#### CREATING NEW MARKETS THAT SERVE POOR CUSTOMERS

#### Paul Polak, Dec 27, 2001

The act of creating new markets brings with it a new-testament quality of destruction and rebirth, of death and resurrection. Economists describe it as a process of creative destruction<sup>1</sup>, and modern business gurus talk about disruptive innovation<sup>2</sup>, or suggest that a successful company or a country must be willing to "shoot its wounded and suckle the survivors.<sup>3</sup>" The creation of transformative new markets releases waves of chaotic unpredictable energy, which destroy the old and create the next generation of new markets. The personal computer spawns the internet, and the transistor radio puts a peasant in the remote reaches of the Yellow River Basin in touch with the current price of wheat in Shanghai. 50 years ago, new markets created by products like affordable cars changed the culture of nations, but now disruptive innovations like the internet become an inescapable part of the air we breathe as a global family.

The creation of new markets that serve poor customers has the power to create new wealth where only pervasive poverty existed before. But for the 1.3 billion people in the world who survive on less than a dollar a day, the concept of creating new markets now barely applies, because with few exceptions, they have been bypassed by the existing marketplace. This represents a wasted opportunity of staggering proportions, both for profit motivated commercial enterprises willing to change the way they do business, and for development organizations looking for practical solutions to poverty in the face of the dismal track record of current poverty alleviation programs. Creating new markets for income generating products and services that poor people can afford to buy as customers can create enough wealth to propel poor people out of poverty into the middle class. Opening access to new global markets for products and services created by poor people adds to their wealth, and opens the door for them to become active players in the global marketplace.

<sup>&</sup>lt;sup>1</sup> Schumpeter Joseph A. Capitalism, Socialism and Democracy New York: Harper, 1975.

<sup>&</sup>lt;sup>2</sup> Friedman, Thomas L. The Lexus and the Olive Tree. Anchor Books, New York, 2000. P 232

<sup>&</sup>lt;sup>3</sup> Friedman, Thomas L. The Lexus and the Olive Tree. Anchor Books, New York, 2000. P 232

#### The Process of Creating New Markets

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<sup>4</sup> Creating new markets that serve poor customers provides breakthrough innovations in goods and services that provide practical opportunities for poor families to break out of the poverty cycle.

As far as the global majority of the people who are poor are concerned, new markets for income generating products and services that they can purchase have the power to transform their poverty. Opening access to global markets for things produced by the poor further increases their access to wealth, but also opens the door for the poor to become active players in the global marketplace. The creation of new markets that serve poor customers has the power to create new wealth where only pervasive poverty existed before.

The lives we live are profoundly shaped by the pioneers that have created new markets for products and services that range from motor cars to transistor radios to personal computers. The chaotic and unpredictable offspring of these new markets, like the internet that spun off from the personal computer revolution, have unleashed the state of globalization which governs our lives, including those of us who protest most vociferously against it.

The innovations that create new markets wreak havoc with what goes before them. Clayton Christensen<sup>4</sup> describes disruptive technologies as breakthrough innovations that cast aside the sustaining technologies that defined the markets preceding them. Companies in existing markets ignore them at their peril. Thomas Friedman goes even further. To embrace breakthrough technologies, companies and countries must be willing to "destroy the old to build the new". They must be willing to "shoot its wounded and suckle the survivors"<sup>4</sup>.

But for the 1.3 billion people in the world who survive on less than a dollar a day, and for the two billion or more additional people in developing countries who are poor by western standards, the concept of creating new markets barely applies, because with few exceptions, they have been effectively bypassed by the existing marketplace. This represents a wasted opportunity of staggering proportions. The world's poor majority represents remarkable marketplace opportunities for commercial firms, but only if they are willing to give up their conventional ways of doing business. Perhaps more importantly, there is increasing evidence that existing approaches to poverty alleviation have, with few exceptions, failed. Creating new markets that serve poor customers provides breakthrough innovations in goods and services that provide practical opportunities for poor families to break out of the poverty cycle.

By creating new markets for poor customers, I do not mean creating new market demand. The demand is already there, but it has not been recognized. Creating a new market is an entrepreneurial process that identifies a previously unrecognized chasm in the marketplace and exploits it.

Perhaps the best way to understand the process of creating new markets for poor people, is to look at some examples of market creation that were not created with poor customers in mind.

# **Examples of Market Creation in the Commercial Marketplace**

**Henry Ford and the Mass Produced Car.** There were many motor cars on the market when Henry Ford entered the picture, but they were expensive toys for the rich. Ford recognized the unmet mass market for a car that a working man could afford, and the assembly line, combined with effective marketing and a national distribution system was the disruptive innovation that made it possible.

Norita and a New Mass Market for Transistor Radios There was a sizeable conventional market for hi fi systems and radios when Norita recognized the vast new market that could be created by taking advantage of transistors. But the radios and hi fi systems were of high quality, relatively large, and very expensive. Norita recognized the vast unmet market potential of a radio that made up for its deficiencies in quality by a price that a college student could afford, and a size small enough to fit in his shirt pocket, and the global market for transistor radios was created.

**Jobs and Wosniak and the Birth of the Personal Computer** Prior to the birth of the Apple, computers in Universities and Research centers took up a whole room and were very expensive, Jobs and Wosniak produced a computer that could sit on a desk top that was cheap enough to be bought by a college student, and this disruptive technology and the marketing and distribution system used to make it available launched the personal computer revolution.

These are three examples of creating new markets, and there are many more, from the invention of the steam engine to the emergence of the internet. But in a surprising majority of the new markets that have been created, the innovative products on which they are based represent breakthroughs in miniaturization and affordability, that are made available to a mass market through an effective marketing and distribution mechanism. The creation of new markets for poor customers shares these central characteristics, but in a much more radical form.

# **Chaotic Unpredictable Energy Creates More New Markets**

Some new markets, like the five inch disc drives that replaced 8 inch disc drives in computers, make a dramatic impact in the disc drive field and destroy the companies that made 8 inch drives that couldn't adapt to the new disruptive technology. But these are new markets are not transformative, like the introduction of personal computers.

Transformative new markets release unpredictable chaotic new energy which in turn creates further transformative new markets.

The fact that personal computers were radically cheaper than their research forerunners put a computer in hundreds of millions of homes, and this made the internet revolution possible. The new mass market for cars created by Ford stimulated the emergence of a highway system, which in turn stimulated the emergence of a national truck transport system, which was profoundly internationalized by containers.

This same chaotic release of energy of transformative new markets is also a regular feature of new markets that serve poor customers

# A Definition of Creating New Markets That Serve Poor Customers

New markets that serve poor customers can have just as striking an impact on transforming their poverty as the personal computer market has had on the transfer of information. One type of new market that has a transformative impact on poverty consists of new products or services that poor people can buy to dramatically increase their income. Another type of new market creates new transformative market opportunities for products or services grown or produced by poor people. I define poor customers as the 1.3 billion people in the world who earn less than a dollar a day.

Like their counterparts in the existing commercial marketplace, the creation of new markets that serve poor customers share two basic characteristics

- 1. They are based on disruptive innovations in products or services, that break previous barriers in affordability and miniaturization
- 2. They incorporate the development of an effective institutional structure that facilitates transactions between buyers and sellers of the breakthrough product or service.

These new markets not only break open new opportunities for commercial enterprises, but also provide practical opportunities to break the cycle of poverty.

# **Creating New Markets That Serve the Poor**

The principles of radical innovations in affordability and miniaturization, and the creation of institutional environments facilitating transactions to buyers and sellers, apply equally in the creation of markets that serve both rich and poor customers. But the application of these principles to the creation of markets that serve poor customers is radically different.

# **Disruptive Innovations for Poor Customers**

A ten dollar radio is a far cry from a \$350 hi fidelity Bose system. Multiply this difference by a factor of ten, and you begin to approximate the difference between creating new markets for poor and rich customers.

#### The Ruthless Pursuit of Affordability

A rule of thumb for real estate brokers in western countries, is that the most important factor in the value of a piece of property is location, after that comes location, and th third most important factor is still location. The most important factor determining the value of a product or service for a poor customer is affordability, followed by affordability, and then some more affordability. This is not because poor people do not place value on quality differences. It is simply that, on an annual income of \$300, there are only a very few things that poor customers can afford to buy. A one pound reduction in the weight of a racing bike in the west can command a doubling of price. But a poor farmer who lives 12 kilometers from a village market in India will gladly accept a bike that can carry his vegetables to market that is double the weight of a conventional bike, if the extra weight would cut the price in half.

I learned this lesson the hard way on the first development project implemented by International Development Enterprises, the non profit organization I founded twenty years ago. We helped refugee blacksmiths build and sell 500 donkey carts to other refugees in Somalia, and donkey cart owners needed tools to fix flat tires. We offered them lug wrenches made in Britain that would last 15 years at a price of twelve dollars, and Chinese lug wrenches that would last two years at a price of twelve dollars. The Chinese lug wrenches sold out immediately, and I think we still own the British ones.

95% of western designers spend their lives designing products for the richest 10% of the world's population. The design process in the west optimizes efficiency, at the expense of affordability. Disruptive innovations that create new markets for poor customers are based on a design process that reverses this paradigm, by optimizing affordability, often at the expense of efficiency. Making radical breakthroughs in affordability begins by identifying the key contributors to cost of conventional technologies, and then finding tradeoffs between efficiency and affordability that are acceptable to the poor customers that buy them.

By studying the key contributors to cost of conventional drip systems, we were able to cut the cost by two thirds to make them affordable to small farmers. The modifications to the system that made this radical drop in price possible, lowered the uniformity of water distribution from each drip point from 95% to 80%, a drop in efficiency that small farmers were glad to accept in return for the drop in price.

# Miniaturization

The quarter acre plots of the typical small farmer in Bangladesh are two small for a western combine to turn around in, much less harvest his crop. Miniaturization of products also converts conventional products that are two big to be usable into a size that fits the needs of poor customers, or bundles useful products into smaller sizes that are affordable. Cigarette vendors in India have long recognized that they can dramatically increase sales by bundling cigarettes in packets of two to three for people who can't afford to buy a carton. Following the same principal, Unilever sells micropackages of laundry detergent in Indian villages. Of course the cost per cigarette or per ounce of detergent is significantly higher, but the affordability of the small package makes the

extra cost palatable to the poor customer. In many developing countries, this obvious simple principle has yet to be discovered by vendors of critical items like vegetable seeds.

In the case of low cost drip irrigation packages, conventional drip systems in India start at the five acre size, and are sold exclusively to larger and wealthier farmers. But most of the farmers in India cultivate less than 3 acres, divided into four or five separate plots. By surveying small farm customers, we learned that the size of drip systems they were most interested in were smaller than a quarter of an acre, and this dictated a radical miniaturization of conventional drip systems. Some 20,000 of these small low cost systems were purchased by small poor farmers in the first three years.

#### An Institutional Structure for Transactions Between Buyers and Sellers

In the west, there are no bars that prevent a Norita from putting transistor radios on the market, or a high school student from buying one. In fact there are thousands of retail outlets, and now the internet, which make it easy for a customer to make a purchase, and there were thousands of marketing and promotion options and distribution networks for Norita to chose from to let potential customers know about his product, and go and buy one if they wanted to. These are all things we take for granted in developed countries.

But if I invent a low cost drip system that could revolutionize the productivity and income of millions of small farmers in China, there is no mechanism to give a small farmer the option of buying one. Peasants in China are used to getting things like this from the government for free, but the government rarely asks peasants what they think they need, and as a result the things it provides are usually the wrong things, or things that don't work. So I could take my invention and try to make a very large sale to an agency of government, and if I am successful, I might make some money on the sale. But I likely will need to make a significant payment to government distribution will likely ensure that most of my low cost drip systems are put in the wrong hands, so they work poorly, and there is no customer driven aftermarket.

The fact is that the establishment of a vibrant private sector rural marketplace in China, where a hundreds of millions of small farmers could purchase the tools, inputs, and information they need, and in turn gain access to large markets for the high value crops they produce, without transport and marketing constraints, would represent a positive revolution more significant than decollectivization.

The irony is that steps required to create the institutional structure for a market are not so complicated. The most important thing that gets in the way is the policy framework established by the government. The absence of private ownership of land in countries like China and Vietnam, for example, create significant constraints to the flow of credit which small farmers need to purchase modern inputs. The provision of massive subsidies and the assumption of responsibility by the government for the distribution of agriculturual

technology and inputs also puts major constraints on the establishment of a vigorous private sector rural marketplace.

If these constraints are absent, the facilitation of a private sector rural marketplace is a relatively simple matter, exemplified by IDE's experience in facilitating the emergence of a private sector Treadle Pump marketplace in Bangladesh that encompassed 70 manufacturers, 3,000 villager dealers, and several thousand village technicians who drilled wells and installed pumps. The steps used to accomplish this were relatively simple.

- (1) develop a product or service with transformative new market creation potential, through a disciplined process of customer feedback and field testing
- (2) inform potential customers about the product through a targeted rural mass marketing and promotion campaign
- (3) facilitate emergence of a dealer network through training, recruitment, and threshold marketing procedures in each dealers market area
- (4) provide training for rural technicians required to install the product
- (5) plan a withdrawal strategy from the beginning, and implement it

While these steps apply to a non-profit organization facilitating the creation of a new market, they apply equally well ( without the withdrawal plan and with additions like a competitive marketing plan) to a for profit organization creating a new market. The reason that development organizations need to play a lead role in creating new markets for poor customers for many products or services, is that the conditions that make venture capital investments for products serving poor customers in developing countries often make the initial investment unprofitable. Once the volume of market demand is stimulated, however, it is in the economic self interest of private sector firms to jump into the marketplace. And, in some instances, a venture capital investment in creating a new market that serves poor customers can be profitable in the private sector from the beginning.

A similar process is needed to establish new markets for the goods and services produced by poor people. An a beautiful area river valleys in the hills of Guizhou Province in the south of China, for example, is blessed with the natural climate and water resources to produce high value vegetables for the Beijing market in the dead of winter, when prices are at their highest. Some 2 million half acre farmers who live in this Natural Greenhouse could work their way out of poverty by taking advantage of this marketplace opportunity, but a glut for tomatoes and other vegetables is already quickly developing. This is because transport access to the north, and an institutional structure to market and distribute perishable products, is either abysmal or non-existent. In both cases, the absence of an institutional structure facilitating equitable transactions between buyers and sellers is the key constraint to creating new wealth for the poor.

# A Venture Capital Approach to Economic Development

The creation of new markets that serve poor customers depends on the existence of a vibrant venture capital infrastructure. Unfortunately, such an infrastructure is absent in

the existing private sector in developing countries, and it is entirely absent from the funding mechanisms of existing development donors, who often invest heavily instead in projects that are not sustainable in the private sector, or worse, discourage the emergence of vibrant new markets that serve poor people.

The private sector approach to venture capital for the poor does not work because, for one thing, there is no practical system for the protection of intellectual. While a patent process might exist, the court system is so flawed that pursuing legal remedies is usually be useless, especially for an enterprise with meager financial resources. It is important to remember why roadside vengeance is a routine occurrence after traffic accidents in poor countries- the person injured knows that he or she is unlikely to expect justice through the easily corruptible court system. Families, individuals, or enterprises with capital to invest have opportunities likely to produce rapid high returns, and often are not motivated to invest in prospects with horizon returns. Finally, the risks of political climate and unpredictable changes are high enough in poor countries discourage long-term investments by existing private sector players. The private sector players, however, will come into the market in strength once large scale market demand has been proved, and the key risks in creating a new market have been removed or attenuated.

One practical solution to these barriers lies in the adoption by If major development donors like the World Bank, and USAID, and DIFID were to adopt a venture capital approach to create new markets that serve new customers, most of these barriers to private sector participation in market creation can be removed. The basic principles of such an approach would be, once again, relatively simple, based on the expectation of venture capitalists in the west that of each five venture capital investments, one might turn into a major winner, three are likely to be losers, and one will likely chug along barely making a profit.

- 1. Keep the initial investment as small as possible
- 2. Jettison the losers as soon as possible
- 3. Invest in the winners

Wrapup paragraph