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**Global Technology & Operations**  
**MasterCard Worldwide**

**Mobile Telecom + Financial Services:**  
***Commerce Follows Communications***

Remarks to:  
**3GSM World Congress**  
**Fira de Barcelona, Spain**  
**February 14, 2007**



Good afternoon. It's a pleasure to be with you today ... and it's an honor to share this platform with some of the true thought-leaders in today's global—and mobile—economy.

I am especially pleased to be taking part in this conference because of an experience I had this summer.



February 15, 2007

2

*“I noticed mobile phones in the hands of individuals who were obviously not economically well off.”*

Jamaica is the country of my birth. I return periodically to visit family there and keep in touch with old friends. On each visit, I find that many aspects of life in Jamaica remain unchanged—the beauty of the countryside ... the warmth of the people ... and unfortunately, in many areas, the extreme poverty.

But on this particular trip, I observed that something quite new had transpired in the three years since my previous visit. In poor, rural areas, I noticed a significant number of mobile phones in the hands of individuals who were obviously not economically well off. It was a remarkable change.

In addition to the mobile phone’s typical uses, I saw that it had become for many Jamaicans an ornament ... a fashion statement ... and a validation of their self-esteem. I cannot say whether these people even had running water in their homes. But they did carry prepaid mobile phones.

That observation confirmed for me that a sea change is indeed underway in mobile technology and market penetration. That development is of special interest to me, in my role at MasterCard, because where communications go, commerce quickly follows.

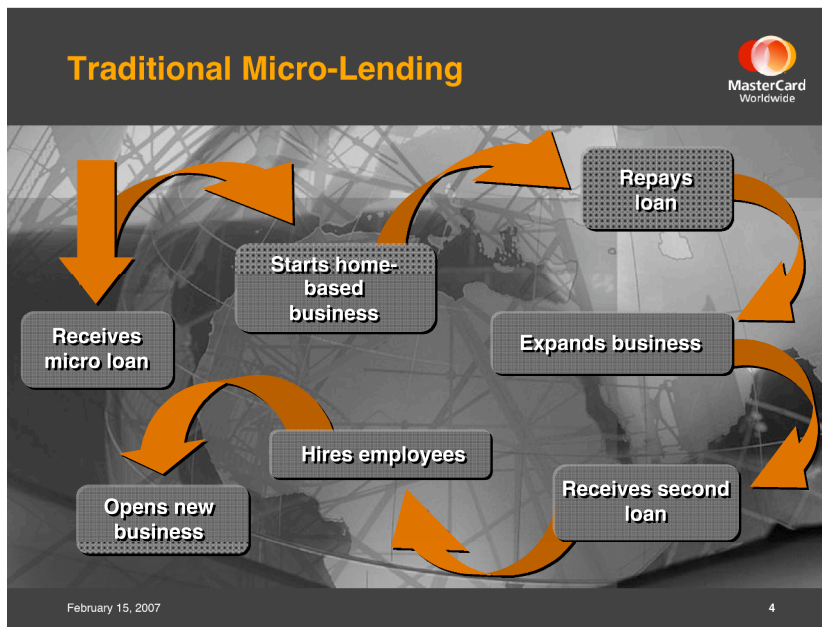


*“The majority of growth is coming from low-income countries.”*

As my associates on this panel have observed, the majority of subscriber growth is coming from developing markets. Look back at growth rates since 2000, and you can see the remarkable difference between high-income and low-income countries.

How will you make your service indispensable to the people behind these percentages?

You are familiar with the remarkable success of microfinance programs, such as that pioneered by Muhammad Yunus. These programs move people from poverty to economic stability ... from the *informal* economy to the *formal* economy, and its attendant opportunities.



*“Micro-lending programs move people from poverty to economic stability.”*

As Mr. Yunus describes the original model, a woman in a village receives a tiny loan. With that money, she typically invests in materials, such as bamboo reeds, and starts a home-based business selling hand-woven baskets.

What might happen next?

With revenues from her first enterprise, she repays the loan, buys seeds, and begins selling home-grown vegetables. With another loan, she rents a shop, hires employees, and opens a grocery store.

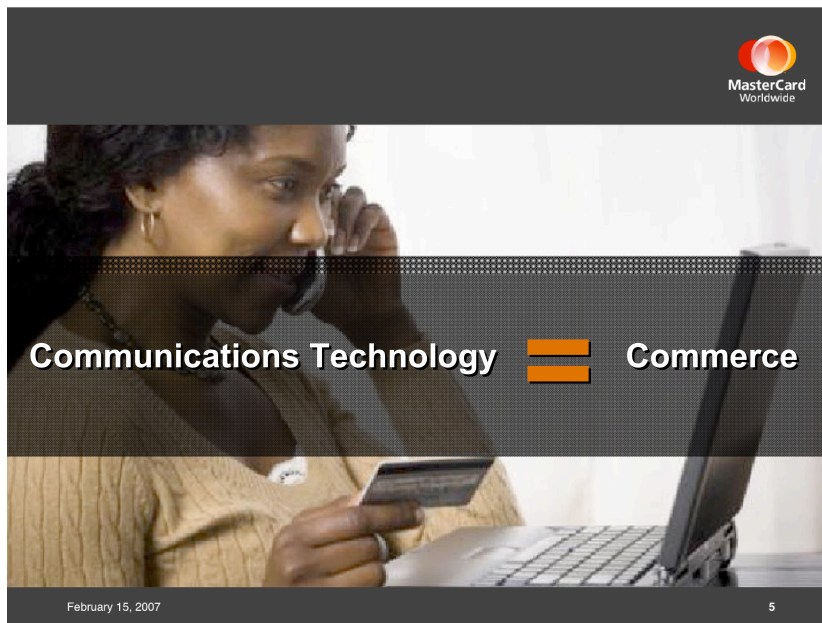
Her next venture? I wouldn't presume to guess.

But one thing we can be sure of: This ambitious entrepreneur and her family represent a most lucrative business opportunity.

The mobile industry, through GSMA, is about to join MasterCard at the heart of commerce, by making international person-to-person money transfers simple, fast, secure, and affordable.

The beneficiaries will be some of the millions of people in developing markets—people, such as our micro-credit-enabled entrepreneur, who lack access to traditional banking services.

To understand the potential of this partnership, let's look at an equation—a very simple one.

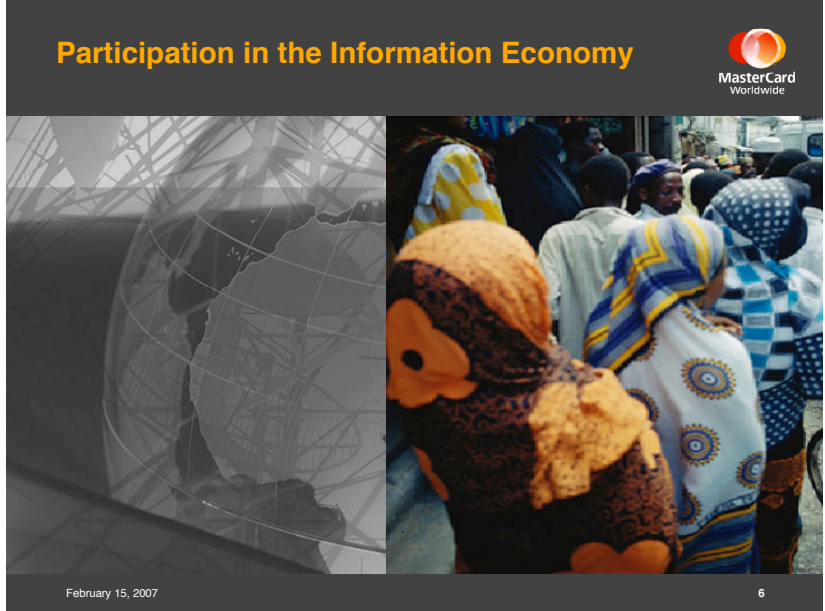


*“Commerce follows communications.”*

Throughout history, the speed of communications has determined the speed at which commerce moves ... and the friction that slows it down.

Generations ago, the speed of global communications—and, therefore, global business transactions—was about 60 days. That's how long it took a sailing ship to cross the Atlantic Ocean.

Today, the speed of communications—and commerce—is nearly instantaneous.



*“Common standards have transformed telecommunications and financial payments.”*

As a result, millions of people around the world are now able to participate in the Information Economy. Key to their participation, however, is the development of common technological standards.

The other day, I was speaking with colleagues on a conference call.

I was in my office in the U.S., others were in the U.K., and one of our colleagues was in his car, speaking to us from the Netherlands ... and then Belgium ... and, by the end of the call, Germany.

Common standards have provided the lubricant to transform telecommunications—and also financial payments. MasterCard’s industry-leading technology and payment system standards create advanced interoperability, massive efficiencies, lower costs, and higher speeds.



*“MasterCard’s payment system standards create advanced interoperability, massive efficiencies, lower costs and higher speeds.”*

This is what globalization looks like: Our global processing platform connecting consumers with more than 25,000 banks ... in 210 countries and territories ... using 160 different currencies.

No longer are communications and payments tied to physical locations. Today, technology is freeing us from the constraints of geography.

So much freedom can give one pause.

If you have ever felt a sense of disorientation because your teenager is walking around the house while watching TV on her cell phone, don’t despair. That is merely the sensation of one paradigm passing, and a new one dawning.

Free From Constraints of Geography



*“We are experiencing a shift from place-based to person-based communications and commerce.”*

It is the shift from *place*-based communications ... to *person*-based communications. And where communications go, commerce follows.

A friend told me that he bought his elderly mother her first mobile phone, and a few days later, he called her number. She answered it at her sister’s home and asked, in amazement, “How did you know where to find me?”

Just as my friend’s mother is no longer tied to a hard-wired phone in her kitchen ... soon she will no longer be tied to a physical ATM ... or a branch office of her bank ... or a point-of-sale device at a store.

These two factors—mobile communications and financial services—represent more than simple convenience. They are fundamental indicators of a market’s economic development.

Consider this equation.



*“In developing countries, mobile telecom infrastructure has out-paced financial services infrastructure.”*

Economists report a close correlation between mobile telecom infrastructure and financial services infrastructure. According to the World Bank, communications and commerce grow together, and together, they drive economic development.

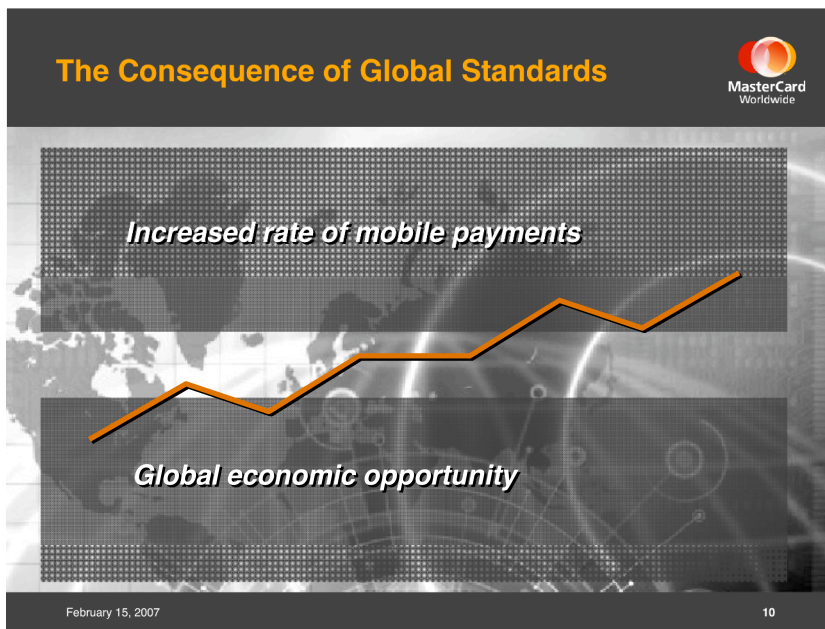
In developing countries, mobile telecom infrastructure has out-paced the traditional, physical infrastructure of financial services. Mobile phone service might be available, but the nearest bank is probably a two-hour bus ride.

And therein lies the opportunity.

Many mobile operators are exploring this opportunity to facilitate payments. But to date, most such projects remain just that—explorations. They are limited by the proprietary systems of the mobile operator or the payments partner.

However, a different sort of partnership could remove those limitations and could ease the friction that impedes commerce. That would be a partnership between the GSMA, representing the mobile telecom industry, and MasterCard, the world’s globally integrated payments system.

As a public company, MasterCard operates with the highest level of transparency.



*“The rate of mobile payments could parallel the adoption of mobile technology in the developing world.”*

As the world’s most extensive integrated, point-to-point, totally redundant payments network, we are uniquely positioned to help the mobile industry develop global standards for mobile payments practices.

What would be the consequence?

The common, ubiquitous standards arising from such a partnership could transform today’s isolated explorations into a global surge of economic energy. The rate of mobile payments could parallel the adoption of mobile technology in the developing world.

Emerging economies could leap-frog over the traditional precursors to economic growth.

Gone would be the impediments of physical, financial infrastructure. And in their place?

A solution that enables economic opportunity—predicated on *person*-based communications and commerce.



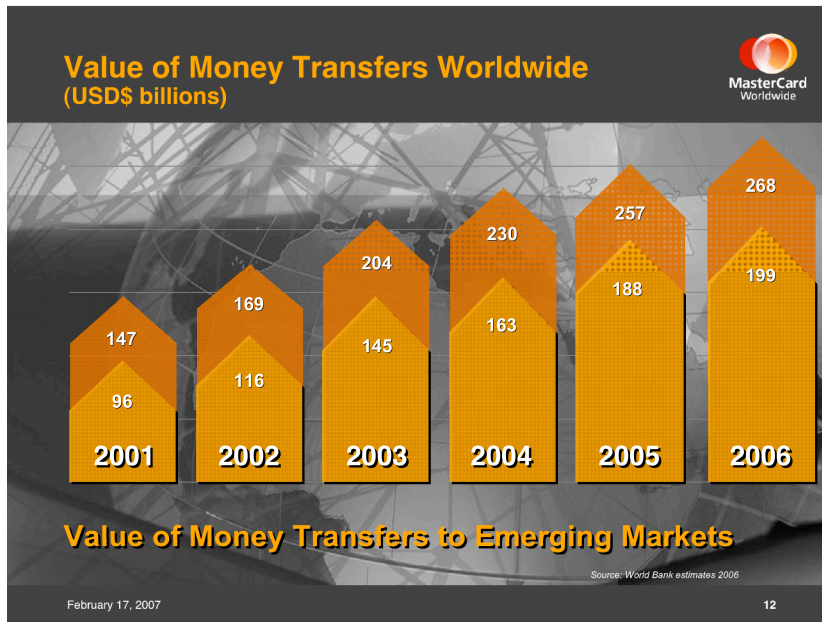
*MasterCard<sup>®</sup>  
Money  
Send<sup>™</sup>*

*“Our solution enables economic opportunity in the form of person-to-person mobile money transfers.”*

MasterCard and the GSMA intend to jointly offer that solution in the form of person-to-person mobile money transfers.

Mobile devices will be used to initiate the transfers.

The MasterCard MoneySend programme will enable the sender to transfer funds by using a MasterCard payment card, and will enable the receiver to access those funds by using a MasterCard credit, debit or prepaid card.



*“In 2006, money transfers to developing countries made via official channels alone totaled USD \$199 billion.”*

The World Bank tells us that money transfers from expatriate workers are growing dramatically. Last year, in 2006, such money transfers reached the US dollar equivalent of \$268 billion. That’s an increase of \$121 billion in six years.

But look at how much of that represents money transfers to developing countries. That segment alone represented USD \$199 billion last year.

Mind you, these figures—remarkable as they are—represent only a portion of the true market.

These numbers are only the volumes that we can see ... the official amounts made via so-called “formal” channels, and reported by the central bank of every country.

Economists tell us that the *true* amount—including money transfers made via so-called *informal* channels—cannot be measured, but is certainly enormous.

Some calculate that the informal volume is every bit as great as the official, reported figures ... thereby doubling the official estimates.

This solution holds the potential to create a continuous, self-sustaining loop of truly democratic opportunity—in the form of ever-expanding economic benefits for *all* participants.

That includes mobile phone operators, who will help design and provide the service ... MasterCard, who will provide global payment products and processing ... financial institutions, who will provide access to funds via MasterCard payment cards ... as well as individuals, communities, and even countries.



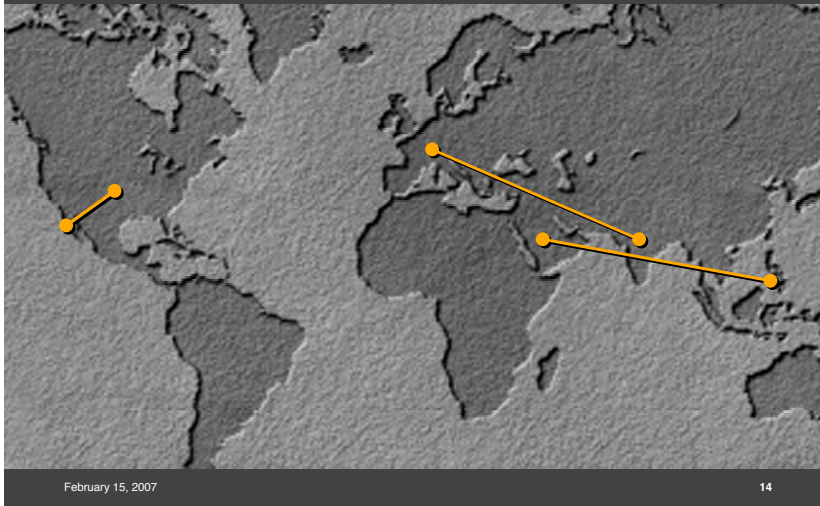
*“This solution holds the potential to create economic benefits for all participants.”*

How could this unfold?

Let’s return to people like our ambitious entrepreneur, who began by selling baskets and vegetables.

While she is at home building her small business and caring for her children, her husband, son or daughter is likely to have joined the legions of workers who travel to another country to find work.

## Global Corridors for Money Transfers



*“Certain corridors are common for workers who regularly send money home to their families.”*

Certain corridors are especially common for expatriate workers—for example, from India to the U.K. ... from Mexico to the U.S. ... from the Philippines to Saudi Arabia.

For our discussion, let’s consider an actual individual—Roberto, who is from Latin America.

He spends nine months of every year in the U.S. as part of a program for foreign workers.



February 15, 2007

15

*“These workers and their families do not yet enjoy the full benefit of their hard work.”*

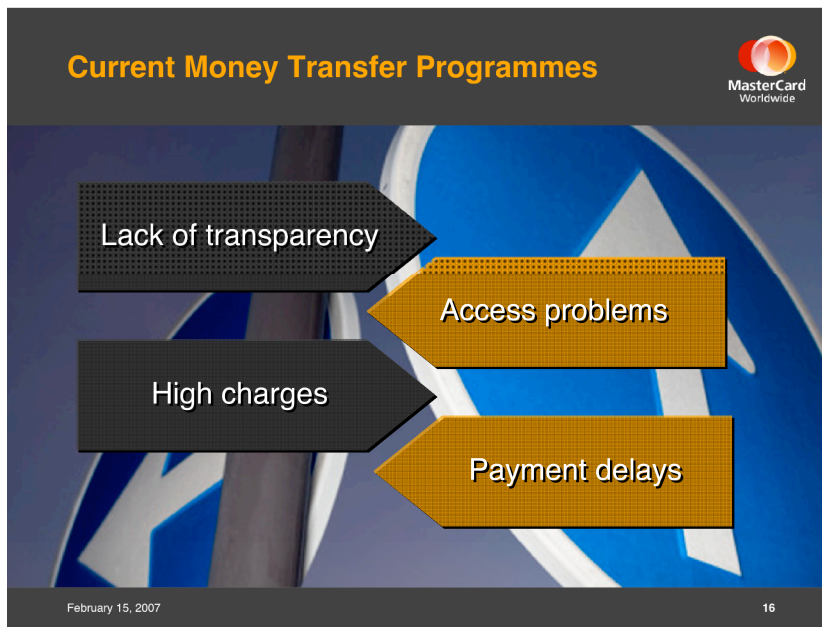
After many years of hard work for a large company, he is now in charge of equipment maintenance at one of the company’s locations in Texas.

The money that he sends home every month provides his extended family with a comfortable living—and provides his village with an injection of economic vitality.

Back home, his wife drives a good car.  
He has money to lend to relatives who want to start a business.  
He is sending his children to school.

But Roberto, his family and his community are not yet enjoying the full benefit of his hard work.

That’s because the payments that Roberto sends every month to his family back home can be expensive, slow, cumbersome or risky—depending on the existing payment channel he uses.



*“Even formal money-transfer channels may present problems of access, lack of transparency, and high fees.”*



If an expatriate worker like Roberto uses an *informal* remittance channel—such as a courier, or an unregulated company—he may be charged unexpected fees ... or his money may be stolen ... or his payment delayed.

But even if he uses a *formal* channel, such as a money transfer organization, or MTO, his family is likely to face the problem of access. Few villages in the developing world have convenient access to an MTO office.

The lack of transparency provided by many services leaves workers and their families vulnerable to high fees ... and also leaves their governments vulnerable to money laundering and other schemes.

Many transfer fees—resulting from high fixed costs—work as a premium charged against the poorest senders. The smaller the amount sent, the more serious the effect of transfer fees and other charges.

**Current Money Transfer Fee Structures**

£500 transferred:

- 1% to 8% fee

£100 transferred:

- 4% to 40% fee

\* UK Department of International Development (DFID)

February 15, 2007 17

*“Fee structures of today’s money-transfer options present a daunting challenge for workers and their families.”*

For instance, the transfer fee for 500 pounds sent from the U.K. to India typically ranges from 1 percent to 8 percent. But ask to send a smaller amount—say, 100 pounds—and the transfer fee can reach as high as 40 percent.

These are fees charged by formal channels.

The total amount charged by informal channels is more difficult to estimate, because players at every step of the transfer process may charge additional fees.

Taken together, the difficulties and fee structures of today’s money-transfer options present a daunting challenge for expatriate workers and their families. The difficulties are best expressed by the workers themselves.

*“I send money twice a month, but my mom sends money to Mexico every single week.”*

*“I work in London, and every month I send money to my family. Sending money back to my country is a big headache for me.”*

*“When I send money, sometimes it takes 3 or 4 days.”*

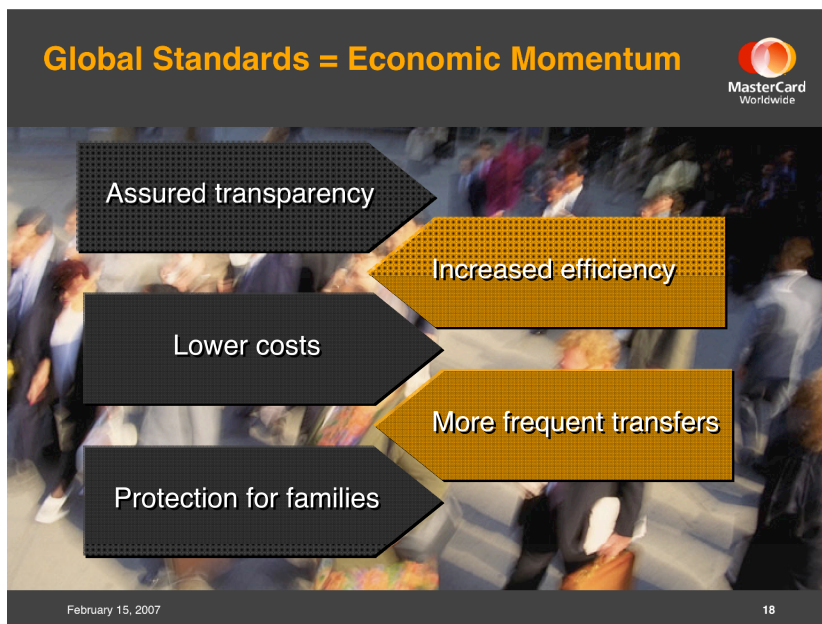
*“The difficult thing is communicating from here to over there, to make sure the money actually gets there.”*

As you can imagine, the economic effect of these inconveniences and high fees can be debilitating.

Think of the woman whose husband, son or daughter has found work in another country. Perhaps the worker is able to scrape together 100 pounds per month to send home.

What is the impact if fees totaling 20 or more pounds are taken from that amount?

The expatriate worker may not send the money at all ... or the individual may feel compelled to use informal and uncertain means. In either case, the amount that reaches home is dramatically reduced.



*“Global standards, and the resulting simplicity and lower costs, would give expatriate workers an increased incentive to send money.”*

But what if global standards were established to ensure transparency?

The economic momentum would create efficiencies and lower costs. Workers and their families would be protected. Expatriate workers would have an increased incentive to send money—and would do so more often. And their families back home would receive not just 70 or 80 of the 100 pounds transferred ... but well over 90.

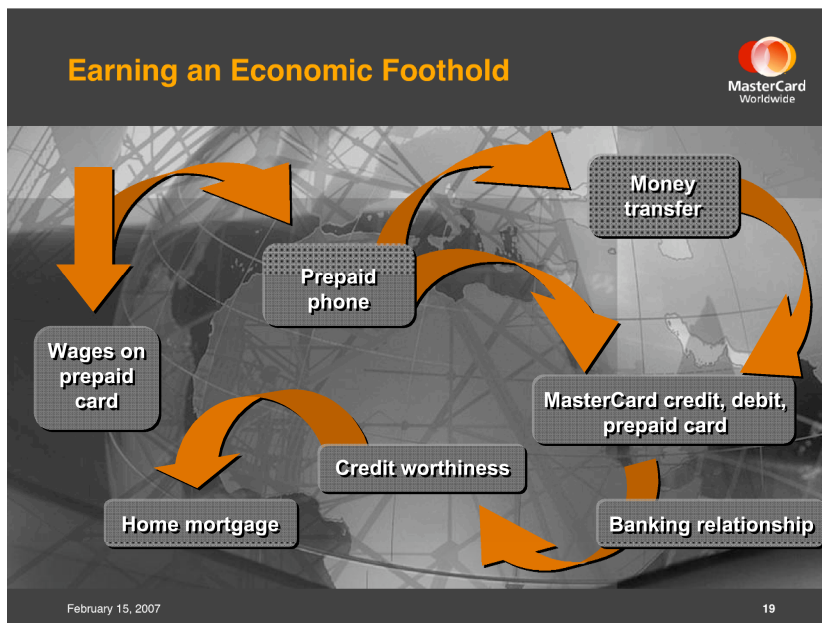
Just as a tiny micro-loan can spur dramatic economic value for a family or village, so a lower-cost money transfer can have a huge impact on a family’s well being.

MasterCard MoneySend is designed to achieve these goals.

We intend to work with our customer financial institutions to facilitate money transfers by ensuring cost efficiency, reliability, transparency of charges, and accessibility.

Other money transfer services may require the recipient to wait several *days* to access transferred funds. But MasterCard MoneySend is designed for efficiency and speed at every step. We can switch transactions as fast as 120 milliseconds over our global payments network.

Expatriate workers using our network can trust that the payments they send to their families will arrive when promised ... for a reasonable fee ... to an easily accessible payments vehicle.



*“We hope to drive a new economic cycle that helps people living in poverty earn a foothold in the formal economy.”*

Traditional microfinance projects help people escape from extreme poverty. Our programme is designed to provide another tool for achieving that goal.

We hope to drive a new economic cycle—one that helps people living in poverty earn a foothold in the formal economy.

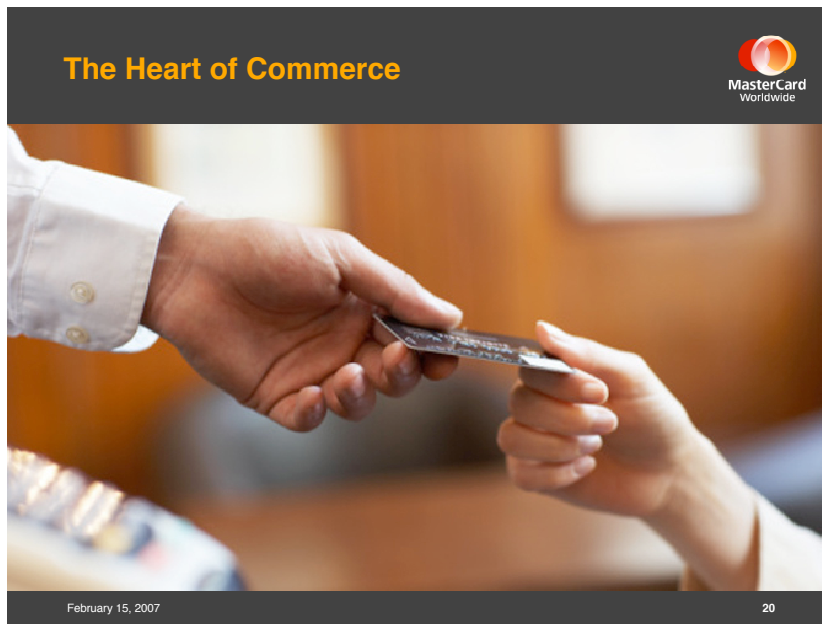
A worker, far from home, receives a prepaid card on which his wages are deposited. Using a mobile device, he uses MasterCard MoneySend to transfer funds to his family’s MasterCard account.

By using a MasterCard credit, debit or prepaid card, the family can, for the first time, establish a relationship with a bank.

With their new credit history, they can obtain a mortgage from a bank ... loans for education or business ... and a ticket to new status as thriving participants in the formal economy.

Remember that in many emerging economies, a mortgage might cost as little as USD \$200 or \$500—a very small amount, by western standards, to achieve economic stability.

The benefits will not stop there.



*“Our programme’s goal will be the expansion of global markets for the financial services and mobile telecom industries.”*

Mobile operators will know that MasterCard’s global payments system supports banking laws and regulations ... and our commitment to transparency will minimize the risk to their networks from fraud and other misuse.

The MasterCard global system will deliver the same core functions, whether our partners provide services in Barcelona, Brazil or Bangladesh. However, our flexible architecture will enable local customization—regardless of geography or currency—that will adapt to local circumstances.

At the outset, MasterCard will work with the GMSA and select financial institutions to provide core, common standards for a basic person-to-person mobile money transfer service. But over time, we anticipate being able to innovate in very significant ways.

Our programme's goal will be economic growth for workers, their families, and communities ... and the further expansion of markets for the financial services and mobile telecom industries.

In its position at the heart of commerce, MasterCard is participating in a number of money-transfer programmes and other pilot efforts in under-served markets. We've been working with partners in Asia, Africa, and throughout Latin America.

We have found that these programmes can become enablers of microfinance. When we remove the friction that impedes international money transfers, commerce will follow communications.



*“When we remove the friction that impedes international money transfers, commerce will follow communications.”*

MasterCard holds a pivotal position in the global economy. From that post, our ultimate goal is to help release pent-up economic energy ... to further expand global markets ... and to help improve the lives of millions of people who at present lack access to the financial tools they need.

We may speak of markets ... but together, our industries will serve individual workers and their families. Let's remember who they are.

These workers belong to a self-selected segment of individuals who will go to extremes to do an honest day's work for an honest day's pay.

Their goal is simple—to support their families with dignity.  
It is in the best interests of our industries to help them succeed.

Why? Our motivations are economic ... but also social.

These people—these determined, ambitious workers—represent the bricks and mortar of a stable society.

They are the precondition for a robust economy.

They are the raw material of an emerging entrepreneurial class.

These people represent the future of their communities ... and quite possibly, the future of *our* communities as well.

And when you and I give them an easier, faster, more affordable, reliable and secure way to support their families back home, you can be certain they will make use of it.

Our industries—working together—will do well to keep pace with that same spirit and determination.