



Emerging Markets Insight

BY MIRAE ASSET FINANCIAL GROUP
Q4 2015

STAR STARTUPS IN CHINA AND INDIA



DUCERE



春雨医生



Some people say there are 7 new firms every minute in China, and India may not be far behind. The best and brightest are rushing to realize their ideas. We chose 8 promising startups in China and India. Let's look at what these startups have to offer.

Part 1 China
DJI, ele.me, Zhaogang, Chunyu Yisheng

Part 2 India
Ducere, TrulyMadly, BabyChakra, Organic Harvest

EDITOR-IN-CHIEF EDITORS DUNCAN PARK
KIM KUK HWA
JUNG KIYEON
MARC SICHEL

ART YANG YOUNG HEE
LEE HOO SHIM
PARK SOL, LEE HAE RIN

Q4 2015

CONTENTS



33



04



14

20



17

- 3 Startup Special
- STAR STARTUPS IN CHINA AND INDIA**
- Part 1 China
- 4 DJI Continues Upward Trajectory
- 7 A Winning Formula From ele.me
- 10 Zhaogang: Bringing the Steel Industry into the Internet Era
- 14 Chunyuyisheng Finds a "Healthier" Business Model
- Part 2 India
- 17 Ducere: Smart Shoes of the Future
- 20 TrulyMadly: A Trio Playing Cupid

- 23 BabyChakra: Unraveling the Baby Matrix
- 26 Organic Harvest: Care the Organic Way
- 29 Indonesian Energy
- RPE's Rapid Transformation and Big Goals**
- 33 Brazilian Reform
- Curing the Crippling Effects of Debt**

MIRAE ASSET RETIREMENT INSTITUTE

PRESIDENT KIM GYUNG ROK

EXECUTIVE DIRECTOR LEE SANG GEON

RESEARCH FELLOW YOON CHI SUN

RESEARCHERS OH EUN MI, OH HYUN MIN

MIRAE ASSET GLOBAL INVESTMENTS (HONG KONG) LIMITED

CMO, HEAD OF INTERNATIONAL BUSINESS DEVELOPMENT ASHLEY DALE

CHRIS WILDMAN ELDORA WONG
SABRINA KWEK

MIRAE ASSET GLOBAL INVESTMENTS (UK) LIMITED

BETINA TOMIC ELLIOT BERMAN
FREDERIC NIAMKEY NICOLAS JONES
OLIVIER MAMPOUYA JAD SHAMS
SANDER VAN OUWERKERK

MIRAE ASSET GLOBAL INVESTMENTS (USA) LLC

CEO & HEAD OF MARKETING PETER GRAHAM

MIRAE ASSET GLOBAL INVESTMENTS (INDIA) PVT.LTD.

MARKETING HEAD VAIBHAV SHAH

MIRAE ASSET GLOBAL INVESTMENTS (BRAZIL) LIMITED

COMMERCIAL & PRODUCT DIRECTOR RICARDO VENTRILHO

PUBLISHED BY MIRAE ASSET FINANCIAL GROUP

PUBLISHER & CHAIRMAN HYEON-JOO PARK

Emerging Markets Insight is a quarterly, on-line publication of Mirae Asset Financial Group. Our editorial mission is to provide timely and actionable information about economics, finance, and business opportunity to key stakeholders in emerging market investing, particularly financial professionals, strategists and academics.

Contact us for further information on subscriptions:
EMmagazine@miraeasset.com

Certain information contained in this document is compiled from third party sources. Whilst Mirae Asset Global Investments (Hong Kong) Limited ("Mirae Asset HK") has, to the best of its endeavor, ensured that such information is accurate, complete and up-to-date, and has taken care in accurately reproducing the information, it shall have no responsibility or liability whatsoever for the accuracy of such information or any use or reliance thereof. Mirae Asset HK accepts no liability for any loss or damage of any kind resulting out of the unauthorized use of this document. This document is strictly for information purposes only and does not constitute a representation that any investment strategy is suitable or appropriate for an investor's individual circumstances. Further, this document should not be regarded by investors as a substitute for independent professional advice or the exercise of their own judgement. The information and materials provided herein are given on a general basis without obligation and on the understanding that any person acting upon or in reliance on it, does so entirely at his or her own risk. This document is issued by Mirae Asset Global Investments (Hong Kong) Limited and has not been reviewed by the Securities and Futures Commission.

Part 1 China

- 4 DJI Continues Upward Trajectory
- 7 A Winning Formula From ele.me
- 10 Zhaogang: Bringing the Steel Industry into the Internet Era
- 14 Chunyuyisheng Finds a "Healthier" Business Model

Part 2 India

- 17 Ducere: Smart Shoes of the Future
- 20 TrulyMadly: A Trio Playing Cupid
- 23 BabyChakra: Unravelling the Baby Matrix
- 26 Organic Harvest: Care the Organic Way



STAR STARTUPS IN CHINA AND INDIA

They have huge markets. They have so many young entrepreneurs who are seizing the opportunity. Some say it's just a bubble. Or—maybe it's the next big thing.

How we chose them

China

Among thousands of startups, Chinese business magazine, *China Entrepreneur*, selected 100 companies that are three years old and recorded operating earnings over \$8

million in 2014. And the *Entrepreneur* chose them on the basis of operating earnings, net profit, business model, technology, management, etc.

India

Indian business magazine, *Business World*, asked startups in India to send their infor-

mation to be considered for "Young Entrepreneur Awards." The magazine selected 22 companies under three years old category. The magazine looked them over again through presentations and evaluations.

Here we have the 1st through 4th placed companies for China and India.



DJI CONTINUES UPWARD TRAJECTORY

Frank Wang Tao is a notorious perfectionist, whose abrasive personality led to most of his colleagues walking out on him from his drone company, DJI Innovations. Also a pragmatist, he even has a single bed in his office, where he works and sleeps.

By Liu Yi

Many of the entrepreneurs in Silicon Valley have a positive outlook on the future of drones, and DJI's drones have quickly become a must-have item. In fact, even Bill Gates and Apple cofounder Stephen Wozniak are also known to be DJI drone enthusiasts.

From *Star Wars* to *Game of Thrones*, and even on the lawns of the White House and the official residence of the Japanese Prime Minister, one can see the shadows of DJI drones, of which the Phantom series is often compared to the Ford Model T because of its innovation and dominance of the drone industry.

Wang, 34, developed a helicopter flight control system in his senior year at Hong Kong University of Science & Technology. He was completely devoted to the group project, staying up until 4 or 5 a.m. and even skipping classes in the daytime. Unfortunately though, the night before the group presentation, the hovering function of the onboard computer system unexpectedly failed, yet Li Zexiang, Professor of Robotics at the university, took notice of Wang's passion and dedication and thanks to his recommendation, Wang was admitted into the graduate school. One could say that the group project marked a turning point in Wang's life.

In his graduate school years, Wang built prototypes of flight controllers in his dorm room. Then, in 2006, he and his two friends

initiated a research project in Shenzhen using their scholarship money and founded DJI. However, due to his headstrong personality, the other founding members announced their departures just two years later.

Meanwhile, the conditions necessary for the drone industry to expand from a military-oriented to a consumer-oriented market were met. Around 2008, were rapid advancements were made in relation to the battery, motor, flight control and sensor systems and technologies. The reduced cost for the major parts and components, and the miniaturization and high-accuracy

trends paved the way for commercialization of drones. At some of the forums for drone enthusiasts, some argued that the quadcopters are better than the monocopters as the four-propeller designs are cheaper and easier to program.

The Phantom Series

DJI began developing a support system to shoot stabilized video during flight by adjusting the direction of the accelerator, and by 2012, after continuous research and investment, DJI was able to develop the software and hardware systems necessary to build a drone including the control soft-



Wang is explaining about drone to Mark Rutte, the prime minister of the Netherlands.



Chinese Startup 1



Wang's drone has become essential equipment at the film industry.



ware, propellers, support system, horizontal stabilizer and remote controller. Based on prior designs, DJI launched its Phantom series in January 2013. This became the world's first consumer-level drone series, and DJI seized the opportunity to dominate the market. In 2015, DJI topped the list of emerging companies showing the highest growth announced by *China Entrepreneur Magazine* in an article headlined "Future Star Enterprises."

DJI's marketing strategy is quite interesting. According to the curator who planned the Wings of Combat Drones: China Drone Competition, DJI took part in both the industrial and commercial drone exhibitions, and in contrast to the drones of other companies that exhibited fixed wings, only those manufactured by DJI had several propellers that allowed indoor flight with

DATA

Sector	Drone
Founder(s)	Frank Wang Tao
Year of Inception	2006
Base	Hong Kong
Capital invested	Not disclosed
Investors	Excel Partners
No. of employees	2,800
Key customers	Film industry and drone enthusiasts



Chinese Startup 1

high effectiveness. DJI found a niche in the market with military and commercial drones that were considerably cheaper than other models and were of higher quality compared to model aircraft.

DJI has defined its drones as a “flying camera” for use in the filming and broadcasting industries. Aerial filming was nothing new at movie and TV shoots, but the rental cost for a helicopter amounting to nearly \$10,000 per day was considered a hefty sum of money. The aerial shoot by a drone controlled by a drone flight specialist, on the other hand, produced the same effect, yet it only cost a couple of thousand dollars. As a marketing strategy, DJI opened an office in Hollywood, and made its drones available for the filming of American TV shows including *Modern Family* and *Homeland*.

In addition to the Hollywood celebrities, many entrepreneurs in Silicon Valley developed a positive outlook on the future of drones, and DJI’s drones soon became a must-have item. In fact, even the afore-

mentioned Gates and Wozniak are also known to be DJI drone enthusiasts.

DJI grew at a rapid rate. In 2011, there were only 90 employees with the annual revenue recorded at \$4.2 million. But now, there are 2,800 employees, and three factories are in operation. This year’s revenue is expected to be three to five times that of last year, which was recorded at \$130 million. DJI even received a \$75 million invest-



In 2015, DJI topped the list of emerging companies showing the highest growth.



ment from Accel Partners, a Silicon Valley venture capital firm, this year, and it plan on expanding further by boosting investment in the application field.

At the same time, DJI will open the SDK (Software Development Kit) platform this year for developers to create apps specific to their fields of interest based on accurate measurement and imaging analysis made possible through basic-level programming.

According to *China Entrepreneur magazine*, there are two models: a camera-based model with human- and object-tracking software that allows panoramic photography and a flight route control-based model that runs a corresponding control program to allow the aircraft to fly in a specific orbit.

At present, DJI has 70% share of the civilian drone market and 50% of the miniature drone market worldwide. With DJI turning its focus from the drone-based platforms to the application of aircraft platforms, the growth potential of this emerging enterprise is still unknown.



Phantom 3, new model drone was introduced in London last April.



A WINNING FORMULA FROM ELE.ME

Will a “Didi” or “Kuaidi” emerge in the popular field of takeaway (food delivery) apps? This is indeed likely because several giants are entering or are about to enter this growing field, including ele.me.

By Zou Ling

There have been hundreds competing takeaway platforms, including meituan.com, Baidu Waimai, Taodiantian, and daojia.com.cn, but ele.me is the most dominant at present. While the current leader and second-ranked meituan.com are locked together as competitors, rumors of their merger are frequently heard.

“This rumor only indicates that the industry is amazed at the development of ele.me,” according to founder and CEO of ele.me, Zhang Xuhao. Zhang is convinced that the future of ele.me will be built on the transformation of its supply chain and on the degree of realization. Zhang insisted

that ele.me is a company with a dream, which will be accomplished through mergers, acquisitions or a selloff. The next goal of ele.me is to ring these bells. But when? According to Zhang, the earliest time will be 2018.

Ele.me has never regarded itself as a “pure Internet company.” In an interview with *China Entrepreneur Magazine*, Zhang said that ele.me does not consider itself as a “takeaway company,” but as a Taobao (a website similar to eBay and Amazon, operated by Alibaba) in the catering sector.

“We have never been [only] a takeaway delivery company, and the company’s goal



is to connect all food-related needs. The process of transactions becomes standardized. In this process, innovation is particularly critical.” Zhang admitted that more and more Internet companies are cooperating with each other in order to achieve the O2O (online-to-offline) model. This year, ele.me began to cooperate with Jingdong and other courier companies and also actively on the upstream side with the supply chain of restaurants that offer delivery service. He will not rule out future partners, including financial institutions. Zhang made this representation to the media at a press conference earlier this year as he was seeking financing.

University Roots

Similar to the early start-up companies in Silicon Valley, ele.me is a company that was founded by Zhang and his schoolmates at Shanghai Jiao Tong University in 2009. Initially, their purpose was just to meet the demand for nighttime snacks, and later the company became a well-known takeaway ordering website at the university.

After failing to strike a balance between his studies and business, Zhang chose to suspend his schooling and relied on the university's resources and reputation in order to develop ele.me outside the campus. Zhang participated actively in several national entrepreneurship competitions with the university's student entrepreneurship team, successfully attracting VC investment in the early stage. Within five years, Zhang received five rounds of financing. Earlier this year, ele.me announced it received an investment of \$350 million in the E round of financing, becoming one of the most closely watched star companies in the O2O field. This was the first entrepreneurship project of Zhang, who was just 26 years old when he founded the company, the same age as Mark Zuckerberg when he started Facebook.

“Eating is required more frequently than taking a taxi, so takeaways will surpass the taxi-calling market sooner or later,” said

Kang Jia, a cofounder of ele.me. According to Kang, the daily orders on ele.me exceed two million, and the next goal of the company is more than 10 million orders a day. “Plus breakfast, afternoon tea or nighttime snacks, the daily demand will be five meals at most. The market potential is amazing.” This goal means that ele.me wants to become the Taobao in the catering sector. Daily orders on Taobao are currently around 20 million.

Changing the Model

Zhang has never concealed his ambition to build an “ecosystem” that connects online and offline takeaways. However, the key to success has never depended on the online part; instead, the offline part is the core indicator of the success of the business model. Zhang expressed his goal: “At the crossroads in every city, there are ele.me deliverymen who are on their way to deliver takeaways, whether they are hired by us or come from a third party or social sectors are used. The engines of our takeaway

delivery vehicles are never turned off.”

This means that ele.me has begun to change to a “heavy capital model”—changing from a purely online “ordering channel” to an overall solution provider that can solve transport capacity and distribution for businesses. Zhang has defined three delivery routes for ele.me, including the company's own logistics, third-party logistics, and social logistics from heavy to light loads. The construction of a logistics system is a strategic focus of ele.me this year.

Previously, Zhang and his team spent time considering the logistics model in the takeaway field. “We conducted a survey long ago to see what the most important thing was for ordering takeaways. It was the logistics,” Kang told *China Entrepreneur*. Therefore, ele.me started the construction of its own distribution team last year. “There are two aims,” Kang said. “One is to increase the supply of excellent restaurants, and the other is to accumulate experience for the operation of our entire logistics system.”

This summer, the “Hummingbird” distri-



DATA	
Sector	Takeaway app
Founder(s)	Zhang Xuhao, Kang Jia, Wang Yuan, Deng Ye
Year of Inception	2009
Base	Shanghai
Capital invested	Not disclosed
Investors	Hwaren group, TenCent
No. of employees	10,000
Key customers	Students and young smartphone users





bution system, which had been researched by ele.me for a long time, quietly went live. "The product of Hummingbird is social logistics, aimed at [a] restaurant's own distribution staff and crowdsourcing distribution. This means that ele.me can now integrate other distribution teams with our own," said Kang. The "Hummingbird growth data is very impressive, and there have been more than 50,000 active deliverymen and hundreds of thousands of orders on an average day."

The introduction of Hummingbird should resolve the efficiency problems related to a restaurant's transport capacity. "For example, if the restaurant from which you order a takeaway has installed the Hummingbird system, you will receive a short message telling you that the takeaway delivery is on the way after you place the order. So you do not need to worry. The short message will also give you a link so that you can check the location of the deliveryman," Kang said, describing the application scenario behind the Hummingbird. In-depth cooperation will be carried out between the Hummingbird and Jingdong, and it is very likely to connect Jingdong's transport capacity system in the future.

This sounds much like the "moves" displayed in taxi-ordering software, and Kang also admitted that many products and operations programs of ele.me have actually been influenced by the ideas of taxi-ordering software. "The most inspiring thing is subsidies, and the efficiency depends on the method of subsidization. In fact, the entire takeaway industry used the experience of the taxi-ordering industry. A "subsidy war" in the takeaway industry also broke out among friends, turning the takeaway software industry from the original "light asset" model to a "heavy asset" model—large-scale money-burning, self-construction of the distribution system, and even participation in the integration of social distribution teams. So far, this has far exceeded the capabilities of a typical software company.

However, Zhang was not surprised by this

"I don't think a light or heavy capital model is so important in the era of the mobile Internet."
—Zhang Xuhao



change. "I don't think a light or heavy capital model is so important in the era of the mobile Internet. Didi car ordering software was regarded as a light asset company at the beginning, but their burn rate was faster than that of any heavy asset company." He believes that user experience is a fundamental factor in the measurement of a company's quality. "Even if I'm a heavier asset company than others, I will surely be the final winner because I provide a better experience than they do," said Zhang.

Prepared to Grow

According to Kang, the expansion of a company with only four people initially into its current size of more than 5,000 people has proven the management capability of ele.me to some extent. "If you have no management ability, you will not become a heavy company." Compared with its competitors, ele.me is joining a "payload game" that meituan.com does not intend to participate in at present. The opposite intention by ele.me should help it better challenge its opponents.

Established earlier than meituan.com, ele.me is still facing challenges in third- and fourth-tier cities where meituan.com performs better. In 2014 meituan.com had a market share lead of about 3 percentage points. However, ele.me maintains its market leadership through its advantage mainly in the first- and second-tier cities.

Zhang also noted that ele.me needs to further "penetrate down," so it is expanding

rapidly. In early 2014, ele.me was operating only in 20 cities, but after a year had expanded to 250 cities. Moreover, ele.me is also participating in upstream activities in the catering industry, providing food ingredients to restaurants using its platform. The reason behind this business is that many small- and medium-sized businesses lack good procurement channels and bargaining power. Ele.me conceived of gathering businesses together and purchasing food ingredients cooperatively. "Ele.me is not only delivering takeaways, but also transforming the whole industry. It has logistics, orders, a trading platform, and the supply chain," said Zhang. Zhang, a graduate of the Business Department of Shanghai Jiao Tong University, and meituan.com co-founder Wang Xing, a graduate of the Computer Department of Tsinghua University, are jokingly regarded as being in a contest between "the technical school and the business school." Ele.me, which wants to be "the Taobao in the catering sector," can set off on its bell-ringing journey only after defeating meituan.com.

Kang believed that day will come sooner or later. "Our chances of winning are above 80 percent," he said confidently to *China Entrepreneur*, adding, "ele.me aims to be a company with a market value of one hundred billion dollars, which means that we must have no disadvantages." One advantage he noted is "We are younger than the previous generation of entrepreneurs, so we can continue for more years."



ZHAOGANG: BRINGING THE STEEL INDUSTRY INTO THE INTERNET ERA

Wang Dong combines Zen and chutzpah to forge a winning formula.

By Zhou Furong

Most strategies for selling steel on the Internet are fairly simple: You carry out production research at the top of the supply chain, buy advertisements and then sell your product to customers. However, Zhaogang.com, one of China’s major e-commerce platforms for steel, has turned things upside-down by doing the complete opposite: focusing on researching the needs of and providing services to consumers at the lower end of the supply chain.

Zhaogang CEO Wang Dong has found that 70% of products are bought by small-sized buyers. In the steel market as it existed four to five years ago, these small buyers were constantly at the mercy of brokers whose purchase ability outweighed their own. In contrast to this, Zhaogang’s business model focuses on making the smallest buyers in the industry its point of entry.

Zhaogang.com founder Wang was wearing a simple striped T-shirt on the day of our

meeting. With a plumpish figure, he came across as a relaxed and somewhat ordinary individual. An employee of the site who was standing nearby explained that no matter how big the crisis, Wang always maintains a cheerful attitude.

Established three years ago, more than \$14.1 billion worth of transactions have been conducted through the platform. It has also managed to kick off a new trend in the B2B e-commerce sector as numerous e-commerce startups dealing with plastics, wood, agricultural products and other commodities have started imitating Zhaogang’s B2B business model.

On Jan. 21, Zhaogang announced that it had raised \$100 million during its series D financing. How does Wang plan on spending this money? “Any e-commerce site whose goal isn’t to sell products is just full of bluster,” Wang told *China Entrepreneur*.

Game Strategy

The game of Weiqi, or Go as it’s more commonly known in the West, has been a source of inspiration to Wang. In fact a quotation from the 11th century, “Classic on Weiqi in Thirteen Chapters,” hangs on the wall of his office: “An expert pays attention to the entire board and focuses on encircling his opponent, and thereby achieves vic-



DATA

Sector	Steel online sales
Founder(s)	Wang Dong, Lao Huigang, Way Changhui
Year of Inception	2012
Base	Shanghai
Capital invested	Not disclosed
Investors	IDG Capital, Hwasong Capital
No. of employees	1,000
Key customers	Small-size steel buyers and producers





tory.”

It seems Wang’s company strategy over the past three years owes a lot to this way of thinking.

An ancient game, Weiqi takes more than just brains to understand its myriad changing strategies and unlock its deeper mysteries; it also requires a certain Zen way of looking at the world. Just like in Weiqi, when it comes to business, Wang likes to keep his distance from his competitors, slowly putting down his pieces in ways they won’t understand, then relying on overwhelming strength to bring in victory. This way of thinking can be seen reflected in the way Wang dealt with two major decisions that once faced the platform: whether or not to charge for its matchmaking services (acting as a go-between helping steel producers, secondary-end customers and end customers complete transactions), and whether to focus only on matchmaking or also getting involved in buying and selling themselves.

In the beginning of 2012, Wang and his former coworkers Rao Huigang and Wang Changhui cofounded Zhaogang.com. Their goal: create an online matchmaking platform that could match those selling steel with those looking to buy.

At the time, traders began to experience a credit crunch due to the central government’s \$640 billion stimulus plan coming to an end, and steel production was experiencing overcapacity as supply far outweighed demand. This was leading to a large number of steel traders going bankrupt. Assessing condition the industry was in, Wang thought this was the perfect time to step in and use the power of the Internet to cure the industry’s woes.

“No matter the industry, if you can connect manufacturers and service providers together, your business will become huge,” noted entrepreneur Charles Xue once said.

This thinking has had a huge impact on Wang.

In January of 2012, Wang came to Beijing for a meal and a little chat with New Oriental Education cofounder and angel



Wang Dong used to be a college professor before he went into business.

investor Xu Xiaoping. After 20 minutes, Xu finished his meal, dabbed the corner of his mouth with a napkin and said: “A version of JD.com for steel... OK.”

Less than a month later, Xu’s Zhenfund invested \$800,000 in Zhaogang. Altogether, Wang received a combined \$1.6 million in angel investments from the Zhenfund and K2VC.

“What can you do with only [\$800,000]”? I started off with information matchmaking. By providing simple information services, I knew no one would catch on to what I was doing,” Wang said.

Like playing Weiqi, Wang’s focus was on the endgame. His plan was to spend the first two years setting up his pieces and attracting orders his way. Once these preparations were complete and the number of transactions on the site reached a certain level, Zhaogang’s next step would naturally be to get involved in selling steel itself, and from there it could completely dominate the board.

During the startup’s first year, Wang ran into his first development bottleneck and the first major strategic decision he would have to make for Zhaogang. That first year, Zhaogang had been focusing all its energy on matchmaking services.

Sowing the Seeds of Change

Things were rather difficult in the beginning. In China, the traditional channels by which steel is sold are complicated and tricky, and it’s not unusual for buyers to change their minds and cancel orders. This posed a significant hurdle for Zhaogang. The company went practically door-to-door looking for interested parties and still had trouble finding clients. Some even thought it was trying to pull some sort of con since what it was proposing was so different from the way things were usually done.

The customary way of doing things in the industry is for sellers to announce their inventory and prices every day. In some of China’s technologically disadvantaged regions, this means printing lists out and posting them on their doors, whereas in more advanced regions, sellers will post this information through apps such as QQ messenger.

However, no single format exists for these posts, meaning they can be found as Word, Excel and even text documents. Processing and finding matches for all this information requires powerful IT tools. When it first started out, Zhaogang’s ability to accurately make matches was only around 50%. Determined to do better,



Wang focused resources on bringing in IT experts. This was the right move, and finally Zhaogang was able to break through its information processing bottleneck. At the time, the platform was able to process and update information from more than 1,000 sellers on a daily basis. Putting more focus on its online architecture, Wang soon discovered that every time the platform was able to increase its analytical abilities, its matchmaking success rate would make a huge leap forward. Wang also decided to have the platform streamline the negotiating process from the traditional 13 steps used by most in the industry to just three simple phases in the hopes of making everything as quick and easy as possible.

Upward Trajectory

With the company's ability to process information solved, Zhaogang's business took off. In 2013, Zhaogang.com's third-party platform helped move 5.4 million tons of steel and transaction volume reached \$320 million. First-party sales from Zhaogang's own steel operations reached nearly 500,000 tons and revenue neared \$320 million. The year 2014 was a huge breakthrough for the steel industry when it came to e-commerce. Zhaogang's transaction volume quadrupled to 20.42 million tons and \$11 billion. Of that, third-party transactions accounted for 17.38 million tons of steel and \$9.5 billion, while first-party transactions moved 3 million tons of steel for an annual revenue of \$1.5 billion.

By 2014, Zhaogang had gone a long way toward replacing the steel industry's traditional methods of buying and selling with its own system. It seemed that at this point Wang could finally breathe a sigh of relief.

Going back to that first year, there were other pressures that Wang faced which impacted his decisions. For one, the funding Zhaogang had received from investors had been almost completely spent, a sign that it was time to find a way to start turning a profit.

The first strategic decision that had to be



“By providing simple information services, I knew no one would catch on to what I was doing.”
—Wang Dong, Zhaogang

made was whether or not to charge a fee for the platform's matchmaking services. At the time, the company only had 30 or so employees, who for the most part felt charging a fee was the best choice. Wang, however, disagreed with their thinking. Again this was his experience with Weiqi coming through. Sometimes you have to sacrifice some pieces to move yourself into a more advantageous position.

For Wang personally, if he had wanted to be part of a company that only processed information and handled searches, he would have never left his old job. What Wang really wanted was to achieve something greater. In the same way that Ctrip eventually became the first stop for people looking for plane tickets and hotel reservations, Wang wanted Zhaogang to become the first stop for companies in need of steel, and from there continue on to integrating other areas of the supply chain, such as processing and shipping, into the company's business.

The Next Step

The company's second strategic decision came during its second year.

In January of 2013, Zhaogang received \$10 million in Series B financing from K2VC and Matrix Partners. During the first quarter of that year, daily transactions on Zhaogang had reached 10,000 tons, and a continual stream of quality suppliers were entering the platform. At this point Wang began considering a new question: Should Zhaogang be like T-mall or JD.com? In other words, continue just matchmaking or should it have its own steel operations?

“Taobao and Alibaba is always considering how to earn revenue from its traffic, such as by selling advertisement space. Whereas, at its most basic, JD.com looks to shorten the distance between manufacturers and consumers. It wants to lower the number of shipments it takes to get things from manufacturers to consumers to two trips. Our way of thinking is closer to JD.com's,” Wang said.

On the surface this meant transforming from an information platform to a transaction platform. Profit aside, Wang's true motivation behind this change was the desire to revolutionize the way steel was bought and sold in the industry.

“The steel industry needs to move from a wholesale model to a retail model. I think this will become a trend,” Wang said.

In March of 2013, Zhaogang began its own operations. So far this decision has proven to be a success. According to Wang's plans for 2015, first-party sales should reach 12 million tons, while third-party matchmaking should reach 35 million tons. It's clear that first-party sales are quickly catching up to third-party transactions on the site.

In 2013, Wang began expanding the company's focus to the entire production chain by providing value added services such as warehouses, shipping and financial services. “My strategy for this year is to extend our reach to the entire country, expand our use of online technology and continue integration,” Wang told *China Entrepreneur*.

Zhaogang currently has more than 20



offices across China and is still expanding. Making use of Internet technology, the company's goal is to make it so that nearly all matchmaking and other transactions carried out on the platform are automated so that no employees are involved. As for the future, Wang intends to focus considerable energy on increasing integration by ensuring purchasing, processing, logistics, finances and other aspects of the business are all connected by one system.

Wang has already started making moves in this direction. Not too long ago, a cold-rolled steel processing company in Shanghai was on the verge of shutting down due to heavy losses and a lack of orders. Seeing a chance for expansion, Wang decided to cooperate with this company. With the company providing equipment and Wang providing orders, the company's processing business became one of Wang's extremely profitable asset-light businesses.

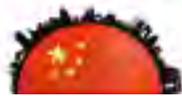
The lack of cooperation between traditional warehouses and e-commerce companies is another issue that Wang has had to face. In the past, due to an imbalance in supply and demand, dealers would sometimes have to gather inventory from several different warehouses to fill orders for steel. In some cases, warehouses could move inventory only once a year. In order to better streamline this process, Zhaogang established its Smart Business Department, which began researching the turnover rate of inventory in detail.

Once the department began getting a better grasp on supply and demand, Zhaogang was able to have manufacturers produce goods in accordance to actual demand. For some warehouses, inventory turnover went from 130 days to only 10 to 15 days. With inventory moving faster, Zhaogang's cargo fee revenue also improved. Currently, Zhaogang has four warehouses in Shanghai, with 18 other warehouses throughout the country that are managed in cooperation with steel processing enterprises.

Furthering the "Zhaogang Dream"

With warehouses taken care of, it was time to move on to logistics. Taking US shipping company Howe Robinson as a model, Wang established Pangmao Logistics with a fleet of more than 600 vehicles.

Besides warehouses and logistics, Wang also extended Zhaogang's reach into the financing industry by allowing buyers to purchase steel on credit. Once this service came online, Wang discovered something very interesting. Most of the small-sized clients on the platform usually only needed to borrow a little over \$16,000 (100,000 yuan) at a time, which they usually paid back in just seven days. Lacking computerized smart analysis, the minimum payback period for most peer lending or bank loans was at least a month. By using Zhaogang, however, these borrowers could save themselves three weeks worth of interest.



By 2014, Zhaogang had gone a long way toward replacing the steel industry's traditional methods of buying and selling with its own system.

Wang likes to keep things simple, except when it comes to hiring the right people. "Zhaogang's hiring standards are very strict and the process is very tedious. I only want to keep those people who really acknowledge the Zhaogang dream," Wang explained.

As transactions have increased over the past three years, so too has the number of Zhaogang employees. In 2014, Zhaogang employees increased from more than 200 at the beginning of the year to more than 800 by the end of the year.

Figuring out how to train qualified

employees is Zhaogang's current bottleneck. The profit-oriented thinking of most traders means everything they do is about making money and how much of a percentage they will earn. Figuring out how to bring these traditional traders into the Internet era is a difficult challenge for managers.

Years of playing real-time strategy video game StarCraft has taught Wang the value of a good battle strategy. Coming from a technology background, Wang believes that, when it comes right down to it, technology is what makes e-commerce businesses competitive, and what makes online technology competitive is its system architecture. Although commodity trading may look simple, developing the right technology to bring it into the Internet age is very complicated and requires experienced programmers and system architects.

"Why do so many e-commerce businesses fail? System architects are key. By looking at how many system architects a company has, you can see what rank they are," Wang said.

At the beginning of 2014, Wang realized just how important system architecture was and so began searching throughout the country for qualified system architects. So far the company has had some great success stories. For instance, also coming from an IT background, Zhaogang cofounder Rao Huigang has some contacts in this area. Using all his charm and days after days of convincing, he finally managed to bring Ctrip's entire train ticket IT team over to Zhaogang.

Currently of the approximately 1,000 employees that work for Zhaogang, one-third are IT employees.

Zhaogang's middle management is also full of traditional traders. However the company has an unwritten rule that states that these traders are not allowed to work in positions that influence company strategy.

"In the Internet + era, if you bring in people from traditional sectors into your company's strategic levels, you'll be done for," Wang advised.



CHUNYUYISHENG FINDS A “HEALTHIER” BUSINESS MODEL

Zhang Rui, the founder of Chunyuyisheng (Spring Rain Software), has his hands full these days thanks to the company's first official product, Sirenyisheng, after four years of effort.

By Wang Yujia



In August 2014, when Chunyuyisheng announced that it had received \$50 million in Series C financing, those in the industry noted Zhang Rui's ability in obtaining low-equity loans despite the fact that Chunyuyisheng's business model is simply a "search and healthcare" app.

Li Guanghui, the COO of Chunyuyisheng, said, "We've spent three years on online healthcare services to pinpoint the usage

patterns among doctors and service users." During the first three years, all of its 50 employees dedicated their entire time to the development of this product despite the failure to gain profits. Similar to other online service providers, Chunyuyisheng offers its services free of charge, and even provides doctors with incentives as a means to boost their participation.

The commercialization of its product had

been postponed multiple times until the summer of 2013 when the number of users reached 12 million, and Zhang announced plans to commercialize the product by the end of the year. At the time, Chunyuyisheng was equipped with the basic model for a healthcare service platform which it had been developing for three years. The number of users was nearly 27 million, and the number of active users reached 850,000.



There were about 30,000 registered doctors, with some 39,000 questions posted on average on a daily basis.

The most popular concept for online services has been to recruit users by offering key products free of charge and turning traffic into cash flow after it reaches a certain mark by receiving money from upstream companies. However, there was already a dominant online channel for the healthcare industry in China, with most of the promotions for private hospitals commissioned to Baidu. Under these circumstances, it was nearly impossible for venture firms to turn traffic into steady income, and Zhang was also well aware of this situation. Haodaifu, an affiliate of Chunyuyisheng founded five years earlier, was generating low profits and was still searching ways to charge users for its telephone consulting services even in 2013.

Finding a Way In

Between 2013 and 2014, Chunyuyisheng began implementing various means of imposing charges. Then, in May 2014, it

launched a second product, Kongzhongyiyuan. In the early days, Chunyuyisheng tried to procure healthcare services from doctors to be sold to the users based on a “buy cheap, sell for more” business model. Then, it promoted the “autonomous cost determination method (charging more for urgent consulting services)” on its platform.

Chunyuyisheng even attempted various other methods including membership services, monthly subscriptions and annual subscriptions. While 90% of the users responded that they were willing to pay for the services in a consumer survey, the numbers didn’t reflect reality. What Zhang sought more than the growth of operating profits was the seamless operation of the membership system, and he wanted to create a stronger connection between the platform and its users.

In October 2014, Zhang recruited Liu Chengping as the CMO and placed him in charge of commercialization. Liu’s first impression of the company was surprisingly not too bad. He said, “A healthcare product company with 60 million users is like a gold

mine. I initiated two projects, which were the membership ranking systems for the service users and doctors, and they were the key to commercialization.”

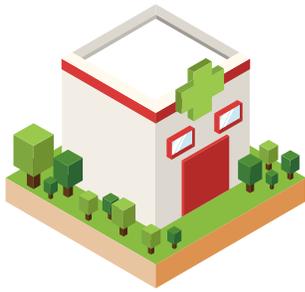
Liu intended to reinforce the connection between the platform and the users through commercialization. It was impossible to provide high-quality services on a healthcare platform where countless questions are asked on a daily basis, and there was lack of “brand effect” of doctors or a sense of connection between the doctors and service users. Without any fee determination standards, it was also difficult to encourage the users to pay for the services. Accordingly, Liu modified Kongzhongyiyuan and defined it as a “communication and transaction platform for doctors and patients, sort of the Taobao [a website similar to eBay and Amazon] of the healthcare industry.” Then, it identified the doctors—with top ratings determined by user reviews—who can provide high-quality services with excellent medical expertise and techniques, as well as a group of users who frequently used the services and were willing to actually pay for the services.

Following the revamping of Kongzhongyiyuan, the “brand value” of individual doctors continued to grow, and the concept of “determining and paying the cost of healthcare services according to need” became better accepted. However, the membership system imagined by Zhang was difficult to establish. Under these circumstances, another weakness of the mobile healthcare app was gradually revealed. Compared to social media, travel and shopping apps, healthcare apps are used less frequently. Consumers would rather seek healthcare services when they suffer from a disease or a medical condition instead of becoming a member in advance at a cost.

“Charging money for healthcare consulting services cannot be an ideal business model alternative. We’ve been receiving more than 80,000 questions a day, of which only 2,000 cases result in fee payments,” said Liu.



DATA	
Sector	Mobile healthcare
Founder(s)	Zhang Rui
Year of Inception	2011
Base	Beijing
Capital invested	Not disclosed
Investors	Rushan Capital, Pavillion Capital, Blue Run Ventures, BAI
No. of employees	2,800
Key customers	Smartphone users and corporate customers



“A healthcare product company with 60 million users is like a gold mine.”
—Liu Chengping, CMO, Chunyuyisheng

“Simple inquiry services are difficult to commercialize due to lack of customer loyalty. This is because there is no guarantee that a prior user will seek services from the same doctor. Kongzhongyiyuan has low customer loyalty, like Taobao, making it difficult to create massive commercial value,” concluded Liu.

Meanwhile, following the launch of Kongzhongyiyuan and receiving a loan at the end of 2014, Chunyuyisheng was able to recruit a large number of new users through continuous promotions. According to Zhang, Chunyuyisheng had 60 million users and 100,000 registered doctors as of May 2015 and receives 80,000 questions a day on average. It has a 60% share of the mobile healthcare service market and is the fastest growing company in terms of the number of service users.

The Promise of Sirenyisheng

When there is a weak link between the platform and users, it is impossible to create commercial value. For this reason, the top priority for Chunyuyisheng was to create a stronger link. After ranking the registered doctors and patients, it launched its third product in May 2015, which was recognized by Zhang as its first “official” product. It is none other than Sirenyisheng, a commer-

cialized healthcare service platform. Similar to the Home Doctor of America, it provides healthcare services to individual users. For an annual fee of \$480, users can receive all types of offline healthcare services, excluding surgery, as well as drug prescription and examinations. It even includes the cost of regular health checkups. A majority of the registered doctors are young doctors with relatively little experience, who use their off-hours to track the health issues of their patients and record the data regarding the changes in their health conditions. For matters that lie outside their own areas of expertise, they make referrals to the appropriate specialists.

“Commercial value can be created only if the patients trust their doctors and will be willing to pay the long-term subscription fees to obtain services from those doctors,” said Liu, who also explained that Chunyuyisheng was able to launch this service platform thanks to the information and data it obtained on the doctors and patients who used its prior services over the course of the past four years.

In order for the registered doctors or the doctors to whom patients are referred to provide offline healthcare services, Chunyuyisheng has opened a healthcare center and set forth the necessary standards to encourage hospitals to participate in the services. In the first phase of the project, it established 25 healthcare centers in Beijing, Shanghai, Guangzhou, Wuhan, and Hangzhou. Chunyuyisheng plans on opening 300 more healthcare centers by the end of this year, with majority of them set up at public hospitals.

“It was only after the launch of Sirenyisheng that we were able to break the deadlock and make progress,” Zhang said.

When Zhang was interviewed by *China Entrepreneur*, only a month had passed since the online launch of Sirenyisheng. But Zhang revealed that the company had already recorded \$3.2 million in revenue. Currently, it only offers B2B services, with enterprises as key clients that register for

services to provide healthcare benefits to their employees.

“Sirenyisheng is actually an insurance business, where the underlying concept is ‘We are one (I’m benefiting others, while others are benefiting me).’ What is the key change shown by Sirenyisheng? Healthcare services aren’t sought frequently. Imposing one-time fees would lead to financial losses for the service provider. On the other hand, if we provide comprehensive services to lower the frequency of patients visiting the hospital, we can generate more profits and have a better income-and-expense ratio,” said Zhang.

He plans to develop partnerships with insurance companies, which will allow insurance companies to purchase Chunyuyisheng’s services and integrate them into their existing products or develop new healthcare insurance products.

One service-use pattern caught Zhang’s attention. Seventy percent of all users resolved their healthcare issues by seeking one-time consulting services or receiving prescriptions; but only 30% actually took a step further and received more complex healthcare services such as blood tests and surgery.

Zhang believes that the inappropriate allocation of medical resources amid the “prevalence of patients seeking medical specialists even for the common cold and tertiary hospitals overflowing with patients” is a business opportunity for his company. The healthcare service platform of Chunyuyisheng, Kongzhongyiyuan and Sirenyisheng can meet the healthcare demands without relying on premium healthcare resources such as medical specialists and tertiary hospitals.

“Our business model is a new type of data-based healthcare services, and commercial value can be attained based on the insurance system,” said Zhang. He predicts that the future of Chunyuyisheng lies in securing health data on users through the company’s three products, based on which it will provide healthcare insurance services.



SMART SHOES OF THE FUTURE

Krispian Lawrence, CEO of Ducere Technologies, believes shoes are not just for walking. His company's Lechal footgear shows the way.

By Mala Bhargava

Unlike so many cocksure entrepreneurs today, 30-year-old Krispian Lawrence, CEO of Ducere Technologies, comes across as a breath of fresh air: not worldly wise and not a ruthless go-getter, but rather earnest, warm and passionate about what he's doing. Of Lawrence and his partner Anirudh Sharma, you might say they have their hearts in the right place—in this case, their shoes.

Lechal, or "take me along" in Hindi, is a pair of Bluetooth-connected smart shoes that buzz the wearer to go left or right, nav-





igating the way to a destination. It's that simple. And yet it isn't, because the idea has such potential. The world's first smart shoes caught the attention of media world-wide when they were first announced by Hyderabad-based Ducere Technologies, the company set up in 2011 by Lawrence and Sharma, to create "intuitive, unobtrusive, and user-friendly wearable technology" solutions. Lawrence and Sharma are graduates of the University of Michigan and the Massachusetts Institute of Technology. Their company currently employs 85 people. Ducere started by bootstrapping, but raised \$2 million in investment capital to start with and is now looking to raise more funding, not for product development but for scaling up.

Shoes With "Vision"

The first of the wearable solutions to come out of Ducere was born out of compassion. During a visit to Begaluru, Lawrence and Sharma were idling around when they happened to notice visually impaired people moving about, trying with some difficulty to find their way around. The rest was serendipity: The idea arose for a pair of navigational shoes that use haptic (vibration) feedback to communicate with the wearer. Rather than reinvent the wheel, they put together existing technologies but in a wholly innovative way. The shoes are fitted with Bluetooth and sensors. The wearer's mobile phone is fitted with a Lechal app. And the shoes and phone talk to each other. With these connections made, a person with an eyesight problem can allow the phone with its maps and other information, and the shoes with their vibration, to guide him anywhere that's findable on the map.

By itself, technology would have solved the navigational problem using audio cues. But Lawrence is tuned in to what would work better for someone with eyesight problems. "For visually impaired people, the sense of hearing compensates by being the primary and sharper sense," he said. "But

you wouldn't want to take that up and keep it focused on audio feedback from the phone. Instead, the person needs his best sense free for other cues. Haptic uses the sense of touch, separately from audio." Ducere worked with the LV Prasad Eye Institute to research how haptics works. "Our product design is all about inclusiveness," said Lawrence, "If something is designed well, it should not discriminate about who's using it. It's not about different technology for the differently abled but one technology for all." Ducere invented navigational shoes that use vibration feedback to communicate with the wearer.

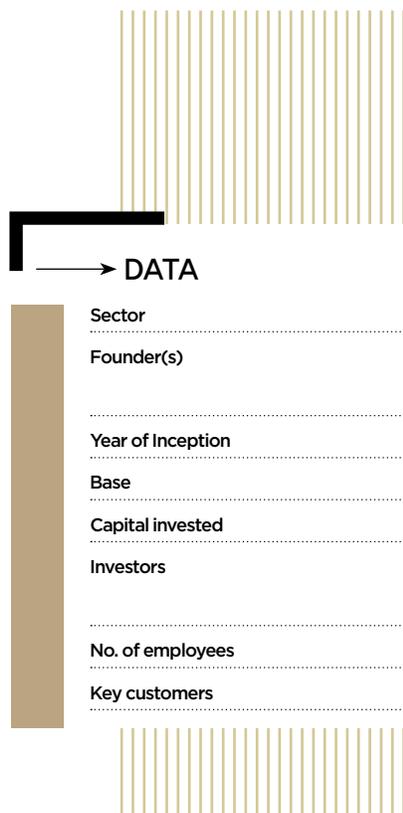
Once the idea took hold, Lawrence and his team began building on it, adding simple and intuitively powerful features such as being able to use a button on the phone to control the app and the feedback the user will get. Two presses, for example, will trigger a specific action. Feedback was built in to prevent a user from bumping into objects; another to vibrate long or short to signal an upcoming directional change.



"It's not about different technology for the differently abled but one technology for all."
—Krispian Lawrence, Ducere Technologies

Going Mainstream

The possibilities began to unfold as it became increasingly clear that shoes could



Sector	Wearable tech
Founder(s)	Krispian Lawrence and Aniruh Sharma
Year of Inception	2011
Base	Hyderabad
Capital invested	Bootstrapped initially. Angel investment of \$2 million in 2012
Investors	Angel investors
No. of employees	85
Key customers	Product not yet commercial yet



be as smart as you make them and that anyone could use them. Straightaway, there are health- and fitness-use cases. The shoes can count the wearer's steps, time a run, track activity, and do anything else, for that matter, that one can program them to. Deciding to take the connected shoes mainstream, Lawrence started the Lechal Initiative, wherein shoes for the visually challenged and the blind can be subsidized by sales to general consumers. A second product, under the same brand name of Lechal, is a set of insoles to be used with any shoes a user can fit them into. The original Lechal shoes are solid red and black, but if that doesn't work for some people, they can use the insoles. The shoes even have an accessory—an interactive charger that responds to a snap of the fingers and tells you the battery status.

Future Footprints

But will consumers readily adopt these connected shoes? Vishal Gondal, CEO of GoQii, a wearables company that sells a fitness band with coaching services, summed up Lechal's biggest challenge: "It's a great idea, but the biggest problem will really be getting users to adopt this. That's the part that's never easy. How are they going to do it?" Wearable technology has indeed often been accused of having no real killer application, making it a matter of curiosity, but not necessity. Although this may be changing gradually, with fitness and fashion both becoming reasons to use wearables, it is still common to find users abandoning their devices after a short while of use.

But Lawrence's belief in the connected future of footwear is strong. "Just as we take it for granted that a phone can send email or let you play a game or do

the number of things it does today, it will one day be a matter of fact that shoes will have the ability to communicate with users for many reasons, navigation being only one of them. "Shoes are like a natural extension of the body," he says, "You can't leave home without them. So it's only fitting that technology should be built-in."

Ducere Technologies has a software development kit ready for developers to go ahead and explore more use cases for the Lechal shoes. One such use is already in the

making: fall detection. If a visually impaired person or an elderly person uses the shoes and is in danger of falling for some reason, a detection feature should communicate to the phone and quickly send out an alert to get help. It is applications like these and more that Lawrence would like to see incorporated via apps for the Lechal shoes. For instance, indoor navigation is an issue that needs to be addressed. Buildings like airports or hospitals or supermarkets are difficult to navigate. Ducere is already working on a solution with which a map is instantly created when a person walks into a building. After that navigation is as usual, with haptic feedback.

"Shoes are like a natural extension of the body. You can't leave home without them."
—Krispian Lawrence



Lechal shoes and insoles, while a brilliantly simple idea, haven't started walking yet. Pre-orders are just beginning to be fulfilled and the company is a long way off from flooding the market with smart shoes plans do. Production is on and training is in progress.

Distribution is to be "everywhere" and there are some tie-ups with footwear companies, but until Lechal shoes are on the feet of enough consumers, we will not know how well they will be received. One thing is, however, for sure: Lechal is only the first of a line of innovative products coming from Ducere. Three more in new categories are lined up for release after the Lechal shoes.



A TRIO PLAYING CUPID

Hitesh Dhingra, Sachin Bhatia and Rahul Kumar's company TrulyMadly helps you find love that you can trust.

By Vishal Krishna



Two-thirds of Indians are less than 35 years of age. No prizes for guessing that a big chunk of this number is single and is ready to meet people.

In fact, you have at least 80 million youngsters, of both sexes, in urban centers, wanting to meet each other over a cup of coffee or a movie or a game of tennis.

The Internet has been a go-to place for many young people as it allows them to connect online first and then meet in the physical world. But world over, this system raises security concerns about the kind of people one could run into in the real world. This is where TrulyMadly, a curated dating platform, found a great business opportunity. It helps in making connections based on shared interests as well as verifying the parties against their Facebook profiles. A user has to provide his or her passport details or other government-certified identity cards for verification. This way, the dating company can also access the person's legal history.

When Hitesh Dhingra, Sachin Bhatia and Rahul Kumar started the business a year ago they realized that they had to strike a chord with women if this venture was to become a success. "Research says that most women were not happy to be on dating sites because of lack of security layers and feared that they might just end up meeting a criminal or a stalker," said Bhatia, a cofounder of TrulyMadly.

So the first thing that the TrulyMadly app and website does is check the Facebook profile of a person; its automated engine removes anyone who has false information or images. "It is important to verify before we allow people to use the app because some of the married men try to come in as singles," said Bhatia. Only after the first level of background check—through a user's social media profile—is completed satisfactorily, a person is allowed to log on to the app. Once the user logs in, he or she is allowed to access the first 10 profile views for free. And it is only when two people like each other's profiles, TrulyMadly allows

them to chat with each other. At the third level, once both are comfortable meeting each other after chatting on the messenger, their phone numbers are made visible with their consent.

The company has 500,000 users registered on its platform, and a fresh infusion of

venture capital money of \$5.25 million from Helion Ventures and Kae Capital will allow it to build the technology needed to make it a better and more popular product among youngsters. Earlier it had raised \$100,000 from MakeMyTrip founders Deep Kalra and Rajesh Magow. It had also raised money



DATA

Sector	Dating platform
Founder(s)	Hitesh Dhingra, Sachin Bhatia and Rahul Kumar
Year of Inception	2014
Base	New Delhi
Capital invested	\$5 million
Investors	Helion and Kae Capital
No. of employees	25
Key customers	Young people





from Manish Vij, the founder of Tyroo. "The company offers a secure way of connecting people and it is a great platform for youth to meet people. The data collected by this platform will create a very valuable business," said Ritesh Banglani, partner at Helion Ventures. The business model is very unique. Currently, users pay for the profiles they want to view. TrulyMadly is also creating a strong content play. Here, key courtship greetings and phrases can be monetized: it is called a "freemium" model where you get a few items for free and you can buy the rest based on your needs. There are also opportunities for games and quizzes to be monetized.

The First Courtship

In 2010, Bhatia exited travel site MakeMyTrip after spending a decade there as one of its founders. He decided to take a



social barriers attached to dating in India. After conducting primary research and building the technology, they set the ball rolling in March 2014. "We ran a pictorial campaign that went viral in Delhi," says Bhatia. The campaign titled #breakingsocialbarriers created a buzz in Delhi and then went national. "These clever photographs showcased that one could cut across all barriers," said Bhatia.

Businessworld spoke with a few users of the app. "It was just curiosity that drew me to register on the site. But I never expected it would change my life because I met a wonderful person," said Manjula, a banker from Bangalore. It seems everyone was downloading the app out of curiosity, but then they ended up using it because of the



***"We ran a pictorial campaign that went viral in Delhi."
—Sachin Bhatia***



break and angel invest in a few startups. Meanwhile Kumar, who had worked with Bhatia in MakeMyTrip, was working at a hospitality services firm as a technology expert. In 2012, the two of them ran into Dhingara, who had just sold his startup LetsBuy to e-commerce giant Flipkart. Over several meetings, they decided they had to focus on a social platform for the youth that would allow them to express themselves without the fear of

guaranteed safety.

Tinder and OKCupid are the closest competition to TrulyMadly. But these are not curated and it is optional to register as a premium customer. Also, they are making no attempts to protect women from potential dangers.

Recently, in the US, Tinder sold 10% of its stake to InterActive Corp at \$500 million. This sale made the dating industry a darling of valuations. No doubt the same is going to be the case in India, but surely with an Indian touch, quite truly and very madly.



UNRAVELLING THE BABY MATRIX

Naiyya Saggi and Mitesh Karia, founders of BabyChakra, are creating an ecosystem for helping parents with young children.

By Sonal Khetarpal





In India, 60% of the people live in nuclear families and 80% of family decisions are taken by young mothers. It was these numbers that had Naiyya Saggi, cofounder of BabyChakra, thinking about the need to make parenting easier for young couples, especially when traditional family structures are gradually breaking down. With these thoughts, Saggi returned to Mumbai after finishing her MBA from Harvard Business School and started talking to friends about the entrepreneurial ecosystem. Many of them, who were also young parents, voiced a unanimous pain point: difficulty in finding and deciding on child care services around their vicinity. They found local services by asking Facebook friends for suggestions or by doing a Google search, which didn't always provide an adequate solution to their problem, said Saggi.

It was then that Saggi, along with her childhood friend Mitesh Karia, who was then working with HSBC bank, set up BabyChakra, an online platform to help

young Indian parents discover and decide on local services for moms and children, starting from when they are expecting to when their child is 5. They launched the closed version of the BabyChakra mobile web product in June 2014 in Mumbai. Their aim was to ease the process of decision-making for parents and develop their community so they could get support and advice from each other in real time.

To build this community, they started a MomStars program in September 2014. This entailed having a group of local, influential mothers who acted as BabyChakra's evangelists in their community. Their task was to inform others about what was happening in their locality and write candid reviews on local services. There are around 400 MomStars in Mumbai, Delhi and Bengaluru today. "Of these, 100 are quite active and write a review or share feedback every other day," said Saggi. In return, they get special privileges, exclusive event invites and services from BabyChakra. The

BabyChakra has based its offerings around three features —local services, content from experts, and events for kids.

MomStars community acts as an offline/online touch point for BabyChakra, which is essentially a tech startup.

Saggi and her partner have based their offerings around three features —local services, content from experts on maternal and childcare, and events for kids. They launched their website in November 2014 in Mumbai, then in January 2015 in Bangalore and recently in Delhi. They have added another feature, "Buzz," to make their platform social. This allows a user to contact any parent and follow their posts and reviews.

"The social and community feature of BabyChakra differentiates it from the other players in the industry. There are e-commerce companies which are primarily like an online store, and then, there are a few international content sites, mainly blogs, which may not often be relevant for Indian parents. There is no player that has yet built a community of local parents for discovery of services, content and reviews in this space. BabyChakra is special since it helps in discovering and making decisions on local services for parents through social integration, crowdsourcing and community building," said Karan Maheshwari, chairman of MIPL, who is also one of the investors in BabyChakra.

To bring in more personalization, BabyChakra has ensured its website is mobile-compatible as parents were accustomed to "Googling" for information on local services on their phones. The startup is launching an Android app in Mumbai. Since the BabyChakra team was part of the Google incubation program, Launchpad, the company has offered to spotlight the app

DATA

Sector	Parenting
Founder(s)	Naiyya Saggi and Mitesh Karia
Year of Inception	2014
Base	Mumbai
Capital invested	Not disclosed
Investors	Mumbai Angels, Singapore Angels Network, Maheshwari Investors, Arihant & Shruti Patni
No. of employees	15
Key customers	Mahindra Retail, Lifecell, Johnson & Johnson



Naiyya Saggi set up BabyChakra to help young Indian parents in picking the right services for childcare in their neighborhoods.

on its Play Store. So far, more than 200,000 people have used the BabyChakra platform; of these, 25,000 are registered users on the website.

One of the main challenges that the BabyChakra team faced stemmed from this business being very operations heavy. "On one hand, we have to list the local services and events and then go for their verification," said cofounder Karia, who looks after the operations part of the business. "A lot of times we would update it on the site and realize two months later about the closure of that service. Managing this along with developing the community of parents was a tough model to crack. Now, we have streamlined a process where our team verifies the service profiles every three months."

At present, the BabyChakra website has 5,500 listings of local services. Even though these listings are from vendors in Delhi, Mumbai and Bangalore, they have users from 20 countries such as the US, UAE, UK, Singapore, Australia and South Africa. Karia says these parents may be visiting the site



"We want parents from across the world to use BabyChakra for all childcare decisions."
—Naiyya Saggi, BabyChakra

to read the content covering topics ranging from planning a baby, to delivering one, to raising a toddler. Also, many of the Indian expatriates in these countries are keen to know about the services they can use when they are back home.

Although the firm is still in the process of finalizing its revenue streams, it has earned money by giving premium listing to local services such as hospitals, baby photographers and child-friendly restaurants. It has also logged revenues by signing up with brands such as Mahindra Retail, Johnson & Johnson and stem cell bank Lifecell by helping them connect with the local community

of mothers to sample their new products or services. A revenue source the BabyChakra team is planning to tap is getting people to transact on its website and earning a commission on the transaction.

This year, investors including Mumbai Angels, Singapore Angels Network, and Arihant and Shruti Patni of wealth management company Patni Financial Advisors have invested an undisclosed seed round in BabyChakra. The startup will use the money to upgrade technology, hire more people and expand into three more cities. "After moving to metros, one of the challenges the company might face is expanding into tier 2 cities where technology penetration is not deep," said Maheshwari of Maheshwari Investors.

Since its launch, the company has already grown between 35% and 40%, said Karia. "We want parents from across the world to use BabyChakra for all childcare decisions. It is the potential of having billions of BabyChakra babies in the future that is super exciting and keeps us going," said Saggi with a glint in her eye.



CARE THE ORGANIC WAY

India may be saturated with natural products but Rahul Agarwal believes he offers something better with Organic Harvest.

By Joe C. Mathew



Organic Harvest claims to be the only company in India with a full range of organic personal care products.

When Rahul Agarwal, a 33-year-old Delhi-based chartered accountant, decided to plunge into the highly competitive personal care industry, his idea had few takers. The reason was simple: Skin, hair or body care products were available not just by the dozen, but by the hundreds in India. With its legendary ayurveda base, the country has no dearth of natural and herbal products either. For such products, it's a market spoiled with abundant choice.

Agarwal was determined, though, as his three years of research had revealed a wide gap in the existing personal care industry—the demand for organic products and the dearth of suppliers of them—and he wanted to tap it. It was similar to discovering the healthy glory of organic vegetarian food in a country known for its vegetarian fare. Agarwal's two-year-old startup—Organic Harvest—claims to be the only company in India with a full range of organic personal care products, including skin care, hair care and body care products.

How will Organic Harvest stand out in a market that is already full of natural products? How do you know Organic Harvest products are made using ingredients that are truly "organic"? By merely following international practices, Agarwal says. He is importing his entire lot of raw materials from globally renowned organic product supply sources. Each lot of raw material that reaches the company's manufacturing facility in Himachal Pradesh carries raw ingredients certified by organizations like EcoCert, OneCert and NaTrue. Sourcing these products in exactly the same way a

global organic personal product company does, made Organic Harvest stand apart from every ayurvedic and natural products company that uses domestically available raw materials. "I consider Body Shop, Forest Essentials and L'Oreal as our competitors, though most of the international companies have a limited range of organic products," Agarwal said.

His company's top-selling products include three-in-one face wash, scrub, anti-wrinkle cream and shampoos, and 41 skin, hair and body products in addition to 18

varieties of essential oils, it manufactures.

The company works with three distribution channels. It supplies these products through 2,000 general retail stores, organized retail chains and through its own stores. Across India, the company employs over 500 saleswomen to operate Organic Harvest counters in malls and large retail outlets. "There is a substantial market for us. I consider anyone who can afford to spend \$12 to \$14 for a 30 grams cream to be a potential customer," Agarwal said.

In 2013, Agarwal decided to try his luck in



DATA	
Sector	Personal care
Founder(s)	Rahul Agarwal
Year of Inception	2013
Base	New Delhi
Capital invested	\$2.4 million
Investors	Promoter
No. of employees	750
Key customers	Aspirational, upwardly mobile population



the personal care product business. He had no experience in this business but had a successful startup in the education sector behind him. "There is a growing interest in organic foods. The idea is to avoid consuming cancer-causing pesticide residues that are often part of the vegetables and fruits that are locally available. Similarly, natural

flowers and vegetables, plant and fruit parts used as raw ingredients for personal care



"We are today present in almost 50 cities. In two years, we have built a pan-India presence."

***— Rahul Agarwal,
Organic Harvest***



Agarwal aims to open 10-12 stores in prominent malls and high streets within one year.

products can also contain harmful and harsh chemical residues," he

said. Once market surveys identified the

potential of organic products, Agarwal

set up a research and development facility in

Delhi. He also signed a contract manufacturing

agreement in Parwanoo, Himachal Pradesh.

"Our quality control and production teams

are present in the factory. We get it done ourselves

using an outsourced facility," he said.

Organic Harvest was initially introduced in the Delhi market.

Within a few months, it scaled up its operations to cover Uttar Pradesh, Punjab and Haryana. "We

are today present in almost 50 cities. In two years, we have built a pan-India presence,"

he added. Recently, Organic Harvest signed up with Health & Glow, which operates around 100 stores in Bengaluru, Hyderabad and Mumbai, to deepen its presence. The company has sold over 160,000 units of various products so far. Its growth phase also saw two industry veterans joining the top management team. Sumesh Sood, chief operating officer, was associated with major cosmetics brands such as L'Oreal, Coty Vita Care and Lakme, and has an extensive working experience of creating distribution channels in marketing and branding activities. Monjish Nandi, general manager (Sales & Marketing) has over 30 years of experience with companies like Shahnaz Husain, Lotus Herbals and Ozone Ayurvedics. He was the key person behind the launch of the product "No Marks" for Ozone, which was later acquired by Bajaj. "Immediately after the launch of the initial products, I took Sood and Nandi on board," Agarwal said. In fact, 20% of the shareholding has gone as employee stock options.

"We are planning to open 10 to 12 stores in prominent malls and high streets within one year," Agarwal said. The company plans to build its distribution channel pan-India over the next 12 to 18 months, covering all major cities and reaching out to more than 50,000 outlets. The company has plans for an international market too. "We are looking at exporting to Bangladesh, Nepal and the Middle East nations like Saudi and UAE in the near future. We will also launch a range of professional care products such as facial kits for salons in the coming year.

The challenge for the company will be in finding its space among internationally renowned brands as their import dependence nullifies any major cost advantage with international brands. Its revenue projections are equally ambitious. A \$3.75 million target for this year, \$9 million for 2016-17 and \$15 million for 2017-18 will depend on its expansion plans.



Bur Maras, founder of Ratu Prabu Energy used to be an engineer who graduated from the New Mexico Institute of Mining Technology.



RPE'S RAPID TRANSFORMATION AND BIG GOALS

Ratu Prabu Energy is planning to build oil and gas infrastructure while continuing to provide services to oil and gas companies to help them increase production. RPE's property business is in the right place at the right time, and the company also has transportation plans.

By Albert W. Nonto



Bur Maras thinks that less attention is being paid to storage even though imports of LPG keep increasing.



Bur's company has already talked to Pertamina about building a terminal to store 300,000 tons of LPG in East Java province.

With energy production declining, Ratu Prabu Energy (RPE), a publicly listed company owned by B Bur Maras and his family, is looking for opportunities in the service industry that supports production. And, he adds, his group is also moving in a number of other prospective directions.

As some of its own oil wells have dried up, the group and its diversified subsidiaries

have turned to providing services for oil and gas wells and drilling inspection and maintenance services in order to increase oil field production capacity.

The company's experience in providing services for China National Petroleum Corporation (CNPC) led to potential contracts with oil companies in the Middle East, but the strengthening US dollar has put a spanner in the works.

"The status is on hold, and we will continue to talk after the world economy stabilizes," said the company's president director, B Bur Maras.

Oil and Energy Infrastructure

As the use of gas becomes more popular and demand soars, Bur has been planning to

build liquefied petroleum gas (LPG) and liquefied natural gas (LNG) terminals to supply the growing number of customers. He sees that less attention is being paid to storage even though imports of LPG keep increasing.



Ratu Prabu Energy

- Oil and gas service company founded by Burhanuddin Bur Maras in 1993.
- Recently it began property development as it seeks to increase its revenue stream.



Only a few players have started to build LPG terminals. Bosowa Corporation, the group of companies run by the Aksa Mahmud family, is operating LPG/LNG terminals in Makassar and is to build another in East Java's Banyuwangi. Another LPG terminal in Semarang is owned by crude palm oil consortium CPM-Pertainsana-Opico. Kalla Group is also planning to do a similar project through a subsidiary

"With gas, the crucial issue is that it has to be brought to users and needs to be connected through LNG pipes," said Agus Cahyono, the director for oil and gas programs at Indonesia's energy ministry. Terminals to store gas are a critical need.

Pertamina, Indonesia's state oil and gas company, has encouraged the private sector to provide terminals as this will help reduce its own costs.

Sources in the industry say Pertamina has to pay about \$75 million per year to rent a LPG tanker ship stationed in Banten, a cost that could be reduced if the country had more terminals.

Land needs to be located for LPG terminals. Such projects are not complicated: "It is merely a simple iron construction and is easy to do as this is only a huge tank to store LPG," said Bur.

Indonesian state-owned gas distributor PT PGN estimates that growth in demand for LPG has been running at about 7% per year over the past five years, now standing at about 4.3 million tons. Only 1.2 million tons is produced locally and the rest is sourced from the international market.

Bur's company has already talked to Pertamina about building a terminal to store 300,000 tons of LPG in East Java province with an estimated investment of about \$250 million.

Policy Reform

Bur has consistently expressed concerns about Indonesia's oil and gas policy in a number of roles, including as a lawmaker for the Democratic Party from 2004 to 2009. In his view, some regulations and policies are

obsolete and need to be changed.

A graduate in oil engineering from the New Mexico Institute of Mining Technology, he sees the need, for example, to change the cost recovery scheme between government and oil contractors in favor of a royalty system. In Malaysia, he says, the royalty scheme divides income in the ratio of 30% for the operator and 70% for the govern-

ment, while in Brunei the split is a simple 50-50.

Such a system would encourage major oil companies to search for new oil and gas reserves, said Bur, adding that he believes Indonesia still has plenty of fields waiting to be discovered with new exploration technology. At the Cepu block on the Central Java-East Java border, ExxonMobil has been able

Bur is one of a few Indonesians who have a solid educational background in the oil production business.





Indonesian Energy

to double production using its own technology.

Meanwhile there is much controversy over the government's intention to hand oil and gas blocks to national companies as contracts end, a move that Bur supports. But, he added, the existing operators normally have expertise that Pertamina lacks.

He also believes that Indonesia needs to be friendlier to the international oil community. When he was in parliament he was tireless in expressing his concern to his colleagues about the need to be more open to foreign counterparts and the need to change some regulations to benefit both sides.

Expertise in the oil and gas business is controlled by a few world oil giants, he says, and Indonesia needs to work with them if it wants to develop the industry.

When it comes to refineries, the pool of expertise is also limited. There have to be doubts about Iran's capacity to build a refinery, he warned. "Maybe they have money, but they lack expertise and experience."

Property Interest

With the decline of the oil and gas business, the Ratu Prabu group is concentrating on developing its property projects on its 12 acres of land in the new business district along South Jakarta's Jl. TB Simatupang.

In addition to its existing office towers Prabu 1 and Prabu 2, the group is planning to invest in a new apartment project, Prabu 3, a 50,000-sq m office building, Prabu 4, and another apartment project, Prabu 5.

Bur will not give up the oil and gas drilling business. "It takes five to ten years for exploitation after exploration has shown there is a real reserve so, at the moment, it's a good time for property development," Bur said, noting that the new towers, in which he'll work with a number of partners, will need at least \$380 million in investment. "We have good and reliable financial sources from the overseas market," he said.

Bur is one of a few Indonesians who have a solid educational background in the oil pro-



As traffic becomes worse in the country's cities, Ratu Prabu wants to move into mass transportation.

duction business. Basuki Wiwoho of Indika Energy is another, who in the past worked with Ibrahim Risjad of Risjadson Group, Albert Halim and Anthoni Salim's older brother Hans Maramis in PT Sarida Perkasa, but the company has now closed as part of the contraction of the industry.

Light-Rail Project

Bur has changed little as he gets older. He remains outspoken about what he believes is good or bad for the country. When he served as treasurer of the Democratic Party, he did not hesitate to criticize party founder and President Susilo Bambang Yudhoyono.

And he still has a creative mind. As traffic becomes worse in the country's cities, Ratu Prabu wants to move into mass transportation, a plan he says he has discussed with senior figures in the government of President Joko Widodo. His initial project would be a light-rail transport (LRT) system initially running from Jakarta's Cibubur to Cawang.

The entire \$14 billion project would be fully funded by the private sector, with financial backup from the Asian Development Bank and perhaps the Korean Exim Bank. "We have met several times with the banks and some government officials and got a green light. Korea has expressed interest in providing rolling stock."

Bur's experiences in oil infrastructure con-

struction in the US should prove useful in building steel rail systems above existing roads, including toll roads. He insists that a project in Jakarta could be completed in four years. And, he adds, a dedicated power plant would feed the system. For the time being, he has three consultants working on a feasibility study, with hopes that the project can be executed soon.

According to his calculations, the number of people who would use efficient public transport in Jakarta has reached 5 million to 6 million per day.

The project would complement, not compete, with the city government's existing MRT plan. "They will do their own plan, and I will also do my part," he said.

As it would be a privately owned business, Bur is looking at an operational life of more than 30 years, with return on investment after 10 years.

After presenting the concept to a number of banks, he said there is widespread interest. "I do believe that people are waiting for this," he said.



CURING THE CRIPPLING EFFECTS OF DEBT

Two studies show Brazil could collect more than \$75 billion with the privatization of state-owned companies and bring public deficit down to zero in eight years. It would be possible to make the national accounts sound again—it is all about will.

By Humberto Maia Junior



Trensurb is the company in charge of operating the only line of urban trains in the Greater Porto Alegre—they carry about 220,000 passengers daily throughout 22 stations that connect the center of this southern capital to the city of Novo Hamburgo, in the metropolitan area. The

company was established in the 80s to relieve the heavy volume of vehicles entering and leaving the city via the BR-116, a highway which, back then, was already showing signs of saturation. Even though Trensurb's scope is eminently local, it is one of the approximately 100 companies

controlled by the federal government. Among them, some companies are solely state-owned, while others are semi-public enterprises in which the private initiative is a minority shareholder.

According to a survey carried out by the NGO Contas Abertas, these state-owned



companies employ half a million people, and their annual transactions including wages, procurement and investments total \$364 billion—an amount that corresponds to approximately 80% of Argentina's GDP. The list is varied. There are giants, such as Eletrobras and Petrobras, and smaller companies, such as Trensurb, and Cobra—a service-focused arm of Banco do Brasil. It is a remnant of the 70s, a time when the government formed state-owned companies to act in almost every sector. In its origin, Cobra was a computer manufacturer. Does it make sense for governments, whose main activities should be in the areas of health, security, education and regulation, to spend money and energy in urban mobility or in a technical service provider?

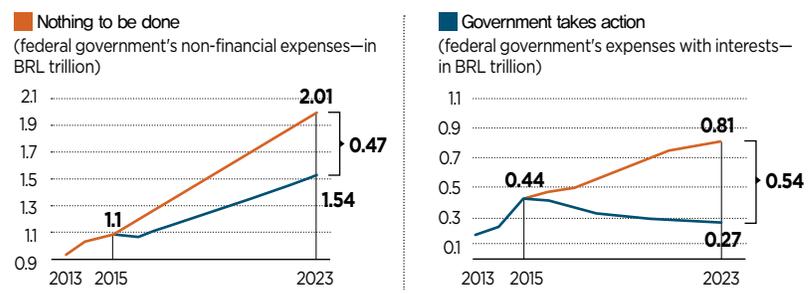
The discussion about state-owned companies becomes urgent when public accounts are struggling to find balance. In July, the government was forced to reduce the savings goal this year from 1.1% of the GDP, \$17.2 billion, to only 0.15% of the GDP, with room to reach a deficit. "Selling assets is an alternative for the government to increase cash flow, given the current difficulty in collecting," said Cid Heráclito de Queiroz, former Attorney General of the National Treasury, and one of the authors of the Fiscal Responsibility Law. This type of solution is common among private companies to deal with hard times or reduce debts that have become too heavy. This is precisely the situation of the public sector in Brazil, especially the federal government, whose debts have taken an explosive route. Selling, at least partially, some of the companies it owns in a variety of segments that are typically private is also a way to make the state more efficient and diminish public expenses. Stymied by current circumstances, the government recently started signaling that it might make a move in this direction. With Joaquim Levy leading the Treasury, an initial public offer for Caixa Econômica

1 TRILLION LESS IN EXPENDITURES

A study carried out by RC Consultants shows how the government could decrease expenses, nearly zeroing nominal deficit, and thus controlling public debt. It would take eight years. A set of measures to cut expenses would have to start being applied in 2016 continuing until 2023, when it would also mean an interest decrease.

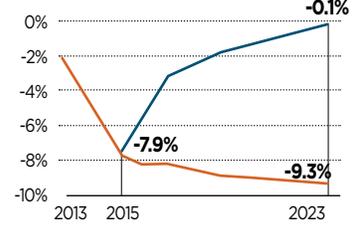
Emergency Cuts	Structural Cuts	Result: fewer financial burdens
<p>The government would take the first step by cutting BRL 110 billion in expenditures in 2016 and 2017—preserving only priority expenses (1BRL=\$.26).</p> <p>How to do it</p> <p>Creating an Expense Limitation to cut, on average, 7.6% of the expenses with the public structure.</p>	<p>Cuts would be deepened by reforms to increase expenditure efficiency. The economy obtained would be, on average, BRL 271 billion a year up to 2023.</p> <p>How to do it</p> <p>Creating a Fiscal Management Council and limiting expenses from going beyond 70% of the GDP's variation.</p>	<p>An improved fiscal situation would relieve the pressure over inflation and improve the risk perception of investors, decreasing interest. Brazil would reach 2023 with a nominal deficit close to zero. The cost of the debt would go from 7.6% to 2.6% of the GDP.</p>

Cuts would decrease the public expense trajectory—making federal expenses lower, by 2023, than they would be if no adjustment is made.

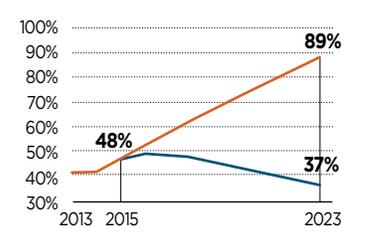


Possible gain by 2023 : BRL 1 trillion (0.47 trillion + 0.54 trillion)

With these measures, the nominal deficit would get close to zero by 2023. (federal government's nominal result—in relation to the GDP)



And the federal public debt would go from 48% to 37% of the GDP in eight years (gross federal debt in relation to the GDP)



Sources : RC Consultores

Federal (a bank) and the sale of BR fuel distributor and Instituto de Resseguros do Brasil (a reinsurer) were considered. For now, there are only studies on these measures.

Privatization Alternative

In a study carried out exclusively for EXAME, the consultancy Bain & Company shows that there is a lot to be earned should there be a will to take the privatiza-



Brazilian Reform

tion route. Bain calculates that the government could raise \$75.4 billion with the sale of eight large companies, among which are Caixa Econômica Federal and the shares it withholds at Eletrobras and Banco do Brasil. According to Bain, the sale of Petrobras shares only—including BR Distribuidora—whose stockholding of the government is 46%, could add up to \$34.3 billion. Eletrobras, the mother company to energy generators such as Furnas, Itaipu and Chesf and to distributors in the North and Northeast, could be worth \$7 billion. To reach these figures, Bain averaged assessments obtained through two methods. One of them considers the estimated market value of state-owned companies and semi-public enterprises. The other considers how much listed companies in the same sectors are worth in the stock market.

The comparison between the two methods reveals how much state-owned companies represent in terms of inefficiency for the economy. According to the first

“Selling assets is an alternative for the government to increase cash flow, given the current difficulty in collecting.”
—Cid Heráclito de Queiroz, former treasury official

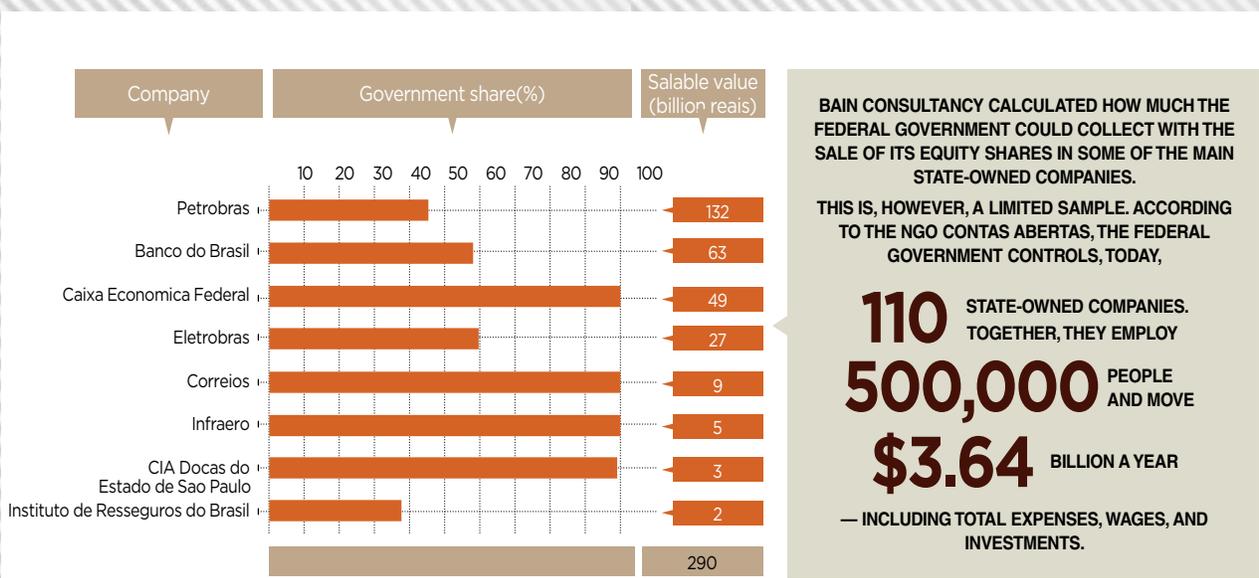
method, the companies controlled by the analyzed state are valued at \$55.64 billion, 30% less what they would be worth if they were to be assessed similarly to private companies. A clear example is Eletrobras: if it were private, its market value would reach \$18.98 billion—more than four times the current value of \$4.16 billion. “Under private control, companies would be more efficient, profitable and valuable,” said Bain associate Fernando Martins. Another concrete example of inefficiency is in the port sector. Seven public ports are managed by Companhias Docas, which is controlled by the federal government. They commonly

fail in a vital mission: keeping good traffic conditions for ships. “The dredging of channels is often interrupted due to lack of funds or problems in the tender for suppliers,” said the president of an operator of port terminals. “Due to this problem, large ships cannot dock, reducing our productivity.”

Expense Cuts

Evidently, the public accounts situation requires other actions. More than increasing revenues, it is essential to decrease expenditures. The way the government has chosen to do this has been ineffective. Projects to cut expenses have met obstacles among the opposition in Congress and a lack of articulation of the government. How to escape the trap? A study carried out by RC Consultants showed how the federal government could gradually reach the so-called zero nominal deficit—when spending is not higher than what is collected. This would be a set of measures to cut expenses on an emergency basis, make

THE WEIGHT OF STATE-OWNED COMPANIES



BAIN CONSULTANCY CALCULATED HOW MUCH THE FEDERAL GOVERNMENT COULD COLLECT WITH THE SALE OF ITS EQUITY SHARES IN SOME OF THE MAIN STATE-OWNED COMPANIES.

THIS IS, HOWEVER, A LIMITED SAMPLE. ACCORDING TO THE NGO CONTAS ABERTAS, THE FEDERAL GOVERNMENT CONTROLS, TODAY,

110 STATE-OWNED COMPANIES.
 TOGETHER, THEY EMPLOY
500,000 PEOPLE AND MOVE
\$3.64 BILLION A YEAR

— INCLUDING TOTAL EXPENSES, WAGES, AND INVESTMENTS.



Brazilian Reform

the state structure leaner, and reduce interest payments on public debt. "If this proposal was put into practice, public expenses would go down in the next eight years," said economist Pablo Rabello de Castro, an RC associate. According to his estimates, by 2023 the country will be able to reduce expenditures in about \$260 billion should measures be enforced. The first one proposed is the adoption of an expense limitation, similar to the model applied to countries such as the United States and Germany in recent years. In Germany's case, the limit is triggered whenever the public deficit exceeds 0.35% of the GDP. There, social costs, military expenses, and 4,000 public service jobs have been cut. In Brazil, RC's proposal estimates initial federal budget cuts of an average of 7.6%. The idea is to preserve important expenses, such as investments, and cut the remainder: expenses with staff and official vehicles, office material, advertisement, trips, and electricity. Social expenses would also go through a screening process. With time, the expenditure increase would be limited to 70% of the GDP growth.

The other front consists of increasing the efficiency of the state. The first action would be to create a Fiscal Management Council, whose existence is contemplated in the Fiscal Responsibility Law. The law dates back the year 2000 but the council is yet to be implemented. About 30 countries have this type of council. A study carried out by the International Monetary Fund showed that effective actions taken by such a council could improve the primary result of a country by up to 1.5% of the GDP. The council works as an oversight agency for public expenses. There is a lot to be done in this area. A study carried out by economist Márcio Bruno Ribeiro of the Institute of Applied Economic Research analyzed public accounts of 17 Latin American countries and showed that Brazil is 11th in terms of the quality of its public



"Under private control, companies would be more efficient, profitable and valuable."
—Fernando Martins, Bain & Associates

services. The conclusion: For the same level of expenses, the performance of the services should be 20% better. Or, when reading the results from a different perspective, 20% could be cut and services should remain at the same level. An example of what can be done: In the last five years, the federal government saved almost \$8 billion by adopting an electronic procurement system to replace common bidding processes. "Innovation can result in saving billions of Reais in public resources and increased state efficiency," said Marizaura Camões, Director of Research at Escola Nacional de Administração Pública,

an institution that is maintained by the federal government.

By improving the quality of the expenditures made, debt is contained. And the vicious circle would begin to be dismantled. It can be explained thusly: A country with bad fiscal management will suffer from investors' distrust. They then start demanding higher interest rates to finance the public debt. Today, interest total 40% of the government's net collection. Brazil, with a gross debt of 65% of its GDP, spent an equivalent to 7% of its GDP to pay for interest in the last 12 months, while Japan, with a debt of three times its GDP, spent half as much, proportionally. RC's program estimates that by 2023, Brazil's interest would go down to 2.6% of the GDP, which would make the zero nominal deficit viable.

For the time being, this is only a dream. But the first step needs to be taken or Brazil is bound to live a nightmare: increasing debt, lack of trust, and an aggravation of the crisis.