

# The Mobile Connectivity Cost Index 2016

A whitepaper from Rethink  
Technology Research and iPass



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## Executive Summary

As the number of devices people use increases, connectivity has never been more important. Whether mobile professionals are trying to be productive by day or connect with family and friends by night, there is a tangible need to be always connected. And with the continued growth of cloud applications and Unified Communications (UC), high-quality, secure connectivity is no longer “nice to have,” it’s a “must have.”

This report focuses on the connectivity options available to professionals who work on the go. It debates which of these options is the most cost-effective and best optimized for secure mobile working. Using desk-based research methods, this report answers whether free Wi-Fi hotspots really are a cost-free connectivity option and whether changes to data pricing in 4G LTE bundles make cellular data roaming a viable option. These options have also been compared to the costs of using paid-for Wi-Fi in venues such as hotels, airports and on aircraft.

This paper’s findings are as clear as they are concerning. Free Wi-Fi does not provide the simplicity, convenience and security that today’s mobile professionals require. When considering the impact on worker productivity, the very notion of “free” quickly disappears.

Furthermore, although the costs of cellular roaming in Europe have been reduced, they still remain substantial when the amount of data used by a mobile professional is taken into account. Additionally, piecemeal payment for Wi-Fi becomes expensive very quickly, and critically fails to provide the simplicity and convenience that business users crave.

This report highlights that a mobile professional uses around 760MB of data per day, predominately for business activity. All the cost comparisons have been based on this level of data usage. However, this figure doesn’t take into account how mobile professionals spend their free time. For example, within a busy travel schedule, down time is very important, and a mobile professional may want to stream a movie or TV show in their hotel room. This would result in a great deal more data being used. Just one hour of Netflix streaming can typically result in the use of between one and 3GB of extra data, which dramatically increases overall data costs.



The amount of data used by the average mobile professional for predominately business activity

## The Connectivity Options

Considering the behavior and data consumption patterns of the mobile professional along with the costs associated with mobile working, this report compares three connectivity options:<sup>1</sup>

- 1. Predominately cellular:** This approach works well if you aren't a heavy user of data, but for those looking to use video or other bandwidth hungry applications data allowances can quickly be used up. Therefore, the mobile professional reliant on the predominantly cellular option will need to find alternative offerings so that additional devices can be connected.
- 2. Buying Wi-Fi on demand:** The mobile professional looking to purchase Wi-Fi is also presented with some challenges. Being connected is a constant need, and requires the mobile professional to continually create profiles and log in to new Wi-Fi services with personal information such as passwords and credit card details. This process is inefficient, risky and quite expensive. Moreover, it is hard to keep track of those details and expenses, particularly when traveling.
- 3. Free Wi-Fi:** While a popular option for many mobile professionals, free Wi-Fi poses numerous obstacles, which render it wholly inefficient and costly. There are instances where "free" Wi-Fi is offered but is limited in time or to certain activities. For the mobile professional looking to connect to cloud-based apps, share large files or stream video, payment is required to ensure a "premium" experience. In addition, there are security and privacy risks.

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1. Costs based on exchange rate figures from May 2016.

## Average Data Usage

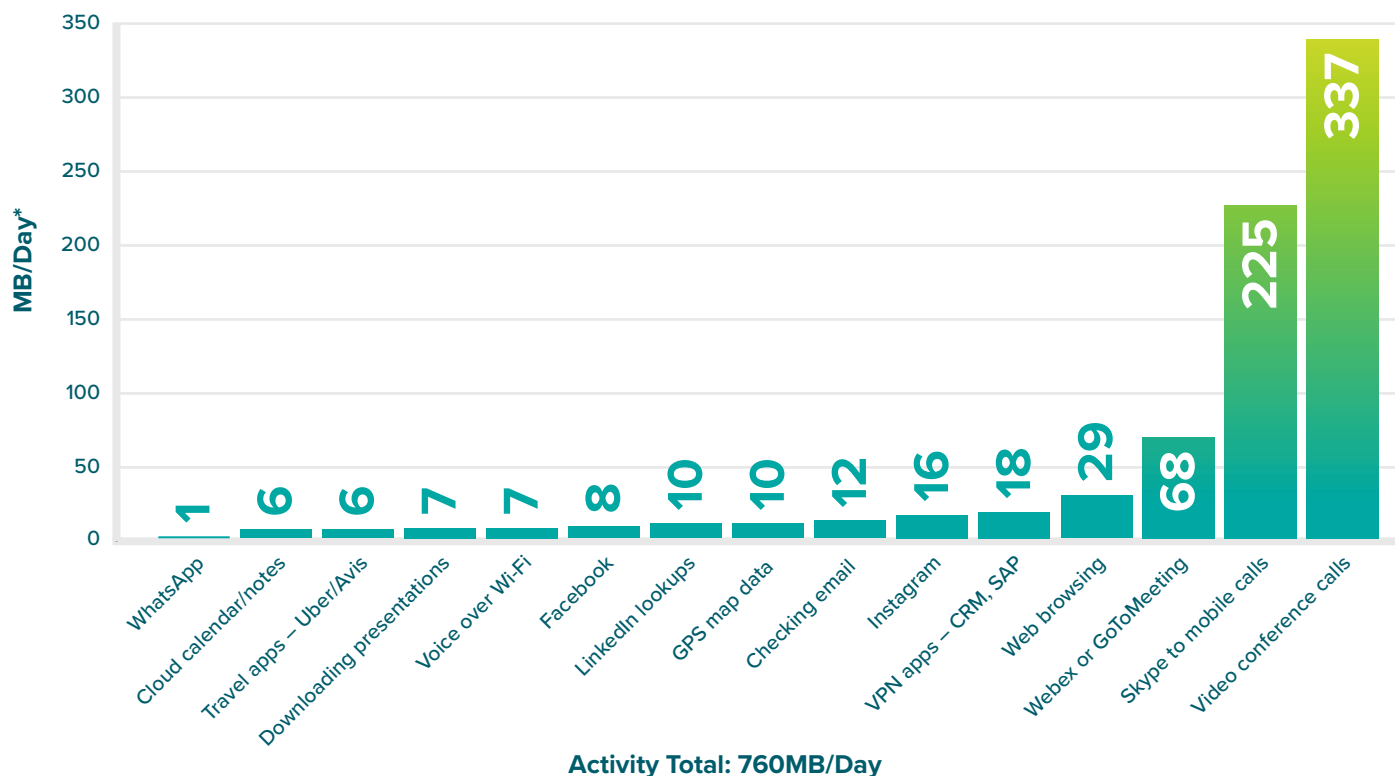
Mobile professionals today use a host of devices to remain productive, from laptops, smartphones and tablets, through to the latest wearable tech. However, as the number of devices per person increases, so too does the amount of data they use.

Rethink Technology Research has looked at the applications mobile professionals use while on the go, along with the frequency with which these applications are used, to create a detailed picture of data usage in 2016.

This research demonstrates that the data requirement for a mobile professional is around 760MB of data per day, four times greater than just a few years ago. The table below demonstrates the different activities of a typical mobile professional along with the average data usage per task.

*The average mobile worker now consumes approximately **760MB** of data per day.*

Average data usage for the 2016 mobile professional



\*Amounts rounded to the nearest whole number

But why has the amount of data needed by a mobile professional increased so dramatically over the past few years? Upon investigation, there are a number of contributing factors:

1. **Email isn't plain text anymore** and now includes presentations, documents and high-resolution images.
2. **Cloud applications are becoming increasingly prevalent** as critical business tools – e.g. CRM, Unified Communications, Gmail and Dropbox.
3. **Voice over Wi-Fi and video calling apps** like FaceTime and Skype for Business, used to facilitate business communications, have become more popular.

4. **Web conferencing is becoming more popular**, as tools like WebEx, GoToMeeting and Skype bring more teams together.

5. **Increased screen sizes and the rise of “phablet” devices** have made the viewing of video content much more enjoyable, but have also led to an increase in data consumption.

Now that it's clear how a mobile professional uses technology to remain productive, it becomes important to understand exactly how often that worker is out of the office.

## Mobile Professional Profiles

The mobile professional, estimated to be working on the go for 16 hours a month, will need access to connectivity when working away from the office or home. They will also need connectivity when traveling for business.

According to IPK International, a travel research company, there were 77.5 million international business trips made in 2015 by North Americans and Europeans; 13.6 million of these were made by North Americans traveling internationally, while 63.9 million were made by Europeans. Of the 63.9 million trips made by Europeans, 83 percent were within Europe and 17 percent were outside. These trips lasted an average of six days. In addition, the United States Travel Association states that a U.S. mobile professional makes one to two trips per week.

For the purposes of this report, it is assumed that for the following profiles, mobile professionals will use 760MB/day or 4.5GB over six days of travel a month. For U.S. and European mobile professionals traveling within their respective regions, this will be six overnight trips. While those traveling to Europe from the U.S. or vice versa, along with those traveling abroad elsewhere, will make two trips of three nights each on a monthly basis. It is assumed that they will require a further 1.5GB of data for 16 hours of additional “on the go” working a month.

### The profiles:

1. U.S. mobile professionals working “on the go” and traveling within the U.S.
2. U.S. mobile professionals working “on the go” and traveling outside of the U.S.
3. U.K. mobile professionals working “on the go” and traveling within Europe
4. U.K. mobile professionals working “on the go” and traveling outside of Europe
5. French mobile professionals working “on the go” and traveling within Europe
6. French mobile professionals working “on the go” and traveling outside of Europe
7. German mobile professionals working “on the go” and traveling within Europe
8. German mobile professionals working “on the go” and traveling outside of Europe

*“The direct and indirect costs of keeping mobile professionals connected are more than many businesses realize.”*

— Patricia Hume, Chief Commercial Officer of iPass

## The Cost of Connectivity

### The indirect costs associated with mobile working

When connectivity is unavailable, the indirect costs of lost productivity cannot be underestimated. The constant search for connectivity can quickly render mobile professionals unproductive, often resulting in serious consequences. Consider being unable to send basic emails or check in with colleagues on the status of a project. Likewise, being on deadline but failing to send vital information to a client is equally, if not more, distressing. Additionally, consider the case of a mobile professional who must spend 30 minutes walking from coffee bar to coffee bar in a city, just to get a free Wi-Fi connection.

None of these practices are efficient ways to conduct a mobile business in 2016. And as a result, business leaders need to understand the operational value of providing access to secure and reliable connectivity. However, this value is often misunderstood because hidden in complex expenses. The fact is, most mobile professionals expect Wi-Fi, so businesses must provision their employees with a cost-effective solution.

For each connectivity option, this report has accounted for lost labor time in its cost model. When connectivity is not available or needs to be actively searched for, there is a hit to productivity. Simply Hired reported in 2015 that the average salary of a U.S. “Mobile Professional” is \$63,000. This equates to 50 weeks at \$1,300, or \$32.50 an hour. Based on inflation, we have increased this to \$32.65 for 2016. We have used this hourly rate to calculate the impact of lost productivity, when workers are unable to connect or spend time looking for a connection. However, it is clear that there are many mobile professionals that are paid much more than \$63,000 per year. For example, the average CEO takes home \$171,000, and in many cases earns much more. Consider then, the cost to the business if a CEO spent three hours across a four-day business trip unable to be productive.

## What happens when mobile professionals use a predominately cellular solution?

It is important to note that cellular services normally include a fixed amount of data customers can use as a contract term. And when most of these services reach their

cap, a mobile professional is either automatically charged a fixed fee for additional data or is prompted to purchase a separate bolt-on product.

### Use predominantly cellular

	Starts at	Up to	Lost Labor	Inflight Wi-Fi	Total Best Case	Total Worst Case
U.S. user in the U.S.	\$40	\$75	\$784	\$60	\$100	\$859
U.S. user outside of the U.S.	\$125	\$675	\$784	\$80	\$205	\$1,459
U.K. user in Europe	\$47	\$86	\$98	\$54	\$101	\$184
U.K. user outside of Europe	\$59	\$340	\$784	\$96	\$155	\$1,124
French user in Europe	\$31	\$250	\$98	\$54	\$85	\$384
French user outside of Europe	\$1,275	\$1,275	\$784	\$96	\$1,371	\$2,059
German user in Europe	\$68	\$75	\$98	\$54	\$122	\$172
German user outside of Europe	\$254	\$457	\$784	\$96	\$350	\$1,241

### U.S. mobile professionals working “on the go” and traveling in the U.S.

It can be assumed that mobile professionals will have a domestic cellular plan with some level of data allowance. For the purposes of this study, we will look at this as a given cost and only take into account the cost of adding an additional 6GB of data to a cellular plan. From our research, we found that through AT&T or Verizon, this would amount to an additional \$40 to \$75 a month.

### U.S. mobile professional working “on the go” and traveling outside of the US

The most cost-effective way to connect while traveling outside of the U.S. is to use Verizon, which will cost an additional \$125 to source the 4.5GB of roaming data required for six days of international travel. However, this isn’t the case with other cellular providers. Traveling internationally on T-Mobile, which had the highest data roaming charges, will cost mobile professionals an extra \$675 a month to source the data needed.

Both AT&T and Verizon suggest that some Wi-Fi is included as part of their cellular packages, but their global footprint is so small so as to make reliable use of the service impossible, except as an occasional respite from using cellular.

Due to the upgrades needed for international travel, most plans would also include the additional data needed for the additional 1.5GB of “on the go” data usage in-country each month.

### European mobile professionals

In 2012 the European Commission placed data caps on data roaming charges in the European Union. These rates have been reduced over the last few years; and data roaming charges in Europe are due to be completely abolished in June 2017.

For those traveling within Europe, the issue is now access to the amount of data, rather than roaming charges. With 4.5GB being used when traveling each month, the mobile professional needs a plan that can meet this demand and



that can be used across Europe. The additional 1.5GB of data used for working “on the go” in-country, during any given month would be covered either through the mobile professional’s initial or upgraded data plan.

#### **U.K. mobile professionals traveling within Europe**

Vodafone customers in the U.K. are able to use the same data allowance they use at home when traveling, for an extra £3 per day. This would equate to £36 for 12 travel days. However, in order to gain the 4.5GB roaming data required for a mobile professional, an additional £11 phone upgrade fee is required – bringing the total cost to £47 or \$67.50. With Everything Everywhere (EE), a £10 upgrade would be required as well as £2.50 for 500MB of data from its Euro Data products, meaning the required 4.5GB of data will cost an additional £32.50 or \$47.

3 Mobile charges its customers £5 a day for unlimited data usage when traveling within Europe. However, this plan does not cover major destinations in Europe, or any destinations outside of Europe, apart from the U.S. Mobile professionals using 3 Mobile can expect to pay an extra £60 or \$86 to be able to remain productive when traveling in Europe.

#### **U.K. mobile professionals traveling outside of Europe**

The U.K. mobile professionals looking to predominantly use cellular connectivity to remain productive when traveling outside of Europe will face steep charges. Vodafone customers are provided with the “World Traveler” service at £5 per day for data use. Mobile professional would also need to pay an £11 upgrade fee to get their 4.5GB of data, bringing the total cost for mobile working outside of Europe to £41 or \$59.

Conversely, EE charges £40 for 750MB, which would result in a £240 or \$340 charge for the 4.5GB required.

#### **French mobile professionals traveling within Europe**

SFR provides a single unlimited tariff for the whole of the EU, which comes with 3GB of data a month. To get the required 4.5GB, a mobile professional will have to pay an additional cost of €28 or \$31 per month. Orange is more expensive, charging €220 or \$250 for the required 4.5GB of data.

It is important to note that the disrupter in the market, Iliad, was also considered due to its aggressive pricing and European-wide data offering. However, the packages it offers simply would not meet the data requirements of a mobile professional throughout the year.

#### **French mobile professionals traveling outside of Europe**

For those French mobile professionals required to travel globally the outlook is bleak. For travel outside of Europe, Orange offers French mobile professionals 100MB for €25, which equates to a figure of €1,125 or \$1,275 for the 4.5GB of data required.

Indeed, with the exception of travel to the U.S. and French overseas territories, other French operators offer rates very similar to Orange’s.

#### **German mobile professionals traveling within Europe**

German T-Mobile customers looking to successfully work “on the go” within the EU would require a data plan upgrade from a €13.45 subscription to a premium ‘Data Comfort’ subscription priced at €79.95, which would cost them an additional €66.50 or \$75.

In comparison, Telefonica offers its German customers an “all-in” Large, Extra Large or Premium Package, where an additional €5 can be paid to gain home data amounts. This requires an upgrade of at least €30, totaling an additional €60 or \$68.

#### **German mobile professionals traveling outside of Europe**

For German mobile professionals looking to travel outside of Europe, T-Mobile offers a data supplement of €50 per GB. The 4.5GB required would cost a German mobile professional €225 or \$254.

However, German customers with Telefonica will end up paying considerably more, data charges of €90 per GB, or €405 or \$457 for a full 4.5GB.

## Cellular provides no inflight option, leading to lost productivity

There is no such thing as “inflight cellular.” U.S. mobile professionals looking to remain productive at 35,000 feet will either have to incur an extra charge such as the Gogo monthly Wi-Fi rate, at \$60 within the U.S. or \$80 internationally, or suffer a loss of connectivity and productivity. This lost productivity would amount to 24 hours a month for U.S. mobile professionals traveling within and outside of the US. Based on the simply hired data, this would equate to \$784 in lost labor.

For European travelers, the challenge is greater, as Wi-Fi is only available on 22 percent of planes in the region. Therefore, we have either included a lost labor cost (\$98), for when Wi-Fi is available but not used, or the cost of Wi-Fi (\$18 a flight) for three flights a month.

When traveling further afield, Europeans would be able to select flights with Wi-Fi. The cost of this is typically \$24 a flight. The lost labor cost of not having inflight Wi-Fi when mobile professionals are traveling beyond Europe is calculated to be \$784 dollars based on four international flights of six hours each. However, this lost labor cost can be much more dramatic for destinations such as South America and Asia, where flight times can be more than 10 hours. Mobile professionals could be losing as much as a week of work in any given month, by simply failing to connect when inflight.

## What happens when mobile professionals purchase Wi-Fi on demand?

In order to understand the true costs of purchasing Wi-Fi on demand, it is important to consider the piecemeal pricing of Wi-Fi at airports, inflight and at both hotels and coffee bars.

### Buy Wi-Fi as you go

	Airport	Inflight Wi-Fi	Hotel	Wi-Fi Passes	Total Hard Cost
U.S. user in the U.S.	\$28	\$60	\$36	\$24	<b>\$148</b>
U.S. user outside of the U.S.	\$9	\$80	\$36	\$24	<b>\$149</b>
U.K. user in Europe	\$54	\$54	\$36	\$46	<b>\$190</b>
U.K. user outside of Europe	\$18	\$96	\$36	\$46	<b>\$196</b>
French user in Europe	\$22	\$54	\$36	\$40	<b>\$152</b>
French user outside of Europe	\$7	\$96	\$36	\$40	<b>\$179</b>
German user in Europe	\$48	\$54	\$36	\$22	<b>\$160</b>
German user outside of Europe	\$16	\$96	\$36	\$22	<b>\$170</b>

### Getting Wi-Fi in U.S. Airports

Firstly, it is important to dispel a common myth, that the majority of U.S. airports offer free Wi-Fi. A look at the top 50 U.S. airports shows that only 64 percent of them offer entirely free Wi-Fi, while the rest either use the freemium model or simply charge all the time.

Under the freemium model, airports offer free Wi-Fi for periods of 20, 30 or 45 minutes, but once this period is exhausted, time charges apply. There is another catch with U.S. airport Wi-Fi. While there are many free Wi-Fi hotspots available in U.S. airports, many only allow a connection fast enough for a cellphone, so in order to become fully productive, mobile professionals are required to pay premium rates for high-speed Wi-Fi.

Those charges vary between \$2.95 per hour and up to \$7.95 per hour, but in some cases, daily 24-hour charges apply; these range from \$4.95 a day to \$9.95 a day. The average payment for use of Wi-Fi in U.S. airports is \$6.40. On the basis that a mobile professional traveling solely within the U.S. would be able to harness free Wi-Fi 64 percent of the time, the remaining cost of topping up this service would be \$28 a month.

### Getting Wi-Fi in European Airports

Much like in the U.S., some airports in the U.K. offer free Wi-Fi, others have a freemium model, while others charge. This is also the case in France and Germany. In the U.K., 65 percent of airports charge for Wi-Fi, while in France this number is 36 percent and in Germany the percentage is 71. The average cost of airport Wi-Fi in the U.K. is \$6.95, whereas in France it is \$5, and in Germany it is \$5.60.

The average cost of Wi-Fi in a U.K. airport is \$6.95 for either hourly or daily access. However, since only 65 percent of U.K. airports offer paid Wi-Fi, this report has calculated the cost of 12 airport visits for a mobile professional traveling within Europe based on 65 percent of \$6.95x12. Additionally, for the mobile professional traveling outside of Europe, the calculation is 65 percent of \$6.95x4 airport visits.

### Getting Wi-Fi in hotels in the U.S. and Europe

Wi-Fi in hotels has become far more complex over the past couple of years. Indeed, services that used to be purely paid became mostly free around 2012. However, the picture has changed again, and now there are various free, freemium and paid models on offer.

When looking at the global hotel groups, only Hyatt offers free Wi-Fi in every room, regardless of who booked the room or by what means. Across every other global hotel chain, including Marriott, Hilton, Home Inns, InterContinental, Wyndham, Carlson Rezidor, Starwood, Best Western, Choice Hotels, Accor and Loews, seeking and paying for connectivity become complicated.

For some hotels, mobile professionals that book via the chain's dedicated website will be provided with free Wi-Fi. Some chains such as Marriott, Hilton and Home Inns provide a clear distinction between free, but slow, Wi-Fi, designed for mobile devices only, and premium Wi-Fi, which on average costs anywhere between \$5 and \$12.95, but can provide the bandwidth a mobile professional requires.

Mobile professionals need to pre-plan to ensure they get access to high-quality Wi-Fi. Indeed, this research revealed that some chains only allow customers to authenticate a maximum of two devices to the Wi-Fi network. However, if a mobile professional has a third or fourth device that requires Wi-Fi connectivity, some hotels will charge a punitive bill of between \$200 and \$800.

Wi-Fi can be free for members of hotel loyalty programs, but in some cases up to eight bookings are required to qualify for those programs. By co-opting mobile professionals into loyalty programs, hotels are using free Wi-Fi as a value add to drive competitive advantage.

Prior research conducted suggested that mobile professionals were required to pay for Wi-Fi in hotels 50 percent of the time, at an average cost of \$4 per night. In just over a year, this price has tripled to \$12 per night for a premium Wi-Fi connection, fast enough for use by a laptop. On that basis, a mobile professional paying for premium Wi-Fi for three of the six nights he or she is away will have to expend an extra \$36, whether staying in Europe or in the U.S.

### Getting Wi-Fi when working “on the go” in-country through hourly or daily passes

Outside of traveling for business, the mobile professional will also be working on the go throughout the month. To ensure productivity, a mobile professional will have to pay for Wi-Fi 50 percent of the time, through an hourly pass purchased from a local Wi-Fi provider. It is assumed, but by no means certain, that for the rest of the time, they would be able to find a free Wi-Fi hotspot that would meet both their connectivity and security needs.

The costs for hourly passes varies from country to country. Rethink estimates that a mobile professional would pay \$2.95 an hour in the U.S., compared to \$5.75 in the U.K. and \$5 in France. In Germany there tends to be daily rather than hourly charges of approximately \$5.60 per day. For the purpose of this study, it is estimated that the mobile professional will purchase two hours of Wi-Fi passes four times per month.

## What happens when mobile professionals only use free Wi-Fi?

Opt for using free Wi-Fi					Total	Total
	Airport	Inflight Wi-Fi	Hotel	Lost Labor	Hard Costs	Real Costs
U.S. user in the U.S.	\$0	\$0	\$0	\$1,159	\$0	\$1,159
U.S. user outside of the U.S.	\$0	\$0	\$0	\$1,143	\$0	\$1,143
U.K. user in Europe	\$0	\$0	\$0	\$767	\$0	\$767
U.K. user outside of Europe	\$0	\$0	\$0	\$1,143	\$0	\$1,143
French user in Europe	\$0	\$0	\$0	\$767	\$0	\$767
French user outside of Europe	\$0	\$0	\$0	\$1,143	\$0	\$1,143
German user in Europe	\$0	\$0	\$0	\$767	\$0	\$767
German user outside of Europe	\$0	\$0	\$0	\$1,143	\$0	\$1,143

### Relying on free Wi-Fi suffers as a strategy for three notable reasons:

1. When there is no free Wi-Fi, workers do without and cannot work efficiently.
2. Mobile professionals waste precious time looking for free Wi-Fi rather than paying for it, resulting in lost productivity.
3. Free Wi-Fi connections are often slow, limiting the scope of activity one can do and devices one can use.

Indeed, the effects of a free Wi-Fi-only approach can be evaluated based on this report’s assumption that the cost of labor for a mobile professional is, on average, \$32.65 an hour.

### **In U.S. or European airports**

Mobile professionals traveling short-haul either in the U.S. or Europe will suffer three hours of lost productivity at airports a month, as they will only be able to rely on free Wi-Fi for a portion of their time at airports. Indeed, for the mobile professional traveling long-haul, the amount of productivity lost will be greater, due to earlier check-in requirements for longer flights. On that basis, this report suggests that a mobile professional opting for free Wi-Fi only will experience 1.5 hours of lost productivity for each journey. However, this report only assumes a total of four long-haul journeys, which results in a loss of six productive hours, much the same as with short-haul flights.

### **Inflight across the U.S. and Europe**

The sticking point here is that inflight Wi-Fi is almost never free. In this situation, mobile professionals looking to remain productive on short-haul flights of an average duration of two hours in the U.S. will lose 24 hours of productivity across the six trips made, including return flights. In Europe, with an average flight time of one hour, this number would be reduced to 12 hours a month. Regarding long-haul flights, this report assumes a six-hour flight duration across four trips, resulting in a worrying 24 hours of lost productivity in a month.

### **At hotels in the U.S. and Europe**

Mobile professionals looking to use free Wi-Fi in hotels also stand to lose even more productivity. As mentioned earlier in this report, most major global hotel chains will offer a free Wi-Fi connection, which is serviceable around half of the time. On that basis, this report assumes that mobile professionals traveling short-haul will experience 1.5 hours of lost productivity, spread across three evenings where they will lose an additional 30 minutes finding and traveling to an alternative location with quality free Wi-Fi, such as a coffee shop. As long-haul travelers are making fewer trips, the amount of lost productivity would only be one hour.

### **Working “on the go” in-country**

Finally, when working “on the go” each month, mobile professionals looking to solely use free Wi-Fi will lose time hunting for appropriately secure hotspots. It is estimated that they will lose four hours of productivity a month looking for, and then making their way to, locations with free Wi-Fi.

*The loss in productivity from free Wi-Fi can cost businesses between \$767 and \$1,159 per mobile professional each month, dependent on their location and destination.*

## The Best and Worst Case Cost Analysis for Different Types of Mobile Professionals

Business leaders need to understand the operational value of providing access to secure and reliable connectivity. The fact is, where connectivity is unavailable, a deficit in productivity is created.

For the average mobile professional, this cost is high, but not necessarily severe. But what if this mobile professional was a CEO of a major corporation, or any other C-level executive? The resulting loss of labor for these mobile professionals can easily skyrocket.

For the purposes of analysis, this report has suggested three persona profiles with differing travel options, providing an overview of what lost labor can really cost. Each will follow a select travel pattern in-line with this report's "typical" mobile professional. However, here the focus is on the resulting cost based on the value of each persona's time and therefore lost productivity.

### The personas:

- **The CEO – Average wage of \$171,000**  
(\$85.50 p/h)<sup>1</sup>
- **The Head of Sales – Average wage of \$96,000**  
(\$48.00 p/h)
- **The Consultant – Average wage of \$78,000**  
(\$39.00 p/h)

**Jim the CEO** heads a large telecommunications company in the U.S. He flies within the U.S. on a regular basis for meetings with widely dispersed teams and customers and works "on the go" regularly.

Jim predominately relies on cellular to keep himself connected. By approaching connectivity in this way, he faces a minimum additional cost of at least \$40 a month, paying for the cellular data required to remain productive when on the move. Jim does not pay for inflight Wi-Fi access. And since he cannot use his cellular connection

inflight, he loses around 24 hours of productivity each month, resulting in **\$2,052** of lost labor.

**Sally the Head of Sales** works for an organization that provides networking equipment to some of the world's top organizations. Based in the U.K., Sally's senior position sees her increasingly spending more time working in the U.S., due to an increasing number of new accounts.

Sally only uses free Wi-Fi when traveling or working "on the go," in an effort to keep her connectivity costs down. Indeed, this approach saves her \$18 at the airport and an additional \$96, not having to pay for inflight Wi-Fi. However, Sally isn't factoring in the piecemeal connectivity that free Wi-Fi often provides. As a result, Sally is at her most unproductive while at airports and inflight, due to the fact that free Wi-Fi is only free for a short amount of time or not available at all. She also wastes a considerable amount of time each month looking for and traveling to free Wi-Fi hotspots. This results in **\$1,680** of lost labor a month.

**Nita the Branding Consultant** is French and works with some of the world's top brands to make sure they are presenting themselves competitively. She travels outside of Europe on a regular basis for meetings in the U.S. with colleagues and clients.

Nita predominately uses cellular connectivity when traveling. Her company won't allow her to expense Wi-Fi costs or use free Wi-Fi hotspots for security reasons. For "on the go" working in-country, this isn't a problem. However, as a French individual traveling to the U.S., her cellular costs amount to an additional **\$1,275** per month for the 4.5 GB she requires. Additionally, due to the fact Nita cannot be productive while inflight, she is hit by another **\$1,209** of lost labor per month. As a result, Nita's direct and indirect costs amount to **\$2,484** per month.

1. Hourly pay is calculated based on a 50-week working year, and a 40-hour working week. Hence annual salary is divided by 50, and weekly salary is divided by 40.

## Conclusion

To remain productive, mobile professionals need access to 760MB per day, or 4.5GB per month, when traveling, as well as 1.5GB of data a month when working “on the go” in-country.

However, the cost of this data is over and above the cost of existing office, home broadband and cellular service packages. This cost represents a challenge for enterprises, who seek to keep their mobile professionals productive “on the go.” Using cellular could be a feasible approach when a mobile professional doesn’t use a lot of data and is traveling or working on the go domestically. However, opting for a cellular-only approach outside of a mobile professional’s home region makes little sense, due to the draconian roaming rates for U.S. and European workers traveling outside of their home regions.

Similarly, paying for Wi-Fi when it is needed isn’t a cost-effective option either, with mobile professionals incurring between \$148 and \$196 per month using airport, inflight and hotel Wi-Fi services, as well as hourly Wi-Fi passes from local providers.

Using free Wi-Fi may seem like the ideal way to mitigate mobile connectivity costs, yet as this study shows, the impact on productivity is significant. This productivity loss can range from \$767 to \$1,143 per month depending on the worker’s location and destination.

*Mobile connectivity costs  
North American and  
European businesses at  
least **\$2.91B** per year.*

When looking at the best case cost scenario for both U.S. and European mobile professionals, calculating in the 77.5 million international business trips made each year, this study shows that there is a staggering \$2.91 billion spent on mobile connectivity annually to enable on-the-go working.

It is clear the direct and indirect costs of keeping mobile professionals connected continue to rise. Businesses must have greater visibility into how much their employees are spending to connect. Today, easy access to cost-effective and secure connectivity is paramount. And therefore, a monthly global Wi-Fi subscription package is crucial, offering businesses greater cost controls while providing mobile professionals unlimited, always-on and invisible access to millions of Wi-Fi hotspots around the world, in airports, hotels, train stations, convention centers, outdoor venues, inflight and more.

## About iPass

iPass (NASDAQ: IPAS) is the leading provider of global mobile connectivity, offering simple, secure, always-on Wi-Fi access on any mobile device. Built on a software-as-a-service (SaaS) platform, the iPass cloud-based service keeps its customers connected by providing unlimited Wi-Fi connectivity on unlimited devices. iPass is the world’s largest Wi-Fi network, with more than 57 million hotspots in more than 120 countries, at airports, hotels, train stations, convention centers, outdoor venues, inflight, and

more. Using patented technology, iPass SmartConnect™ takes the guesswork out of Wi-Fi, automatically connecting customers to the best hotspot for their needs. Customers simply download the iPass app to experience unlimited, everywhere, and invisible Wi-Fi.

iPass® is a registered trademark of iPass Inc. Wi-Fi® is a registered trademark of the Wi-Fi Alliance. All other trademarks are owned by their respective owners.

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