**EXCERPT**

**Worldwide Mobile Worker Population 2009-2013 Forecast**

Stephen D. Drake + Justin Jaffe + Raymond Boggs

**IN THIS EXCERPT**

The content for this excerpt was taken directly from the IDC Market Analysis Report, Worldwide Mobile Worker Population 2009-2013 Forecast, by Stephen D Drake, Justin Jaffe, and Raymond Boggs (Doc # 221309). All or part of the following sections is included in this excerpt: IDC Opinion, In This Study, Situation Overview, Future Outlook, Essential Guidance, Learn More, and Synopsis.

**IDC OPINION**

The worldwide mobile worker population is set to increase from 919.4 million in 2008, accounting for 29% of the worldwide workforce, to 1.19 billion in 2013, accounting for 34.9% of the workforce. Key highlights across the regions include:

- **The United States** has the highest percentage of mobile workers in its workforce, with 72.2% of the workforce mobile in 2008. This will grow to 75.5% by the end of the forecast period to 119.7 million mobile workers. The United States will remain the most highly concentrated market for mobile workers with three-quarters of the workforce being mobile by 2013.

- **Asia/Pacific** (excluding Japan) represents the largest total number of mobile workers throughout the forecast, with 546.4 million mobile workers in 2008 and 734.5 million in 2013.

- **Western Europe**'s mobile workforce, at 96.5 million for 2008, accounts for roughly half of its total workforce. The mobile worker population in this region will experience healthy growth of 6% compound annual growth rate (CAGR) to reach 129.5 million mobile workers for 2013.

- **Japan** will grow by a CAGR of 3.3% to reach a mobile worker penetration rate of 74.5% of its workforce being mobile by 2013, for a total of 49.3 million mobile workers.

- **The rest of the world** (ROW) includes Central and Eastern Europe, Middle East, and Africa (CEMA), Latin America, and Canada. It has the lowest penetration of mobile workers at 13.5% for 2008, but still represents a significant opportunity at 125.7 million mobile workers. It will grow at a CAGR of 4% to reach 153.2 million mobile workers by 2013.
IN THIS STUDY

Methodology

The forecast information and analysis in this study was prepared by IDC using a multifaceted approach. Information sources used to develop this forecast include the U.S. Census Bureau, the Bureau of Labor Statistics, and other similar government statistics for other regions and countries, as well as primary and secondary resources. Primary sources include surveys of vendors and mobile users, and secondary sources consist of publicly accessible information and in-depth meetings and discussions with vendors. This study also incorporates surveys and forecasts published in related programs.

The survey results regarding telecommuters, home-based businesses, and work extenders are drawn from IDC's ongoing home office research. The principal source of information is IDC's 2009 Work-at-Home Survey. This national survey of 758 U.S. households was conducted by telephone to track the extent at which people are working at home and the nature of their jobs, as well as home office household use of advanced technology products and services. Respondents were identified using random-digit dialing of residential telephone exchanges. The survey provides statistical accuracy to ±3.6% at the 95% confidence level.

Definitions

IDC segments the mobile worker population into three core categories: office-based mobile workers, non-office-based mobile workers, and home-based mobile workers. Within each of these categories, IDC further segments the mobile workers (see Figure 1). The sections that follow provide definitions for each category and subcategory of mobile worker.
Mobile Workers

Mobile workers can be divided into three mutually exclusive main categories: office-based mobile workers, non-office-based mobile workers, and home-based mobile workers.

Office-Based Mobile Workers

Office-based mobile workers are those whose primary workplace is the office. This category includes mobile professionals, occasionally mobile workers, and mobile nontravelers.

Mobile Professionals

Mobile professionals are employees that are away from their primary workplace 20% or more of the time. These employees are typically made up of traveling executives, consultants, sales reps, insurance agents, pharmaceutical reps, and others, such as those in the healthcare industry. Mobile professionals are considered to be travelers when they are between locations and visitors when they arrive.

Source: IDC, 2009
Occasionally Mobile

Previously known as the mobile migration opportunity, occasionally mobile workers are those who may be involved in some mobile activity outside of their primary workplace but do not fit the criteria of mobile professionals who are away from their office at least 20% of the time. These employees may only be mobile a few times a year or less than 20% of their workdays per month.

Mobile Nontraveler

Mobile nontravelers are those workers who are mobile within the office or campus environment but do not travel outside of the office or campus. An example would be IT professionals who travel within buildings and campuses to assist in administration of networks and PCs but are not considered to be mobile professionals or occasionally mobile workers as defined because their mobility pattern remains within the office or campus environs.

Non-Office-Based Mobile Workers

Non-office-based mobile workers are those workers who are mobile but are not in an office environment. The two types of mobile non-office-based workers include mobile field workers and mobile on-location workers.

Mobile Field Workers

Formerly known as mobile data collectors, mobile field workers are typically field service employees from various vertical industries who collect data. Increasingly, these employees are delivering enhanced services beyond data collection (such as sales functions) to better serve clients’ needs and provide an upsell opportunity for the company.

Workers move from location to location and include those in typically service-oriented fields such as transportation, package delivery, trucking, route accounting, utilities, HVAC, construction management, and warehousing logistics. What makes mobile field workers unique is their pattern of mobility. The locations to which they travel may be part of a regularly traveled route or may vary from day to day. For example, a driver for a package delivery service may drive the same route every day. Conversely, a field service employee’s route may be determined at the beginning of each day based on a list of scheduled service calls or may change throughout the day as service calls are received. Mobile field workers often, but not always, operate a company vehicle as part of their job.

Mobile On-Location Workers

Mobile on-location workers are those employees that work at a specific location but outside of an office environment. Unlike mobile field workers, these employees are typically mobile only within a specific area, as they are on location at their primary workplace. Mobile on-location workers may work indoors (e.g., in a restaurant or warehouse), outdoors (e.g., at a construction site), or in mixed environments. Examples include warehouse workers, hospitality workers, and rental car employees assisting customers who are picking up and dropping off vehicles. Some may operate specialty equipment (e.g., forklifts and construction equipment) as part of their job.
Home-Based Mobile Workers

Home-based mobile workers are those mobile and remote workers who use their home as a workplace all or part of the time. This category includes telecommuters and mobile home-based business workers.

Telecommuters

Telecommuters are corporate employees who work at home during normal business hours. The threshold for telecommuters is three days a month or more, though some telecommuters may spend no time in traditional offices. (In effect, they are telecommuting full time.) These workers may have an informal arrangement between the employee and the supervisor, or the work arrangement can be more formalized with a written policy and enrollment.

Telecommuters consist of the following:

- **Mobile professionals (telecommuters):** This segment consists of those telecommuters who also travel away from their homes or corporate offices at least 20% of the time. This definition is consistent with office-based mobile professionals, with the only distinction being that these employees work out of their homes three days a month or more. An example would be regional salespeople who, because of their territory (e.g., the northeastern United States) may report to corporate offices but, because of logistics, work out of their homes and travel within their regional sales territories, visiting clients and prospects.

- **Occasionally mobile (telecommuters):** This segment consists of telecommuters who may be involved in some mobile activity outside of their primary workplace but do not fit the criteria of mobile professionals who are away from their offices at least 20% of the time. These employees may be mobile only infrequently. This definition is consistent with that of office-based occasional mobile workers, with the only distinction being that these employees are telecommuters. An example here would be the worker who telecommutes occasionally for business or personal reasons and has a tendency to travel occasionally to clients or other offices.

- **Nontraveling telecommuter:** Nontraveling telecommuters are workers who are considered to be mobile by virtue of being telecommuters but do not travel away from the home or the corporate office. An example would be a finance department employee who telecommutes a particular number of days because of personal or professional reasons and only works from home or the main office and does not travel for business purposes.

Mobile Home-Based Business Workers

Mobile home-based business workers consist of those home-based, income-generating business owners who are the following:

- **Mobile professionals (home business):** Mobile professional (home business) workers are those home-based business owners and employees whose primary workplace is a home and who are away from their primary workplace at least 20% of the time.
Occasionally mobile (home business): Occasionally mobile (home business) workers are those home-based business owners and employees whose primary workplace is a home and who are away from their workplace less than 20% of the time. They may only be mobile a few times a year.

Other Types of Mobile Workers

IDC identifies a number of additional categories of mobile workers that are essentially an overlay of the categories defined previously. IDC does not quantify these categories separately but uses them largely to further qualify and detail the core mobile workers.

Travelers

Travelers are mobile professionals or occasionally mobile workers, home and office based. They are defined as travelers at the specific time when they are in transit in a plane, train, airport, train station, and so forth. Travelers are on their way to their final destination, which may be a hotel, conference center, client site, or satellite office or are on the return journey. Travelers differ from commuters; commuters are en route to the office, but travelers are on their way to or from a visitor site.

Visitors

Visitors are travelers who have reached their destination, which may be a hotel, conference center, client site, or satellite office. At the point at which mobile workers become visitors, they have reached a certain level of “fixed” mobility in so much as they are mobile because they are away from the office, but unlike travelers, they are much less transient.

Commuters

IDC recognizes that the majority of the U.S. workforce commutes to some extent from where they live to where their workplace is located and back home (exceptions include full-time telecommuters and home-based business owners). IDC is interested in those commuters who are leveraging some mobile device technology on their way to work or returning. Like the traveler, the commuter is very transient in nature, but unlike the traveler, who may spend a day or more traveling and is typically in different locations, the knowledge-working commuter has a much shorter traveling time (from minutes to several hours) and is typically traveling the same route each day. The means of traveling is often very similar (e.g., takes the subway to work every day) and typically very limited (e.g., car, subway, or bus).

Corridor Cruisers

Corridor cruisers include those office-based employees that travel within the office or campus area. Corridor cruisers include mobile nontravelers as well as a percentage of office-based mobile professional and occasionally mobile workers, who may exhibit this work pattern at certain times.

Work Extenders

This segment includes corporate workers who take work home from traditional jobs after normal business hours. Although they work in the evening or on weekends,
corporate after-hours employees are not compensated separately. Their reward would likely come through raises and promotions associated with greater productivity.

**Geographic Definitions**

IDC includes five regions in this study: the United States, Western Europe, Asia/Pacific (excluding Japan), Japan, and ROW.

Countries in the Western Europe forecast include Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Countries in Asia/Pacific (excluding Japan) include Australia, China, Hong Kong, India, Indonesia, Korea, Malaysia, New Zealand, Philippines, Singapore, Taiwan, Thailand, Vietnam, and the rest of Asia/Pacific (ROAP).

The ROW region includes Canada; Central and Eastern Europe, the Middle East, and Africa (CEMA); and Latin America.

**Situation Overview**

IDC estimates that the mobile workforce population worldwide totaled 919.4 million in 2008. Figures 2 and 3 illustrate the number of mobile workers by region in 2008 and the proportion that they represented at that time.
Asia/Pacific (excluding Japan) had the largest number of mobile workers in 2009 at 546.4 million, representing 59.4% of the total mobile workforce population. The United States has the highest penetration of mobile workers at 72.2% for 2008, with 108.9 million mobile workers out of a workforce of 150.9 million. Japan exhibits penetration near that of the United States at 62.9% for 2008, with 41.8 million mobile workers out of a workforce of 66.5 million. Western Europe had 96.5 million mobile workers, accounting for nearly half (48.7%) of the region’s workforce for 2008. ROW had a penetration of 13.5% for 2008, representing a total of 125.7 million workers out of a workforce of 928.4 million. ROW consists of Central and Eastern Europe, Middle East, and Africa (CEMA), Latin America, and Canada.

The global economic downturn has had a negative impact on the total workforces across all regions and on the total number of mobile workers as frustrated workers leave the labor force. However, IDC does expect a slow, steady recovery in to gradually reduce high unemployment levels and grow the labor force.

**Future Outlook**

**Forecast and Assumptions**

**Worldwide**

As Figure 4 indicates, IDC expects the number of mobile workers worldwide will reach 1.19 billion in 2013, up from 919.4 million in 2008, reflecting a CAGR of 5.2% during the forecast period. In addition:
The market share of Asia/Pacific (excluding Japan) will grow from 59% in 2008 to 62%, for a total of 734.5 million mobile workers in 2013. Much of this is due to the sheer size of the population in China and India, combined with the fact that both countries are experiencing rapid economic expansion. From a mobile technology standpoint, this is a large greenfield with relatively small adoption of technologies compared with the size of the mobile worker population. However, infrastructure, socio/economic, and cultural barriers must be taken into account for much of this region when considering technology adoption.

ROW, which is made up of Canada and emerging market countries in CEMA and in Latin America, represented a 14% share of the market in 2008 at 125.7 million mobile workers. It will account for 13% share in 2013 with 153.2 million mobile workers. Similar to APEJ, with the exclusion of Canada which exhibits patterns similar to the U.S. market, this region is a greenfield for technology adoption when considering the size of the mobile worker population. As with APEJ, infrastructure, socio/economic, and cultural barriers must be taken into account for much of this region when considering technology adoption.

The U.S. mobile worker population will grow from 108.9 million in 2008 to 119.7 million in 2013. Its share will decline from 12% to 10% as regions with larger populations experience growing mobile worker populations. Despite the relatively small share, mobile workers in the United States adopt and use far more mobile technologies than any other region, including those with much larger mobile worker populations.

Western Europe's mobile worker population will grow from 96.5 million in 2008 to 129.5 million in 2013, and as such, its share will grow from 10% to 11%. Western Europe is second to the United States in terms of mobile technology adoption. Some cultural barriers exist for enterprise mobility in parts of this region. There is far more variability between countries in this region when compared with the U.S. variability between states or regional areas.

Japan's mobile worker population will grow from 41.8 million mobile workers in 2008 to 49.3 million in 2013. Its share of the market will decline from 5% to 4%. As with the United States, the decline in Japan's share is due to growth of regions with larger populations. Japan is a leader in consumer mobile technology adoption and usage; however, due to cultural reasons, it has had limited adoption of enterprise mobile technologies. However, government initiatives to promote telecommuting could help spur some adoption of mobile technologies.
Mobile Workforce Penetration by Region

- Regional comparisons indicate that the U.S. workforce has the highest percentage of mobile workers in 2008 at 72.2%; this is expected to grow to 75.5% by 2013, essentially reaching the sustainable limit.

- Japan's mobile worker penetration rates will increase the most during the forecast period, growing from 62.9% penetration in 2008 to 74.5% in 2013 as it has a similar industry sector structure to the United States. It has essentially reached its sustainable limit of mobile worker penetration.

- Western Europe's mobile worker penetration will increase from 48.7% in 2008 to 50.3% in 2013. Continued growth is expected in Western Europe as southern European countries shift to more services-based economies and adoption of enabling technologies allow previously nonmobile workers to become mobile.
The penetration of mobile workers in Asia/Pacific (excluding Japan) will grow from 30.2% in 2008 to 37.4% in 2013. The relatively low penetration compared with some other regions is offset by the sheer size of the workforce and the size of the mobile workforce. A good deal of growth potential still exists, though structural barriers do exist.

The mobile worker penetration for ROW was 13.5% in 2008, and it will grow to 15.4% in 2013. As with APEJ, the low percentage is nullified by the large relative size of the workforce. A good deal of growth potential still exists, though structural barriers do exist.

**Market Context**

Table 14 provides a comparison of our 2007 (see *Worldwide Mobile Worker Population 2007–2011 Forecast*, IDC #209813, December 2007) and 2009 forecasts. This is further illustrated in Figure 6. The current forecast is revised slightly upward due to a change in counting for Western Europe to include "zero person companies," with only a principal owner and no employees, and due to better visibility into ROW, particularly certain countries in CEMA and Latin America. Furthermore, the pace of innovation, increasing demands for business response time, and a growing acceptance of businesses to incorporate mobility all act as drivers for mobility in the workplace. However, barriers to the adoption of mobility/remote work into businesses still exists. Barriers include cultural resistance, the cost-prohibitive nature of wireless solutions, security risks, and global macroeconomic risks. Furthermore, the global economic crisis has had a negative impact on the overall global workforce and on the mobile workforce as well.
### Table 14


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<th>2005</th>
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<tr>
<td>2007 forecast</td>
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<td>Growth (%)</td>
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<td><strong>Total workforce</strong></td>
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<td>2007 forecast</td>
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**Notes:**

In this document, for Western Europe, IDC decided to add the self-employed category (or zero-person companies category) to the number of total workforce as this is an important work category in many European countries. As a result, the total workforce number in 2008 is higher than 2007, even though the number should be slightly lower because of the current recession. For this reason, the numbers between 2007 and 2008 are not directly comparable.

ROW numbers from 2008 forward have been restated due to better visibility into CEMA and Latin American countries based on extensive vertical analysis. For this reason, the numbers between 2007 and 2008 are not directly comparable.


Source: IDC, 2009
FI G U R E  6


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Source: IDC, 2009

ESSENTIAL GUIDANCE

Our advice for organizations deploying mobile solutions and suppliers delivering mobile solutions to customers is as follows:

- Mobility needs can vary greatly across geography, industry, business size, and mobile worker type. Vendors need to offer a variety of mobile devices with multiple form factors and capabilities. It is important for vendors to understand how needs differ across this strata in order to develop the optimal mix of products and services, and to then market effectively to each segment and subsegment.

- Mobile platform providers should evaluate the value that their offering can bring a customer now, and in the future. Increasingly, companies will want to do business with a mobility company that allows them to integrate mobile software into their larger technology roadmap and support varied mobile worker types.
Resistance to working remotely can come from employees with concerns over the boundaries of their personal time being compromised. It can also come from employers concerned over employee abuses of working remotely in the form of personal calls from the corporate mobile phone or reduced productivity combined with less time in the office. Provided that clear expectations and a "contract" between employer and employee is set, these concerns can be overcome and abuses from either side can be mitigated.

Although mobility deployments can bring a number of benefits to a company, it also needs to be aware of the risks inherent in allowing sensitive data to sit on small devices that can be easily lost. Developing a plan around managing and securing devices should be part of a larger mobility deployment.

Mobile solutions must align with the long-term mobility strategies of enterprises, and allow for easy migration to new mobile platforms as well as support for multiple platforms and form factors.

**LEARN MORE**

**Related Research**

- *Enterprise Mobility in the Cloud* (IDC #220192, October 2009)

**Synopsis**

This IDC study provides a worldwide five-year mobile worker population forecast through 2013 and analysis across three major worker categories and 13 subcategories in five regions: the United States, Western Europe, Asia/Pacific (excluding Japan), Japan, and the rest of the world (ROW).

"As mobility continues to play a key role in enabling companies to achieve greater productivity worldwide, IDC expects the global mobile worker population to increase from 919.4 million in 2008 to more than 1.19 billion in 2013, representing nearly 35% of the worldwide workforce," said Sean Ryan, research analyst for IDC’s Mobile Enterprise group.