# sphere





HUTCHISON HYDRATES

14 Water Play: HWL's water business

On Target: Chi-Med zeroes in

A duty to the future

Download Sphere online





#### *Sphere* Magazine #36 October 2014

#### Cover Illustration

The ying and yang icon symbolises the need for balance, according to Taoist philosophy. In this cover, the aquatic version of the classic image reflects our need to balance mankind's relentless use of water with the need to preserve and protect our sources of it. Hutchison's various water businesses not only provide H<sub>2</sub>O to a thirsty mankind, but are also using technology and engineering to protect water's sanctity, bringing balance back to Earth.



Sir Arthur C. Clarke's Third Law of Prediction: "Any sufficiently advanced technology is indistinguishable from magic."

#### WELCOME

### INDISTINGUISHABLE FROM MAGIC

Sir Arthur C. Clarke's fertile imagination produced seminal science fiction novels including 2001: A Space Odyssey. He popularised the concept of geostationary satellites for communications, positioned in an orbit now known as the Clarke Orbit.

A renowned futurist, Sir Arthur's Third Law of Prediction stated "Any sufficiently advanced technology is indistinguishable from magic." Humanity is now dependent on technology that might as well be magic. Modern consumers have little idea how necessities like water arrive at their homes, how utilities are made safe and reliable, or how medicine heals.

Someone has to know how all that technology works. That's where Hutchison comes in.

Take fresh potable water, the stuff of life. People turn on the tap and assume the water is safe with no idea of how it is sourced, purified, tested, delivered and treated. Hutchison Water knows and is always learning and investing to do it better.

Wonder drugs? Same. Someone puts decades of investment, in the form of sweat and money, into research to cure man's afflictions. That someone is Chi-Med, supported by Hutchison China, whose 'magic' is on the verge of transforming medical treatments for a range of diseases.

Even simple pleasures, like cheering your national team at the World Cup and the Olympics, can't happen without a global army of technical experts, a logistics supply chain and marketing 'wizards'. When the games begin, Hutchison has a role to play.

Sphere, while thought-provoking, is a little less mysterious. Still, how many readers know what Pantone, perfect bound or narrative arc refer to? Maybe there is a little magic in *Sphere* too. We hope that as you read these pages, you will discover some parts of Hutchison that are "indistinguishable from magic".

#### Hutchison Whampoa Limited 和記黃埔有限公司

HWL

All rights reserved. No part of this magazine may be reproduced without written permission of Hutchison Whampoa Limited. Opinions expressed herein are those of the writers and do not necessarily reflect the opinion of Hutchison Whampoa Limited. All currency conversions are approximations.

©2014 by Hutchison Whampoa Limited

Published by Hutchison Whampoa Limited 22/F Hutchison House 10 Harcourt Road Central Hong Kong Available on www.hutchisonwhampoa.com

#### HWL In-house Editorial Team Laura Cheung Jeremy Lau Hans Leung Erica Liu Wendy Luk Ada Chan

Feedback & Enquiries SphereE@hwl.com.hk

#### Editor Andrew Work Writers Calvin Lam Cassy Chau Printing

bigboXX.com Limited Creative Consultant

thewhamagency.com

#### Blackie Hui Illustrations Don Mak

Designed and

Produced by

**HK**• Magazine

Publisher

Greg Crandall

**Creative Team** 

Pierre Pang

Mike Hung

Cecilla Cheng

Media Group I td

Tel: +852 2850 5500

**Production Team** Sharon Cheung Kelly Cheung

## CONTENTS

#### 04

#### **NEWS BITES**

Ports and Related Services Property and Hotels Retail Telecommunications Infrastructure Energy And more!

#### 10

**OPERATIONS FEATURE** 



#### Party Time: HWL Behind the Scenes at the World's Biggest Parties

When the world parties hard, HWL is hardly partying. From Brazil to London to Beijing, Hutchison firms are behind the scenes, ensuring the world has a good time. Olé! **COVER STORY** 

## HUTCHISON'S WATER PLAY

Hutchison Whampoa's water business is delivering the goods to a thirsty world. From the desert to floodplains to a store near you, HWL's water business pushes the boundaries of technology and engineering to answer communities' needs around the world.



#### **HEALTHCARE FEATURE**

#### On Target: Chi-Med Zeroes in on Fatal and Chronic Diseases

Chi-Med is rewriting the rules of the pharmaceutical business. A new way of finding drugs and fresh thinking on how to develop them could change the way we see pharmaceutical research.



#### 24

#### **PHILANTHROPY FOCUS**

#### A Duty to the Future

Mr Li Ka-shing has recently addressed graduates at Shantou University, calling them to be 'custodians of the future' and with a mindset of service to humanity.





#### **RETAIL FOCUS**

#### Customer 360: A S Watson's Big Customer Win

A S Watson is using cutting-edge technology to deliver a more personal shopping experience. Happier customers are more loyal customers – a win-win for clients and A S Watson's global retail chains.





## NEWS



#### INFRASTRUCTURE

#### **POWERFUL PRIZES I: UTILITY STAR**

UK Power Networks won four awards at the inaugural *Utility Week* Stars Awards 2014. The company received "Team of the Year (Operational)", "Team of the Year (Customer Facing)", and the "Customer Service" award. Morris Temple, a tower linesman with 52 years of experience, was joint winner of the "Long Service" award.



#### **POWERFUL PRIZES II: ENTERPRISE**

Northumbrian Water received the Queen's Award for Enterprise, one of the most prestigious business awards in the United Kingdom. This is the second time Northumbrian Water has received the accolade in the sustainable development category. A celebratory reception was held at Buckingham Palace. Heidi Mottram, Chief Executive Officer of Northumbrian Water, had an audience with Her Majesty Queen Elizabeth II to receive the award.

#### CORPORATE

#### HUTCHISON WHAMPOA: GLOBAL AND RISING

Hutchison Whampoa has continuously been recognised as one of the most influential companies around the world. HWL was recently placed 136th in the 2014 *Forbes* Global 2000 ranking. The *Forbes* ranking is a comprehensive list of the world's largest, most powerful public companies as measured by a composite value looking at sales, profits, assets and market value.

*Fortune* takes a different approach, ranking firms by revenue, and recently ranked HWL in 363rd position in its *Fortune* Global 500 – 2014 World's Largest Corporations. When ranked within Chinese companies only, HWL was placed in 70th position in the *Fortune* Global 500.



#### TELECOMS

#### **3 Ireland completes acquisition of O**<sub>2</sub> in Ireland

**3** Ireland has completed the acquisition of  $O_2$  in Ireland, taking **3** Ireland's market share to 37 per cent and raising subscriber numbers to over two million active users.

"This is a big day for the Irish telecoms market," said Robert Finnegan, CEO of **3** Ireland. "We will now get down to the task of combining the strengths and talents of the two businesses to create a major force in the Irish mobile market, which will be good for competition, good for consumers and good for Ireland."

#### CORPORATE

#### Hutchison Chevening Scholarships go social

HWL is a long-standing partner to the prestigious Chevening Scholarships that fund talented professionals for postgraduate studies in the UK. The Group, which so far has donated a total of GBP6.4 million to the programme, jointly funds the scholarship with the Foreign and Commonwealth Office to send promising talents from Hong Kong and Mainland China to a partnership university. Now the use of Facebook and Google's keyword search to promote the scholarships brings them into the 21st century to reach even more candidates. The schools are venerable, but HWL and the recipients are on top of the latest social media tools.





#### RETAIL

#### **THE SMILE SEEN AROUND THE WORLD**

A S Watson Group (ASW) has launched its first-ever Global Smile Campaign in its 10,800+ store network in Asia and Europe. It aims to improve and promote customer service with a human touch in its businesses. The campaign kicked off on 18 June with 100,000 employees across 25 markets being asked to "welcome customers with 100,000 smiles", delivering a pleasant shopping experience to customers all over the world.

#### LIVE THE DREAM!

Upholding ASW's commitment to nurture potential student athletes, it organised the ninth Hong Kong Student Sports Awards to commend student athletes for their outstanding performance. With 7,425 awardees thus far, this year's 913 recipients represented over 80 per cent of all local primary, secondary and special schools. Students were honoured with a certificate and scholarship to thunderous applause from their parents, school principals and teachers.



#### WATSONS IS WHERE THE HEART IS FOR HK

The "Asia's Top 1,000 Brands" report from *Campaign Asia-Pacific* and Nielsen revealed Watsons is the only local brand in the top 10 for brand recognition in Hong Kong in a regional survey. Watsons has also been named as Asia's No.1 Pharmacy/Drugstore Brand\* for the sixth consecutive year since 2009.

\**Campaign Asia-Pacific* "Asia's Top 1,000 Brands" survey 2014 of over 6,000 respondents.

#### **The Global Smile Campaign:**

3 25 markets

- **③ 10,800+ stores**
- **③ 100,000 employees**
- **③ 100,000 SMILES!**

## NEWS

#### OTHERS

#### WEDDING PLANNER IN YOUR POCKET

ESD*life*'s new wedding app will allow couples in the throes of wedding planning to obsess about their upcoming nuptials anytime, anywhere. Since 2011, its online



platform "Wedding Union WOW" has welcomed 16,000 members who exchange advice and opinion, saving them time and effort when organising their own weddings. The new app is perfect to share the most up-to-date wedding information and happiness among couples.



#### **FOOTIE FUNDRAISING**

Metro Broadcast, a Hong Kong radio station, has been showing its charitable spirit. In the kick-off ceremony of "Metro 2014 King's Cup Charity Football", Metro Deputy Managing Director, Sung Manhei, Board Member of The Community Chest Hong Kong, Lincoln Yu Kam Yuen, the football coach, and other celebrities promoted a healthy workout lifestyle to all walks of life through a football competition and also raised funds for those in need.

#### PORTS

#### To be the BEST

On 6 June, Barcelona Europe South Terminal (BEST) held a groundbreaking ceremony for the next phase of its development. Ceremony officials included the President of the Government of Catalonia, The Most Honourable Artur Mas i Gavarró, and Hutchison Port Holdings Group Managing Director, Eric Ip. Attendees included the Mayor of Barcelona, Xavier Trias; the Mayor of El Prat de Llobregat, Luis Tejedor Ballesteros; and the President of the Barcelona Port Authority, Sixte Cambra.

In 2015, BEST will have a contiguous 1,500 metre berth with a draft of 16.5 metres, allowing four mega-vessels to dock simultaneously. Next up: 11 super post-Panamax gantry cranes and 54 automated stacking cranes, distributed over 27 automated container storage blocks.



#### HOTELS

#### **8 DEGREES OF EXCELLENCE**

Harbour Plaza 8 Degrees, a Hong Kong hotel, has had its extraordinary hospitality recognised by being named as the "Best Mid-range Hotel in Hong Kong" by TTG China Travel Awards 2014 for the fifth consecutive year. Votes for this award are cast by travel consultants, travel experts, tour operators and destination management companies.

Café 8 Degrees was honoured as the "U Favorite Buffet" by U Favorite Food Awards 2014 for the third consecutive year. It also topped the Best-Ever Dining Awards by *Weekend Weekly* for the second consecutive year. Café 8 Degrees' buffet was particularly favoured by judges and won in the "Best Buffet" category for the second time. These publications recognise what industry professionals from across China know: 8 Degrees = one great hotel.





ENERGY

#### First oil at Sandall Thermal Project

Husky Energy's Sandall Thermal Project located in the province of Saskatchewan, Canada, achieved its first oil production earlier this year. The 3,500 barrels/day oil project builds on two additional thermal projects from last year and is the next commercial plant in Husky's strategy to develop longer production life thermal projects.

Shanghai Hutchison Pharmaceuticals has built a standardised breeding, processing, research and production demonstration base for toads.

#### OTHERS

#### SHANGHAI PHARMA GROUP AND CHI-MED TO DEEPEN COOPERATION

Shanghai Pharma Group and Hutchison China MediTech, through its Shanghai Hutchison Pharmaceuticals (SHPL) operation, have recently signed a cooperation agreement that will see six of Shanghai Pharma Group's traditional Chinese medicine prescription drug products transferred to SHPL's control in a new pharmaceutical sales company. The six prescription drug products cover a wide range of therapeutic areas, including cerebrovascular disease, prostate health, bronchitis, cancer pain and kidney disease.



#### PROPERTY

#### **FIVE IS FINE IN FUTSAL**

Futsal is a fast-paced, indoor variation of football played with five per side. It was developed in Brazil and Uruguay but has fans as far away as Chengdu.

Accordingly, Hutchison Whampoa Property (Chengdu) co-organised the Chengdu "i-City Cup" with the Chengdu Football Association. One hundred corporate teams participated in the four-month competition, enabling members of the Chengdu business community to build bonds through sport – Brazilian style!



#### **SOLVING THE TOAD JUICE SHORTAGE**

Demand for a key ingredient for the medicine Bufotalin has seen the demand for key ingredient Venenum Bufonis, extracted from toad glands, increase year by year.

SHPL has built a standardised breeding, processing, research and production demonstration base for toads in Shandong Province as a wholly owned subsidiary of the Heze and Hutchison Bioresource Technology Co Ltd.

### NEWS



#### HOTELS

#### **FIVE SENSUOUS SENSES**

In celebration of the 12th anniversary of the Harbour Plaza Metropolis (Hong Kong), the hotel launched "A Touch of Five Senses" room package in August. By incorporating five sensory inputs – mood lighting (Sight), massage (Touch), custom Canto-pop (Sound), a tasting dinner (Taste), and boutique aromatherapy (Smell) – into nine designated themed rooms, guests were able to enjoy a brandnew type of hotel experience.



#### OTHERS

#### **READING FOR A BETTER TOMORROW**

The TOM Group visited the Fong Shu Fook Tong kindergarten in Hong Kong to donate books to underprivileged children. The group's 10-year commitment to give the gift of reading, delivered through their "Love to Share-Love to Read" programme, aims to cultivate a lifetime reading habit among people from all walks of life. This year's focus on the environment saw them partner with the Baby-Kingdom Environment Protection Education Fund to instil a strong sense of environmentalism in schoolkids.

#### INFRASTRUCTURE

#### Park your money - high-flying returns

In July 2014, a 50/50 joint venture comprising Cheung Kong Infrastructure and Cheung Kong Holdings acquired Park'N Fly, the largest off-airport car park provider in Canada. The enterprise value of the transaction was approximately CAD381 million. Park'N Fly provides off-airport car park solutions in Toronto, Vancouver, Montreal, Edmonton and Ottawa.





#### **EVERY STEP COUNTS**

The HK Electric Volunteers Team celebrated its 10th anniversary this year, registering more than 36,000 service hours in caring for the environment and the community. With elderly care as its key service focus, HK Electric volunteers pay monthly visits to single elders, especially those with financial and mobility problems, and help them buy bulky daily necessities.

#### TELECOMS

#### iPhone 6 mania cured by 3 Hong Kong

The iPhone 6 launch in Hong Kong saw thousands come down with an iPhone fever **3** Hong Kong had to cure. Well-planned logistics and aggressive advance marketing and sales meant many pre-ordered their phones through **3**Shops across Hong Kong. Pop up distribution centres opened at the crack of dawn to make sure iPhone fanatics could get their phones even before they went to work.





#### **RECYCLING FOR GOOD**

Hutchison Telecommunications Hong Kong Holdings (HTHKH) ran a special recycling station at Hutchison Telecom Tower from 20-22 May as part of the "Sharing for a Cause" campaign organised by the Kids4Kids charitable institution. HTHKH invited employees to donate usable educational and household items to help children in need.

#### PROPERTY

#### **"LOVE YOU FOREVER" QINGDAO!**

The Harbourfront is Hutchison Properties' massive residential, shopping and entertainment district on the Qingdao waterfront, a district known as Xin Jie Li.

They brought the love to Qingdao with a sumptuous wedding event named "Love you forever". Eight pairs of newlyweds dressed up with national costumes from around the world to demonstrate their passion.



#### PORTS

#### **ENVIRO-PORTS**

Hutchison Port Holdings' (HPH) business units around the world are constantly improving their environmental performance by reducing energy consumption and pollutant emissions. HPH recently introduced four electric Rubber-Tyred Gantry Cranes (eRTGC) at the Port of Felixstowe which deliver energy savings of around 45 per cent compared with conventional diesel-driven models. They have also reduced emissions and improved air quality around the port.

Lighting plays a part as well. HPH has completed the installation of energysaving LEDs at the Mexican business unit's Ensenada International Terminal and Ensenada Cruiseport Village.



Electric Rubber-Tyred Gantry Cranes deliver energy savings of around 45 per cent.

#### **CERTIFIED GREEN STARS**

Europe Container Terminals won its second Lean and Green Star in March. This award is for companies actively engaged in innovations that make the supply chain more sustainable.

In early June, Hongkong International Terminals secured a renewal of the ISO 14001 environmental management system certification, which provides practical tools for companies to identify and control the environmental impact of their operations and constantly improve their environmental performance.

#### ENGINEERING

## PARTY TIME HWL BEHIND THE SCENES AT THE WORLDS' BIGGEST PARTIES

When the party is on, no one wants to stop and think about those working to make sure that everyone has a good time. Under the hood of major events like the FIFA World Cup and the Olympic Games, Hutchison teams are in full swing around the clock to make sure that everything happens when it is supposed to so the world can celebrate in style.





travel to power, Sphere looks at how HWL firms do the

work so everyone else can enjoy the party.

#### OLÉ! OLÉ! OLÉ! **HUTCHISON AND THE WORLD CUP!**

The World Cup is one of the most viewed events around the world. This year, **3** Hong Kong and Hutchison Global Communications Limited (HGC) joined in on the fun while making sure their mobile and broadband networks stayed secure for its Hong Kong customers.

Historically, most football fans only watched matches live on TV. Recently, however, younger people watched the World Cup on their mobile phones, over the Internet or on any one of a range of mobile devices.

#### **BRAVE NEW WORLD CUP**

The World Cup experience, in the modern era, isn't just waiting for a televised event. **3** Hong Kong's mobile network was used for viewing matches, highlights, instant updates, and replays on demand, around the clock. Instead of using satellite, HGC deployed advanced Radio Over Fibre technology to help a TV station deliver World Cup content live. HGC's abundant bandwidth enabled the content to be transmitted over an optical fibre dedicated to the World Cup.

#### **MAKE WAY FOR FANS**

Still, game time is the most exciting and the time of highest demand. Thanks to the time difference, much of the mobile usage was in the early morning, avoiding normal peak usage. It meant that routine network upgrades and maintenance work, usually carried out from 2 am to 5 am, were rescheduled to days without matches during the World Cup.

To fully take advantage of the World Cup, a host of initiatives was introduced to **3** Hong Kong service subscribers. Fans could check out World Cup content through the Planet 3 mobile portal, in addition to playing games and winning prizes.

**3** Hong Kong didn't just take care of fans in Hong Kong. It even launched a special phone plan for fans who were visiting

Brazil during the World Cup. How they got there was another question. If you want to get off your phone, on to a plane and into the stadium, you need another star World Cup player.

#### **PLAYING TO WIN - FOR TICKETS**

Hutchison-Priceline (Travel) Ltd also gets on the field for this football fiesta every four years. It is approached by VIP customers to get them - and their guests - to the games. The company uses extensive and carefully cultivated industry connections to work with select business partners of FIFA to ensure that clients can access the best of the contests.

Time is the biggest challenge for the company, says CEO of Hutchison-Priceline, Tony Ma. The team can make a little magic happen, but not full-blown miracles. For global events like the World Cup, preparation begins a year in advance. This is true not only for travel, but also for special World Cup promotions and marketing efforts with valued partners.

For example, Hutchison-Priceline was hired by an international credit card company to manage its promotional campaign for the 2014 World Cup Brazil. The highest wintertime spenders at a high-end Hong Kong shopping mall were offered a package to travel to the World Cup. Hutchison-Priceline was responsible for the planning and execution of the travel programmes, making sure the winners made it to the World Cup! The staff may not have been able to go, but they shared in the excitement by sending other people.

"One of the major advantages for Hutchison of taking part in the World Cup is to make our staff happy. The staff are so engaged, happy and feel proud to be a part of it," says Mr Ma. If the staff in Hong Kong are enthusiastic to be taking part in a FIFA World Cup happening on the other side of the world, imagine the electric feeling from being in the middle of the action, playing host to the world. When the Olympic Games arrived in London and Beijing, Hutchison's teams were behind them 100 per cent.

#### **POWERLIFTING AT THE OLYMPICS**

The London 2012 Summer Olympic Games were a majestic spectacle. 10,820 athletes

from 204 national teams competed at 34 venues. The games were alternately spectacular, heartbreaking and sometimes simply breathtaking.

Much less visible to the public, yet absolutely essential to the sporting extravaganza, were the services of UK Power Networks. Their efforts in powering most of the Games garnered them the prestigious Utility of the Year title. As a contractor and not a sponsor, UK Power Networks was intended to remain unknown to the public. The group unrolled seven years of groundwork, just to stay invisible when the whole world was watching.

#### THE HARDWARE: SUBSTATION CENTRAL

The electricity distribution networks of UK Power Networks were responsible

#### **ESDLIFE: FIFA WORLD CUP** STOREFRONT TO THE WORLD

In 2006, ESD Services Limited (ESDlife), a company focusing on e-commerce, was selected by FIFA to operate its official online shop in Asia for the 2006 World Cup Germany. The company was responsible for the whole online sales process, from designing the website to merchandising, delivery and inventory control.

The biggest challenge, according to Tony Ma, CEO of ESDlife and Hutchison-Priceline, was countering the scourge of counterfeiting that supplied shoddy replica paraphernalia and dented the legitimate business of FIFA and ESD*life*. The firm had to be vigilant to identify and discourage online fraudsters by alerting the relevant authorities to their presence.

Mr Ma says, "We had to design the website, source the products and merchandise goods from licensed suppliers. And we had to determine what to order, the quantity and manage the inventory control ... it was an interesting experience and we were all excited about it."

for supplying energy to 29 of the 34 Olympic Games venues. They also powered a greater number of associated supporting non-sporting venues, such as the International Broadcasting Centre and Main Press Centre.

The construction programme began in 2006. An entirely new Olympic Park distribution network was required. The new main substation at Kings Yard had a 132 MVA capacity and needed a 7 km bore tunnel to carry new 132 kV cables. The substation was accommodated in an area two-thirds the size of an equivalent capacity substation, a triumph of innovative, costeffective design. The engineers had a place for nature in all this construction – the main substation features a brown roof providing a habitat for nesting birds.

Olympic Park, when operational, comprised a network covering 185 distribution substations, 250 km of cables, and 900 street lights.

The construction cost to UK Power Networks was more than GBP125 million, and included the removal of 100 temporary distribution substations after the Games. These substations have now been serviced and reused on the company's network.

#### THE SOFTWARE: DEVISING A PLAN

Three years before the event, the group put together a special project team to devise the operational strategy.

Four hundred and sixty individual mitigation measures were implemented, including the testing of network protection systems at 116 major substations across London. Steps were taken to safeguard the system from physical attacks. Staff members were deployed strategically to respond to system faults. Capital works were brought forward to ensure the overall network had maximum availability and resilience. The network was at its best for Olympic and perennial customers alike. Detailed contingency plans were developed for a wide range of possible issues, and in the final six months leading up to the Games, eight separate exercises were carried out involving all levels of response management.

Even pre-planning for a possible cyberattack proved invaluable, when in the early hours of the day of the opening ceremony, credible plans for cyber-attacks against electricity supplies for the opening ceremony were uncovered by security services. Thankfully no attack came to fruition, but the plans implemented were a product of attention to detail and forward thinking.

#### **GOLD MEDAL PERFORMANCE**

UK Power Networks successfully remained invisible. The significant influx of tourists and those watching the Games caused a seven per cent increase in energy consumption across London for extended periods of time, compared to the same period in 2011. Yet, despite higher demands, unprecedented travel, and roadwork restrictions, network performance actually improved during the Games. No power failures occurred at any of the Olympic sporting venues, hotels, transport networks, command and control centres, or broadcasting stations during the Games. The London Organising Committee's standby generators were kept idle throughout.

In addition to the Utility of the Year title, UK Power Networks' London 2012 team was also granted the Team of the Year award by Utility Industry Achievement Awards in 2012. It required a colossal team effort from the preparation to the execution of service. This experience benefited later Olympics, as UK Power Networks shared their expertise with Sochi 2014 and will do the same for Rio 2016.

Rock-steady engineering isn't the only way Hutchison has supported past Olympics. At the Beijing Summer Olympics 2008, it was human capital that had to be upgraded.





Everything a visitor to the Beijing Olympics needs - especially how to find a Watsons outlet!



#### THE PEOPLE'S OLYMPICS

The 2008 Beijing Summer Olympics were a resounding success. Much of the city's efforts focused on training the over 100,000 volunteers for the Olympics and Paralympics. Watsons China made sure they did their part to upgrade the city's human resources.

#### **CONVENIENCE FOR TOURISTS**

Beijing today is a much more internationalised city than it was in 2005 when volunteer preparation began. Watsons China realised that they could contribute to helping tourists and making the Games a success.

Watsons used their experience in customer service to produce a custom-made package containing vital information for tourists: a map of Beijing city, a subway map, schedules for the Olympic Games and events, airport shuttle bus routes and timetables, useful daily phrases in Mandarin Chinese, emergency telephone numbers, and, of course, the locations of the nearest Watsons stores and details of Watsons products.

Twelve thousand copies were placed in 12 Watsons stores in Beijing and 38,000 copies in special restaurants, economy hotels and the airport. They proved wildly successful in both helping tourists and driving business to the stores. Many visitors were from regions that Watsons does not serve. They were introduced to the brand as a trusted go-to in Beijing for their trip. When they arrived, they could even find someone who spoke English to help them.

#### "I CAN SPEAK ENGLISH"

To better serve foreign tourists, Watsons made the commitment to send staff to a well-regarded specialist English language training school for two and a half months. After the training, staff sported "I can speak English" badges. The English language service was available in 12 Watsons stores in Beijing and one in the seaside city of Qingdao, the venue for the Olympic sailing events.

From Beijing to London to Hong Kong, the Group's experience in upgrading infrastructure power and human capital continues to make the difference to the success of global sporting events. Like the world-class athletes in the spotlight, staff dedicate themselves to the challenge and bring their best to the events. It's possible they may miss being in the stands. But then again, why go to the party when you can *be* the party?



Credit: Hong Kong Rugby Football Union

#### HK ELECTRIC SHOWS ITS MUSCLE FOR THE RUGBY SEVENS

They may be smaller than the Olympics, but the 2009 East Asian Games and the annual Hong Kong Rugby Sevens still have high standards. The Hongkong Electric Co Ltd (HK Electric) made sure it pulled out all the stops to guarantee their supply of energy was stable and secure.

#### "METICULOUSITY"

Special events demand meticulous testing to ensure all the equipment within substations is functioning as planned. The police then sweep the area for suspicious elements, and when everything checks out, seal the entrance. This seal lets them identify immediately whether anyone has accessed the substations, and prevents unauthorised interference with the equipment.

During the critical periods of the events, HK Electric avoids having other planned work in the same part of the network. Since all the supply networks are interconnected, this maintains maximum availability to the substations servicing the events. Staff technicians are then stationed within the vicinity of the substations. Usually, HK Electric makes a pledge to its customers to arrive at the scene within 28 minutes on average for an incident in urban areas. But for mega events like the Rugby Sevens, they cut that down to less than one minute, with staff on standby at Hong Kong Stadium.

#### **BACK-UP PLANNED**

In HK Electric's network supplying the Hong Kong Stadium, more than one cable is installed to feed substations at the same time. If one cable fails, the other one automatically picks up the load and safeguards any event from interruption.

The supply network is world class with reliability of over 99.999 per cent. But at mega events, HK Electric goes the extra mile to make sure game visitors and global viewers get 100 per cent excitement from the action.





## HUTCHISON'S WATER PLAY

For all the talk of increasing demand and climate change-driven shortages, precious few are doing anything about one of the two resources most crucial to life: water.

utchison Whampoa, however, is on the job. It is making and moving water to where people need it most. From hydrating nations to putting clean water in an athlete's hand, HWL is using world-class technology and decades of engineering experience to provide water where it is needed and to make sure it isn't showing up where it isn't wanted. If even the mildest of predictions about the huge demand for water management and technology come true, HWL is going to be on the front line in supplying global water needs for decades to come.

#### A STREAM IN THE DESERT: SOREK DESALINATION PLANT

In the Old Testament, Isaac repeatedly quarrels with Philistine shepherds over the rights to a number of wells (Genesis 26). Water management has been an issue in the region since time immemorial. However, new technology and thoughtful water management could change how the region thinks about water. Desalination is the key.

One of the largest desalination projects in the world is the Sorek Desalination Plant (SDP). Located about 15 km south of Tel Aviv, SDP has a total capacity of 150 million cubic metres per year. In a joint bid with local company IDE Technologies. Hutchison Water Limited won the tender to build and operate this important one of a kind facility. "The Sorek Desalination Plant was the first major project that Hutchison Water carried out. We were very pleased that the first project of this scale was the world's largest," says Amikam Cohen, CEO of Hutchison Water. Since its completion in 2013, the plant has continuously provided clean, fresh, potable water to millions of users, satisfying 20 per cent of Israel's residential and commercial water demand.

#### **TECH BREAKTHROUGH**

The SDP utilises the seawater reverse osmosis desalination process to provide water to Israel's national water carrier system. The plant employs some of the most advanced technologies available. Gil Doron, Senior Project Manager of

#### "It was like Armageddon."

Mike Madine, Sewerage and New Development Manager, Northumbrian Water

Hutchison Water, explains, "The Sorek project is really a groundbreaking project in desalination." It uses 16-inch membranes instead of 8-inch membranes, and these are positioned vertically rather than horizontally, simplifying processes and allowing for safer operation. The intake and outtake pipes are carried in a tunnel under the seabed approximately two kilometres out to sea, assuring the quality of the seawater used and protecting the environment. "There is a pit which was built on the beach of Palmachim, and if you walk on the beach you won't have a clue that underneath it there is a shaft and a tunnel - an amazing technological achievement," Mr Doron explains.

#### **WORKING HAND IN HAND**

Technological and environmental commitment has not gone unrecognised by the industry. The Sorek plant recently won the "Desalination of the Year" award at the Global Water Awards. The award is given by Global Water Intelligence, the leading research player in the field. Sorek was recognised as the most impressive technical and ecologically sustainable achievement in the industry. On the success of the project, Dan Eldar, Executive Director of Hutchison Water, says, "In terms of the execution of this project ... this is an exemplary project which was built very successfully, on time and on budget."

IDE Technologies' expertise was joined to a very experienced team which was assembled for Hutchison Water. The Hutchison Whampoa Group brought its financial expertise to bear, lending to the Sorek project's success. "We were

#### **HUTCHISON'S KINROT VENTURES**

Hutchison Water's track record enabled it to win a bid in 2012 to operate a technology incubator in Israel: Hutchison Kinrot Ventures. The incubator gives Hutchison Water the ability to grow early stage technology companies and to help them go to the market with a proven, working technology. Dr Eldar explains, "We help more than a dozen technology companies develop their products and prepare them for penetration into global markets so they can benefit from the Group's global presence in more than 50 countries around the world."

These are just two firms with outstanding potential to change the world:

#### Aquarius Spectrum has a

unique solution using innovative sensors and algorithms to provide high-accuracy acoustic water leak detection at low costs. Its technology allows the detection of leaks as small as one millimetre, allowing utilities to prioritise repair efforts and reduce leakage. This helps utilities save water, energy and money.

Hydrospin, established in 2010, has developed a unique micro-generator that produces energy from water flow inside distribution pipes. The energy produced powers the operation of devices measuring water toxicity, pH, chlorine, and pressure. This system provides utilities with real-time data and eliminates the need for costly and toxic battery packs and damage-prone solar panels. Better information at a lower cost helps save the environment with fewer expensive batteries used and improved water management.

really proud to have been able to raise the financing for this project, and to do it in a way which really takes into account the financial strength of the Group," explains Ronen Wolfman. CFO of Hutchison Water.

The combination of advanced technology capabilities and international financial nous meant that the joint venture could deliver a low-cost and efficient, high-quality project. "It all boils down to a lower price for Israeli consumers," says Dr Eldar.

#### **QUENCHING MORE THAN THIRST**

While the SDP has been touted as a technological marvel and a financial success, it provides more than a supply of clean water. By producing clean, potable water through desalination, Israel produces more than half of the drinking water it needs and is able to, and does, provide water to its neighbours. Dr Eldar explains that by addressing demand arising from water scarcity, SDP had "demonstrated that water can be produced at a very attractive price, and, rather than creating regional strife and tensions, water

supply can be a foundation for regional cooperation."

#### **THE FUTURE**

Dr Eldar hopes to replicate the Sorek project in other parts of the world. "We are now the builders and operators of one of the world's largest desalination plants and that puts us in a very good position to win additional contracts in the water space." Mr Cohen sets out his expectations, saying, "The proven success of Hutchison Water in building and operating one of the world's largest desalination plants gives us an opportunity to further grow our desalination business in other areas of the world, building upon the technology and know-how of the Group, as well as upon the Group's financial strength."

While Hutchison Water is using new technologies to provide water in the desert, Northumbrian Water Group (NWG) is using decades of expertise to bring clean water to the people of Britain – and then carry it away again.

#### FEAST OR FAMINE - WATER AND WASTE MANAGEMENT IN THE UK

From the deserts of the Middle East to Europe's wet north-east, HWL is managing water in ways that reflect the diverse environments in which the Group works. In the rainy north-east of England, desalination is not required. There, the challenge is to hold water, make it pure, and ensure it reaches the sea without putting houses underwater en route.

#### **THE ENGLISH TRIO**

NWG has three operations in the UK. Each has unique characteristics and separate systems, making them almost as distinct from each other as they are from Sorek.

 Northumbrian Water is the original, and largest of the operations. It supplies potable water and manages waste water disposal and run-off. This means managing waterway contamination and flooding arising from man-made causes, extreme weather and possible future climate change effects.



- Essex The driest part of England features a reservoir that not only serves the people, but also houses a UNrecognised bird reserve.
- Suffolk The smallest operation has low winter demand contrasted with high summer tourist demand.

Across the UK, the general approach is to store water during the winter and then release it over the summer. Reservoirs, built in the Victorian era, powered Britain's rise as an industrial nation. Many of the same reservoirs are still in use. Alongside them, more sophisticated water management has come into play as well as new resources including the giant Kielder Water reservoir opened by Her Majesty the Queen in 1982.

#### RESERVOIRS -A NATURAL SANCTUARY

Fortunately, the company has recently completed measures to avoid future shortages. The expansion of the Abberton Reservoir saw GBP150 million spent to expand its capacity by 60 per cent to 40,000 megalitres. Planning began in 1993, permission was finally granted in





2009, and the expansion was completed in 2013.

The delay was due to repeated protests by environmentalists. The reservoir, however, has now become a recognised centre for nature preservation. The Abberton Reservoir Visitor Centre sees thousands visit its vibrant wildlife reserve every year. and the reservoir is a vital resting stop for over 40,000 migratory birds annually. They find a more tranquil resting place than existed during the Second World War, when The Dam Busters, the Royal Air Force's 617 Squadron, practised bombing runs there. The reservoir is a UN-designated Ramsar Convention site, recognising its importance as a wetland habitat worthy of special note.

#### **NORTH BY NORTHUMBRIA**

The eponymous Northumbria, in England's north-east, is where the company has its origins. Its Kielder Water, the largest man-made reservoir in Europe, is one of 22 major impounding reservoirs, serving 2.7 million people. It is surrounded by Kielder Forest - the largest working forest in England. The area was a water-hungry centre of heavy industry in the Victorian era, and the reservoir was created to serve that industry. However, it was completed just as industry decamped to Asia, system maintenance reduced leakage dramatically and industrial processes improved water use efficiency - all reducing demand. The upside is that Northumbrian Water is ready for potential climate change.

#### **CLIMATE CHANGE UK**

Current thinking is that climate change means the UK will have wetter winters and drier summers - overall a neutral impact on annual supply. The concern is that weather incidents will be more intense with sharper bursts of rainfall giving rise to flooding. With large reservoirs already in place, Northumbrian Water is ready upstream. Downstream is another issue.

#### **THUNDER THURSDAY**

Thunder Thursday – 28 June 2012. A perfect storm, or rather three of them, caught the entire nation's meteorological establishment unaware by converging on England's north-east and dumping a month's worth of rain on the area in just two hours.

"It was like Armageddon. The sky was completely black," recounts Mike Madine, Sewerage and New Development Manager. A storm of this magnitude occurs once in 1,000 years and cannot be prepared for. NWG is ready for nearly any contingency, but nature continually tests its limits.

With sophisticated radar weather tracking stations and close cooperation with the UK government's Environment Agency and municipal officials, the company has been much more proactive about controlling flooding in recent years. The upstream parts of Northumbrian Water receive relatively clean water which is treated so that it reaches top drinking water quality standards, but its sewerage division must deal with whatever the public puts down the drains. It must work with developers, the public and nature to keep waterways clear.

#### DWAINE PIPE SAYS 'ONLY PEE AND POO GO DOWN THE LOO'

Dwaine Pipe has become Northumbrian Water's champion for keeping drains clean. He teaches people about the two distinct systems for sewers, what goes in each and what shouldn't be flushed away. Homes and businesses send foul water to one system that delivers it to treatment plants. Rainwater run-off from streets, outdoor eaves and yards goes directly into rivers and streams, clean enough to be returned to the environment. The systems in the past were somewhat mixed, allowing some run-off water into the sewerage system. But now, increased demand means systems are being sealed off from each other so only waste water

goes through the foul water system to the treatment plant, improving efficiency. Dwaine Pipe has become a surprise hit with the community and has had a real impact on the business.

#### **STOPPING DO-IT-YOURSELF FLOODING**

A proactive approach also means that Northumbrian Water closely monitors major and minor landscaping that can change the region's flood-risk profile. For example, if 1,000-2,000 new homes are built in an area, it can dramatically impact run-off patterns far away downstream.

At a micro-level, 'urban creep' can also increase flood risk. Households that pave over lawns and gardens can reduce the local area's ability to absorb rainfall and increase loading on rainwater collection systems. Collectively, an area's flood-risk profile becomes riskier over time. Furthermore, the distinction between the two systems may be lost on many 'do-it-yourself' plumbers who connect their home's foul water output to rain run-off collection systems – a big no-no that Northumbrian Water must be on the lookout for.

#### **FLOOD ALERT!**

While the weather cannot be controlled, it can be prepared for - almost always. Advanced radar tracking with the Met Office, which detects incoming weather, sees Northumbrian Water spring into action, warning high flood-risk customers to batten down the hatches. Heavy rains in 2005, 2009 and on Thunder Thursday mean that customers take such warnings very seriously.

Decades of rich and varied experience, domestic and international, coupled with a

#### **DWAINE PIPE - A PIPE FOR THE PEOPLE**

Northumbrian Water staff refer to Dwaine Pipe as being 'recruited' in July of 2012, as if he is a real person. Created as part of the public information campaign 'Love your Drain', he has had an operational and costsaving impact on the company beyond expectations.

Blocked drains - caused by things like nappies, baby wipes and cotton buds cost Northumbrian Water around GBP1.6 million per year.

They developed a fully integrated behavioural change campaign with clear objectives. Dwaine Pipe was created to appeal to a broad range of customers, delivering messages in a positive, fun way around keeping drains clear. Most water companies tell people what they can't do rather than what they can do. Northumbrian Water wanted to help and engage their customers in a clean fresh way rather than hector them.

A radio campaign, roadshow events, press advertising and an educational programme with a Dwaine Pipe puppet show sees him travelling the length and breadth of the north-east of England. He has appeared in pantomime and cooked up a storm with celebrity chef Jean-Christophe Novelli at a food festival where he encouraged everyone to scrape cooking fats into the bin. This activity has been supported by a secondary campaign that targeted businesses such as takeaways and restaurants and provided them with tools to deal with grease disposal.

Analysis shows blockages have been reduced by more than 10 per cent, representing a significant saving to the business and a real service improvement for customers.

As well as reducing blockages, Dwaine Pipe has been winning awards too. The campaign was a Gold Winner in the Chartered Institute of Public Relations Corporate Social Responsibility Campaign and recently won Marketing Initiative of the Year at the *Utility Week* awards, the Oscars of the UK utility industry.

Northumbrian Water's customers love Dwaine Pipe too. He has an integrated social media campaign, which sees him communicate with residents of the north-east and promote his key messages. Dwaine Pipe has his own Facebook and Twitter accounts (follow him on Twitter @loveyourdrain) and his popularity is spreading.





Stringent procedures to produce distilled water: multi-step filtration and boiling water at 105°C.

long-term outlook mean that NWG is well positioned to become the water bearer for the over four million people they serve in England.

Sphere has shown how water can be sourced from the sea and collected from the sky. The oldest part of the Hutchison water story has its origins in a part of the world where indoor plumbing didn't even exist, water quality was always suspect and was a threat to people's health. Demand for pure water is still high in Hong Kong and China, the birthplace of Watsons Water.

#### WATSONS WATER: 100 PER CENT PURE

Watsons Water has the oldest origins of any part of the Hutchison water story. The century-old water manufacturer was the first company in Hong Kong selling distilled water and was a pioneer in the carboy business (large replaceable water bottles used in dispensers). The company originated from a vision of Dr Alexander Skirving Watson, founder of the A S Watson Group. He wanted to provide people with clean water – a challenge in 1903's Guangdong – to help them look after their health and well-being.

Nowadays, Watsons Water uses a multi-part process to ensure the purest water. It puts the water through a threelayer filtration – sand, then carbon, then micron-filtration. Next, the water is boiled at 105°C, the optimal temperature, according to the Manufacturing Director of A S Watson Industries Ltd, Mr Teo Keng-peng. It is distilled from steam at a lower 30°C, then treated with purifying ozone before bottling.

#### **PURE WATER, PURE IMAGE**

Purity and hygiene are vital safety considerations and also a marketing strategy. "We share the same water source with other water companies but what differentiates us is that we adopt multistep filtration and distillation processes," says the Managing Director of A S Watson Industries, Michelle Chan. "We don't think price is the major concern for customers. The main concern lies in the confidence of the customers in the products they buy." Emphasis on quality assurance and quality control builds trust in the marketplace.

Inside the factory plant of the company in Hong Kong, Mr Teo opens the doors to a room where machinery booms and the temperature is as high as a sauna. This is where the distilled water is produced. The testing room, however, is a sharp contrast. It is cool and tranquil, with all the right ISO certificates on the wall. The staff in the testing room perform frequent tests on all Watsons' products and every incoming batch from suppliers.

The company holds to one principle, lending to its success in Hong Kong and China. "There is a personal touch," explains Ms Chan. In 2002, the company revolutionised the design of the water bottle to make it easier to grab. Also, its award-winning two-capped design is unique in the market and gives the product a distinct appearance compared to its counterparts.

#### TRUST

Watsons' bottled water is also a big success in China since it made its return in 1996. It was first imported from Hong Kong in glass bottles for consumption in five-star hotels. In 2003, the brand rolled out a mass market version for consumers following the switch to the two-capped design. As a trusted brand selling distilled water in China, Watsons Water has fulfilled its customers' desire for safe water.

Water in China is supplied by water departments in local cities, either from the public water supply or designated water sources approved by the local government. Watsons Water's factories in Guangzhou, Shenzhen, Dongguan and Beijing go through the same stringent procedures to produce distilled water – the multi-step filtration and boiling water at 105°C – as undertaken in Hong Kong.

Quality control is critical in China. The company has conducted research on the Chinese market and confirmed that most consumers expect bottled water to be safe and reliable to drink. To meet customer expectations, Watsons' factories in China conduct rigorous testing of their products to guard against bacteria, heavy metals and toxic substances.

Watsons' use of technology and strong customer communication is similar to that used by NWG, albeit to different ends. Along with Sorek, all three operations use solid engineering to ensure that people in Asia, Europe and the Middle East have a steady supply of aqua. The Group-wide investment in people, engineering and technology means that as water becomes more valuable, HWL will be ready to both help its customers provide for their needs and to take care of the planet.

#### INNOVATION

## ON FATAL AND CHRONIC DISEASES

Modern research-intensive pharmaceutical firms are a powerful corporate force in the world for good reason. If medicine still depended on shamans and witch doctors, the world would be a miserable place. The phrase, "It's serious, but there's a new drug ..." means hope for the afflicted. These companies, however, are usually the final stage in a chain of companies that seek new ways to heal.



t the beginning of the chain, there is Hutchison China MediTech Limited, aka Chi-Med.

Fifteen years ago, visionaries within the Hutchison Group asked if there was a better way to produce more effective drugs faster, helping more people. They set out a strategy and put their ideas into action. Christian Hogg, the CEO of Chi-Med, was recruited to lead the new company in 2000. Speaking to Sphere, he explains, "14 years ago, Mr Simon To, Managing Director of Hutchison China, and I started working towards developing a pharma business with the support of the Group." They found a way to meet major unmet medical needs in China and globally, and to pursue exciting, albeit challenging, business opportunities for the Group.

#### **THE PROBLEM WITH DRUGS**

Among the few drugs that make it to market, their high cost reflects the expenses associated with testing both those that succeed and those that fail to pass muster. Chi-Med hit on a novel R&D strategy that breaks down into a three-part approach. Research lines are in botanicals; small molecules with validated, or known, targets; and small molecules with novel, or previously unproven, targets.

#### **BOTANICALS: HERBOLOGY**

Qinghaosu is a well-known botanical wonder drug that exploded onto the world's consciousness in the 1990s. Effective against malaria, it has been known since the fourth century's Ge Hong described it in *The Handbook of Prescriptions for Emergencies*. Novartis developed it and, under the name artemisinin, its use became globally widespread.

Chi-Med tapped the same well of knowledge: the Chinese pharmacopoeia. The scientists at Chi-Med extract key compounds from a complex mix of biological elements to determine exactly what compounds do and how effective they are. Well-known examples of popular drugs "It started with a belief by Hutchison senior management in traditional Chinese medicine and its global applications."

Christian Hogg, CEO of Chi-Med

include artemisinin and the cancer drug tamoxifen, derived from the Pacific yew tree.

#### KNOWN TARGETS: CLEAN POWERFUL HITS

The second approach, using small molecules against known targets, makes use of current scientific knowledge to refine first-generation drug therapies that often have multiple side effects and associated toxicities. At one time, testing

SPHERE #36 2014 2 0



was hit or miss – educated guesswork at best. But now, our understanding of biochemistry has given us tools to dramatically focus our efforts.

Chi-Med looks at existing therapies that might affect many pathways relevant to the cancer under attack and focuses on them. Mark Lee, Vice President, Corporate Finance and Development of Chi-Med, explains how improving this process benefits patients, saying, "You can ramp up the dose and hit the target hard." This allows doctors to increase dosage, killing tumours faster, and more importantly, completely.

In cancer treatment, the newest drugs developed by large pharmaceutical firms are often too expensive for many patients around the world. Some of those patients are in China, which now has the highest number of new cancer patients in the world. As a China-focused company, Chi-Med is well placed to deliver more affordable, targeted therapies suitable for the huge and growing Chinese market.

### Focused: "You can ramp up the dose and hit the target hard."

Mark Lee, Vice President, Corporate Finance and Development, Chi-Med

One such drug is Fruquintinib. This anticancer molecule has been developed using Chi-Med's model of refining existing, less specific medicines to find a more effective treatment with fewer side effects. More are to come.

#### **NOVEL TARGETS: DISEASE UNDER FIRE**

The third approach, targeting small molecules against novel targets, means taking on a disease in a completely new way with a new molecular formulation. In recent years, rules in the US concerning drug testing for patients with terminal illnesses have been changed. Now, where a prognosis is fatal, promising new drugs are allowed to be tested on those for whom other drugs have failed already. From these treatments, researchers know immediately whether a drug has any impact and side effects. This reduces uncertainty, time and cost and enables drugs to come to market faster. This means more people have their lives, and time with loved ones, extended. In some cases, formerly fatal diseases can be beaten back and lives saved.

The new designation of 'Breakthrough Therapy' means that promising drugs can be approved and delivered to suffering patients faster – in 60 days or less if approved. As the US is still the biggest market in the world by expenditure, this can cut half a decade or more off testing and allows researchers to understand how their drugs work much faster so that they can improve them and help even more people.

2 1 SPHERE #36 2014



Chi-Med houses diverse operations under one roof in the Shanghai research centre which allows for a high degree of collaboration among colleagues.

Chi-Med has a number of promising drugs that could be helping cancer sufferers soon (see Volitinib below). It also has an inflammation candidate beginning pre-clinical trials with partner Janssen (a Johnson & Johnson subsidiary).

#### **WORLD CLASS BRAINS**

Chi-Med hasn't made this happen alone and it hasn't followed a traditional path. Its internal and external partners are a big part of the story and Mr Hogg credits many people and companies for helping Chi-Med along the way.

Scientists, for example. The company may not operate in a traditional Western research locus like New Jersey, Boston or Basel – but has all their best scientists. They are the alumni of the world's best universities and most advanced pharmaceutical research centres. They have worked with the world's most sophisticated research-intensive firms like Pfizer, Novartis, Celgene, Roche and Phenomix.

It's not just the executive leadership. The company is unusual in that, for an early-stage firm, it has a sizeable staff contingent. Companies doing research in

#### Botanicals R&D is looking at plants with promise to be developed into drugs.

early stage molecule investigation in the US or Europe may seize on one molecule and set up a company that never has more than 10 people. Mr Hogg explains that Chi-Med has "almost 250 full-time scientists and staff in our R&D business ... all in Shanghai." Traditional firms will outsource almost all their processes, testing and production of materials. Chi-Med does it all on-site. "Everything is done internally ... we want to keep the expertise and we want to build up our own team over time." Having this intellectual firepower under one roof doesn't just make for cost-effectiveness, but also leads to faster sharing of results and ideas. It has a huge impact on operational effectiveness.

#### **SOLID SUPPORT**

Mr Hogg is clear about the support the company has received over the past 14 years. "Over a long period of time, the company, Hutchison, has been massively supportive with a long-term view. This is not a short-term project, this is a long-term project that requires an enormous amount of patience and commitment by everybody."

The Hutchison Whampoa Group is known and respected for its companies in a wide range of industries. However, in 2000, pharmaceutical research was not one of those industries. The Group then started making acquisitions of firms in China. While these companies were being reformed to make them profitable, Chi-Med launched its research programme, a serious, investment-intensive undertaking. The investment required for even one drug to be developed is in the scores of millions, not including late-stage development and global distribution.

While the company did have a listing on the London Stock Exchange's AIM market, it had a real moment of validation when Mitsui Global Investment's healthcare specialist division chose to support the



With top-notch technical equipment at hand, Chi-Med is able to develop precise formulation processes for the manufacturing of new drugs and ensure stability and consistency in every dose.

company through an investment. One of the best in the business had taken a long hard look at Chi-Med – and liked what they saw. "We were able to convince Mitsui – they are very experienced biotech investors and great people to work with, and they knew [that Chi-Med was on the right track]. They put money in here into the drug R&D and it was about USD20 million then. That got us through to 2011," says Mr Hogg.

A crucial step in taking drugs into the final stages of development and hopefully preparation for global development is partnering with a major pharmaceutical company. Commitment to support expensive global trials – and later marketing and sales muscle – tells the market that the industry leaders with decades of global experience have done their due diligence and believe in the product's potential.

Having a pipeline of promising new drugs demands access to a steady supply of funds and expertise to make sure that drugs get through final testing and into the hands of doctors and patients to save lives.

#### **BIG PLANS, BIG PARTNERS**

Chi-Med has the solid support of global

leaders, such as Swiss giant Nestlé Health Science who are supporting the development of its gastrointestinal drug. They have joined forces in the joint venture Nutrition Science Partners. Nestlé, as a global leader in food production as well as drugs, is the best of partners for producing the botanicals necessary to support drug production, and will also bring the resources of Prometheus Labs to support research, as well as its global sales and distribution network. Nestlé has the rights to work with Chi-Med and their vast library of 1,500 purified natural products and 50,000 extracts from traditional plants.

A partner on the 'known target' approach is America's Eli Lilly & Company. The global giant is keen on Fruquintinib, a drug that promises to help a range of cancer patients with solid tumours. Lung, colorectal, gastrointestinal and renal cancer all show promise as being likely targets for the drug, making it a potential blockbuster.

AstraZeneca is another partner interested in Chi-Med's Volitinib – an anti-cancer molecule that could be paired with AstraZeneca's powerful AZD9291 for a tumour-busting cocktail effective against resistant lung cancer tumours.

#### **PROMISE FOR THE FUTURE**

With cancer drugs in particular, the upside can be tremendous. A drug approved to treat one condition, which may be rare by itself, often holds promise for treating other cancers. The health benefits and financial upside can be immense, with both millions of people experiencing life improvement and the company reaping significant profits that can fund research into more drugs.

This investment will see its first novel drugs ideally come to market some time in 2016 if all goes well – 16 years after the venture began. It has taken a long-term commitment by HWL and the people at Chi-Med, who have been there from the start, to see the results begin to come in. New promising molecules and botanicals will need to be found and put into the pipeline to bring more cures and treatments to an eager world.

Chi-Med and Hutchison's commitment, hard work, and innovative thinking have brought them to this point and will carry them beyond. This is how Hutchison heals. □



## **A DUTY TO THE FUTURE**

On 27 June this year, Mr Li Ka-shing, Chairman of the Li Ka Shing Foundation, made his address to the graduating class of Shantou University, located in the eponymous coastal city a few hours' drive north-east of Hong Kong. The speech was covered widely in Chinese and international media who parsed and analysed Mr Li's thinking presented in this annual address.

lobally, there is relevance in his message, titled "Sleepless in Hong Kong", which speaks to challenges faced in all of the developed and developing world. His deep concern about "widening inequality, intensifying resource scarcity and waning trust" is not only causing him sleepless nights, but no doubt disturbs the nocturnal repose of responsible leaders, young and old, the world over.

#### **INEQUALITY: UNACCEPTABLE**

The recent concern regarding income inequality is global. Politicians, economists, activists and, yes, business leaders, are all addressing the topic. While the attention may be recent, the conceptual concern is not. The metrics to describe inequality were developed in 1912 by Italian statistician Corrado Gini (the Gini coefficient). Since then, statisticians have found a wide range of means to measure income inequality, wealth inequality and income mobility in societies.

Globalisation and the advent of the knowledge economy are raising man's productivity, the source of widespread wealth and rising living standards. Mr Li recognises that not all will be successful at capitalising on the opportunities presented by these two forces. His speech was a call to arms to consider how we can ensure that those unlucky in circumstances of birth are not left behind.



Far Left: At the Shantou University Commencement Ceremony, Mr Li Ka-shing addresses graduates in a speech titled "Sleepless in Hong Kong". Centre: Mr Li joins the members of the Student Council to ring the Bell of Truth. Right: Sporting a Shantou jersey, Mr Li refreshes his basketball skills.

Mr Li calls for governments to support education and innovation. He is concerned that "toxic welfare dependency" is part of a cocktail that can stall growth. A handout is not enough to lift people up and ahead in a changing world, nor provide them with an equal footing for opportunity in an unequal world. It can leave millions dependent and resentful, leading to another force weakening society – the erosion of trust.

#### TRUST

Inequality is intimately connected to the erosion of trust, especially where the perception of entrenched inequality persists.

Trust is a bedrock of the market economy and functioning societies the world over. Neighbours trust each other to behave in respectful ways that enhance their neighbourhoods and communities. Business partners trust each other to deliver on contracts. People trust their governments to generally do right by them. In places where there is little trust, people live with fear and resentment. Where there is no trust, there is discord.

Mr Li explains his concern that "trust, the bedrock of an enlightened society, is crumbling before our eyes. If trust is no

SPHERE #36 2014

longer the reinforcing positive energy field, the consequences could be dire. Trust enables us to live in harmony, without which more and more people will lose faith in this system, breeding scepticism towards what is fair and just, doubting everything and believing all has turned sour and rancid."

Mr Li challenged the students, explaining that "The future of our imperfect world needs your commitment, needs your positivity, needs your compassion, needs your fortitude and needs your resolve." The students of Shantou University are not the only people needed. This message applies to thinking, feeling people everywhere who have any capacity to make change in their communities, their cities and their nations. All their commitment, positivity, compassion, fortitude and resolve will also be needed.

#### **RESOURCE SCARCITY**

The connection between efficiency and productivity has a direct bearing on how much we can devote to alleviating our previous two 'sleepless' factors. As humanity determines how to most efficiently use its resources to do what it must do today, it will have more to invest where it must for the future. "Inside your vision of tomorrow, will you show respect for the most humble, put value on individual and human dignity and take action to better your community?" ~

#### Mr Li Ka-shing

#### **CUSTODIANS OF THE FUTURE**

Mr Li concluded by invoking the duty of custodians. To ensure that society does not leave people at the bottom of the economic scale, undermining trust that underpins our civilisation, we must intelligently deploy our resources to have enough to stimulate innovation and support education that can transform our world for the better.

Our service to humanity demands "dedication and [an] undertaking to be the custodian of the future". With that noble goal in our sights, we can hopefully prevent some sleepless nights for those that come after us.

#### TECHNOLOGY

## A S WATSON'S BIG CUSTOMER WIN



magine: You walk into a store and before you speak to a salesperson, your phone beeps. You are offered a custom deal for the product

you are considering buying, along with all the relevant information about the features and options you are interested in. The features are perfect and the price is right. You buy, thrilled with the convenience and savings.

This is the latest magic that technology can perform and A S Watson Group (ASW) is stepping up to stage the magic on a global scale.

The magic is the Customer 360 strategy aided by 'big data' which, in both the public and private sectors, is becoming a big story. It refers to the massive amounts of data collected over time that are difficult to analyse and handle using common database management tools. But once the hurdles are overcome, the benefits are immense. A study from the University of Texas reveals that using big data can increase overall productivity in the retail sector by as much as 49 per cent.

Launched this May, the Customer 360 strategy will improve ASW's digital and customer relationship management (CRM) programmes to retain customers



and improve profits. With over 80 million members in its CRM programme globally and more than 1.6 million visitors on its digital platforms worldwide, the retail group has the data. Now it is thinking big.

#### **FROM DATA TO INFORMATION**

Once they join the membership programme, a customer's purchase history will be stored and studied in aggregate. Information like the frequency of purchase and shopping patterns will be harnessed to make customer-centric decisions on product range, promotion offers and store space. Suppliers and retail brands can also develop new product trials for targeted loyal customers and personalise communications with customers by offering tailor-made sales offers.

Being the largest international health and beauty retailer in Asia and Europe – with 10,800 stores in 25 markets – the data collected by ASW is not just big, it's of astronomical proportions. "We have an average of 27 million customers shopping with ASW every week. In addition to the in-store experience, we have embraced all aspects of customer touchpoints, from member experience to social media, mobile apps and e-commerce, to enable us to serve our customers 360 degrees," says Dominic Lai, Group Managing Director of ASW.

#### ELEVATING THE SHOPPING EXPERIENCE

The deployment of big data is merely the latest reinforcement of the retail group's new CRM programmes that began in 2012. The advancement of technology has been transforming traditional retail businesses and has seen the group shift its focus beyond physical stores to technology platforms. Already, ASW is experiencing phenomenal growth in its e-commerce sector. In Taiwan, Watsons cooperates with Yahoo! and achieved 100 per cent growth in online sales in 2013. In the UK, ASW operates the second largest beauty and health retailer, Superdrug. Its online sales grew by over 50 per cent in 2013. "On average, our customers

#### "The key to ASW's Customer 360 strategy is to be customercentric."

Mr Dominic Lai, Group Managing Director of ASW



Big Data: 1990 in overall productivity



Customers who shop at ASW's online platforms spend 2.9 times more than customers who shop only in stores.

who shop with us online spend 2.9 times more than customers who shop only in stores. We believe this provides us with enormous potential to drive incremental sales with a more powerful e-commerce platform," says Mr Lai. With big data now in place, the digital and CRM programmes can scale new heights.

But the Customer 360 strategy is more than business. It elevates the shopping experience of both in-store and online customers. Now, ASW can analyse registered users' purchasing details and provide custom services to online buyers and help suppliers to open new doors via online platforms. Customers are happy together with ASW and their partners.

On top of the virtual shopping centres, an illustration from Ukraine showcases the targeted application of the Customer 360 strategy that takes place in a physical store. Watsons Ukraine has a pilot location-based CRM programme which makes use of location-serviceenabled mobile devices: smartphones. Through a location-based service, customers who visit a specific store can be offered bonus loyalty points and receive custom deals based on their sales history. This is all activated automatically through their smartphone without the need for customers to approach salespeople. The practice has brought more interaction to the shopping experience of customers and is powered by the seamless coordination of the CRM programme, social media, and big data working harmoniously together.



The Ukrainian example is just a start and the opportunities for leveraging big data and marketing are huge in other markets. "We will continue to drive member acquisition, especially in China where we have in excess of 39 million members in our CRM membership base. Our members enjoyed the extra benefits as well as the more personalised and relevant communications we provide to them," says Mr Lai.

#### **NEW WORLD OF BUSINESS**

Internet technology and communication trends have also changed the advertising approach of ASW, which has shifted from traditional mass media to digital media, especially on mobile devices in the era of the 'app'. This helps provide an accurate understanding of advertising effectiveness, allowing ASW to adjust their marketing campaigns and make correct investment decisions.

The integration of digital and social media, CRM and big data applications in the Customer 360 strategy shows how ASW has adapted to the new world of business. "The key to ASW's Customer 360 strategy is to be customer-centric. It's more than just providing quality products at great prices, it is about engaging, informing and involving our customers in their shopping decision-making process," Mr Lai concludes. ASW's swift response to put the right people, technology and processes in place will enable the group to turn big data into big smiles for customers and big success for ASW. □

SPHERE #36 2014 2 8



