

# Amazing Taiwan

## 23 Brands Revolutionizing the World of Sports

In Taiwan, cutting-edge technology is transforming the sporting world. Here, we'll take a deep dive into Taiwan's obsession with sports, from its world-leading eSports industry to an up-close look at the latest products of Taiwanese innovation.

*Everyday Excellence*

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**TAIWAN  
EXCELLENCE**  
OFFICIAL  
M O O K



**Taiwanese**

**People,**

**Products**

**and Technology—**

**Changing the World Every Day**

In late December 2019, Taiwan was the first country to realize the threat of the COVID-19 pandemic and take proactive measures against it. The Taiwanese government delivered a warning to the WHO, and on January 20 established a Central Epidemic Command Center. Minister of Health and Welfare Chen Shih-chung spearheaded a variety of protective measures, from restricting immigration to increasing production of virus-prevention products.

Furthermore, Taiwan's genius digital minister Audrey Tang developed a "face mask management app" that helped to ensure a stable supply of these vital goods to the populace.

Indeed, the Taiwanese government is always quick to act, and responsive to change.

The same is true for Taiwan's private enterprises. Taiwanese companies are always sensitive to the latest international trends, and—through intense trial-and-error—they deliver truly one-of-a-kind products to the worldwide market.

In this volume, we'll take a closer look at everything from Taiwan's eSports industry—which has truly come into the spotlight in the post-COVID age—to cutting-edge products keeping the Taiwanese people healthy and fit, from bicycles to health care items, and much more.

Read on to unlock the secrets of these world-class wonders of Taiwanese technology.

Taiwan Excellence,

*Everyday Excellence*

"Taiwan Excellence" believes that innovation makes a difference in everyone's life.

Excellence means creative designs that we use every day – on the street, at work, at home.

It's the things we touch. It's the things that touch us.

Excellence means the technology that makes us healthy, keeps us moving,

and gives our children a green tomorrow.

Excellence empowers people to dream amazing dreams, and live fuller lives.

It's the best made in Taiwan. It's the choice of innovation.

For everyone. Everywhere.

Every moment. Everyday.





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# All Eyes Are on

# eSPORTS

## in Taiwan

eSports refers to organized competitions of multiplayer computer games. Since the dawn of the eSports age in 2018, the market has grown rapidly around the world. In 2020, with the COVID-19 pandemic preventing people from leaving home limiting their entertainment options, eSports that can be played and watched online are a hotter topic than ever.

In comparison, Taiwan was quick to embrace eSports long before the current situation. Here, eSports are recognized as equivalent to traditional physical sports, and receive the full backing of the government. Now, with additional cooperation with corporations and academia, Taiwan's eSports market is booming. In Part 1, we'll explore Taiwan's impressive efforts in the eSports world.

# ESPORTS Heating Up Like Never Before!

In Japan, eSports came on the scene around 2017 and have gradually grown in popularity since. This new industry, where top-class gamers compete in games is drawing attention around the globe. While still in its infancy in Japan, eSports is growing at an unprecedented rate in the global market. 2018-2019 and 2019-2020 saw consistently high annual growth rates of 22.4% and 15.7%, respectively, with eSports becoming a \$11 billion USD industry in 2019. And the eSports revolution has only has begun.

Asia is playing a vital role in the expansion of eSports across the globe. In the year 2019, the Asia region accounted for 25% of the global eSports market, with 19% of that being China. In particular, Taiwan has proven to be a mecca for eSports, recording a growth rate of over 40%. eSports have a high profile in Taiwan, with star athletes such as Oil King establishing their stardom in various game titles both at home and abroad.

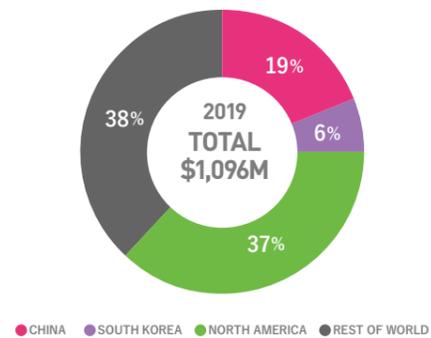
Why have eSports been able to take Taiwan by storm? Part of the answer can be traced to 2017, when the Sports Industry Development Act was revised to recognize eSports as a technical sport equivalent to physical sports like baseball or soccer. As a

result of this, high schools and universities established eSports courses and curriculums. With the full backing of the government, they developed skilled athletes, as well as creative personnel skilled in event planning and media communications. Private industries, too, received tax write-offs for eSports-related expenses. This cooperation between industry, government, and academia set the stage for Taiwan to take center stage in the eSports revolution—a role it plays to this day.

The COVID-19 pandemic has meant a greater demand for home entertainment options, leading to vastly increased profits for the game industry—and eSports are in the spotlight as well. Traditional sporting tournaments cancelled due to virus concerns have been rescheduled and held as online gaming tournaments. After the Madrid Open tennis tournament was cancelled, it was held virtually via an online tennis game in April 2020, making news for the many active tennis stars—including Japan's Kei Nishikori—taking part. With the world changing as it is, the circumstances surrounding the eSports industry are also underdoing a dramatic transformation—making it an industry to keep a close eye on going forward.

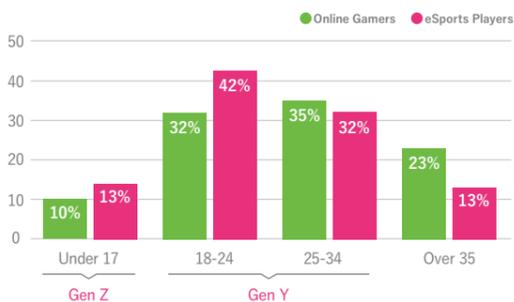
## World eSports Market by Country

©Newzoo | 2019 Global Esports Market Report



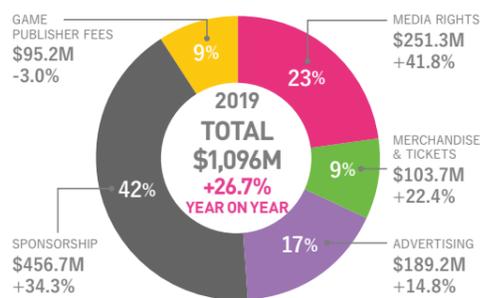
## eSports Fan Age Demographics —More than 80% are Gen Y and Z

©Taiwan Cyber Athlete Association



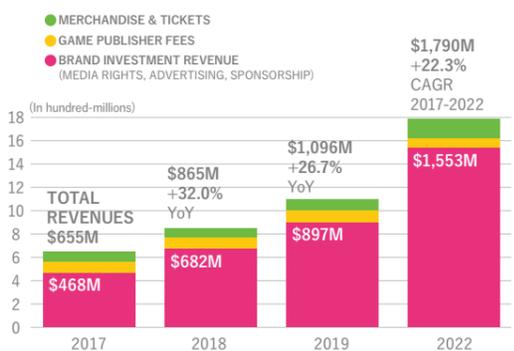
## eSports Earnings Breakdown (including year-on-year growth)

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## eSports-related Revenue by Year

©Newzoo | 2019 Global Esports Market Report



## FIVE POINTS OF FOCUS

### 01 eSports are officially recognized by the Taiwanese government

In 2017, the Taiwanese government updated the Sports Industry Development Act to put eSports on the same level as traditional physical sports, resulting in a strong partnership between industry, government, and academia. eSports athletes who meet strict qualifications are even eligible for military service exemptions.



### 02 Tax breaks for PC manufacturers and corporate sponsors

In Taiwan, private-sector businesses are eligible for tax write-offs on expenses invested in eSports. As a result, many companies now sponsor eSports teams or contribute prize money for tournaments. The emergence of eSports has also provided a boost for PC manufacturers.



### 03 Taiwan's eSports audience ranks 5th in the world

Not unlike physical sports, spectators outnumber athletes in the eSports world. Amazingly, viewing numbers in Taiwan for eSports videos and streams rank fifth in the world, with Taipei claiming first place among world cities. These remarkable numbers—especially in light of a relatively low population—are proof that eSports have truly taken hold in Taiwan.



### 04 eSports in academia

With the revision of the 2017 ordinance, high schools and universities have established departments covering the eSports industry. Students can learn everything from building hardware to streaming matches and managing teams—schools aim to develop not just pro athletes, but also the talented professionals who will support the industry.



### 05 The eyes of the world are on the Taiwan Game Show!

Held every year in Taipei, the Taiwan Game Show is a major event that draws over 600,000 attendees. Here, eSports take center stage alongside the latest titles from Taiwan's game industry. The 2020 event was unfortunately delayed and eventually canceled due to the COVID-19 pandemic.

# Meet the Movers and Shakers of Taiwan's

# ESPORTS Revolution!

It's no exaggeration to say that Taiwan is at the forefront of the worldwide eSports revolution, and you'll find many people and companies leading the charge. In this feature, we spoke to three such individuals: Michael Shih, a key figure in Taiwan's eSports legislation; Jose Liao of ASUS, a major hardware supporter of the industry; and the star pro gamer Oil King, who has claimed victories around the world.



## Taiwan Cyber Athlete Association Michael Shih

Born in 1964. Famous as a singer/songwriter as well as an avid gamer, he was the emcee for Taiwan's first eSports television show, and serves as the chairman of the Taiwan Cyber Athlete Association.

**“My goal is to raise the social standing of eSports for the next generation of athletes.”**

It was 2013 when we founded our association, Taiwan Cyber Athlete Association. At the time, the position of eSports in Taiwanese society was incredibly low compared to where it is today—I remember hearing many negative opinions about eSports from the people around me. As a player of online games for over forty years and an eSports fan, I wanted to invigorate the industry and support a higher social standing for eSports athletes, so I devoted myself intensely to my work as association director.

To make this a reality, I approached the government to

convince them to recognize eSports as an actual sport. With the support of IT minister Audrey Tang, a hearing on eSports was held in Taiwan's Legislative Yuan in October of 2016, and an ordinance including a variety of our requests revised in November 2017. The results have been phenomenal. First, a national budget was secured for creating eSports-related departments at high schools and universities. This served not only to develop athletes, but to provide the younger generation with an opportunity to study eSports across multiple disciplines, from team management to tournament organization, streaming video production, and more. Athletes who star at international tournaments receive financial support from the government, and private industries are eligible for tax breaks on all eSports-related expenses. This includes not just sponsoring tournaments and contributing prize money, but also money spent on spectator tickets. The 2017 ordinance provided the foundation for industry, government, and academia to cooperate in promoting eSports going forward.

With the stage set, the position of eSports in Taiwanese society rocketed up. Now backed by public organizations, eSports came to be viewed in a more positive light by the general populace. It's reached the point where now, a majority of young Taiwanese say they want to work in the eSports industry in the future. Taiwan ranks fifth in the world in viewers of online eSports video streams, showing just how eSports has come to

Developing the next generation of athletes through the establishment of university eSports clubs. Talks given at assisted-care facilities and other events have also served to raise awareness of eSports among the general populace.



Shih has performed renditions of many game theme songs at eSports title matches.

be accepted across society as a major form of entertainment.

Of course, there are still issues to address. Firstly, Taiwan has not achieved a business model to monetize eSports on their own. For private enterprises supporting eSports, the main benefits are limited to tax write-offs and image improvement. Salaries for pro athletes also lag behind other countries, with even top-class pros making less than \$5,000 USD a month. There's an ever-present risk of star athletes moving abroad where there is far more money to be made. To a degree, this is unavoidable—Taiwan is a smaller market that lacks the population of other countries. And this goes for more than just eSports; when doing business in Taiwan, one always has to keep an eye on the overseas market. Still, there are things that can be done here at home. For example, I mentioned Taiwan's impressive number of eSports spectators. Currently, the vast majority of these view events for free, but if a culture of paying to watch eSports were to take root, it would certainly help with monetization. This is one of the main issues our organization is working to resolve.

As another of our goals, we're looking to collaborate with Japan for the future of the eSports industry. eSports still haven't really taken off in Japan, but as a country with a strong culture of gaming and animation, the potential the embrace eSports is definitely there. By joining together, Taiwan and Japan could expand each other's markets. In this sense, there are many challenges we're hoping to take on.

## Taiwan's Digital Minister, Audrey Tang, and the Future of eSports

Audrey Tang, Taiwan's genius “digital minister”, has earned accolades in 2020 for her response to the COVID-19 pandemic. She was also a key contributor to the 2017 bill that recognized eSports as a sporting event.

Tang seized the initiative in recognizing eSports after meeting with Michael Shih of the Esports Association in November 2016, when the two discussed the particulars of the bill. She exerted particular influence in the matter of whether or not to apply a military service exemption for eSports athletes. This exemption was previously afforded to Olympic athletes, and the same rule can now be applied on a conditional basis to eSports, with pro athletes for the incredibly popular title League of Legends being eligible for the exemption. They have made it a goal to further expand this exemption to even more eSports athletes in the future.



Minister Audrey Tang, an innovator who has transformed a wide range of digital industries, is also playing a key role in Taiwan's eSports revolution.

Photo Credit: Audrey Tang flickr Photographer: Kaii Chiang  
<https://reurl.cc/Y1Vrk0>

Sales Vice General Manager,  
System Sales Div.,  
ASUS Technology Inc.

## Jose Liao

Since entering ASUS in 2002, he served as the deputy general manager of ASUS Taiwan and the general manager of ASUS Hong Kong Branch. His management scope is mainly based on the system product operation projects of Taiwan and Hong Kong branches. He has been elected as the manager magazine Taiwan in 2016 Top 100 MVP manager.



## “Forging a Future for eSports With Cutting-Edge Hardware”

eSports have taken Taiwan by storm in recent years, and ASUS was among the first to break into and invest in this booming market. In 2006, we launched our original gaming brand, Republic of Gamers (ROG). When eSports were officially recognized by a government ordinance in 2017—ushering in a new era where eSports truly took center stage—ROG was again one of the first in the industry to seize the opportunity. Until then, standard PC sales made up the bulk of ASUS's revenue, but the rise of the ROG collection of gaming PCs truly changed the landscape. Looking at 2019, the sales growth rate for standard PCs was 20%, but ROG models soared to 30%. In the fourteen years since the brand was launched, ROG has succeeded in making a mark not only for its gaming-specialized motherboards and monitors, but also a wide range of accessories designed with gamers first in mind—from gaming chairs to headphones, smartphones, and more.

Cutting-edge hardware isn't the only reason for ROG's success in the eSports market—there's also our branding and marketing efforts centered on appealing to a generation of young gamers. The ROG brand is based around the concepts of “For those who dare” and “Trendy”, and ROG has spared no effort in realizing that worldview in our designs. In developing the ROG Strix laptop—which has earned effusive praise from users—we worked together with BMW Group Designworks to achieve a truly unique design unseen anywhere else. We've also been proactive in collaborating outside the eSports world to raise awareness of their brand among non-gamers. ROG announced a limited-edition product with New Era—the cap brand from New York that's hugely popular among today's youth—and in April 2020 made the star Taiwanese rapper OSN Gao the official face of our ROG brand.

Needless to say, fast-growing market share in the eSports

field is far from our only goal. More so than immediate profits, we're aiming to raise the profile of eSports and gaming itself within society as a whole. Since the enactment of the ordinance mentioned above, we've invested heavily in students pursuing their studies in eSports. For example, ROG sponsored the team COS CITY HAWK from the Taipei City University of Science and Technology when they represented Taiwan in the Cup of Two Cities of eSports tournament against top eSports athletes from mainland China. Known as a leading eSports brand, ROG's products were selected for the 2018 National Intercollegiate Athletic Games for eSports competition. In addition, we hold monthly eSports events at our experience-based flagship store in Syntrend Creative Park, where users can get hands-on with ROG products. It's not only a chance for our everyday customers to engage with eSports but also provides a community where players can interact with one another. Through efforts like these, we hope to continue to raise awareness and improve the image of eSports as a whole throughout Taiwan.

Looking forward, we're looking to make further inroads into the Japanese market. We actually expanded to Japan in 2008, two years after launching our ROG brand—but unlike Taiwan, gaming consoles such as Nintendo products and the Sony PlayStation dominated the scene there. Recently, however, online gaming is on the rise, and the PC eSports market is seeing a boom. In Japan as well, ROG has formed an online community and provided a place for fans to interact with one another, and has held online product announcements and fan events. As a result of these efforts, in the second fiscal period of 2020, the international ROG brand claimed 30% share of the Japanese eSports market. The overall profile of eSports in Japan is still relatively low, but Taiwan used to be the same. As a company driving the eSports market forward, we're looking forward to seeing what the future holds in Japan.

Professional  
eSports Athlete

## Oil King

Born in 1985. Began competing professionally as a Street Fighter V CE athlete in 2016. Known for his trademark short shorts and toned legs, in 2019 he took over the operations of Taipei Major, a leading Taiwan eSports tournament.



## “I want to take on the world as a pro athlete, and be a role model for the young generation.”

As a professional eSports athlete, my playing field is the fighting game Street Fighter V CE. It's famous across the world, so I imagine most people have probably heard of it. Tournaments are held at Japanese game shows like EVO Japan and the Tokyo Game Show, and I travel to Japan to compete from time to time. To tell the truth, fighting games are more popular in Japan and elsewhere than in Taiwan, so maybe I'm more famous overseas.

eSports have become more popular in Japan, but comparing the two markets, there's still greater interest in Taiwan at this stage. Japan's gaming culture is centered more on consoles like the PlayStation, so I feel that eSports—played predominantly on PCs—is still an alien concept to many Japanese. In Taiwan, eSports started out popular just among the younger crowd, but now people of all ages know about it. Of course, it's not as popular as baseball—Taiwan's number one sport—but eSports pros who win international tournaments are recognized as celebrities. For example, Hearthstone is one of the most popular eSports in Taiwan, and tom60229—one of its most successful players and winner of an international tournament—appeared on a major TV program watched by almost everyone in the country, not unlike Japan's yearly Red and White Song Battle or the U.S.'s American Idol. As I mentioned, my sport of choice—fighting games—don't enjoy the same level of popularity in Taiwan, but you'll still find my name atop the headlines on news sites when I win a major international tournament. This goes to show how much eSports is part of average Taiwanese person's daily life.

Though it's become a part of the cultural consciousness, there are still many issues to address. First is athletes' retirement. At 35 years old, I'm far from young in the eSports world, and it's time for me to start thinking about retirement.



Unfortunately, there are no real examples of second careers for athletes like me. I've received an offer from a certain eSports team that wants me to assist in training young athletes and running tournaments, so I'm hoping to be able to use my experience. To that end, I've been taking part in the organizational side of things lately. I'm even the main organizer for the Taiwanese tournament of the Capcom Pro Tour, a worldwide Street Fighter V CE league. We were set to hold to the 2020 version of the event, but unfortunately it was canceled due to the COVID-19 pandemic.

The pandemic also brought to light another challenge faced by the eSports world. Despite the fact that these are online games, holding matches across national boundaries still proves difficult. These days, many tournaments that were delayed or canceled due to COVID-19 are attempting to switch to an online model. Unfortunately, due to communication speed issues and so forth, even competitors from a relatively nearby country like Japan have trouble competing in Taiwanese tournaments. In eSports, even the slightest time lag can prove fatal, so in the end, competitors have to assemble at a common venue to compete on the international stage—I travel abroad some 15 times a year. If technology advances to the point where players across the world can compete no matter where they are, it will take a huge burden off the athletes.

eSports truly is a dream industry—a way to make a living with the games we all loved as kids. Still, many unexplored possibilities and areas for improvements remain. For the sake of the next generation, I'm looking forward to the breakthroughs that await us.

# Revolutionary Technology Makes Watching Sports More Thrilling than Ever!

Feel as if you're in the stands at the stadium—or even right on the field in the middle of the action—all from your own living room couch. See spectacular plays from all angles on a personal screen, giving you new insight into the game. The impossible is on the verge of becoming possible in thanks to 5G technology. The day is not far off where you'll be able to enjoy sports more realistically and more comfortably than ever before—no matter where you are.

## Rapid streaming with 5G technology!

Ultra-high speeds, ultra-low latency, and multiple simultaneous connections make 5G a truly transformative technology, and the shift will bring about a revolution in various products and services. Sports is no exception—4K/8K video streams will be delivered in real-time with not even 1 millisecond of lag, and combined with AR and VR, it promises to change the way we appreciate our favorite athletes.

Communications and IT is a winner-take-all world, and around the world, private enterprises, governments, and academia are coming together in the R&D race toward realizing 5G technology. As a leading IT country, Taiwan has been setting the pace, with over 20.5 billion NT\$ set to be invested in 5G promotion by 2022, and another 50 billion NT\$ per year marked for the development of smart industries.

Taiwan has traditionally been a leader in the bicycle and sports industries, as well as healthcare and the medical field. In particular, these areas have seen a dramatic transformation to IoT in recent years, with chips embedded into all manner of appliances. That is to say, the stage has been set in Taiwan for the 5G revolution. Traditional Taiwanese craftsmanship and collaboration between companies has also played a large role. World-class personal computer manufacturers have joined with IT companies across various fields to achieve heretofore unseen experiences. Watch a bicycle race from home while virtually competing with the athletes in real-time. This is the sort of next-generation experience that 5G will provide, and seamless integration of curved displays made by PC manufacturers, real-time video provided by telecommuting specialists, and IoT-enabled fitness bikes will surely make it—and much more—possible.



## Don't miss a game — at home or on the go!

### Monitor & PC

Optix MPG341CQR (msi)

In addition to the ultra-wide view angle and curved display suited to the human eye, this monitor includes a Night Vision feature to provide clear visuals even in the darkest shadows, and is perfect for enjoying both sports and games. (see P.28 for details)



### Smartphone

ROG Phone II (ASUS)

An unparalleled graphics powerhouse, this phone promises hours of high-performance gameplay. Take your match into triple overtime without worry! (see P.34 for details)



ROG TwinView Dock II (ASUS)

Expand your enjoyment with a genuine dual-screen gaming experience! You can also enjoy sports while chatting with your friends. (see P.34 for details)

## Cheer in comfort at your team's home field!



### Waterproof Wear

The waterproof, breathable and eco-friendly textile Xpore (BenQ Materials)

Featuring best-in-class waterproof-breathable technology and produced with high-quality materials, Xpore fabrics are ideally suited to apparel for all kinds of activities, including attending outdoor sporting matches.



### Cool Wear

Supercooling Shirts (ATUNAS)

When the action heats up, these shirts can help keep you cool and dry with their moisture wicking properties, allowing you to rely less on your AC and save energy. (see P.52 for details)

### Eco-Friendly Straws

Sugarcane Straws (JU TIAN CLEANTECH)

After use, these eco-friendly straws can be composted, empowering you to do your part for the environment while enjoying sports and gaming. (see P.54 for details)



### My Tumbler

Bee Travel Mug (ARTCERA)

Stay hydrated while in the thick of the action! Keep all manner of beverages fresh with this stylish, high-quality tumbler that is perfect for any adventure. (see P.58 for details)

# Building Brand Awareness in Taiwan: Rakuten's Expansion into Professional Sports

Baseball is one of the most popular sports of Taiwan, and Rakuten made huge waves when they joined the professional league. We spoke with team CEO Takashi Watanabe about the background of the acquisition, Rakuten's goals, and possibilities for the future.



CEO, Rakuten Monkeys  
**Takashi Watanabe**

Formerly administrative and financial director for a private educational services company, Watanabe joined Rakuten in 2007, and in 2012 transferred to the Singapore branch office. As the COO of Rakuten Asia Pte. Ltd., he was tasked with overseeing the company's Asian regional operations. In December 2019, Watanabe was appointed CEO of the Rakuten Monkeys, and the following April he was named director of the Rakuten Taiwan Ecosystem, a role in which he now serves to expand and develop Rakuten's Taiwanese business ventures even further.

## A Nationwide Reputation Strengthened Through the Support of Local Teams

In September of 2019 Rakuten proudly announced their acquisition of the Lamingo Monkeys, Taiwan's most popular baseball team. The following December, the new logo and uniforms of the rebranded Rakuten Monkeys were unveiled, along with several additions to the team roster. Some might wonder what they stand to gain from such a bold foray into Taiwanese professional sports. However, as Takashi Watanabe, CEO of the Monkeys and the director of Rakuten's Taiwan Ecosystem explained, it was a clear-cut decision.

"Rakuten's long relationship with Taiwan dates back to 2008. It was the first overseas market we started online shopping business, due to its close proximity to Japan and the Taiwanese people's affinity for Japanese culture. In 2015 we issued the Taiwan Rakuten Card, in July 2019 we received necessary approvals to start a banking operation in Taiwan, and on May 18, 2020, we completed our registration to establish a joint venture for the new bank in Taiwan. So, as you can see, the acquisition of the Monkeys was a logical step for us to expand our services and bring more people into the Rakuten ecosystem."

As of May 2020, 6.6 million Taiwanese residents—more than 29% of the its population—had Rakuten online shopping accounts. Over 550,000 Rakuten cards had been issued in Taiwan alone, and by all indications the company was poised to enjoy continued growth. However, as Watanabe states, Rakuten

believed that they could achieve even greater gains by capitalizing on the popularity of a professional baseball team.

"This isn't our first venture into baseball. In 2004 we founded the Tohoku Rakuten Golden Eagles in Sendai. While the franchise represents the Tohoku region in Japan, it's also an extension of Rakuten itself, and its accomplishments help build trust in our company nationwide. We're confident that the knowledge and experience we've accumulated over the years will serve us well in running the Monkeys, and we're eager to do our part to help develop Taoyuan's beloved team further. In so doing, we hope that more and more Taiwanese will come to know and trust the Rakuten brand."

Though their acquisition is relatively recent, Rakuten's ownership of the Monkeys has already begun to open up new opportunities for them in Taiwan.

"We've been approached by companies from several sectors about entering into potential partnerships. Some of them might not have considered us an option before—the team has made it much easier to have these conversations."



The Taiwanese pro baseball season kicked off on April 15. The unique cheering style is always a highlight.

## The Growth Potential of Taiwanese Professional Baseball

Baseball has many fans in Japan, so much so that it is considered the national sport—and in Taiwan it is much the same. Despite this comparable popularity, though, a typical Taiwanese baseball game will only be attended by about 5,000 fans. Nevertheless, Watanabe believes that there is potential for tremendous growth.

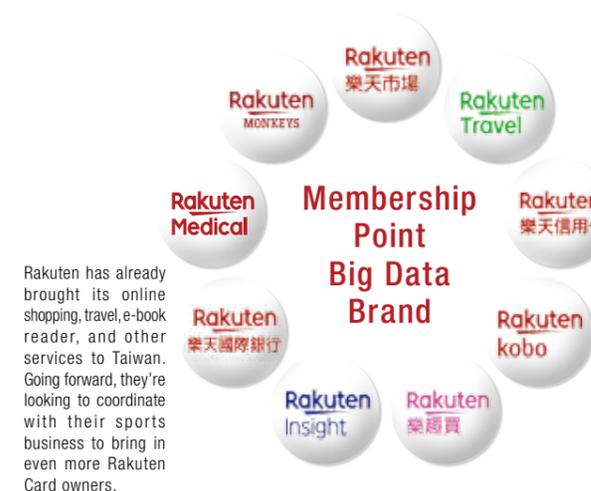
"Right now, the majority of ticket purchasers are the most passionate, dedicated fans, and the casual crowd is relatively small. However, since the only professional sports league in Taiwan is the CPBL, we have an excellent opportunity to appeal to couples and families and grow the casual fan base by offering a richer experience similar to what one might find in Japan and America. Restaurants and bars, amusement park attractions—these are a given. Increased media exposure of the Rakuten Girls cheerleaders and our team mascot are also part of the multi-year strategy to which we've committed. To be clear, this is about more than just the Monkeys—we want to raise the profile of Taiwanese professional baseball league. Contribution to Taiwan's development is not limited to sports business, it is also a theme common to all businesses."



The Rakuten Girls are hugely popular in Taiwan. A photo collection featuring Eli, one of the members of the group, is available on Rakuten Kobo.



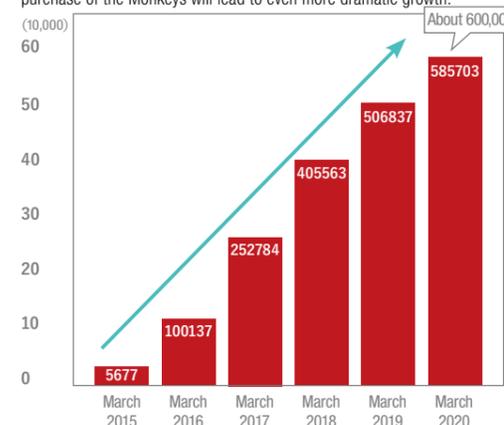
Taiwanese baseball kicked off its season with spectator-free games due to COVID-19, but the Rakuten Monkeys have a robot crowd in the stands cheering them on.



Rakuten has already brought its online shopping, travel, e-book reader, and other services to Taiwan. Going forward, they're looking to coordinate with their sports business to bring in even more Rakuten Card owners.

### Total Number of Rakuten Cards Issued in Taiwan

After the Taiwan Rakuten Card started issuing in Taiwan in 2015, cardholders continued to grow every year. Rakuten expects that their purchase of the Monkeys will lead to even more dramatic growth.



## Expanding Rakuten Group Services Through Professional Baseball

Watanabe believes that Rakuten's goals of running a successful baseball team and bringing more people into the Rakuten ecosystem go hand in hand. If they can effectively leverage their IT services to bolster their sports division, it could lead to a new model for overseas expansion that the company can emulate elsewhere.

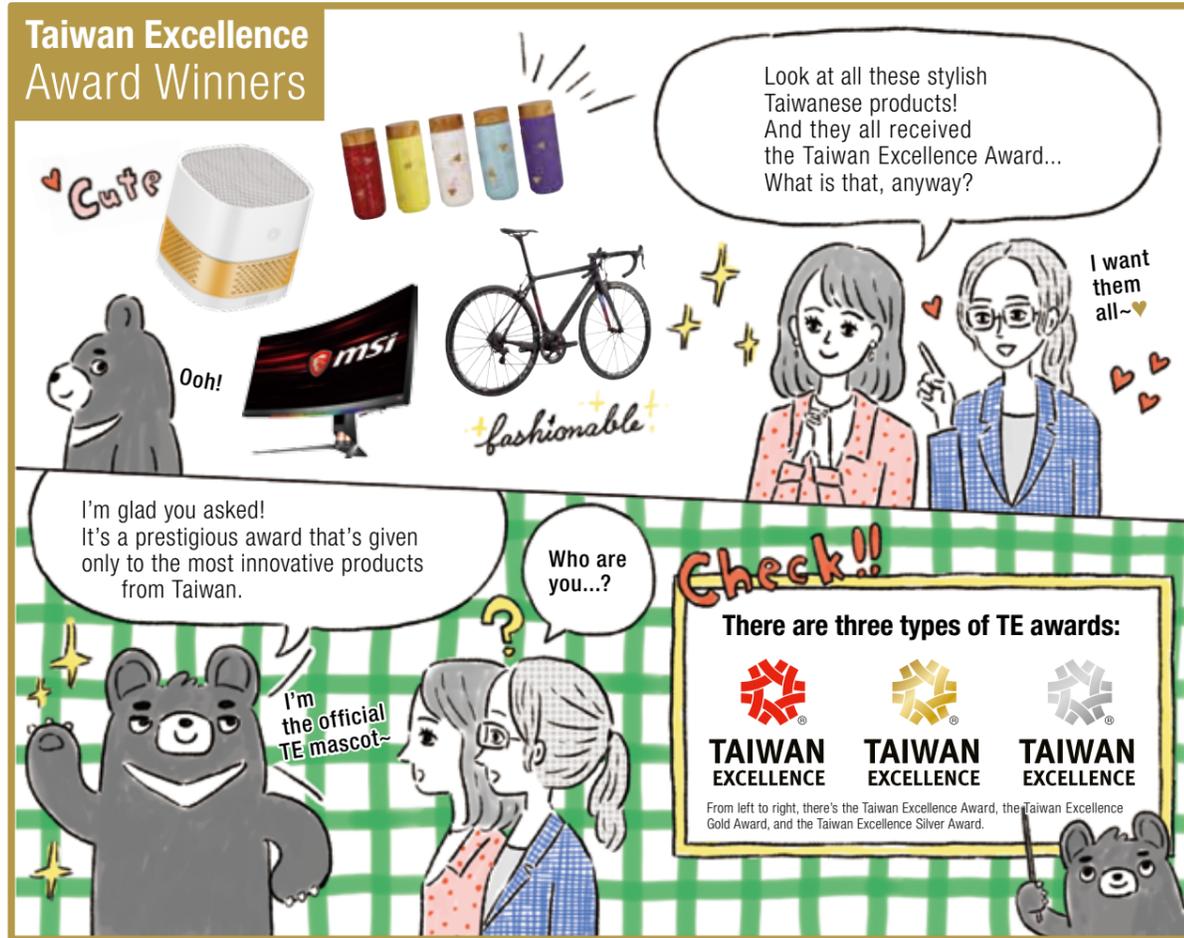
"Compared to Japan, a higher percentage of 20 and 30 year olds attend CPBL games. This same age demographic comprises the core customer base for our Taiwan Rakuten Card, which rewards customers with Rakuten Points that they can redeem for special offers and rewards. I think we can use this system to engage more effectively with both dedicated and casual baseball fans. In the future, we could even appeal to Japanese Rakuten customers so that they might come visit Taiwan and enjoy a baseball game in person."

For the first month or so of the season, games will be played without spectators. The Rakuten Monkeys have made news for high-tech cheering section, featuring drum-beating robots.

"The Rakuten Monkeys are the most dominant team in the league, having won the last three championships. It is important to increase fans to become a strong team. So while we intend to use a variety of strategies to expand our fan base, our first and foremost method will be to maintain our winning streak and aim for a fourth consecutive championship."

How successful will Rakuten's venture into Taiwanese sports ultimately be? Taiwan—and the world—will be watching.

# What's the Taiwan Excellence Award?



The Taiwan Excellence Award is bestowed upon only Taiwanese products of surpassing quality, as recognized by the Ministry of Economic Affairs. This prestigious prize has been awarded since 1993 with the goal of promoting Taiwanese products both at home and abroad. Needless to say, every one of the award-winning items is highly functional, distinctive, and revolutionary! Don't miss your chance to get hands on with them at events or at the Taiwan Excellence Pavilion! (p. 22)



*Tell me more!*

## All About the World-Famous Taiwan Excellence Award

Each year, Taiwan's Ministry of Economic Affairs conducts a strict judging process to select the winners of the Taiwan Excellence Award. The award originated in 1993 with the goal of promoting Taiwanese industry abroad. Only the finest products as selected by professionals receive the award, with the Gold and Silver awards reserved for those with the most innovative value. Award winners can use the Taiwan Excellence symbol with pride in marketing and promoting their product overseas.

The six arches of the Taiwan Excellence symbol represent the pursuit of harmony and cooperation in Taiwanese culture. It is also proof of products that have been recognized on

the national level. These days, it is recognized in over 100 countries around the world as a standard of excellence and quality.

Events promoting the Taiwan Excellence Award are held regularly around the world, from the United States to Japan, Indonesia, Vietnam, and beyond. Attendees can get hands-on with the products while receiving in-depth explanations from experts, allowing them to appreciate all the products have to offer. These aren't just passive exhibitions—they also include road races and eSports tournaments, all serving to promote the most innovative creations of Taiwanese industry across the globe.

## Operating Authorities



### Organized by the Bureau of Foreign Trade (BOFT), MOEA

The Bureau of Foreign Trade (BOFT) under the Ministry of Economic Affairs (MOEA), R.O.C. is responsible for implementing policies and regulations governing foreign trade and economic cooperation. Established in January 1969, the BOFT's role and position have been adjusted regularly to meet the needs of the ever-changing international economic and trade environments. The BOFT has been guiding and working with the Taiwan External Trade Development Council (TAITRA) in numerous promotional trade projects and activities both internationally and domestically. Having worked closely with TAITRA for many decades, the BOFT continues to commission TAITRA for various critical government projects relating to business, trade and investment, while promoting Taiwan internationally.



### Organized by the Taiwan External Trade Development Council (TAITRA)

Founded in 1970 to help promote foreign trade, the Taiwan External Trade Development Council (TAITRA) is the foremost non-profit, semi-governmental trade promotion organization in Taiwan. Jointly sponsored by the government, industry associations, and several commercial organizations, TAITRA assists Taiwanese businesses and manufacturers with reinforcing their international competitiveness and coping with the challenges they face in foreign markets. TAITRA boasts a well-coordinated trade promotion and information network of over 1,200 international marketing specialists stationed throughout its Taipei headquarters and 60 overseas offices worldwide. Together with its sister organizations, the Taiwan Trade Center (TTC) and the Taipei World Trade Center (TWTC), TAITRA has created a wealth of trade opportunities through effective promotion strategies.

# Feel the Future at the Taiwan Excellence Pavilion!

Cutting-edge products of surpassing quality are on full display at the Taiwan Excellence Pavilion. Here, you'll find fascinating items showcasing the best of Taiwanese technology and ingenuity. Examine, touch, and experience the latest technological marvels, and get a taste of the future!



Approximately fifty products are on display in this showroom.



The pavilion is located in a major exhibition complex—why not stop by while you're there for an event?

## Taiwanese Products—Forging the Future

The Taiwan Excellence Pavilion is located on the third floor of the Taipei Nangang Exhibition Center, a landmark exhibition complex. In the showroom—designed to resemble the cabin of a space shuttle—you'll encounter everything from personal computer-related products to e-bikes, medical care supplies, home electronics, software apps, and more. What's more, every item on display here has received the Taiwan Excellence Award for offering "Innovative Value" in the four aspects of Quality, R&D, Marketing, and Design. In other words, it's a full lineup of world-class Taiwanese technological wonders. Visit and experience Taiwan Excellence for yourself first-hand!

Each and every one of the cutting-edge products on display is sure to pique your curiosity.



### TAIWAN EXCELLENCE PAVILION

Address: 3rd Floor, Taipei Nangang Exhibition Center Hall 1, No. 1 Jingmao 2nd Road, Nangang District, Taipei City, Taiwan  
 Phone: +886-2-2785-0605  
 Hours: 10:00 a.m. to 6:00 p.m. / Open daily  
 (\*Hours may vary during events.)  
 Getting There: Adjacent to Exit 1 of the MRT Taipei Nangang Exhibition Center station.

## EXCITING PRODUCTS



1



2



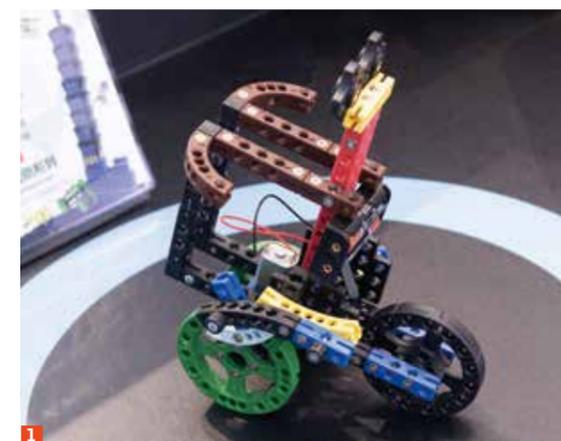
3

## Taiwan Excellence from 2020 on Full Display!

At any given time, around fifty of the nearly 500 products to claim the Taiwanese Excellence Award each year are presented here. The exhibit is renewed every two to three months, so you're sure to find something new each time you visit. Each product is accompanied by descriptions in English and Japanese, with friendly, knowledgeable exhibition on hand to answer your every question.

1 A robot that can freely explore underwater. Easy to control, it can dive an amazing 300m beneath sea level. 2 Taiwan's bicycle manufacturing industry is truly world-class. Needless to say, only the best of the best receive the coveted Taiwan Excellence Award. 3 The medical and healthcare field is also well represented, including these dental care products.

## EXPERIENCE



1



2



3

## See, Feel, and Experience Taiwanese Ingenuity

They might be a marvel to behold, but the exhibits here aren't just for looking. You'll want to take the products in hand and use them for yourself to truly understand their innovative value. Visitors are also encouraged to take photos and share their discoveries on social media!

1 This robotics kit allows you to build your own robot. Experiment as you like, and create a simple or complex machine of your very own. 2 A curved, ultra-high-resolution computer display monitor. 3 This cutting-edge running machine even allows you to train for downhill slopes.



ESPORTS → P.26

CYCLING → P.36

# PART 2 23 Brands Revolutionizing the World

# of Sports

Taiwan is a nation with a true love for sports. Alongside the eSports boom introduced in Part 1, revolutionary new products have been changing the world of traditional sports as well. In Part 2, we'll look at eSports from the hardware side, and also explore Taiwan's world-famous high-end bicycle industry, sports-related products designed

to be user-friendly and environment-conscious, and healthcare products to promote a fit and happy lifestyle. Across these four categories, you'll find 23 companies—all of which have received the Taiwanese Excellence Award. You're sure to get a sense for how Taiwan's cutting-edge technology is changing the game in the sports world.



SPORTS-RELATED ITEMS → P.46



HEALTHCARE → P.62



01

Acer attracts entrants to their tournaments by offering such extravagant prizes as a Predator Helios 700 to the winners. The UI displays players' ranks and stats, and recommends other players based on that data.

## Leading the Pack in the Global Gaming Market

### Acer Incorporated

In 2015, Acer launched the Predator brand, which has cemented its presence in the desktop, laptop, and gadget markets, and made early inroads into the burgeoning domain of esports.

In 2019, Acer released the Predator Helios 700, a high-end gaming laptop sporting cutting-edge specs and a unique keyboard that can be slid out to improve airflow and cooling to the CPU and GPU. Peter Chang, Director, Gaming, Product Marketing and Marketing Planning, Acer Inc., had this to say:

"Throughout our company's long history, we have gained a solid reputation for our ability to meet the demands of our many users in the gaming industry while also balancing performance with price."

"The gaming industry is massive, and the PC market makes up around one-third of the industry's total revenue. We expect the mobile market to grow and the console market to shrink



At the Predator showroom, open to the public, Peter Chang (above), James Hsu (bottom).



in the future. China and America currently hold about half of the market share, but the global eSports market is growing at a pace of 9% each year. Acer has expanded into over 30 countries and is among the top 3 in every country it has entered. Predator has reached maturity as a brand, gaining recognition from its target audience, and allowing us to reach many users who demand high performance. Our next goal is to establish the Planet9.GG platform, which will be one of the pillars of our strategy over the next years."

James Hsu, Director of Growth, Esport Service Platform, Acer Inc., told us a little about this new platform for the company's most beloved customers: gamers.



### Planet9.GG

Planet9.GG is a next-generation eSports platform that encompasses what competitive and casual gamers need to level up and participate in esports below the professional tier. Planet9.GG works with leading game publishers to provide gamers with intelligent eSports game stats and personalized advice to help gamers to team up and level up.

### Predator Helios 700

Users can choose from four different levels of performance. The Max setting allocates CPU and GPU power entirely to games.

"Gaming has become recognized around the world as a sport, and so we've launched a platform that improves the user experience by facilitating growth and social interaction among gamers. They can meet friends, form teams around the same skill level, and take part in tournaments hosted by anyone or any organization. They can work together to compete, and even take lessons from professional coaches. The platform already supports Chinese, English, Thai, and Vietnamese, and we plan to add support for French, German, Brazilian Portuguese and Japanese in Sep. 2020, bringing our number of available languages to eight."



President: Jason Chen  
Founded: 1976  
Industry: PC Brand, Technology  
Employees: More than 7,700



# These Gamer-First Monitors Go One Step Beyond With Beautiful Curved 34" Screens and Specialized Software

Micro-Star Int'l, Co., Ltd.

Taiwan's MSI are renowned for developing devices tailored specifically to gamers' needs. Throughout their history they've developed numerous gaming focused products including notebook PCs, graphics cards, and motherboards. Not surprisingly, many employees are avid gamers themselves.

In 2020, their MPG Series of monitors are on the cutting edge of gaming monitors. Just like their previous offerings they feature curved screens, but the new MPG341CQR model boasts a number of marked improvements.

First there's just the size of the screen. Previous models maxed out at 27 inches, but with this series 34-inch models are available. The reasons to expand are obvious. The 16:9 aspect ratio had long been standard for monitors, but in recent times 21:9 has been used for smartphones and the like. Seeing the coming trend, MSI decided bigger screens would be needed and now gamers can enjoy an even wider field of vision.

Next let's look at the monitors' smart functionality, like the onboard camera that allows for facial recognition. Say several members of a family are playing the same game. With facial recognition, the game can automatically load up the appropriate save based on who is playing. No other monitor on the market has this feature.



MSI Computing and Display Product Marketing Section Head Ikari Lin is a gamer himself and so has a firm grasp on what users are looking for.



Though made with gaming as a primary concern, it's also adaptable to a wide range of uses such as watching movies or office work.

## Optix MPG341CQR

The refresh rate of 144hz and response time of 1ms meet the current standards for high-end gaming, and the monitor also features facial recognition and proprietary software onboard. The Night Vision feature is a nice bonus, allowing for easy gaming in the dark.

Camera Cradle: These days a lot of people stream themselves gaming. So the monitor includes a camera cradle for that very purpose. And it's moveable, letting you reposition it right or left to find the perfect spot.



The screen has a curvature of 1800R, equal to the curvature of a 1.8 meter radius circle. This gentle curve really boosts immersion when gaming.

Mouse Bungee: When a gaming session starts to heat up, sometimes your mouse cord can get in the way. This will keep it in check. It's a real gamer-first accessory.

Finally we have the LED light at the bottom of the monitor. Previously this could only be linked to gameplay, but now it can be used to display other information such as the weather, based on region settings.

Now even in official eSports competitions, the most popular type of gaming monitor is still a flat screen. But MSI is committed to the curve. And it's a reasonable calculation to make.

"When we started selling curved monitors in 2017, they only represented a 30% share of the market. But as of last year that's risen to 60%. With flat panels, your eyes are a different distance from the edges of the screen compared to the center. With a curved screen you don't have that issue. We're confident that going forward more and more users will adopt curved screens."

When it came to development, compared to the units themselves, the proprietary setting software actually took more time to create. Most monitors still require the use of manual buttons on the back of the unit to adjust screen settings. But with this software users can

make adjustments using their keyboard and mouse, and without having to suspend their game. Screen settings can be tailored not just to game genres like FPS, racing, or RPG, but to specific games or workflows as well. About half of all purchasers make use of the software currently.

"We're currently developing a 38-inch curved screen monitor. But size isn't everything of course. We've learned a lot from the failings of LCD screens, and we're going to do our best to create a gaming environment with the best image quality possible."



Chairman: Hsu Hsiang  
 Founded: 1986  
 Industry: Gaming and creation PC design and manufacturing  
 Employees: 2000 (HQ, 2019)





# High Resolution, No Motion Sickness: The Development of VR Headsets and Their Medical Applications

## Innolux Corporation

A Taiwanese subsidiary of Terry Gou's Foxconn, Innolux is one of the world's three largest manufacturers of LCD panels. In 2019, Innolux was the recipient of several Taiwan Excellence Awards, including one for a touchscreen display. Now, through the application of proven technologies developed over the years, Innolux has employed innovative solutions to key problems and developed a new VR headset.

As Innolux's Dr. Chiu-Lien Yang explains, "There are two major flaws with current VR headsets. The first is poor resolution, and the second is motion sickness."

The biggest appeal of VR headsets is the promise of experiencing another world as if you are actually there. However, while it is currently possible to explore 2D worlds in increasingly higher resolutions such as 4K and 8K, until relatively recently 3D displays were limited to 640ppi—and such low resolutions invariably lead to disappointment. However, Innolux's VR headset more than doubles this fidelity with a resolution of 1411ppi, allowing for a far more immersive experience.

With major technological advancements such as automobiles and airplanes, motion sickness has been a reoccurring issue, and 3D is no different. Indeed, there is still a perception that this new technology has yet to be properly adapted to human physiology. Furthermore, the longer one uses VR, the more

likely they are to experience motion sickness.

"Current 3D technology works by generating separate images for your left and right eyes, thereby forcing your brain to perceive three-dimensional objects—this is underlying cause of motion sickness. By outputting at a higher resolution, our headset reduces the strain placed on the brain, and allows it to more effectively process these images. As a result, the user experiences less stress, and the motion sickness problem is resolved."

The development of Innolux's 3D technology began roughly eight years ago, and since that time they have engaged in extensive trial and error. Their foray into VR began in 2018, and while this is relatively recent, they have already made great strides, committing 15 million NTD to research and development. However, Innolux has even greater aspirations.

"To date, VR technology has been largely utilized for video games, but in Europe and especially America, there is a demand for medical applications."

As IoT and 5G technologies continue to advance, it is estimated that by 2023 the market for VR will increase to 14.8 billion NTD, and Innolux is eager to seize this opportunity—hoping to capture at least 20% of the market share. We look forward to seeing what the future holds.



Enjoy all sorts of stereoscopic images with Innolux's VR headset.



Chiu-Lien Yang (Left), Innolux General Director, Head of VR Market Development.

**INNOLUX**  
群創光電

Chairman: Jim Hung  
Established: 2003  
Industry: Manufacturing optoelectronics related products  
Employees: 56,000





The products are popular not only among pro gamers, but also enthusiasts who like to build and overclock their computers, as well as professionals who are building workstations.

# 04

## Combining Dizzying Speeds with Dazzling Lighting: An SSD Spec'ed for Pro Gamers

ADATA Technology Co., Ltd.



### SPECTRIX S40G RGB PCIe Gen3x4 M.2 2280

An SSD with jaw-dropping specs that made a splash in the gaming world upon release. The inclusion of RGB lighting sparked enthusiasm from high-end users.

ADATA's gaming brand XPG (Xtreme Performance Gear) has developed a new SSD (Solid State Drive) sure to meet even the high standards of professional gamers.

Although high-speed SSDs have long been a favorite among users who aim to eliminate stuttering and other visual defects when viewing taxing high-definition graphics, this new SSD boasts a read speed of 3,500 MB/s and a write speed of 3,000 MB/s, making it the fastest M.2 SSD on the market. It also incorporates customizable RGB lighting, a feature that is becoming almost mandatory in the gaming world. As proof of ADATA's thorough quality testing and as testament to the company's confidence in their product, the SSD comes with a five-year warranty—something almost unheard of in the industry.

This SSD distinguishes itself from the countless others with its fully customizable RGB lighting. James Tseng, Product Manager at ADATA, had this to say:

"The products in our XPG series with RGB lighting have been well-received, and now we've brought that same feature to an

SSD. These days RGB lighting is a minimum requirement for gaming-oriented products. By giving users control over everything from the color of the lighting to the speed of the effects, we allow them to express their own aesthetic taste. That's why it's necessary to build an ecosystem where all the different lights can be synchronized. We worked with various PC makers to ensure that the OSEs in their computers would support such functionality in our SSD."

Cheryl Chu, Director of XPG Brand Marketing, had this to say about the company's future:

"From the U.S. to countries across Europe and Asia, the XPG brand is making inroads worldwide. Our goal is to expand the breadth of our products beyond just storage devices and become a full-fledged gaming brand."

Lastly, Mr. Tseng had this to add:

"Japan is a gamer's heaven, but it's a country where the development of home consoles outpaced the rest of the world. As such, PC gaming and eSports are still in their infancy, but we have great expectations for future growth in the region."



1 Cheryl Chu, XPG Brand Marketing Director (Right), James Tseng, Product Manager (Left).

2 To provide the best user experience, the company offers a free downloadable game that lets customers take advantage of their products' full suite of features.

**XPG** | **ADATA**

Chairman: Simon Chen  
 Founded: 2001  
 Industry: Exporter, Manufacturer, OEMs of eSports-related products  
 Employees: 2,000 (HQ, 2019)





**ROG Phone II**

ROG Phone II is designed to provide ultimate user experiences, whether held vertically or horizontally. A detachable fan is included with each ROG Phone II to bolster cooling.

**ROG TwinView Dock II**

An expansion unit enables dual-screen experiences, so gamers can keep playing as they chat or perform other tasks on the second screen.

## A Gaming Smartphone That's Built to Win

### ASUSTek Computer Inc.

ASUS is a multinational technology company, and their name is synonymous with Taiwan. They have a gamer-focused subbrand known as Republic of Gamers (ROG) that's been pushing the envelope for 14 years. ROG offers a wide range of products, including motherboards and laptop PCs. In 2018 they released the first generation of their ROG Phone, a gaming-focused smartphone, and it instantly sparked great excitement among gamers around the world. They now offer a second-generation version of the ROG Phone.

The ROG Phone II is packed with enhancements, and it has already won a Taiwan Excellence award. Shawn Chang, global marketing and sales director, refers to it as a "game changer" — because it has specifications that are unlike anything seen before in a smartphone.

In designing the ROG Phone II, they pulled out all the stops and gave it a high-capacity battery and a specialized cooling system to ensure that it can perform at a high level, for longer.

Shawn Chang is global marketing and sales director for ASUS.



In addition, its display ensures minimal lag and offers the highest level of color accuracy available, and the charging port and mic placement are optimized for both vertical and horizontal modes. When it comes to gamers' needs, the ROG Phone II covers everything.

Although the gaming market is something of a niche, according to Chang, the worldwide market for gaming consoles and PCs totals 9 billion dollars (USD). Mobile gaming devices represent the biggest share of that market, at 45%. That means that the mobile gaming market represents huge potential.

Today, the ROG Phone II is the best-selling gaming smartphone on the market in Taiwan, which is the fourth largest gaming market in the world. Console games still lead the market in Japan, but smartphone options are ripe for growth. Chang notes that the mobile gaming market is definitely one that ASUS is very excited about, and he states with a confident enthusiasm that the ROG Phone II is the best option out there.



The impressive ROG lineup is exhibited in the new ASUS headquarters office building, which was completed in 2019.



Chairman: Jonney Shih  
 Founded: 1989  
 Industry: Electronics  
 Employees: 14,500



Users can connect ROG Phone II to a TV for big-screen gaming. Using accessories that are sold separately, keyboards, mice, and controllers can also be connected.

# The Ultimate Full-Carbon Road Bike Born from Years of Experience in Carbon Products ODM

Advanced International Multitech Co., Ltd.

# 06

After its founding in 1987, Advanced International Multitech spent many years as an original design manufacturer of bikes, golfing goods, and composite materials. 25 years ago, they began using carbon (carbon-fiber-reinforced polymer) as the base material for their golf clubs, which marked the start of their business dealings with Japan's TORAY. Then in 1990, with the support of Taiwan's Industrial Technology Research Institute, they began experimenting with the manufacture of a full-carbon bicycle. At the time, while it was common in the industry to use carbon for certain components, no bicycle existed with a full-carbon body including the rear and fork end parts. Advanced International were able to realize this thanks to their years of experience with carbon and ODM for bike components.

According to Brand Manager Jimmy Liu, who headed up development, TORAY's support was invaluable in helping them build a product from scratch. "They gave us a lot of advice and feedback when we were selecting the carbon material. As a company we got our start in ODM. With ODM, your clients tell you specifically what they want you to make and then you provide the QCD (quality, cost, and delivery). But now in creating our own brand, there was nothing decided ahead of time for us. It really made us appreciate how much thought and intentionality there was on the client side behind all of the ODM products we had made before."

The M8 introduced here is the most advanced model of the

DIZO series, aimed at competitive athletes and other high-level riders. Over 74% of the area of Taiwan is hilly or mountainous, so climbing is a particular area of focus. Thanks to being full-carbon, these bikes are light-weight and really maximize riding efficiency. They're also Union Cycliste Internationale certified and can be used in official races. They're garnering rave reviews from amateurs looking to get faster as well as professionals.

"In addition to Taiwan we're currently selling in mainland China, Hong Kong, and Japan. About 70% of sales are still in the Taiwanese market, but Taiwan has a good reputation for bicycle manufacturers so we're hoping to continue to expand out into the world. We're currently exhibiting in Europe and the Americas." According to Liu, they're hopeful about their prospects overseas.

## CARBON FIBER ROADBIKE

Full-carbon construction, including end parts. These road bikes are ideal for cycling and climbing, made using TORAY's TORAYCA® T1100G aerospace grade carbon fiber, known for its superlative durability.



The DIZO brand is poised to become king of the mountains. Check out the official site to learn more about their discoveries from research and development.



The red and blue coloring represents the M8's "Heartbeat" concept. The thin paint application keeps the frame as light as possible.

Under strict security testing, every product keeps equal quality.



President: Bernard Cheng  
Founded: 1987  
Industry: Manufacturing of sporting goods production and composite materials solutions  
Employees: 8,000





## Setting New Trends Worldwide with Quality Electric Mountain Bikes

Merida Industry Co., Ltd.

Founded in 1972, Merida has been in the business of making bicycles for over 45 years. This storied company ships around 1.5 million bikes to more than 80 countries yearly, and for its accomplishments has received over 30 Taiwan Excellence Gold and Silver Awards. Merida is, without a doubt, an industry leader not only in Taiwan but also worldwide—a dominance that is the result of an extended commitment to competing at an international level.

After operating as an OEM for over 15 years, in 1988 Merida started manufacturing and selling their own MERIDA-brand bicycles. Recognizing Europe as the center of cycling sport and the main market, Merida sought to build their reputation by breaking into the Norwegian, German, French, and Italian domestic markets, among others. However, consumer preferences were constantly changing, and new technological advancements were being made at a rapid pace. In order to be competitive, Merida quickly concluded that, besides of simply selling Taiwan-made bicycles in Europe, they would need to establish a presence alongside the trendsetters and innovators. To that end, in 2001 the company founded Merida R&D Center

in Stuttgart, Germany, and for nearly 20 years the bold creative minds there have conceived countless unique, striking designs.

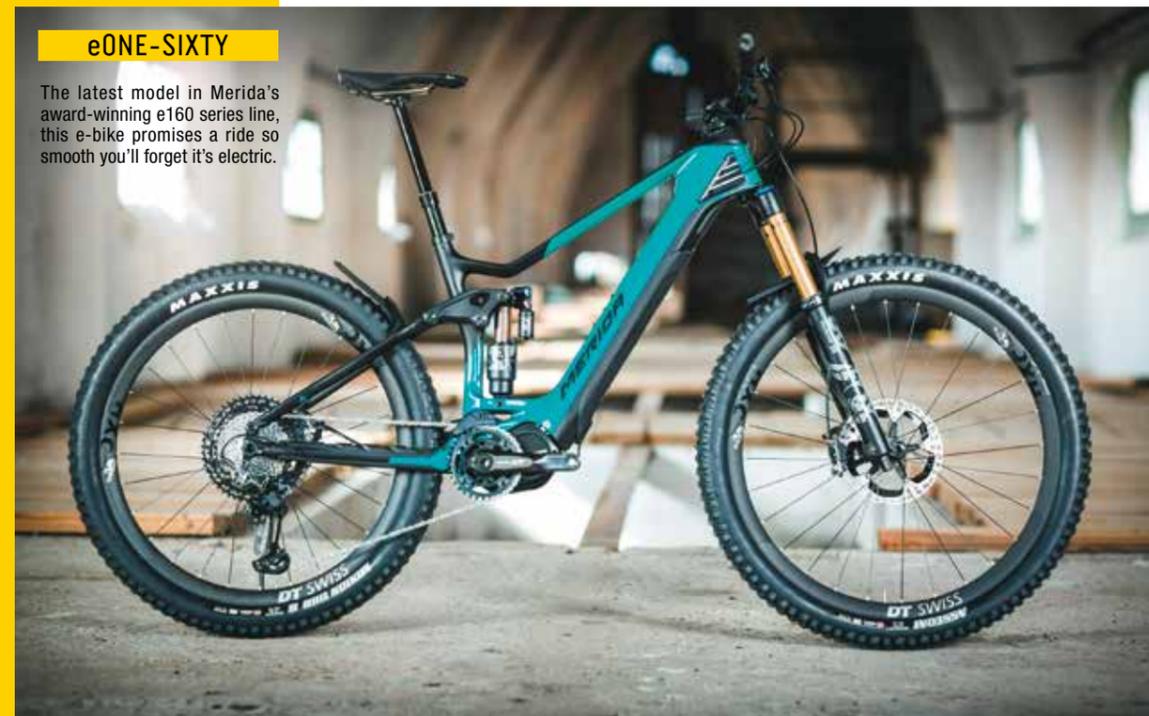
Merida also seeks to hone its craftsmanship through sponsorship of world-class professional cyclists and teams. They currently support Bahrain McLaren Team, a first tier World Tour road cycling squad, with one of the best high-end bikes utilizing the latest technology for competitions. In return, athletes provide valuable feedback to Merida for further refinements—many of which are later applied to general enthusiast models. This process has proven

Any hill can be easily conquered with a Merida electric mountain bike.



### eONE-SIXTY

The latest model in Merida's award-winning e160 series line, this e-bike promises a ride so smooth you'll forget it's electric.



The Thermo Gate is designed to maximize airflow and dissipate the heat generated by the motor—one of many details indicative of the incredible craftsmanship.



Merida R&D Center, located near Stuttgart, Germany, where talented engineers utilize the most advanced technologies and techniques to design revolutionary bikes.



extremely successful, as evidenced by the praise Merida has received from cycling champions and Olympic medalists.

eONE-SIXTY, a dual suspension electric-assisted mountain bike and the latest flag-ship product of Merida, is the Winner of this year's Taiwan Excellence Silver Award and TAIPEI CYCLE d&i Gold Award. It is a super fun e-bike with a clear focus on trail riding and also often used as a kind of 'SUV' bike. Yet while Merida's bikes are beloved in many countries, Merida isn't content to rest on its laurels. "We hope to expand our customer base in both China and Japan," Merida's Senior Vice President William Jeng told us. Given the company's impressive track record to date, there is no reason to doubt that they will more than meet their goals.

**MERIDA**   
美利達自行車

Chairman: Michael Tseng  
Established: 1972  
Industry: Bicycle and electric bicycle manufacturing  
Employees: 1,300





# Fusing Tradition with Technology: Smart Bicycles with a Sense of Style

## Darad Innovation Corporation

The story begins in 2014. At the Japanese Good Design Awards, the first generation of BESV e-bikes had earned high commendations from the judges, who praised BESV as the future of cycling. Produced by Darad Innovation Corp., BESV e-bikes would go on to receive the Good Design Award in 2015, 2017, 2018, and again in 2019. During the most recent awards ceremony, the bikes were lauded for their ability to meet the daily transportation demands of modern commuters and leisure cyclists, while also giving their riders a profound sense of freedom and space. With their pedigree as designers proven beyond any doubt, Darad has now brought us the PSF1, an e-bike that brings the sleek aesthetics of previous models in a foldable form. In fact, at a glance, the bike appears every bit as stylish as those that have come before. Jonathan Yin, Darad's vice president, had this to say:

"Ever since the PS series debuted, customers both in Taiwan and abroad have been asking for a foldable model."

The design of the PSF1 makes no compromises, and its folding pattern is the product of thorough trial-and-error. Mr. Yin showed us how it folds, completing the process in three quick steps which took less than 10 seconds. Many other foldable bikes fold in half from the middle, but for the PSF1, the left and right tires fold toward the middle. This has the effect of blending the folding points into the rest of the bike, a characteristic which sets the

PSF1 apart from its competition.

Mr. Yin gave some background into Darad's decision to jump into e-bike production.

"We had been considering producing electric motorcycles for a while. However, the problem of how customers would charge the motorcycles proved hard to solve. Even if we went ahead and started making them, the same problem would keep arising as we expanded globally, so it became difficult to form a viable business model. With e-bikes, however, people can charge them at home, or ride them even if their battery is dead. That a driver's license isn't required to ride one and that they're safer than motorcycles are bonuses."

In Taiwan, a growing concern over environmental issues has led to the proliferation of bicycle and motorcycle sharing, and electric motorcycles have become more commonplace. However, Darad is committed to becoming a global brand, and is making efforts to sell their bikes in Japan and Germany. Mr. Yin had this to say about the company's vision for the future:

"At our core we are an IT company, not a bicycle company. We will continue to improve the AI in our BESV models—the first smart bikes—and as we lower prices, we hope our e-bikes will become competitive with motorcycles as a form of transportation."

### PSF1 Folding e-Bike

The newest model in BESV's popular PS series. The bike can be folded into a compact size of 84 x 77 x 34 cm. Carrying case is optional. Compared to the average 30kg weight of other folding bikes, the PSF1 only weighs 18.3kg.



#### Mini display

Shows information such as speed, calories burned, gear display, and battery life. You can link it with both iOS and Android phones, where you can plan routes, view your travel history, get weather updates, obtain information on parking spots, and more.



#### Rear suspension

Absorbs shock from the back tire, making for a more comfortable ride.



#### Battery

The lithium ion battery can be charged while either attached or detached from the bike. A 4-and-a-half-hour charge will last for 90km of riding. The charger works whether it is attached to the bike or not.

# BESV

President: Andy Su  
Founded: 2008  
Industry: e-bikes and related accessories  
Employees: 200



## The World's Lightest and Easiest to Use Cyclocomputer

TBS Group Corporation

The AROFLY, developed and sold by TBS, is a cycling power meter with built-in GPS. In a revolutionary design, the sensor is mounted on the rear tire's valve cap, and only weighs 10g including batteries, making it the lightest in the world! Setup is easy and only takes about a minute, making it easy to use with any bicycle.

The sensor can track all sorts of data, from distance and elevation, to pedal cadence, estimated heart rate, and calories burned. And all of that information can be displayed in real time on a handlebar mounted bike computer. The sensor can even connect to bike computers made by other companies, making it accessible for a wide range of users. Collected data can be stored not just in the bike computer but also in TBS' free cloud service AROFLY CLOUD, or shared on the SNS Strava, popular among cyclists.

The cycling sports market has been expanding year on year and is expected to continue to grow. That said, many cycling power meters are too expensive for most consumers, and installation often has to be performed by a skilled worker, so the barrier to entry is considerable. The AROFLY series hopes to change that by offering reasonable pricing and easy installation. Head of the project, and a cyclist himself, Curties Wu says, "there are a lot of cyclists out there who want to try riding longer distances and get a greater sense of accomplishment from their training sessions. AROFLY should open up a whole new world of possibilities for them."

The calculations used to make sense of the data from the rear wheel are patented internationally, having been specially developed to take complicated road and riding conditions into consideration and create accurate results. Based on internal audit, the accuracy is comparable to competitor products in much higher price ranges.

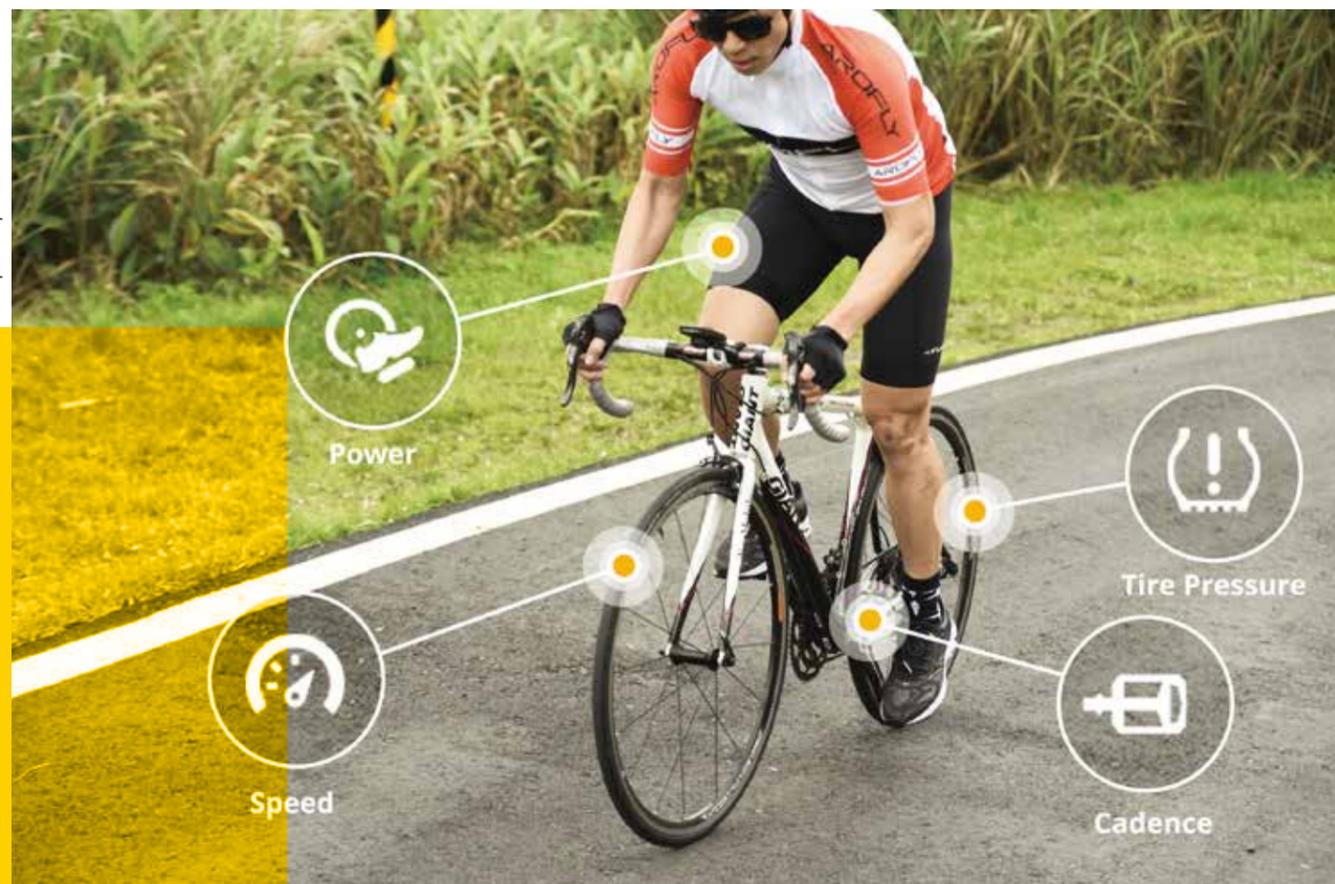


### LINK

AROFLY LINK expands the possibilities for AROFLY even further by allowing for connections to other brands of bike computer.



VP and project head Curties Wu. "We're eager to put this technology and know-how to use in digital devices for other sports as well."



Even with the app and cloud service, the series' most expensive offering, AROFLY X-ELITE, still comes in at under USD 400, an extremely competitive price point industry wide.



(Left) AROFLY's bike computer. Receives data from the sensor via Bluetooth.



(Right) The sensor can fit both Schrader and presta valve caps which are used on the vast majority of bike tires. With no precedent for valve cap mounted devices in existence, development truly started from zero.

# AROFLY®

President: George Wood  
 Founded: 1980  
 Industry: Manufacturing sports and leisure products  
 Employees: 26



Kenda's tires have long been popular with cross-country mountain bikers for being fast, grippy, and reliable.



## Revolutionizing the Mountain Bike Market with Innovative Treads and Fast, Lightweight Designs

**KENDA RUBBER INDUSTRIAL CO., LTD.**

It is no secret that Taiwan is a dominant force in the cycling industry. Indeed, Giant and Merida, two major Taiwanese bicycle makers, are beloved by enthusiasts the world over. However, with its seven factories in Taiwan, China, Vietnam, and Indonesia, there is another company that plays a key role in fueling this success: Kenda, Taiwan's leading tire manufacturer.

Since its founding in 1962, Kenda has remained focused on tire production, and today, not only can their products be found on cars, motorcycles, and bicycles, but on golf carts, trailers, adapted automobiles, industrial and agricultural equipment—or more simply put, on any and every vehicle that has tires. That being said, Kenda first focused its efforts on producing tires for bicycles.

Chih-Ming Chang, head of Product Development Division I. On days off he goes mountain biking, and often uses this as an opportunity to test company products.



The entrance of Kenda's factory.

We had the opportunity to visit the company's Yuanlin headquarters—a four-story building with both offices and manufacturing facilities, which we were permitted to tour. This particular factory has separate production lines for motorcycle and bicycle tires, and it is here that the XC Mountain Bike Tire Booster (K1227) is born.

Since its introduction in 2018, the Booster has accounted for sales of 50 million NTD, which, including OEM sales, amounts to a total of 410,000 units. Chih-Ming Chang, who leads Kenda's Product Development Division I—and who has been an avid mountain biker for over twenty years—told us the story of how this tire was created.

“From conception to completion, we spent about two years developing this world-class off-road tire. Back then, 26-inch tires were considered the standard, but for the Booster we decided to go with the increasingly popular 29-inch size. When released, it was lighter and faster than all comparable products, and it wouldn't have been possible to achieve this without utilizing a new rubber amalgam that took us a long time to perfect.”

However, it is not only the materials which set the Booster apart. This tire also features a new and improved tread design—the product of extensive analysis of optimal thickness, depth, and countless other factors.

Chang was kind enough to show us the company's testing facilities, where tires undergo rigorous trials to simulate real world conditions and to measure their resilience. Every new product must of course be subjected to this process.

However, Kenda is not satisfied with tests conducted in a controlled environment. Since Chang is a skilled mountain biker in his own right, he has taken the Booster for a spin, and was able to personally attest to their comfort. “They're like nothing else,” he said with a smile. “Such great traction that you can't help but get a little reckless.” Given the confidence of its creators and its success to date, we're eager to see how the Booster continues to sell.

### XC Mountain Bike Tire Booster (K1227)

The Booster is a World Cup-proven XC race tire that is aggressive enough to push traction to new limits. On top of that, it is also one of the fastest and lightest XC tires on the market.



Once prototypes have been developed, tires undergo a variety of trials to ensure they maintain uniform pressure during use, to gauge their performance over time, and to measure a variety of other factors.



Not all aspects of tire production can be effectively automated. After assembly, certain portions must be carefully removed by hand.

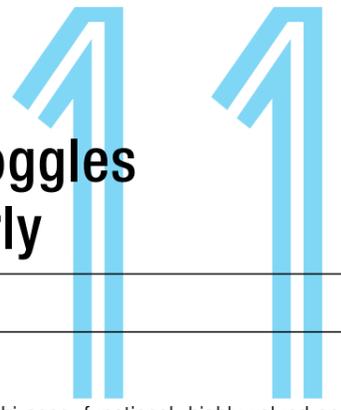
**KENDA**  
SINCE 1962 TIRES

Chairman: Jimmy Yang  
Established: 1962  
Industry: Tire manufacturing  
Employees: 10,000 (as of 2013)



# Meeting New Needs: Swimming Goggles Designed for Seniors and the Elderly

## First Rank Co., Ltd.



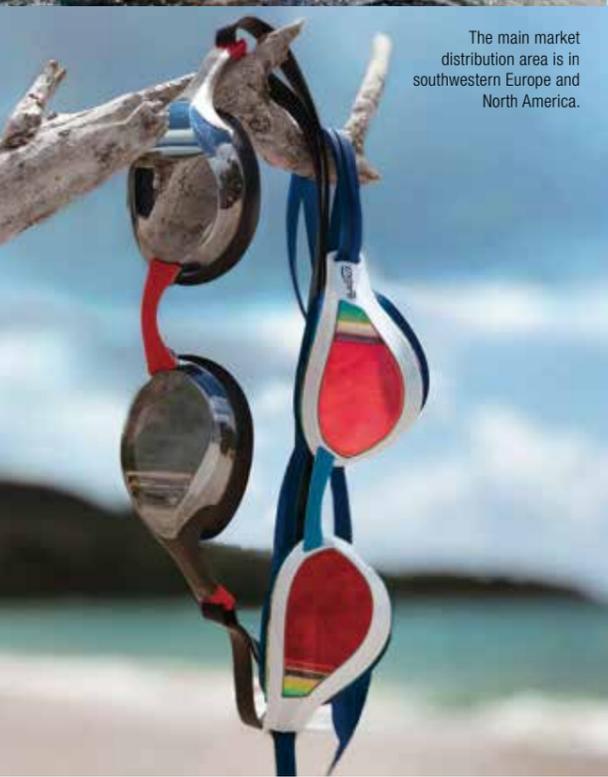
With people around the world living longer lives, many elderly people try to maintain proper sporting and exercise routines. One of the most popular exercises is swimming. Therefore, the need for swimming goggles designed for the elderly has become a niche product, and the demand is increasing along with the growth of the elderly population. Chen Cheng Yo, the founder of First Rank Co., Ltd., explains that he was aware of this demand and designed the Pacific Max Pro swimming goggles—made especially for the elder swimmer—following the success of the Taiwan Excellence Award-winning Pacific & Pacific Jr. goggles for adults and children.

“Since 1979, we’ve been focused on the design and production of swimming goggles. In the past, we have mainly produced the merchandise under our customers’ brands, but now we are developing our own brand: SAEKO. The market for swimming goggles is very competitive. We do not compete at price, but

rather we compete with hi-spec, functional, highly valued and high-quality swimming goggles, using our substantial experience in design and production techniques.”

The Pacific Max Pro, designed by First Rank Co., Ltd, features an extended lens to the frame, providing the swimmer with clear and wider vision. Moreover, the large ergonomic 3D gasket made from eco-friendly thermoplastic rubber provides comfortable fitting. The embedded anti-fog CP lens (originating from Italy) retains clarity and provides longer usage. The easily-adjustable buckled design allows the swimmer to adjust the strap length conveniently and without taking off the strap. Indeed, every design of the Pacific Max Pro is there to satisfy swimmer’s needs.

“The feature of swimming goggles most often mentioned is waterproof, so when we began to develop anti-fog swimming goggles, people are surprised and considered it a major breakthrough. We are constantly improving our products through competitive product analysis. We’ve faced many challenges in the past forty years in development. Therefore, with the substantial experience we’ve accumulated, we are confident that we will continue to design even more swimming goggles to satisfy our customers’ needs.”



The main market distribution area is in southwestern Europe and North America.



Senior designers use the SOLIDWORKS 3D CAD to make drafts and review all the details of models.



Mr. Chen Cheng Yo, the founder of First Rank Co., Ltd. and also a regular swimmer, will test and approve all products before they officially launch into the market.



The S53UV Blade, awarded the 2015 Taiwan Excellence award, featured leak-free fit and superior comfortable fitting. Ideal for training and durable for regular use and triathlons.



### Pacific Max Pro

These swimming goggles were specially designed for the elderly and seniors with wide vision, comfortable fitting and ease of use.



President: Chen Cheng Yo  
Founded: 1979  
Industry: Swimming goggles and accessories  
Employees: 62





**Luft Cube Air Purifier**

The Luft Cube weighs a mere 400 grams and fits in the palm of your hand. The all-black model is popular in Europe, whereas lighter colors are more popular in Asia.

**No More Filters, No More Allergens —the Ultimate Personal Air Purifier**  
**Rice Ear Ltd.**

Until recently, there were only two types of air purifiers: those which required disposable filters, and those which utilized air ionizers. Seeing this, the co-founders of Rice Ear Ltd. set out to invent a lightweight, compact, filterless air purifier by drawing upon their years of experience working in the LED industry. Through crowdfunding, the pair worked closely with over 10,000 backers to develop the Luft Cube, an air purifier unlike any the world has seen before.

The Luft Cube employs revolutionary photocatalysis nanotechnology to break down and destroy bacteria, pollen, and other allergens—without filters—and has the potential to alleviate chronic allergies for countless people in Taiwan and throughout the world. Moreover, since larger units cannot be relied upon to improve the air quality everywhere we go, the Luft Cube was designed as a portable personal air purifier that can be used while working, driving, sleeping, and various other scenarios.

As co-founder Titus Chang told us, the company improved the Luft Cube's design in response to extensive feedback. "Some of our backers wanted to feel as though it was pushing cleaner

air towards them, so we attached a directional air vent cap to the top to facilitate air flow. Others were concerned about fan noise while sleeping, so we switched to a different, quieter model." In this way, the makers were able to leverage their crowdfunding backers to refine their product.

"Our air purifiers are manufactured entirely in Taiwan," co-founder and R&D director Morgan Song explained. "Since Chang and I were both veterans of the LED industry, we were not only able to draw upon our experience to develop our prototypes, but we were also able to work with local manufacturers—there are quite a few prominent ones with impressive facilities—to produce small batches, which allowed us to improve and tweak our designs over time."

"When I was working as an engineer at a large LED company, I realized that we were only focused on cutting costs—we didn't really know how people were using our products," Chang added. "Now, though, we have customers praising our air purifiers and giving us great feedbacks online." Indeed, given the positive responses they've received, it's no surprise that they're feeling a tremendous sense of accomplishment.

The Luft Cube can be powered via a USB connection.

**Workplace use**



The compact, lightweight design allows the Luft Cube to travel with you.

**Outside use**



**Home use**

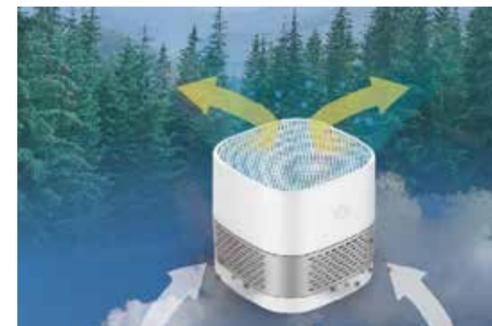


The ultra-quiet fan lets you sleep with the Luft Cube by your bed.

**Car use**



The Luft Cube fits snugly in your car's cup holders.



The Luft Cube utilizes patented photocatalysis nanotechnology to break down and destroy bacteria, pollen, and other allergens, significantly reducing the concentration of these particles in the air.



Rice Ear Ltd. founders Titus Chang (Right) and Morgan Song (Left).

**LUFTQI**

President: Titus Chang  
 Founded: 2018  
 Industry: Manufacturer of air purifiers  
 Employees: 5





xpore™



Xpore membrane is waterproof and offers high breathability. It can keep users dry and comfortable during extreme conditions.



Waterproof testing of shoes by immersing a shoe in the water and simulating walking behaviors.

## Electronic Innovation in the Textile Industry: Developing Ecofriendly Materials

### BenQ Materials Corp.

Ask anyone on the street in Taiwan, and they will attest to BenQ's reputation as an electronics manufacturer. The company's many products, including LED displays and projectors, have proven indispensable in today's technology-driven society. BenQ Materials was founded in 1998 as part of the BenQ group, and they leveraged their expertise gained in electronics manufacturing to move into medical and beauty products. In 2016 they decided to expand into textile production, with operations helmed by Rex Lee.

"Our company has had experience with plastic-based products such as films, focusing mainly on microporous membranes and lamination technology. When considering

how we might use that experience in another field, we turned our eyes to textiles."

After two years they developed a new textile called Xpore, and this year, products featuring the material will be produced by the Italian shoemaker Geox and the French outdoor clothing brand Picture Organic Clothing. Xpore's growth is only just beginning. Dr. Lee had the following to say:

"Xpore can adapt to customer demands. We've already developed a new material for outdoor activities. Both the membrane and the lamination process are our own technologies, and the factories belong to us as well. This means we can customize our product around the needs of the consumer—

something which I think provides a tremendous advantage."

The biggest hurdle BenQ Materials faces is in the outdoor apparel industry, where several competitive products already exist to meet the demand for waterproof, breathable fabric. They are prepared for this challenge, however, and ready to tackle it with a fresh perspective.

"Many consumers of outdoor goods are also environmentally conscious, and we've decided to set ourselves apart by focusing on minimizing our ecological footprint."

They eventually settled on making a PFCs-free and solvent-free textile technology. The Detox My Fashion campaign, created in 2011 by the international environmental organization Greenpeace, urges global clothing brands away from toxic chemicals and harmful emissions. The microporous membrane used in Xpore became the first and only textile to earn distinction from the group.

"Our company grew through the production of electronics and we had little knowledge of or experience in textiles. This was the BenQ group's first foray into the industry, so we really had a lot to learn. Simply put, we had to process textiles through electronically-inclined minds."

Certainly, it was their origin as an outsider that enabled them to uniquely innovate and provide outdoor enthusiasts with another enticing product. Expect Xpore to reach the shores of Japan in the near future.



Wind and storm simulation lab: This lab can generate strong winds and storms within a confined space to test the tolerance of finishing products.

Director Rex Lee, head of the Performance Textile Business Unit, has been with the department since the beginning.



13

The waterproof, breathable and eco-friendly textile Xpore

The name is a portmanteau of "explore" and "pore." This environment-friendly textile meets the demands of customers of outdoor goods.



Chairman: Z.C. Chen  
 Founded: 1998  
 Industry: Functional films, advanced battery materials, healthcare products  
 Employees: around 2,400



# High-tech Products & Efforts to Reduce CO2 by 18%—All Made in Taiwan

## ATUNAS (Sun Own Industrial Co., Ltd.)



Company President Chen Kun has been an avid hiker since a young age.

### Supercooling Shirts

Collared designs can be worn in the office, providing comfort both indoors and outside.



The people of Taiwan love the outdoors, and just as Japan has Montbell and America has The North Face, Taiwan has their own brand for nature enthusiasts: Atunas. With the recent launch of their new line of Supercooling Shirts, Atunas has delivered a product where everything from the fibers to the buttons is made entirely domestically. Chen Kun, president of the company, had this to say:

“While the world had already come to know MIT as meaning ‘Made in Taiwan,’ since about 20 years ago we moved the base of our production abroad to cut costs. However, we have the factories and the technology. We figured it was time to once again develop tech that Taiwan could be proud of and decided to make everything domestically.”

The fabric of the shirts is soft to the touch and makes use of independently developed technology such as heat-dissipating nanofibers, which expel sweat as soon as it is absorbed by the fabric, keeping the body cool for longer.

“Other companies are selling quick-drying shirts, but ours dry much quicker, and are made of material whose functionality will withstand countless washes. They are also lint-free, and boast a UPF rating of 50+, offering a high level of protection against UV rays.”

The quality of the fabric is guaranteed by the Taiwan Textile Research Institute (TTRI), a specialized research body which puts products through a stringent testing process while also



Supercooling Shirts are suitable for not only outdoor but also indoor activity. You can spend your time comfortably without using the air conditioner.

ensuring their wearability.

Although Atunas as a brand focuses on outdoor leisure, Chen Kun wants consumers to know their shirts are also perfect for the office. He calls it “eco-friendliness you can wear,” as the shirts contribute to the cooling of the planet’s atmosphere. The Northern Tropic passes through Taiwan, and the country’s northern regions have a subtropical climate, while the southern regions have a tropical climate. This results in extreme heat every year during the latter half of April, causing a marked rise in the temperature-humidity index. Many outdoor-focused brands pay special attention to environmental issues, and Atunas is no exception.

“Recently Taiwanese professionals have started to reject the suit and tie. By wearing our shirts and lowering their body temperature, they can ease off on the air conditioning. This is a very practical form of environmental conservation.”

The Green Forest waterproof apparel collection is another awarded product from Atunas. Here

we can see the company’s intention and effort to be more eco-friendly. The entire lifespan of a textile consists of producing the fabric, dyeing it, packaging it, delivering it to storage and then to the hands of a consumer, where it will be washed 500 times before being thrown away. This results in the emission of 14kg of CO2 into the atmosphere. Atunas reevaluated every step of their production process to decrease emissions, making changes both internally and in cooperation with their partners. As a result, they achieved an 18% reduction. Their next product is planned to be a yoga ball recycled from discarded factory materials—eco-friendliness customers can use. Environmental conservation will continue to be at the forefront of the company’s efforts.



By reducing effective temperature by 2°C and expelling sweat immediately, the shirts help one feel fresh even in the most uncomfortable heat and humidity.



Inside a shop in Taiwan. Here Atunas products are sold alongside those from other global brands, providing everything needed for an adventure outdoors.



President: Chen Kun  
 Founded: 1975  
 Industry: Production and sale of outdoor goods  
 Employees: 320



# Repurposing Agricultural Waste for Straws to Help Build a Sustainable Society

JU TIAN CLEANTECH CO., LTD

# 15

In 2019, the most popular and trendy drink in Japan was tapioca milk tea. Day after day people lined up at shops all across the country, but this booming business led to a boom in littering as well, as local residents increasingly found discarded straws and empty cups in the streets. Taiwan, where tapioca milk tea originated, continues to grapple with similar issues as well.

Fortunately, JU TIAN CLEANTECH has taken up the challenge of solving this problem. Founded in November of 2018 by Huang Chien-chung, they have already shipped 7 million sugarcane straws to Japan alone.

“Before starting the company, I was studying circular economy in graduate school—I wrote my master’s thesis on potential applications for banana fibers. I’ve always been interested in finding ways to recycle agricultural waste into biodegradable materials.”

Taiwan has an extremely high food self-sufficiency ratio of 83.1%.

Accordingly, it produces a considerable amount of agricultural waste.

“Our company’s mission is to reduce plastic pollution throughout the world. It’s been observed, for example, that the majority of these pollutants in the ocean are single use plastic products. Seeing this, we decided to try processing bagasse to create a biodegradable material to use in place of plastic to create disposable straws. Taiwan has an agricultural surplus of sugarcane and large-scale food and beverage industry had bagasse of it after squeezing it for producing juice.”

At our request, we had the opportunity to test one of these straws with a tapioca drink, and we found it to be no different than a plastic straw.

“Our straws can withstand temperatures from -20 to 50°C. While you can’t use them with hot drinks, they’re ideal for all kinds of cold

drinks you might find at a café. They can be composted afterwards, as is possible in some countries, but in others like Taiwan where this practice is not widespread, they can be thrown away like most trash.”

Amazingly, after only 180 days, more than 90% of the materials used to construct these straws will have broken down. The manufacturing process itself is also quite unique.

“We’ve developed relationships with large food factory producing sugarcane juice—we collect the leftover bagasse they would otherwise throw away and repurpose them to create our straws. Prior to this, they had to pay to have these materials disposed of, so they’re quite happy with our arrangement.”

However, there was still one major hurdle the company had to overcome.

“Our straws are manufactured in a plant where plastic straws are produced. Adapting this production line to our needs to create a new straw was incredibly difficult.”

Nevertheless, developing new products and sustainable methods to manufacture them is essential for a sustainable society—and this incredible innovation is a key step towards that dream.



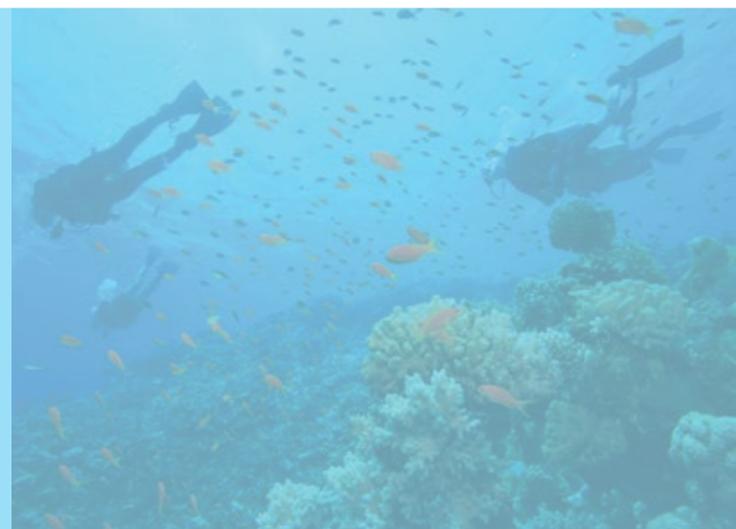
From the left: Straws manufactured with materials refined from coffee beans, tea leaves, bamboo, grapes, and rice hulls. Different materials can be used to produce slightly different colors—accordingly, straws can be customized to meet a client’s specifications. International well-known beverage chains have adopted sugarcane straws as part of their efforts to reduce plastic consumption.



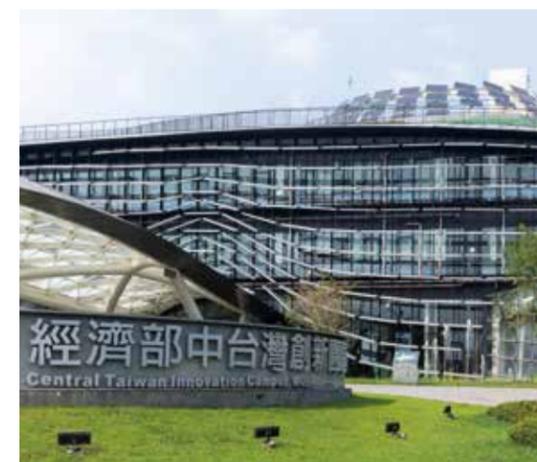
Straws are only one type of single-use disposable product. Efforts are also being made to innovate the manufacturing process of other varieties of tableware.

## Sugarcane Straws

Individually wrapped in paper, each straw has “Compostable—Eco-friendly” printed on them in Japanese.



JU TIAN CLEANTECH founder, Huang Chien-chung. He received a prominent award from Taiwan’s National Central Library for his master’s thesis, which was heavily referenced after publication.



The Central Taiwan Innovation Campus promotes academia and industry to set up R&D. They aim to promote a circular economy.

100% 100道

Chairman: Huang Chien-chung  
Established: 2018  
Industry: Eco-friendly straws, eco-friendly tableware R&D and manufacturing  
Employees: 10



# 16

## From the Construction Site to Your Home— Applying Industrial Suction Cup Technology to Produce Quality Household Goods and Toys

**FERRO-CARBON ENTERPRISE CO., LTD.**



### COLORFUL SUCTION CUP

These colorful waterproof suction cups can support up to 6 kilograms and will remain firmly attached for 2 to 3 months.

Founded in 1989, FERRO-CARBON ENTERPRISE produces a wide variety of goods that are sold in forty-one countries, including the United States, China, Russia, Korea, and Malaysia. In the beginning, the company was focused on developing and manufacturing suction cup tools used to move and place marble tiles and other building materials during construction. However, they eventually realized that their expertise could be utilized in other ways, and in 2009 the company entered the household goods market with their innovative shower head holders. Though most holders could only be installed permanently, their holders could be removed and repositioned with ease thanks to their suction cup design. Wildly popular at the time, these holders were even featured at major Japanese department stores and eventually more than 400,000 units were sold—but this breakthrough success was only the beginning of the company's expansion into household goods.

Since they were originally created for industrial use, FECA's suction cups were far stronger than the usual sort. Despite not

requiring nails, screws, or any other support that would damage a wall, their products could support up to 200 kilograms.

In 2009 the company launched the FECA brand, through which they began to sell an even wider variety of household goods designed for kitchen, living, and play areas, among others. From trash bag holders to smartphone stands, towel and spice racks—whatever the need, there is a FECA product to match. Even Terry Gou, billionaire founder of the multinational Foxconn, uses FECA goods at home.

Perhaps one of the more intriguing FECA products available is the SP1 BASKETBALL KIT. As executive director May Lin explains, the development of this product provided interesting challenges.

“Since we'd already refined our suction cup technology, we had no trouble with that aspect. However, the basketball hoop was a little bit tricky, since it needed to be flexible yet sturdy enough to hold up as a child's toy.”

In addition to ensuring that the product was safe, the

designers took into consideration convenience by including an air pump in addition to the ball and net. In this way, they provided a full package that would allow parents to set up the hoop in different environments and adjust the difficulty to match their child's age and skill.

It should come as no surprise that the company is already exploring ways to further expand into sport and leisure goods.

“We've already designed a suction cup rack that can be used to mount a full-size bicycle on any porous surface—it can support baby carriages and golf bags as well. We'd like to create even more applications for our technology, though, perhaps for outdoor goods and pet furniture like cat steps.”

FERRO-CARBON ENTERPRISE continues to develop new, innovate ways to make life easier and more comfortable. Yet is this only be the beginning of a new era of convenience courtesy of their suction cups? We look forward to finding out.

A Taiwan Excellence Award-winning Knife Sharpener —its powerful suction cups allow for hands-free use.



Executive director May Lin, whose daughter is currently studying abroad at a Japanese university.

### SP1 BASKETBALL KIT

Includes basketball hoop, ball, and air pump. The hoop can be attached to a surface quickly and easily.



Bicycle Holder—supports up to 20 kilograms, and can accommodate bicycles equipped with large off-road tires as well.



Chairman: Steve Chen  
Established: 1989  
Industry: Construction tools, suction cup household goods manufacturing  
Employees: 100





**Bee Travel Mug**

Heightens the flavor and freshness of any beverage, be it coffee, tea, fruit or vegetable juice, herbal drinks, milk, and even alcohol. Comes in five colors.

## Traditional Artisanship for Modern Living—Ceramic Insulated Travel Mugs

### ARTCERA CORPORATION

Established in 1986, the Taiwanese company ACERA initially focused on producing ceramic art primarily for aesthetic purposes. However, in 1998, they launched the Huo Ci LIVEN brand, through which they began to use their artistic prowess to develop contemporary products for modern living. The company studied and tested over 20 materials over three years to develop a ceramic mixture that not only does not include lead or cadmium, but also utilizes their patented far infrared and negative ion technologies—which have been recognized internationally—to change the molecular composition of beverages stored in the tumbler, thereby improving the taste.

Released in 2019, the Bee Travel Mug features an exquisite handcrafted honeycomb motif adorned with lifelike honeybees. This aesthetic is especially popular in Europe, where since antiquity bees have served as symbols of diligence and selflessness, and were incorporated in



Each piece must be perfectly crafted, as the slightest imperfection will lead to problems during the firing process. The motif is carved by hand.

heraldic devices and family crests. The imagery of bees returning to their hive on this mug is not unlike farmers returning home with an abundant harvest. Additionally, the designers of this piece wished to draw attention to the plight of honeybees, which are currently threatened by extinction and play a vital role in Earth's ecosystem.

"We are committed to using natural materials in our products, and we favor naturalistic designs to emphasize this fact," explained Cyndii Yu, ACERA's brand director. "Respect nature, cherish the Earth." This is ACERA's guiding philosophy. These ceramics, which are often regarded as fragile and easily broken, are invaluable expressions of our artisans' skills—they cannot be mass produced. With proper care, they will last for many years, thereby allowing us to rely less on the massive amount of disposable plastics we consume."

In their effort to further this goal, in 2019 ACERA unveiled the LIVEN Kings Vacuum Mug: a stainless steel model with a ceramic core. As this was the company's first attempt at combining these two materials, there were numerous technical hurdles they had to overcome. However, the improved durability was well worth it. Moreover, this design allowed ACERA to offer a new replacement service—should the ceramic core be damaged, a customer can bring their mug to an ACERA shop to have a new core installed. Furthermore, the silicone parts of the inner cover can be removed for cleaning.

"Though we launched our brand with a handful of people out of a single workshop in Yingge relatively recently, Chinese ceramics have a history measured in millennia," added Yu. "By continuing to craft beautiful, eco-friendly works, we hope to preserve this tradition for years to come."



**LIVEN Kings vacuum mug**

Comes in two sizes and seven colors. The stainless steel exterior shields the ceramic core, reducing the risk of damage and allowing you to take it anywhere without worry.



"I want to combine modern characteristics with a heritage of wisdom, and integrate Eastern and Western cultures to develop products" said Cyndii Yu, ACERA Brand Director.



From decorative to more practical, ACERA offers mugs in a wide variety of designs.

**乾唐軒**  
**ACERA**

President: Chunming Yu  
Founded: 1986  
Industry: Art ceramic related products  
Employees: 69



# Double Your Suitcase Space With This Stylish and Lightweight Vacuum Gadget

**BIG GOOD DESIGN CO., LTD.**

In 2016 crowdfunding was launched for VAGO, a compact and lightweight luggage compressor. It went on to earn USD\$1.5 million in just three months, and its popularity has earned it a place at major department stores in 26 countries, including the MoMA Design Store in New York.

This ingenious product is the brainchild of Taching Chao, founder and research developer of VAGO.

"In 2014 I was visiting Tokyo, and I wanted to buy a few warm down jackets for my family, since Taiwan was going through a severe cold spell. However, I didn't have enough room in my luggage, so I ended up going home empty-handed. 1.3 billion people fly across the world every year, and I imagined travelers of all types have had to deal with the same problem. So, I set out to develop a product that would let people get more out of their trips by letting them get more out of their luggage."

Through a long process of trial and error, Chao finally created the world's smallest automatic compressor, weighing just 77 grams and measuring 7 centimeters in length.

"The most difficult challenge was making the compressor powerful enough to create something close to a vacuum seal while also keeping it as small as possible. By using an aerodynamic design, we've managed to pack about 2.7 times more suction power than a household vacuum cleaner into this tiny device."

Since checked luggage cannot contain batteries, VAGO does not have one. Under the assumption that most travelers carry portable batteries, it was designed to be used while connected by a micro USB cable. Freeing up space is not all the compressor is good for—globetrotters can use it to pack dirty clothes and seal away dirt, odor, and bacteria. VAGO can also be used at home to store bedding and clothing that only sees periodic use, making it ideal for small living spaces.



VAGO can be used to save luggage space and share gifts with family and friends!



Available in four colors, with different colors being more popular in different regions. Special care was given to the compressor's sleek design.



Vacuum sealing takes about five minutes and reduces volume by almost half.



BEFORE



AFTER

# 18



Taching Chao, executive director. He is also involved in engineering design and sales strategy.

## Portable Vacuum Device and Vacuum Bag

The storage bags come in three sizes: S, M, and L. An M-sized bag comes with the compressor. An L-sized bag is recommended for bedding.



2020  
Partner of  
Chinese Taipei  
Olympic Committee

# VAGO

President: Shouyi Chao  
Founded: 2011  
Industry: Consumer electronic product design and manufacturing  
Employees: 8



# Generating Earth-Saving Green Energy from Exercise

Sports Art Industrial Co., Ltd.

# 19

The Verde G690 developed by SportsArt is the world's first non-motorized and electricity-generating treadmill for commercial use. Calories expended while exercising can quickly be converted to electrical power, making it both economically and ecologically sound. SportsArt sells their fitness equipment in over 80 countries worldwide, with strong footholds in both the US and Europe, and the Verde G690 has been well-received at universities, public facilities, hotels, and other institutions conscious of their energy costs.

"Currently most treadmills on the market use a motor to drive the running belt. With that sort of design there's a lot of friction to overcome, so energy costs are quite high. To overcome that issue, we focused on the components making up our drive-chain" said Vice General Manager, Michael Kuo.

Bearings under the belt allowed them to achieve low friction. Furthermore, by giving the treadmill a fixed incline they kept resistance down, allowing foot power to naturally drive the belt back.

But Verde G690 isn't just a "generator" for converting your exercise into electrical power. It's a legitimate training tool for jogging, running, and sprinting, so you can generate energy

while sacrificing nothing in terms of efficacy. On the touch panel you'll see in real time how many watts you are generating, and it can save that information as well. Some gyms even use that data to give users of the treadmill rebates.

Ten of the treadmills can generate up to 2000 watts per hour. That's enough to power a washing machine for 6 hours, or a television for 17 hours. The electricity produced is converted to AC voltage via a micro inverter. It's then returned to the grid allowing it to be used directly by the facility, contributing to a facility-wide reduction in energy costs.

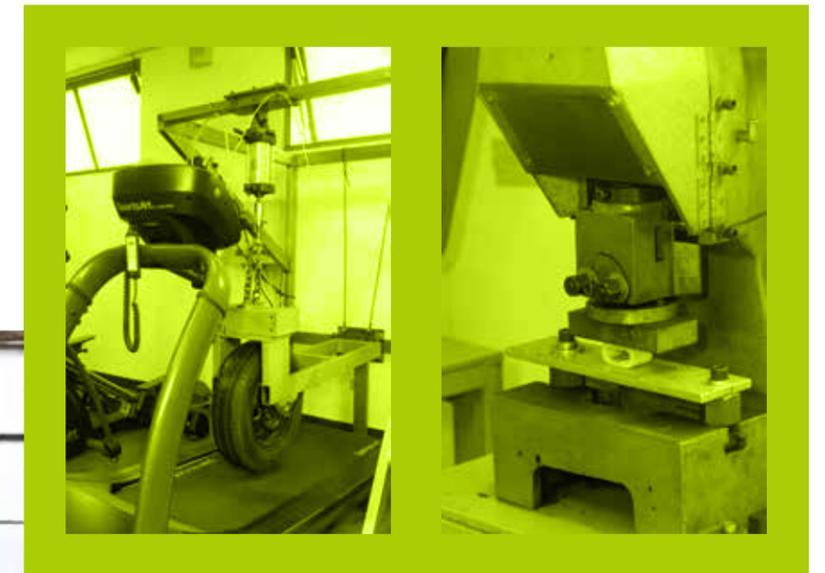
Users' exercise data can be stored and managed in a cloud database, and by downloading an app they can use that data for their own health tracking. SportsArt also develops rehabilitative equipment for nursing and medical care, allowing for connections to the medical field's IoT.

Mr. Kuo says, "we don't want to just propagate existing products throughout the world but develop new products with green energy in mind and make a real contribution to the earth by turning sweat into electrical power."



Research, development and design of major components is carried out in-house. As such they're able to respond to any issues quickly.

The treadmill returns energy directly to the grid for direct use rather than storing it in an internal battery. There's never been a treadmill like this, which also means legislation has some catching up to do. For each country of export, the law has proved something of a roadblock.



Their factory is a state-of-the-art facility featuring automated storage, painting, and welding. They also do their own safety and durability testing.



"We are focused on bringing to market innovative products and technologies that play a role in sustaining the health of the planet and the people" said Vice General Manager, Michael Kuo.

## Verde Treadmill

An electricity-generating treadmill that's also a top-flight training tool. The Verde G690, winner of the 2019 Taiwan Excellence Award, is the 2nd generation model.



**SportsArt**  
THE GREEN FITNESS COMPANY

President: Paul Kuo  
Founded: 1984  
Industry: Manufacture, design and sales of fitness and rehabilitation products  
Employees: 300 (Taiwan)





Johnson Health Tech sells fitness equipment through their subsidiaries in nearly 30 countries. Their products are used in a variety of locations, such as gyms, high-class resorts, and university facilities.

## Health for One and All! An Intuitive Exercise Bike that Tracks Progress with LEDs

Johnson Health Tech. Co., Ltd.

The Matrix CXP Target Training Cycle lets users gauge their progress toward their fitness goals in real time, without having to let up on the pedals. The secret lies in the three-color LED light bordering the touch panel. If the rider is failing to meet their personal targets for watts generated, RPMs, heart rate, calories burned, or distance, the light will shine blue. If their goals are being met the light will shine green, and if they are being exceeded it will shine red. By aiming to keep the light green, cyclists can ensure that their training is on track.

Machines live and die by their accuracy, and the CXP is world-class in that regard. The torque sensor installed in the rear of the body keeps track of rotations and the force exerted while pedaling, and its measurements have an incredibly small 2% margin of error. The bike is not only for athletes training for a race, however – its data can also be used to make sustainable diet plans and for general health monitoring. Those who want to train at home will find a solid workout partner in the CXP as well.

Design and production were handled by Johnson Health Tech, which began as a small family-owned factory in the city of

Taichung, and over the course of almost 30 years has grown into a global company with over 30 subsidiaries. The company takes special care when considering their products' safety, durability, design, and usability, and every single part is tracked and managed with individual barcodes. In Europe and the United States, their brands such as Matrix and Horizon have garnered high praise in gyms and across the fitness industry. The CXP comes equipped with a precision torque sensor, adjustable magnet resistance with 25 levels, a flywheel cover that blocks sweat and dirt, and a seat and handlebars that can be adjusted in four directions. It would be no exaggeration to say that this bike is the culmination of Taiwan's commitment to craftsmanship and to making products that revolutionize the lives of consumers.

Tong Guo, Head of Digital Marketing, said this:

"Indoor bicycles are quieter and shake less than treadmills, so they can easily be used in the home, not just in gyms with bike studios. We want customers to be satisfied with their purchase, so we take pride in having speedy customer service with affordable prices."



### Matrix CXP Target Training Cycle

A professional-grade training bike that can be used at the gym or at home. Set your training goals and its numerous features will help you achieve them.

### Multipurpose Touchscreen

Sporting vibrant graphics and intuitive controls, the animated touchscreen displays your distance, calories burned, watts generated, RPMs, and heart rate. The LED on the borders shows how well you are achieving your goals by flashing three colors: blue, green, or red.



### 25 Levels of Resistance

Users can change the resistance level on the fly by adjusting the lever on the handlebar. There are 25 levels of resistance, offering a high level of control.

### Feel Comfortable in the Saddle

The bike seat is made by Velo, a company specializing in seats for road bikes, and provides comfort during long training sessions.



### No Dirt, No Distress

The flywheel is attached with a cover, not only providing safety but also preventing damage caused by stray sweat and dirt.



At the SPORTEC WEST 2019 event in Osaka and other trade shows, attendees can experience riding the bike for themselves.



President: Peter Lo  
 Founded: 1975  
 Industry: Manufacture and sales of fitness products for gyms  
 Employees: 64 (Japanese subsidiary)



# Advanced Medical Technology for Everyday Living and Personal Health Management

Leadtek Research Inc.

# 21



Leadtek Chairman and CEO K.S. Lu. "In ten years I see at least a hundred million people utilizing these kinds of personalized medical services to improve their quality of life. We ourselves certainly intend to."

Comprehensive health profiles containing all manner of data are essential for developing treatment plans not only for ailing patients, but for those who could benefit from preventative medical services as well. Many smartwatches today include some features to promote healthier living, but the advice they can offer falls far short of a medical professional's. The amor H2 Health Band, on the other hand, interfaces with the amor Physical and Mental Health Management Platform to provide personalized guidance through AI driven data analytics. This technology is already taking Taiwan by storm and is poised to spread worldwide.

Weighing a mere 30 grams, this water and dustproof watch will collect and monitor all necessary data when worn. This data will then be uploaded to the cloud platform in real time, where it will be processed by an AI, which will in turn deliver customized advice. By integrating IoT and AI technologies, Leadtek can act as a one-stop provider of this service.



## amor Physical and Mental Health Management Platform

An amor kiosk can be placed in an office or healthcare facility for public use. Chairman Lu and other Leadtek staff use them regularly.



## amor H2 Health Band

The simple design makes this watch easy for anyone to use. Manufactured in Taiwan, it utilizes thermoplastic elastomers in its construction.

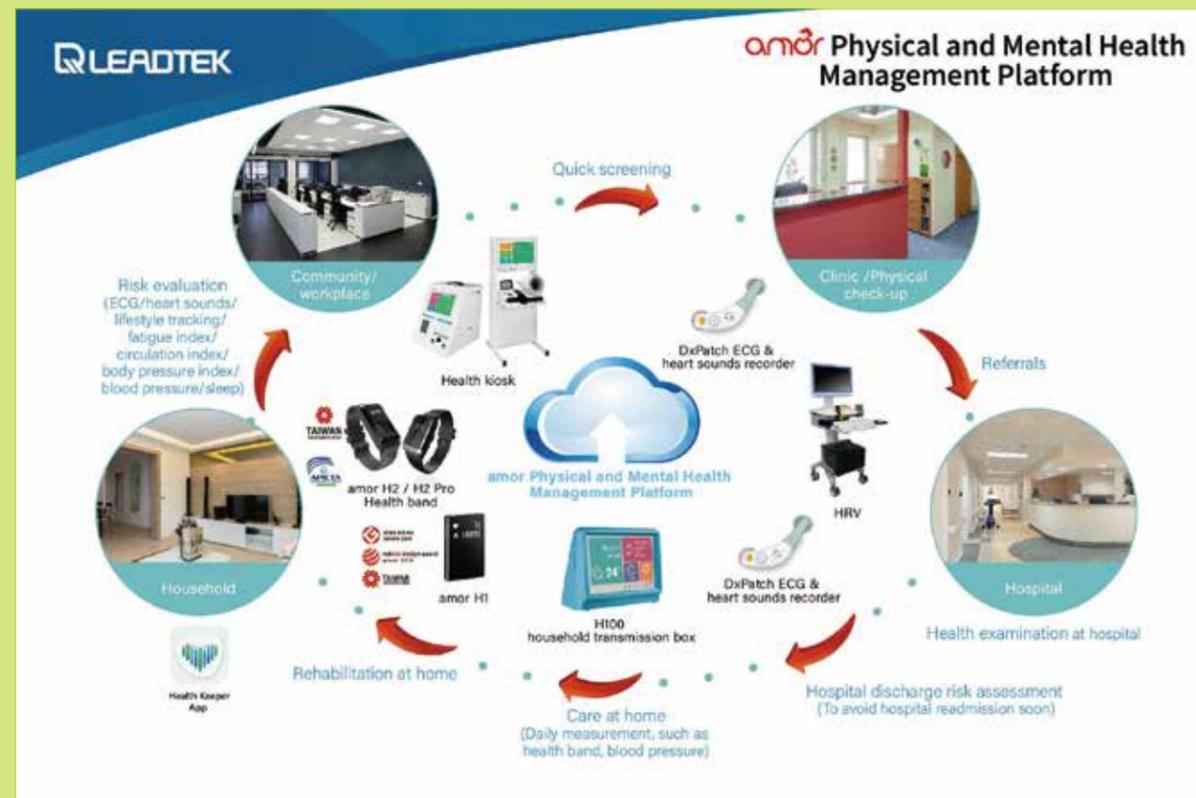
"We started developing this platform back in 1999, since even then the tremendous potential of preventative medicine services was clear," explained Leadtek Chairman and CEO K.S. Lu, who with his engineering background founded the company in 1986.

Mr. Lu was also kind enough to give us a demonstration showing how the amor products work. In only a few seconds, both their smartwatch and their amor Health KIOSK were able to determine our BMI and sleep quality, take an ECG, measure blood pressure, and administer a number of other tests to collect an impressive amount of invaluable medical data. After processing this data, their AI was able to provide advice—stretching to raise a lowered heart rate, taking a walk in a park to increasing blood oxygen levels, and other simple suggestions to help manage our health.

It should be stressed, however, that these advanced personalized medical solutions are not only being embraced by Taiwan's hospitals. This technology is also making inroads into industrial and military sectors. Indeed, the applications are endless.



The watch monitors the wearer's heart rate and uploads this data in real time to the cloud platform. This information can prove useful should they need to consult with a medical professional.



Once uploaded to the cloud platform, the health data can be used for a variety of applications at home or in a medical facility.



Chairman and CEO: K. S. Lu  
 Founded: 1986  
 Industry: Computer and electronic product manufacturing industry, smart medical and AI solutions provider  
 Employees: 290



# 22

## Empowering the Elderly with Remote Health Care Technology Netown Corporation

"I was raised in a community that looked after its elders, but these days they are much less likely to receive that kind of support. I wanted to create something to fill the gap," stated Yen-Shan Lin, founder of Netown Corporation. His solution: the Babybot, a cloud-based wellness monitor designed to provide users with health management guidance remotely.

When measuring both balance and muscle mass, for example, the Babybot will compare this data against international standards and evaluate the user's capabilities. Using AI technology, it will then formulate a custom exercise plan. The Babybot will also track their progress and adjust the plan accordingly, so that by following its instructions, users can increase their muscle mass and improve their mobility.

"Grip strength, lower body musculature, hand-eye coordination—improving all these qualities and more is key to maintaining good health, so regular exercise is essential," continued Yen-Shan Lin. To make this even easier, the Babybot has been designed so that it can interface with other companies' exercise equipment, allowing domestic and overseas consumers to make use of many quality products developed by leading Taiwanese makers.

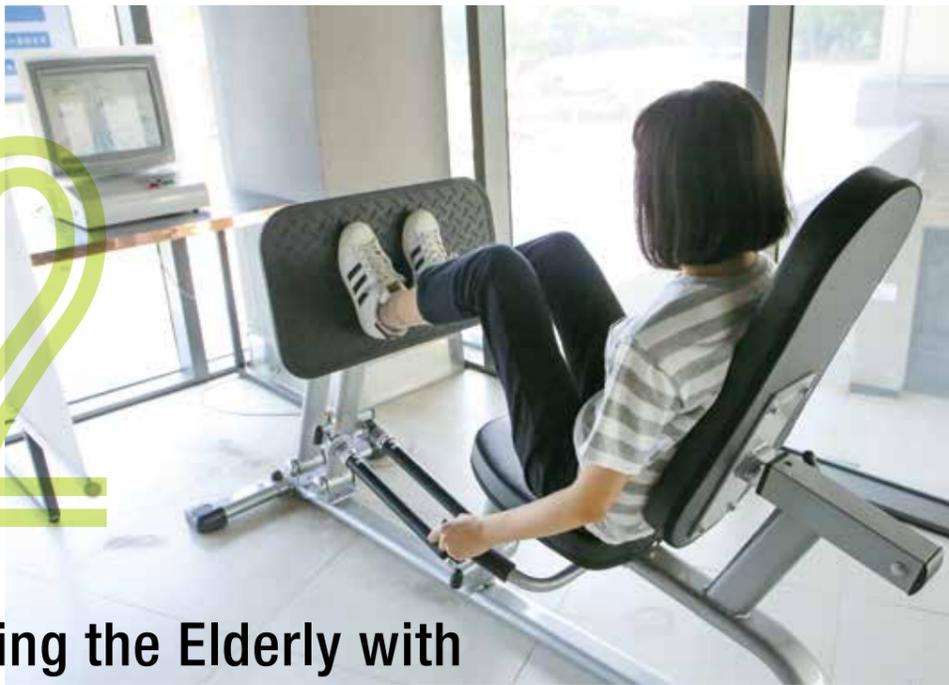
The user interface was another aspect of the Babybot which the designers spent a great deal of time and effort fine-tuning. They understood that an elderly individual would be far more likely to follow their exercise plan if they could operate the Babybot without difficulty, and without having to rely on others for help. After using any one of a variety of standard-issue ID cards to login, the Babybot will automatically begin its

assessment. The AI-generated guidance can be easily reviewed via the touchscreen—the entire process eliminates any necessity for human assistance.

Babybot units can already be found throughout Taiwan in major hospitals, regional health centers, and elder care facilities, among other places. Businesses and organizations throughout the world—including North America and Japan—have also made inquiries into this technology. In Taiwan specifically, however, Netown has developed a unique approach, in which they install Babybot units in sales facilities for public use, and offer high-protein meals on site as well. People are encouraged to treat these spaces as homes away from home, where they can gather and mingle with others while improving their health—an innovative approach to addressing modern problems of isolation and malnutrition among the elderly.



Netown founder Yen-Shan Lin. "Our products provide a form of preventative medical care, and have also proven effective in patient rehabilitation and shortening hospital stays."



### Health Evaluation and Exercise

Health data is compared against international standards to formulate an assessment. Users have praised the simple and easy-to-use interface.



Exercise data is recorded automatically. Users can understand their workout achievement easily with milestone figures, and there is also a ranking of users to encourage everyone to keep improving.



Inside the Taipei Health Experience Pavilion, the demonstration room displayed various Babybot models for different applications, including for professionals, for public, for mobile, and for home.



Netown has patented over 15 innovative technologies, and has received awards from more than 20 government agencies including Taiwan Excellence 2019 and Taiwan Excellence 2020.



The Taipei Health Experience Pavilion, located in the Taipei Expo Park. After a workout, people can take in the beautiful scenery to relax and refresh themselves in both body and mind.



President: Yen-Shan Lin  
 Founded: 2003  
 Industry: Manufacturing of medical, healthcare, and rehabilitation products  
 Employees: 45





The textiles comfortably fit and stimulate the larger surface area, such as the hands, feet, arms, and so on.

## Rehabilitation Therapy for Everyone: Wearable E-Massage Textiles

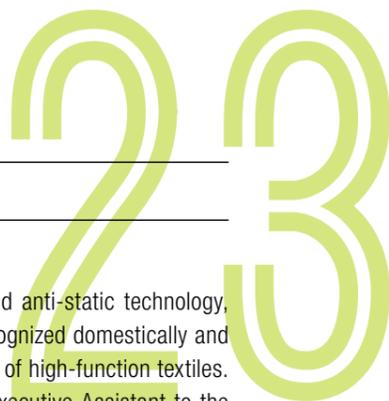
Asiatic Fiber Corporation



"I want to combine and extend the textile into wearable technology and the medical field someday," says Evan Chen, Asiatic Fiber Corporation Executive Assistant to the President.

A pioneer in the field of cleanroom and anti-static technology, Taiwan's Asiatic Fiber Corporation is recognized domestically and internationally as a leading manufacturer of high-function textiles. We had the opportunity to speak with Executive Assistant to the President Evan Chen about one of the newest products in the company's iQmax® line of smart textiles: Wearable E-Massage Textiles.

"Our company manufactures high-function textiles with anti-dust, antistatic, and antibacterial properties, with applications ranging from industrial to safety and medical, and through B2B sales we've developed relationships with clients in Taiwan and overseas—including the U.S. and Japan. It was one of our American clients who asked if we could adapt our technology for electrotherapy treatment, as the traditional approach involves cumbersome devices and pads designed specifically for this purpose—usually at a hospital or clinic—which necessitates travel for patients and regular sterilization of the equipment. To address these concerns, we utilized silver fiber and electronics to develop



You can enjoy personal electrotherapy anytime and anywhere—no need to visit a clinic or share equipment with others.



The first universally compatible module that can be controlled with mobile phones, tablets, and also traditional electrotherapy devices.

### Wearable E-Massage Textiles

The control app can be loaded onto a smartphone or tablet. You can choose from one of eight massage types and use the timer to set a duration.

a new smart textile."

"Silver fiber possesses high conductivity and low resistance, which allows it to carry a current without inducing a powerful shock. With it, we were able to develop a textile ideal for electrotherapy. Moreover, since our American client intended to use this smart textile in products which would require FDA approval, it was essential that the materials pose no health risk. Silver was our choice not only because it is a nontoxic metal, but because it also has antibacterial properties."

Asiatic Fiber Corporation then proceeded to develop their own Wearable E-Massage Textiles, as well as a custom app to control them. From gloves to elbow pads and socks—their comfortable, breathable modules can be adapted to any number of garments. The app requires no additional proprietary hardware, as you need only download and install it on your personal smartphone or tablet.

Of course, the company has continued to improve upon this design. "Recently we've developed new models which can be controlled via a wireless Bluetooth connection, making it even easier for people to go about their lives while using electrotherapy," stated Chen. "We believe our more health-conscious customers around the globe will find these models very appealing," he added. Indeed, Asiatic Fiber seems quite confident that their smart textile technology will continue to be embraced worldwide.

Asiatic Fiber Corporation – Leading the World in Textiles



President: Simon Chen  
Founded: 1973  
Industry: Functional and technical textile industry  
Employees: 80



# A New Lifestyle: Taiwanese Products in the Age of COVID-19

## 7:30am Check the latest information via app

The first thing to do after waking up is to check virus information via LINE app. Infection case status and preventative measures are summarized in one app for convenient perusal.



### Disease Control Butler

DeepQ Technology Corporation

The Disease Control Butler, a chatbot available on the official LINE account (@taiwancdc) of the Taiwan Centers for Disease Control (Taiwan CDC), has been upgraded with consultation functions including such as an introduction to coronavirus disease 2019 (COVID-19) prevention methods, precautions for returning home, reports on the international epidemic situation, and so forth, to provide people users with accurate epidemic prevention information with using MNLPL (Medical Natural Language Processing) technology.

## 1:00pm Online meeting with an important client

Large meetings in the COVID-19 age are held not in meeting rooms but via the internet. With a 12x optical zoom and a PTZ camera, sharing key documents is a breeze. The first-rate video and audio quality means you'll feel as close to your clients as if you were face-to-face.



### VC520 Pro USB Conference System

AVer Information Inc.

A web camera designed especially for large meeting rooms, it features a high-spec speakerphone, an automatic function triggered by facial recognition, and other features that will ensure that your web meetings run more smoothly than ever.

With increased production of goods like face masks and antiseptic solution, along with virus-prevention measures taking advantage of the latest science and technology, Taiwan was one of the first nations to succeed in halting the spread of COVID-19. Going forward, the public and private sectors will continue to work together in exploring a new lifestyle for the post-COVID era. Innovative Taiwanese products are sure to prove key to forging a new future.

## 7:00pm Eating out at a food court, a robot waiter delivers your dinner

Service at restaurants provided by robots! No, this isn't a scene from a sci-fi movie—it's a reality here in Taiwan. The latest AI technology makes it easy to keep a safe social distance from others.



### Intelligent Meal Delivery Service Robot

Taiwan Excellence 2020

TECO Electric & Machinery Co., Ltd.

A service robot designed using the manufacturer's original intelligent mobile platform. With customizable movement and rotation speed, it offers high performance and surpassing safety.



## Taiwanese Products Take Center Stage In Medical Institutions

Making full use of experience and know-how accumulated from the 2003 SARS pandemic, Taiwanese companies are facing the COVID-19 head-on with an array of Taiwan Excellence Award-winning products intended for use on the front line at medical institutions.

### Pro-care Turn Lateral Turning Mattress

Taiwan Excellence 2020

Apex Medical Corp.

This ergonomic air mattress featuring automatic postural change and decompression helps to prevent patient bedsores and reduce the amount of manual labor required of hospital staff.



### Hyper Light Disinfection Robot

Taiwan Excellence 2017

Mediland Enterprise Corporation

This medical device destroys bacteria with UV rays. In testing, it was demonstrated to have a nearly 100% success rate, making it ideal for reducing cross-infections at hospitals.



### Intelligent UVC Service Robot

TECO Electric & Machinery Co., Ltd.

A disinfecting robot featuring spray-type antiseptic and UVC disinfection using LED ultraviolet light, allowing for safe virus prevention measures without human involvement.



## 9:00am Put on a mask and head to work

These days, it's common sense to wear a mask whenever you leave the home. Taiwan has launched a "mask management app", making it easy to identify stores which have masks currently in stock.



### Diamond Shape Face Mask

Taiwan Excellence 2018

Motex Healthcare Corp.

These high-adhesiveness masks effectively block PM 2.5 (particulate matter of 2.5 micrometers or less). Comfortable to wear for long periods of time, they are both higher-quality and less than half as expensive as traditional N95 masks.



## 6:00pm Shopping on the way home, with your temperature measured at the entrance

Shopping malls and restaurants throughout Taiwan have implemented non-contact thermometers and thermography units, making it possible to easily identify individuals with a fever. Wouldn't it be great to have a convenient thermometer like this at home?



### NC200 Non contact thermometer

Taiwan Excellence 2020

Microlife Corporation

This non-contact thermometer incorporates infrared sensor to measure body temperature. Simply bring it within 5cm of your forehead, and it will provide an automatic measurement within 1 second.

## 9:00pm At home, get some exercise and enjoy a movie

Who says you need to go out to have fun? Spending more time at home is more enjoyable than ever when your living room can transform into a fitness center or movie theater as you please!

### Cycle Boxer

Taiwan Excellence 2020

STRENGTH MASTER FITNESS TECH CO., LTD.

A training machine that combines the exhilarating sports of boxing and cycling. With beginner, intermediate, and advanced difficulty modes, you can adjust your training program to match your current level of fitness.



### Smart 4K UHD HDR Laser Cinema Projector

Taiwan Excellence 2020

Optoma Corporation

This high-spec projector can be configured and controlled via your smartphone using a dedicated app. The 4K100 inch projection allows you to enjoy stunning picture quality along with high-fidelity sound.



## The TAIWAN Global Anti-COVID-19 Pavilion Portal Website

TAITRA has launched a portal site dedicated to Taiwan's anti-COVID effort. Users from around the world can find the latest expert opinions on the virus, information regarding suppliers of key virus-prevention products, as well as announcements from the Taiwanese government regarding preventative measures. They're also assisting in business negotiations, so be sure to give it a look!



<https://www.anticovid19tw.org>

Taiwan produces bicycles that are beloved all over the world, and cycling is a great way to see all the sights of the city. Hop on a made-in-Taiwan road bike, and we're off!

# Let's Ride a HOT NEW ROAD BIKE and TOUR TAIPEI'S Best Sightseeing Spots

Taipei is Taiwan's capital city, located in the northern part of the island. Full of sights to see—from the landmark Taipei 101 skyscraper to historical buildings and vibrant nature—delicious food, and much, much more, it's no wonder that draws tourists from around the world.

If you want to enjoy Taipei to the fullest, there's no better way to do so than by bicycle. As one of the world's top bicycle-producing countries, Taiwan has a healthy population of cyclists. Roads are designed for bicycles, with numerous cycling courses providing convenient, comfortable access across a wide area. Hop on one of the latest road bikes made in Taiwan, and experience all the city has to offer.

Let's go cycling!



## Today's Route

This 29-km, 7.5-hour route will take you to all the best sightseeing destinations, from popular photo spots to historically and culturally significant sites, delicious eateries and cafes, and more.

- Enjoy a retro cityscape
- 1 Sisinan Village (the former site of Taipei City's Military Dependents' Village)**  
Check out stunning wall art
- 2 The General Association of Chinese Culture**  
A perfectly preserved gate
- 3 Taipei City Wall - North Gate**  
A tasty bowl of rice noodle soup
- 4 Min Le Swordfish Rice Noodle Soup**  
Relax with a cup of Taiwanese tea
- 5 DEAR TEA**  
Snap a photo by the iconic TAIPEI sign
- 6 Dunhuang Evacuation Gate**  
An elegant structure resembling a white heron
- 7 Shezi Bridge**  
A trendy café overlooking the bridge
- 8 He Pan Ying Yue Coffee**  
Taipei's oldest temple to the sea goddess Mazu
- 9 Guandu Temple**  
Lose yourself in the sunset
- 10 Tamsui Ferryboat Wharf**



## Cycling in Taiwan—Like Nothing You've Seen!

- 1 Roads Designed for Cyclists**  
In recent years, Taiwan has seen cycling roads and paths created all across the island. Within Taipei, many of these routes line rivers, putting breathtaking scenery on display.
- 2 Rest Areas and Restrooms Abound**  
Alongside these cycling paths you'll find places to relax and relieve yourself, get a drink and put air in your tires. Some government and police offices even provide rest areas to cyclists.
- 3 Bring your bike on the MRT (Taipei Metro)!**  
On weekdays from 10:00 a.m. to 4:00 p.m., and all day on weekends and holidays, you can bring your bike on the MRT. (Note that there may be exceptions at certain stations.) Bicycles for children may also be brought on city buses.
- 4 Taiwanese Bicycle Brands: Popular Across the Globe**  
You can't go wrong with a bike from any of Taiwan's famous bicycle manufacturers, world-famous for their high specs and stylish designs.
- 5 A Cycling Shop You Can Rely On**  
Have questions, or run into trouble on your journey? One of Taiwan's best local bicycle shops has you covered!

**● Find the Perfect Route**



The owner, a former pro cyclist, is more than happy to offer advice and suggest cycling routes to meet your needs.

**● Support for Sudden Mishaps**



Have a flat tire or other mechanical issue while riding through Taipei City? Give them a call, and they'll race to the site to help you get back in the saddle. Repair fees start at NT\$200.

**Rider Weapon Bikes**  
Address: No. 206, Sec. 7, Civic Blvd., Nangang Dist., Taipei City 115  
Phone: 886-2-2651-5015  
Hours: 1:00 p.m. to 8:00 p.m. / Closed weekends  
URL: facebook.com/Riderweapon



Model: Reika Miyagi

Leave your bike needs to me!

Start!



Let's Go~!

### 9:30 Sisinan Village (Military Dependents' Village)

A 5-minute walk from Taipei 101, you'll find this former residence for military veterans. Slip back in time amidst immaculately preserved historic buildings.

Address: No.50, Songqin Street, Xinyi Dist., Taipei City  
URL: [www.travel.taipei/en/attraction/details/553](http://www.travel.taipei/en/attraction/details/553)



### 10:30 Taipei City Wall - North Gate (Cheng'en Gate)

Of the five gates that stood in Taipei during the Qing Dynasty, this is the only one that retains its original appearance to this day. Don't miss one of Taiwan's most historic sites.

Address: Section 1, Zhongxiao West Road, Zhongzheng Dist., Taipei City  
URL: [www.travel.taipei/en/attraction/details/543](http://www.travel.taipei/en/attraction/details/543)



Today's Lunch

↑ Rice noodles, a local favorite. NT\$35.  
← Tofu roasted with a savory sauce. NT\$20.

### 11:00

#### Min Le Swordfish Rice Noodle Soup

This rice noodle shop boasts over ninety years of history. The soup with broth from fresh-caught swordfish is irresistible, as are the plentiful side dishes.

Address: No. 3, Minle St, Datong District, Taipei City  
Hours: 6:00 a.m. to 1:00 p.m. / Open daily



### 10:00 Ren'ai Road

One of Taiwan's most beautiful thoroughfares, landscaped and lush with greenery. Designed for cyclists, it's like riding through a forest in the city.

### 10:15

Line of trees

#### General Association of Chinese Culture

A convention center featuring exhibits and events showcasing Taiwanese culture. Experience stunning works from a host of Taiwanese creators.

Address: No. 15, Section 2, Chongqing South Road, Zhongzheng District, Taipei City  
Hours: 10:00 a.m. to 5:00 p.m. / Closed Mondays  
URL: [www.gacc.org.tw](http://www.gacc.org.tw)

Photo Spot!



Behind the building, you'll find striking wall murals that make it a perfect photo spot.



Sweets Time



Dear Fruit Tea with chunks of peach. NT\$80 (left). Rainbow Bubble Tea. NT\$100 (right).

### 12:00

#### DEAR TEA

Open since July 2019, this delightful tea shop offers 32 original beverages made using Taiwanese tea leaves. Their honey tea soft-serve ice cream is also a treat.

Address: No. 10, Section 1, Dihua St, Datong District, Taipei City  
Hours: 11:00 a.m. to 7:00 p.m. / Open daily  
URL: [www.thedeartea.com](http://www.thedeartea.com)



Taiwan tea

### 12:45

#### Dunhuang Evacuation Gate

Along the Tamsui River you'll find this strikingly photogenic sign. With a rest area close by, it's definitely worth a stop.

Address: Intersection of Xinbeihuanhe Expressway and Dunhuang Road



Photo Spot!

TOPICS

#### Dadaocheng Wharf Plaza Restrooms

At Dadaocheng Wharf along the Tamsui River, you'll find unique restrooms where you can bring your bike inside—there's no need to worry about locking it up.

Address: Intersection of Huanhenanbei Expy and Minsheng West Road



Stroll along the path with its colorful walls, and enjoy birdwatching and other sights of nature!

### 13:45

Bridge

#### Shezi Bridge

This 1260-meter bridge connects Shezi Island with the Beitou and Shilin districts of Taipei. Resembling a white heron, it's especially beautiful when illuminated at night.

Nice view!





14:00

**He Pan Ying Yue Coffee**

This trendy café set by the riverside serves light meals and desserts. It's the perfect spot to admire Shezi Bridge while taking a break from the road.

Address: No. 42, Alley 331, Lane 401, Section 7, Chengde Road, Beitou District, Taipei City  
Hours: 7:00 a.m. to 10:00 p.m. / Closed during inclement weather



A little break



15:30

**Guandu Temple**

Northern Taiwan's oldest temple to the sea goddess Mazu. The spacious grounds are home to countless historical treasures, and draw visitors from across the nation.

Address: No. 360 Zhixing Road, Beitou District, Taipei City  
Hours: 7:00 a.m. to 9:30 p.m. (Some services close at 5:00 p.m.) / Open daily  
URL: www.kuantu.org.tw



Temple



Stroll the grounds and admire the ornate sculptures.



16:30

**Zhuwei Station Area**

The wide, well-maintained riverside bicycle paths offer beautiful views, attracting countless cyclists.



You're sure to smile at the sight of dogs comfortably napping along the river.



Almost there!



17:00

**Tamsui Ferryboat Wharf**

Countless TV shows and commercials have been filmed at this famous sunset spot. The nearby fish market offers tasty treats.

Address: No. 199, Guanhai Road, Tamsui District  
Hours: 7:00 a.m. to 7:00 p.m. (Ferryboat)  
URL: tour.ntpc.gov.tw/en-us/Attraction/Detail?wnd\_id=85&id=111429



From the seat of your bike, admire skyscrapers across the river framed by lush greenery.

Do your best!  
**CYCLING EVENTS**  
**YOU WON'T WANT TO MISS**

Taiwan is home to an impressive variety of events for the avid cyclist, from treks around the island to hill climbs, tours of the tropical east coast, and more. Why not take part in one?

**The Ultimate Round-Island Tour**



Lunch and dinner time is a highlight of the tour, and a great chance to get to know your fellow cyclists.



Seeing Taiwan's stunning landscape by bicycle is an experience like no other. You'll also receive a certificate for completing the course.

**FORMOSA900**

An event of the Taiwan Cycling Festival advised by the Taiwan Tourism Bureau, organized by Cycling Life Style Foundation, and co-organized by Giant, one of Taiwan's best-known bicycle manufacturers, this 910-km, 9-day tour will take you around the entire island. Professional guides and support cars will accompany you to ensure your safety. It's an exhilarating way to experience all of Taiwan's beauty from a completely new perspective!

Dates: Nov. 7-15, 2020  
\*Applications must be submitted by Sep. 30, 2020. Minimum participant restrictions may apply.  
Start Line: Taipei City Hall  
Fee: TWD32000 (Please refer to the website for details)  
URL: formosa900.giant.com.tw

**A Thrilling Hill Climb by Bicycle**



Schedule: Oct. 23, 2020  
\*Applications must be submitted by Aug. 25, 2020.  
Start Line: Hualien Qixingtang  
Fee: TWD5000 for international participants (including dinner)  
URL: www.taiwankom.org/en

**Taiwan KOM Challenge**

Start at sea level and scale 3,275 meters to the finish line in a tour that will test your stamina. The climb is tough, but the scenery is simply stunning.

**Trek 365km in Two Days!**



Schedule: Nov. 28-29, 2020  
\*Applications must be submitted by Oct. 25, 2020.  
Meeting Point: Astar Hotel, Hualien  
Fee: TWD2500  
URL: www.cyclist.org.tw

**Tour of East Taiwan – 365 Challenge**

This popular cycling event with twenty years of history will take you across 365 km of beautiful East Taiwan in two days.

Wharf

Goal!



## ESPORTS

English Company Name	Chinese Company Name	Industry	Introductory Page	QR
<b>Acer Incorporated</b>	宏碁股份有限公司	PC Brand, Technology	26	
<b>Micro-Star Int'l, Co., Ltd.</b>	微星科技股份有限公司	Gaming and creation PC design and manufacturing	28	
<b>Innolux Corporation</b>	群創光電股份有限公司	Manufacturing optoelectronics related products	30	
<b>ADATA Technology Co., Ltd.</b>	威剛科技股份有限公司	Exporter, Manufacturer, OEMs of eSports-related products	32	
<b>ASUSTek Computer Inc.</b>	華碩電腦股份有限公司	Electronics	34	

23 Brands Revolutionizing the World of Sports  
LIST OF COMPANIES



## CYCLING

English Company Name	Chinese Company Name	Industry	Introductory Page	QR
<b>Advanced International Multitech Co., Ltd.</b>	明安國際企業股份有限公司	Manufacturing of sporting goods production and composite materials solutions	36	
<b>Merida Industry Co., Ltd.</b>	美利達工業股份有限公司	Bicycle and electric bicycle manufacturing	38	
<b>Darad Innovation Corporation</b>	達瑞創新股份有限公司	e-bikes and related accessories	40	
<b>TBS Group Corporation</b>	世盛國際開發股份有限公司	Manufacturing sports and leisure products	42	
<b>KENDA RUBBER INDUSTRIAL CO., LTD.</b>	建大工業股份有限公司	Tire manufacturing	44	

## SPORTS-RELATED ITEMS

English Company Name	Chinese Company Name	Industry	Introductory Page	QR
<b>First Rank Co., Ltd.</b>	冠馳股份有限公司	Swimming goggles and accessories	46	
<b>Rice Ear Ltd.</b>	稻穗股份有限公司	Manufacturer of air purifiers	48	
<b>BenQ Materials Corp.</b>	明基材料股份有限公司	Functional films, advanced battery materials, healthcare products	50	
<b>ATUNAS (Sun Own Industrial Co., Ltd.)</b>	歐都納股份有限公司	Production and sale of outdoor goods	52	
<b>JU TIAN CLEANTECH CO., LTD</b>	鉅田潔淨技術股份有限公司	Eco-friendly straws, eco-friendly tableware R&D and manufacturing	54	
<b>FERRO-CARBON ENTERPRISE CO., LTD.</b>	鐵碳企業股份有限公司	Construction tools, suction cup household goods manufacturing	56	
<b>ARTCERA CORPORATION</b>	乾唐軒美術工藝股份有限公司	Art ceramic related products	58	
<b>BIG GOOD DESIGN CO., LTD.</b>	創意興業有限公司	Consumer electronic product design and manufacturing	60	

## HEALTHCARE

English Company Name	Chinese Company Name	Industry	Introductory Page	QR
<b>Sports Art Industrial Co., Ltd.</b>	力伽實業股份有限公司	Manufacture, design and sales of fitness and rehabilitation products	62	
<b>Johnson Health Tech. Co., Ltd.</b>	喬山健康科技股份有限公司	Manufacture and sales of fitness products for gyms	64	
<b>Leadtek Research Inc.</b>	麗臺科技股份有限公司	Computer and electronic product manufacturing industry, smart medical and AI solutions provider	66	
<b>Netown Corporation</b>	真茂科技股份有限公司	Manufacturing of medical, healthcare, and rehabilitation products	68	
<b>Asiatic Fiber Corporation</b>	豪紳纖維科技股份有限公司	Functional and technical textile industry	70	



*Planning*

**TAITRA**  
**Chuntse Wu**  
**Michelle Lin**  
**Patty Yen**  
**Raymond Chen**  
**Fred Chung**  
**Susumu Tanaka**  
**Gloria Wang**  
**Janine Ju**

*Editing*

**Ark communications**  
**Satomi Matsuda**  
**Yukako Tachi**

*Writing*

**Manabu Okayasu**  
**Yaeko Kondo**  
**Miho Tanaka**  
**Chisato Yuyama**  
**Yoichi Taniguchi**  
**Hikaru Motoyama**

*Coordination*

**Mari Katakura**

*Interpretation*

**Mie Translation Services**  
**The Dish Clubs, Inc.**

*Photography*

**Toshiyuki Kumagai**  
**John Chen**

*Illustration*

**Keiko Tada**  
**Rie Kawano**

*Translation*

**John Townsend**  
**Sojourner Rothe**  
**Joshua Duran-Carlson**  
**Rob Tunstall**

*Design*

**FLAMINGO STUDIO INC.**

*Sales Division*

**Ark communications**  
**Nagatoshi Ogura**

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