us, “In my home country, people often pay a little money to have a Skype phone number,” rather than a free Skype account, which provides only a name. “Then,” he says, “they forward their Skype number to their local cell phone.”

The result: Friends and family leaving abroad can still reach a home-country contact via an inexpensive Skype call, rather than more expensive international calling plans or phone cards. Yet the recipient is no longer tied to a computer, waiting to receive a call. Instead, he or she can receive calls anywhere via a cell phone.

# FUNTIMES

CELEBRATING AFRICA AND THE DIASPORA



*Eric Nzeribe, Publisher*

When Eric Nzeribe launched *Fun Times* in 1992, the magazine was a fledgling effort based in Liberia, West Africa. Today, *Fun Times* is a glossy, full-cover magazine with distribution in the thousands. And Nzeribe, a Nigerian immigrant now living in Philadelphia, has embraced the online world with gusto.

“We’re on Twitter, we’re on Facebook, we are getting our message out in as many ways as we can,” he says, opening up a copy of the print magazine to show off a QR code. (Readers with smart phones can scan the code and be effortlessly directed to the magazine’s website.)

“The magazine has a three-pronged mission,” says Nzeribe. “Education, enlightenment, and entertainment.” In each area, he says, readers have a variety of online and offline avenues to access magazine features on topics from entrepreneurship to fashion.

*Fun Times*’ newly-launched Twitter feed is growing fast, and maintains a steady stream of tweets linking to the magazine’s own content as well as external articles about African, Caribbean, and African-American history and culture.

When asked if he personally writes the feed, Nzeribe chuckles. “We have some great young people in the office,” he says, “both interns and staff that keep us in the social media mix!”

Nzeribe takes his social responsibility seriously. In addition to articles on politics and immigration policy, *Fun Times* runs advertisements urging readers to get out and vote, and hosts an annual “Still Standing” event celebrating long-married couples who have withstood the stresses of migration. The magazine also offers a “Knowledge is Power” lecture series.

Still, at the end of the day the magazine is also a business. And Nzeribe is tireless about building his network. In addition to *Fun Times*’ social media presence, hard copies are distributed through paid subscription, at special events, and via newsstands and retail outlets.

One more new option is waiting in the wings, he confides: “We’ll be rolling out a mobile app soon.”

There were other creative uses. One respondent told us of a co-worker who used her phone to photograph the order-input screen at the restaurant where they worked, then used it as a study guide to help her memorize the placement of the buttons and the English vocabulary she needed to do her job.

## Radio Renaissance

Interestingly, radio plays a remarkably strong creative role in the lives of our survey respondents. Well over half (57%) of immigrant respondents report listening to radio via their mobile phones. (We were unable to find appropriate comparison data for the broader American public.) The question was intentionally phrased broadly to capture the full range of potential radio sources – including web-based live streams of traditional AM/FM US-based stations, online-only sources such as Pandora and Spotify, live web streams of stations based abroad, and even other creative forms of listenership. (See sidebar: *When That “Conference Call” is a Radio Show.*)

We did not ask listeners to specify whether they were listening to news broadcasts, talk shows, music, or other topics. However, we did ask for the name or URL of sites that respondents listen to regularly.

Based on those responses, we can say with confidence that many immigrants turn to mobile radio to obtain news updates from international sources. See above for more on how respondents obtain international news.

There are no statistically significant differences by age, gender, region of origin, or length of time in the US.

There is some suggestion that African immigrants are more likely to listen to radio via mobile phone, but our sample size is not large enough to confirm this.

### *When That “Conference Call” Is a Radio Show*

Many Americans are familiar with “free conference call” services that allow businesspeople to host calls quickly and easily. Less well known is the other role this technology plays: Hosting community radio shows for immigrants.

Reporter Abdulai Bah was the first to cover this story, in a piece that aired on WNYC radio and the immigration news website *Feet in 2 Worlds* in 2011.

As Bah reports, there are dozens of such shows around the U.S., many hosted by French-speaking immigrants from Ivory Coast, Guinea, and other West African nations.

Like a broadcast show, these programs run at regular times, and feature a host who interviews guests and takes calls from listeners. The difference is that listeners don’t encounter the show by tuning a radio dial.

Instead, taxi drivers and professionals from all across the United States simply dial a long-distance number and enter an access code. Just like that, they’re connected – and the only cost is their cell phone minutes.

## Beyond Mobile: How Immigrants Access the Internet

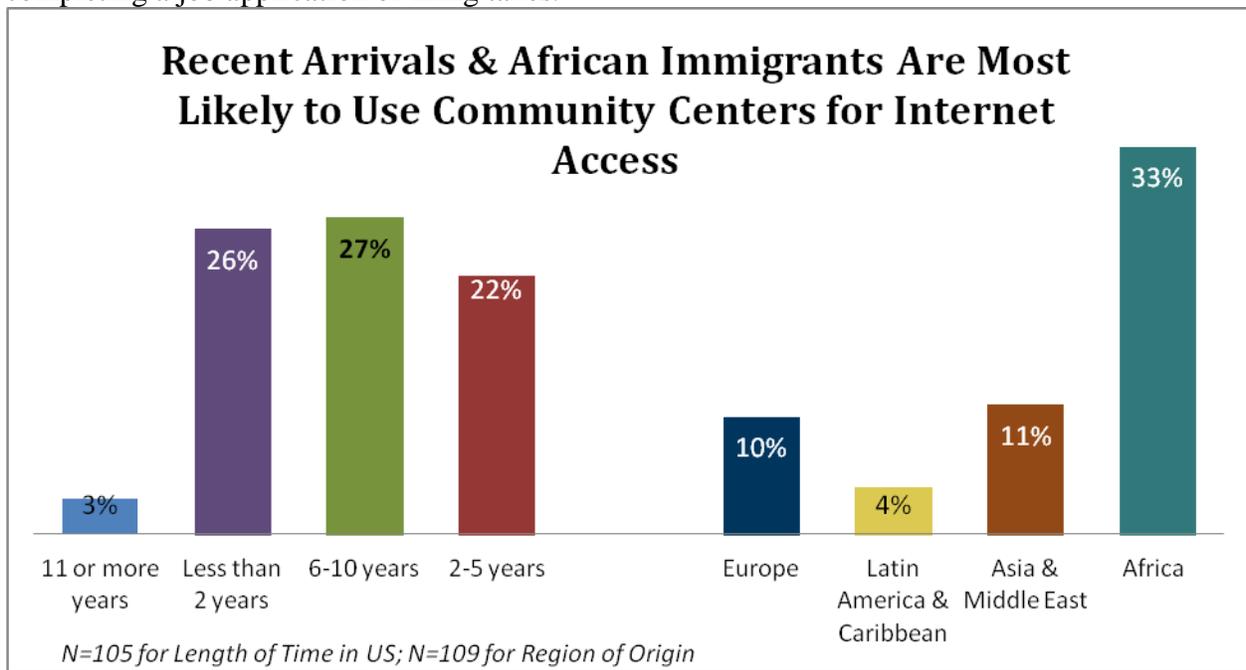
We asked our survey respondents to tell us *all* of the ways that they access the Internet. Phrasing the question this way allows us to discern the breadth of resources available to our respondents. This is a useful indicator of community and civic engagement, as individuals with limited

knowledge of their local communities and few social connections are also less likely to have access to the Internet via a library, community center, or friend.

On average, our respondents reported having 2.4 ways to access the Internet. The majority of respondents access the Internet through their phones (66%), a home computer (81%), or both.

Interestingly, even respondents *with* home Internet access report that they also use other ways to gain access to the Internet. Overall, a quarter of respondents (25%) visit a public library for Internet access, 19% use a friend’s computer, and 15% of respondents report that they visit a local community center.

One potential reason may be that those with mobile-only access are likely to nevertheless engage in certain activities which require access desktop or laptop computer. Such activities can include completing a job application or filing taxes.



There were notable differences in how respondents accessed the Internet. European immigrants were overwhelmingly likely (90%) to report using their mobile phones, as were Latin American and Caribbean immigrants (88%). In contrast, Asian and Middle Eastern immigrants were less likely (61%), as were African immigrants (58%).

Community centers played a surprisingly important role for some respondents. A robust 1 in 4 immigrants who had been in the US for less than two years (26%) reported using a community center for Internet access. The trend continued for immigrants living in the US for 2-5 years (22%) and 6-10 years (27%). Only after more than a decade in the US did the number drop, to just 3%.

There were also clear differences in the use of community centers by region of origin. African immigrants were the leaders at 33%, with Asian and Middle Eastern immigrants at 11%, European immigrants at 10%, and Latin American and Caribbean immigrants at just 4%.

As noted above, public libraries play a significant role for 1 in 4 immigrants overall. Again here there were clear demarcations by region of origin. African immigrants (42%) and Asian and Middle Eastern immigrants (40%) were the most likely to visit libraries for Internet access, while only 12% of Latin American and Caribbean immigrants and just 5% of European immigrants report doing so.

Finally, there were surprising differences with regard to visiting a friend's house for Internet access. Men were almost *three times* as likely to report doing so, at 30% compared to just 11% of women.

It is possible that this result is because single individuals are less likely to have established a household and its associated resources, and men are far more likely to immigrate solo than women. However, our data do not allow us to be certain that this is the cause of the phenomenon reflected in the data. Additional research is needed.

### ***Libraries Play Key Role in Supplementing Internet Access***

It may seem surprising that individuals with home computers and access to the Internet would still travel elsewhere to go online. We asked about this seeming contradiction.

“Internet is about speed,” said one respondent bluntly. “Most of the immigrants I know like to watch videos. If you go to the library, a video that might take a long time to load at home will be much faster.”

For the same reason, he adds, he has accommodated friends who wanted to drop by to borrow his high-speed home Internet connection.

While our survey did not ask specifically about high-speed Internet, numerous respondents did report that they rely on websites and online news outlets for video news stories.

It is likely that those who are most interested in video news are also those who seek out alternative means of accessing the Internet if their primary source does not provide sufficient speed.

## **Making Emotionally Powerful Connections**

This report would not be complete without acknowledging myriad stories we heard from immigrant respondents about the powerful role that mobile technology plays in their emotional lives. Throughout our interviews, respondents told us of relying on their phones and tablet computers to connect them to family events and religious observances around the globe.

Rites of passage were frequently cited. Immigrants told us about numerous graduations, weddings, and funerals for which mobile technology allowed them to be virtually present.

One Swedish immigrant shared a story of how technology helped to unite a mourning family. When a member of her husband's family passed away, not all of the relatives were able to attend the London memorial service in person. The solution was clear: Use an iPad to transmit the proceedings. The idea worked, bringing together a far-flung family in their time of grief.

Some older respondents marveled at the speed with which the migration experience had changed. One West African scholar remarked on the changes in technology since he had arrived in the US in the 1970s. “There used to be only one bank that would wire money to Liberia,” recalls Dr. Konia Kolluhlon. “I had to travel to New York to Chase Manhattan so I could send money home to my sister.”

Another respondent told us about an adult son who had been injured while serving in the military abroad. Not content with his assurances via phone that the injury was minor, his parents contacted a friend who was able to bring an iPad to the military hospital. Seeing their son via video chat provided the reassurance that the worried family was seeking.

For each of these respondents and many others, mobile technology plays a vital role in establishing and maintaining human connection. As detailed in our conclusions and implications below, these bonds are significant factors in shaping immigrants’ global connections – and by extension, those of the United States as a whole.

### ***When Migration Jump-Starts Technological Literacy***



Many immigrants arrive in the US already technologically literate. Those that do not have a strong incentive to learn quickly. One Algerian woman, the wife of an IT professional, told us that before she came to the United States she had been intimidated by computers.

But after arriving in the US, she sought to keep up connections with family back home. The purchase of an iPad started her on the road to comfortable technology use.

When she spoke with us, **she had just taken advantage of her new skills to “attend” a family wedding.** She glowed with pride as she told us about getting dressed up, turning on her tablet computer, and joining her overseas family via video chat for the ceremony.

Afterward, family members helped her “dance” with guests at the reception. The event was capped off when she carried the tablet around her house to **give relatives in North Africa a visual tour of her American home.**

## Catching Up with the New Reality: Conclusions & Implications

The research contained in *Digital Diaspora* documents a startling new reality in the United States: Immigrant technology users who are highly engaged, remarkably savvy, and fearlessly inventive. Their rising purchasing power and entrepreneurial, innovative approach to mobile technology make this population dynamic partners and an appealing audience.

Below, we outline some of the key implications of this shift.

**Today's immigrants represent a digital diaspora that has rapidly embraced mobile technology and is using it in innovative ways.** Our research shows that immigrants are overwhelmingly using mobile phones. More than that, they are using *smart phones*, often with unlimited plans. This is a robust finding that holds true across a wide demographic spectrum.

**Immigrants are using mobile technology to produce and distribute content, not merely consume it.** They are

recording audio and video, uploading and sharing it with contacts across the world. They are modeling their successful economic and social integration, and technological literacy, for audiences in their home countries. And in disseminating their own migration experiences via video and news stories, they are also framing opportunities (and signaling warnings) for the next wave of explorers.

**Key aspects of immigrants' technology usage are occurring under the radar and may be overlooked.** Immigrants are creatively re-purposing existing technology to create new services, such as radio shows hosted via conference call technology and news dissemination through Facebook. While some of this usage is recognized by the broader public and technology service providers, much may not be – suggesting there may be a substantial untapped market for additional tools.

**Immigrants have a complex relationship with US brands.** While hardware products such as iPhones and Androids are sought-after for their functionality and as status symbols, when it comes to mobile *providers*, immigrants' primary loyalty is to the bottom line. Companies that successfully package affordable international plans and respond to the ways immigrants use technology now can have an advantage even over larger and more established brands.

**Immigrants turn to mobile technology to transmit emotionally resonant and powerful events.** In our qualitative interviews, we heard numerous stories of people using mobile phones and tablet computers to transmit video of weddings, funerals, graduations, and other important events to family members in far-flung countries. These meaningful moments help strengthen community and familial bonds, maintaining expatriates' international ties.

**Immigrants are leading the shift away from text and toward visual images and multimedia.** Video technology is overwhelmingly used in one-to-one communication, news production and consumption, and entrepreneurial ventures. This is both a pragmatic consideration – as images become a lingua franca that pull together multilingual communities – and a bottom-line reality,



as entrepreneurs use photos and video to sell products they don't have the words to describe.

**Immigrants discover and adopt new technology practices through both social and economic bonds.** The old-fashioned immigrant grapevine flourishes today as a mechanism for disseminating new technology habits. Men and women learn about new sites and services via personal relationships and ethnic community contacts. Once connected, they are quick to tinker with existing services, often improvising to fit their small-business needs.

**Immigrant users are investing in both hardware *and* unlimited usage plans** – buying smart phones even when they have limited income. All indications suggest that this investment is occurring equally strongly among individuals who have limited English proficiency and those who have limited literacy in *any* language.

**For globally-connected immigrant users, time-shifting technologies are especially valuable.** In addition to having personal contacts across multiple time zones, many immigrants work irregular or unusual hours and endure long commutes. The time they spend time away from a home computer connection becomes an opportunity for mobile usage – and innovation.



**Immigrants are using their smart phones as creative learning tools.** This goes beyond the use of smart phones as mobile dictionaries and newspaper translation tools – although that is happening too. One low-tech example comes from a cashier struggling to adapt in her new American job. First, she took a photo of the order-entry screen at the restaurant where she works. Then, she studied the screenshot at home to help her memorize the English words and placement of the buttons.

**Many immigrants are arriving in the US *already* technologically fluent.** In some cases, newcomers are startled to discover that American practices trail behind their home countries. In others, immigrants accustomed to using tools such as mobile money are bringing that knowledge and experience to the US.

**Immigrants are part of a dynamic global interchange of information, skills, and technology.** This digital diaspora results in US-based immigrants sending their used iPhones and iPads back to home countries, engaging in long-distance technology-based commerce based on their home country contacts and tutoring older relatives as they adopt new technologies.

**In a world where the US is no longer the default destination, immigrants' voices play a powerful role in attracting talent.** While many prospective migrants still dream of coming to America, countries such as Canada, Australia, and Germany are engaged in aggressive efforts to recruit international talent. Immigrants already living in the US can have a substantial impact on their compatriots' migration decisions. Through their personal contacts, as well as news stories profiling successful members of the diaspora, today's immigrants are already influencing the newcomers of tomorrow.

**As a self-selected group of risk-takers, immigrants are primed to identify and capitalize on emerging technologies.** Individuals who make the decision to move across a continent or an ocean are both highly adaptive and unusually adventurous. These traits serve them well in establishing their new lives. More importantly, such characteristics aid newcomers in recognizing and taking advantage of technological opportunities.



Among those who establish their own businesses, technological capacity can provide an entrepreneurial edge. Merchants using creative approaches such as on-demand also draw on their social networks to build skills necessary to communicate with their customers.

**The Welcoming Center for New Pennsylvanians is proud to be a part of this compelling story. We look forward to the next exciting chapter in the future of this *Digital Diaspora*.**

## Methodology

The survey was conducted between July 1 and August 31, 2012. A total of 118 people were surveyed. Thirty-nine (39) of the surveys were conducted as oral interviews, primarily in person, but a handful by phone. The remaining 79 responses were collected via an online written survey. All surveys were conducted in English.

The in-person interviews were conducted with a convenient sample of walk-in and scheduled-appointment clients of the nonprofit Welcoming Center for New Pennsylvanians, an economic and workforce development organization based in Philadelphia. Clients who were visiting our office for employment services, legal consultations, or adult-education classes were offered the option of participating in the survey either before or after their scheduled appointment.

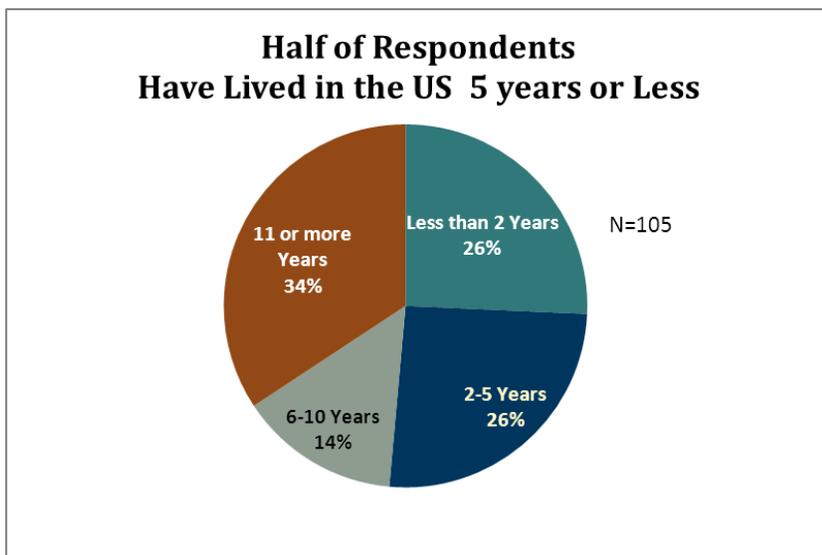
No incentive for survey participation was offered. All clients were assured that participation was entirely voluntary and would not affect their eligibility for programs or ability to obtain services through the Welcoming Center. While we did not gather data on those who declined, there was no obvious pattern that would suggest a response bias.

To protect privacy, interviews were conducted by staff members *unrelated* to the program for which the client was visiting the Welcoming Center. Interviewers recorded only the clients' initials (rather than full names) and did not collect other personally identifying information beyond very general information on country of birth, age, and year of arrival to the U.S.

Interviews were conducted five days a week, primarily during the afternoons. The chief variable in whether a client was asked to participate in the survey was simply whether an interviewer was available at the time the client visited our office. We are satisfied that the sample of clients surveyed accurately reflects the age, gender, racial/ethnic, language group, and cultural diversity of the Welcoming Center's clients overall.

### Demographics of Survey Respondents

With regard to gender, respondents were split evenly between male and female individuals, with exactly 50% men and 50% women.



Given that our in-person survey recruitment was focused on individuals who were receiving services from the Welcoming Center, we anticipated that respondents would overwhelmingly be of working age (18-64) and indeed this was the case.

More than half of immigrant survey respondents (52%) had lived in the US for five years or

less. This finding is particularly significant as it suggests that newly arrived immigrants are highly connected despite their newcomer status.

With a few exceptions noted above (particularly with regard to mobile purchases), there were no statistically significant differences between immigrants who had been in the US for only a short time compared to those who had lived here a decade or more.

Reflecting the diversity of immigrants across the Philadelphia region, survey respondents came from more than 43 different countries (*see list in Appendix*).

Respondents spoke 19 different languages, including Estonian, Kissi, Malayalam, Tamazight, and Wolof. Many respondents were multilingual, and reported speaking three or four languages.

Compared to Philadelphia-area immigrants overall, our respondents were more likely to be from Africa and less likely to be from Asia or Latin America and the Caribbean.



The one area in which survey participants may *not* fully reflect the diversity of individuals served by the Welcoming Center is in the area of formal education and English literacy. This is because the only individuals who were systematically excluded from our sample were those with extremely limited English, because we unfortunately did not have the resources to conduct this survey in multiple languages. In addition, the afternoon schedule of interviews meant that some entry-level jobseekers (who would have been more likely to have limited formal education) who attend our morning intake sessions did not have the opportunity to participate in the survey.

*We would like very much to conduct a future version of this survey in multiple languages. Individuals or organizations interested in supporting this work are urged to contact Welcoming Center President and CEO Peter Gonzales to discuss further.*

Online responses were collected during the same time period. Survey respondents were recruited through personal and community networks among our staff, volunteers, and former clients. Survey links were primarily distributed via targeted e-mails, but there was some very modest use of social media (one individual announced the survey on her Facebook page and several others linked the survey on Twitter).

In addition to the survey interviews, we conducted qualitative interviews with approximately a dozen immigrant community leaders, ethnic media representatives, and others well-equipped to comment on these issues. These interviews were conducted *after* our analysis of survey data, and were used to add detail and illustrative examples to the phenomena documented in our data.

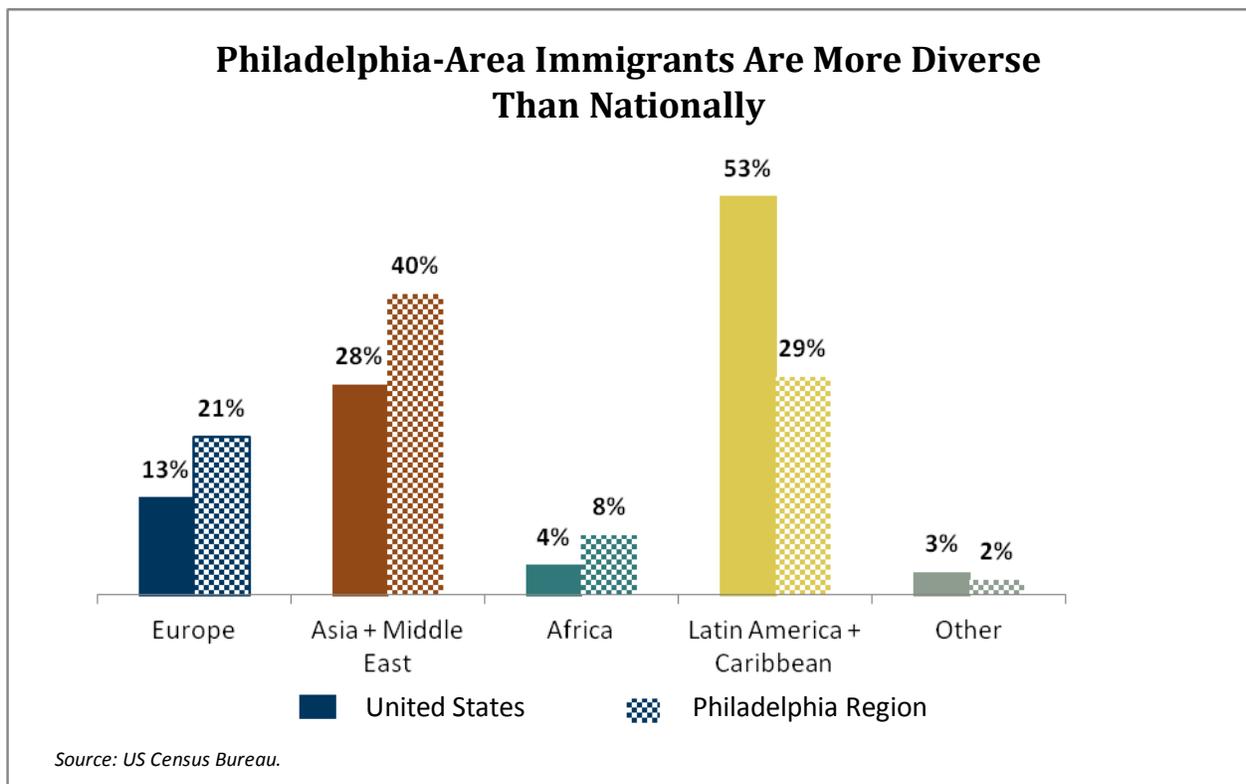
*A note about immigration status.* We did not ask any respondent to disclose his or her immigration status. However, we do know that 100% of the *in-person* respondents had legal work authorization, because that status is a prerequisite for the services they were receiving from the Welcoming Center.

Among the *online* respondents, we do not have sufficient information to reasonably infer immigration status. Given that approximately 11 million of the 40 million immigrants nationwide are undocumented, it would be reasonable to assume that some percentage of our respondents lack legal status as well. However, because our sample was drawn from the Philadelphia area, and this region has a lower percentage of undocumented immigrants, it is likely the percentage among our respondents was also lower.<sup>xvii</sup>

Generalizability

Respondents in our sample were overwhelmingly of working age (18-64 years old). This is largely consistent with the nationwide population of immigrants, of which 81% are between 18-64.<sup>xviii</sup>

With regard to region of origin, our sample more closely mirrored the diversity of immigrants in the Philadelphia metropolitan area than the nationwide picture, in which nearly 1 out of every 2 immigrants is Latino.<sup>xix</sup>



It is likely that our respondents’ education levels were slightly higher than the national average, again given that the sample was drawn from the Philadelphia metropolitan area. Nationwide, approximately 27% of immigrant adults have a college or graduate degree, while nearly 32% have not completed high school or obtained a GED.<sup>xx</sup> In the Philadelphia metropolitan area, the comparable figures are 38% for college degree attainment, and only 22% for those with less than a high school education.<sup>xxi</sup>

While we did not specifically ask about income, we can infer that our *in-person* respondents are likely to have household income in the low to moderate range, as that is the income range for the vast majority of Welcoming Center clients.

Nationwide, immigrants tend to have a slightly lower median income than native-born Americans. In 2010, the US-born had a median household income of \$63,231 compared to \$50,341 for foreign-born. The number drops to \$41,507 for foreign-born residents who had arrived in the last 10 years.<sup>xxii</sup>

Given this lower level of income, it is perhaps all the more remarkable that immigrant families prioritize investment in mobile technology to the extent that our survey reveals.

## **Appendix A: Immigrant Respondents' Countries of Origin**

Afghanistan  
Algeria  
Belarus  
Bhutan  
China  
Colombia  
Dominican Republic  
Ecuador  
El Salvador  
England  
Eritrea  
Estonia  
Ethiopia  
Guatemala  
Guinea  
Haiti  
India  
Indonesia  
Japan  
Jordan  
Kenya  
Liberia  
Mali  
Mexico  
Morocco  
Nepal  
Nicaragua  
Nigeria  
Panama  
Peru  
Poland  
Puerto Rico (U.S. territory)  
Russia  
Senegal  
Sierra Leone  
South Korea  
Sudan  
Sweden  
Syria  
Thailand  
Ukraine  
Uzbekistan  
Vietnam  
Yemen

## Appendix B: Survey Protocol

### Immigrant Technology Use Survey

Date of Interview: \_\_\_\_\_

Interviewer's Initials: \_\_\_\_

Client's Initials: \_\_\_\_

#### 1. What kind of phone do you have?

- Smart phone (Make/model: \_\_\_\_\_ )
- Flip phone
- Other \_\_\_\_\_

#### 2. What do you use your phone to do?

- Send text messages
- Make calls to people in another country
- Pay bills (*using your checking account or similar*)
- Transfer money using a “mobile money” service like M-Pesa
- Video chat (*Skype, FaceTime, etc*)
- Send email
- Buy things (*make purchases*)
- “Clock in” or report hours for your job
- Update social media such as your Twitter or Facebook account
- Listen to radio shows (*live or by pre-recorded podcast*)
- Take photos
- Upload photos to photo-sharing site like Flickr
- Make video or audio recordings
- Upload video or audio recordings to a site like YouTube or Vimeo
- GPS/Directions
- Games

# \_\_\_\_\_

3. Is there anything else you use your phone to do?

4. Is there anything your phone does NOT do, but you wish it did?

5. How do you talk to your family or other people back in your home country?

- |                                |                                                                    |
|--------------------------------|--------------------------------------------------------------------|
| <input type="checkbox"/> Phone | <input type="checkbox"/> Don't talk to my family                   |
| <input type="checkbox"/> Skype | <input type="checkbox"/> Don't have family/They are all here in US |
| <input type="checkbox"/> Email | <input type="checkbox"/> Other ( <i>explain</i> ) _____            |

6. How do you find out about news or events back in your home country?

- |                                       |                                                          |
|---------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Phone calls  | <input type="checkbox"/> Text messages                   |
| <input type="checkbox"/> Twitter      | <input type="checkbox"/> Newspaper ( <i>name</i> ) _____ |
| <input type="checkbox"/> Facebook     | <input type="checkbox"/> Website ( <i>name</i> ) _____   |
| <input type="checkbox"/> Online radio | <input type="checkbox"/> Other _____                     |

7. Is there anything that you used your phone to do back in your home country that you can't use your phone for in the US?

8. If you have a question about how to use technology, who is the first person you ask for help?

9. Do you use a prepaid phone?                      YES                      NO

(IF NO): DO you have a phone plan with unlimited minutes?    YES    NO

(IF NO): How many minutes do you have per month? \_\_\_\_\_

How many texts do you have per month? \_\_\_\_\_

(Circle if applicable)                      Unknown                      Family Plan

**10. Who is your carrier?**

- Sprint
- T-Mobile
- AT&T
- Verizon
- Cricket
- Metro PCS
- Other \_\_\_\_\_

**11. Is there anything else you think people should know about how immigrants use cell phones and technology?**

**12. How do you access the Internet? (check all that apply)**

- Cell phone
- Library
- Home computer
- Friend's computer
- Community center
- Other (*explain*) \_\_\_\_\_

**13. Gender:**            MALE            FEMALE

**14. Country of Birth:** \_\_\_\_\_

**15. Year arrived in US:** \_\_\_\_\_

**16. Age Range:**

- under-20                       20s
- 30s                                 40s
- 50s                                 60s

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## Endnotes

- <sup>i</sup> Cited in *Hispanic Broadband Access* (Hispanic Leadership Institute, 2012.) Viewable at: <http://www.thehispanicinstitute.net/node/1820>
- <sup>ii</sup> Americans and Their Cell Phones. Pew Internet & American Life Project, 2011. Viewable at: <http://pewinternet.org/Reports/2011/Cell-Phones/Key-Findings.aspx>
- <sup>iii</sup> Our sample size was not large enough to look at age ranges within this variable. Overall, it can be assumed that immigrants who have been in the US for a longer time are, on average, older. However, any given subset of longtime immigrants could always be subject to a quirk – such as including many “1.5 generation” immigrants who came to the US at age 10 or 12 -- that could skew the data.
- <sup>iv</sup> Americans and their Cell Phones. Pew Internet & American Life Project, 2011.
- <sup>v</sup> While our survey question cannot be precisely compared to other data about cell phone users overall, it should be noted that the a 2011 survey of *smart phone* users showed 37% use their phones for “online banking.” (*Americans and their Cell Phones*, Pew Internet & American Life Project, 2011. Viewable at: <http://pewinternet.org/Reports/2011/Cell-Phones/Key-Findings.aspx>)
- <sup>vi</sup> Cited in *Hispanic Broadband Access* (Hispanic Leadership Institute, 2012.) Viewable at: <http://www.thehispanicinstitute.net/node/1820>
- <sup>vii</sup> Data from Harris Interactive, commissioned by Placecast; and Nielsen.
- <sup>viii</sup> Americans and their Cell Phones, Pew Internet & American Life Project, 2011.
- <sup>ix</sup> How Women and Men Use the Internet. Pew Internet & American Life Project, 2005. Viewable at: <http://www.pewinternet.org/Reports/2005/How-Women-and-Men-Use-the-Internet.aspx>
- <sup>x</sup> Americans and their Cell Phones. Pew Internet & American Life Project, 2011.
- <sup>xi</sup> Americans and their Cell Phones. Pew Internet and American Life Project, 2011.
- <sup>xii</sup> Americans and their Cell Phones. Pew Internet and American Life Project, 2011.
- <sup>xiii</sup> Americans and their Cell Phones, Pew Internet & American Life Project, 2011.
- <sup>xiv</sup> Americans and their Cell Phones. Pew Internet and American Life Project, 2011.
- <sup>xv</sup> In retrospect, we should have included a category for Facebook, but we underestimated the degree of its adoption worldwide.
- <sup>xvi</sup> See, e.g., “Facebook’s Amazing Growth in the Developing World,” *The Atlantic*, May 18, 2012. Viewable at: [www.theatlantic.com/international/archive/2012/05/facebooks-amazing-growth-in-the-developing-world/257392/](http://www.theatlantic.com/international/archive/2012/05/facebooks-amazing-growth-in-the-developing-world/257392/)
- <sup>xvii</sup> Unauthorized Immigrant Population: National and State Trends, 2010. Pew Hispanic Center, 2011. Viewable at: <http://www.pewhispanic.org/2011/02/01/unauthorized-immigrant-population-brnational-and-state-trends-2010/>
- <sup>xviii</sup> U.S. Census Bureau, 2006-2010 American Community Survey
- <sup>xix</sup> U.S. Census Bureau, 2006-2010 American Community Survey
- <sup>xx</sup> U.S. Census Bureau, 2006-2010 American Community Survey
- <sup>xxi</sup> U.S. Census Bureau, 2006-2010 American Community Survey
- <sup>xxii</sup> US Census Bureau, *2012 Statistical Abstract of the United States*. Table 40, “Native-Born and Foreign-Born Populations by Selected Characteristics.” Viewable at [www.census.gov/compendia/statab/cats/population/native\\_and\\_foreign-born\\_populations.html](http://www.census.gov/compendia/statab/cats/population/native_and_foreign-born_populations.html)