Ray Huang – General Manager, Exponent, Hong Kong



The part of our services that has really taken off these past several years is the intellectual property and cybersecurity space, especially in the banking and healthcare section in Hong Kong.

09.10.2018

Tags: Hong Kong, Exponent, Consultancy

Ray Huang of Silicon Valley consultancy Exponent gives his first impressions of Hong Kong as well as discussing fostering innovation and retaining talent in Asia.

Following your recent move from Silicon Valley, what are your impressions of Hong Kong so far?

What stands out the most about Hong Kong is its demographics and the ability to leverage resources. Compared to Silicon Valley, Hong Kong is relatively small, however, jam-packed with people. Despite the small territory, it is able to pull together the necessary talent, investment, and the target market to create spectacular products and compete on a global level. Hong Kong has been very successful in adding value in different industries including consumer electronics, medical devices, industrial engineering, and manufacturing technology as a whole.

Exponent has an international presence covering all corners of the world. What is the importance of Asia for the company at a global level?

The original goal of Exponent creating a footprint in Asia was to support the manufacturing operations of our US-based clients, which was why offices in both Shanghai and Hong Kong make a lot of sense. But over the years we also developed a very strong local network and have been

supporting companies in Asia, who understand that in order to sell and market great products into the US, they have to meet a very strict set of rules and standards with respect to their manufacturing and engineering practices. Exponent has been most successful in helping these clients to ensure good quality, safe and reliable product design and manufacturing practices are consistently applied regardless of the location.

Looking at Hong Kong specifically, what we do here is different from other Asian markets. We are able to offer a wider range of services that cover consumer products from more perspectives. Not only are we able to provide product design consultation, but we can also advise our clients from legal aspects, such as mergers and acquisitions, product liability, technical due diligence, and intellectual property (IP) matters. Only in Hong Kong have we been able to develop this versatile set of capabilities to highlight not only good manufacturing practices for products being sold in the US or Europe but also offering legal advice for our clients to make sure things go smoothly logistically.

With over 50 years of experience in engineering consulting, we understand the types of issues that commonly occur in the US and can apply this in a proactive way here in Asia.

Where do you see the highest demand for your services coming from?

Firstly, we specialize in the physical analysis of products, which stems from our historic service of failure analysis. We use laboratory analytical techniques to look in detail into what happens to a product to understand why it failed, but at the fundamental sciences of engineering level. This is much more than turning knobs and pressing buttons to solve a problem on the manufacturing line to make it go away temporarily; we want to understand the physical mechanism behind the failure so that the fix can be applied permanently.

Secondly, we advise our legal clients on product liability, which is a mature topic in the US lead by a very consumer protective culture. However, this is an idea that is still relatively new for companies in Asia. In addition to helping them make quality and reliable products, it is also important to educate them on the consequences of what happens when something does not function properly, and the ways to mitigate these risks.

The part of our services that has really taken off these past several years is the intellectual property and cybersecurity space, especially in the banking and healthcare section in Hong Kong. As companies are collecting biometric data or financial data that belongs to the end user, it is

important to make sure these data are protected and not leaked inadvertently. We look to further educate companies in Asia in this regard.

What is the range of your clients and the relevance of the healthcare & life sciences sector?

Our clients range from multinational companies based in the United States to small start-up companies based locally in Hong Kong and Shenzhen. We are always reaching out and pursuing being part of the innovative and technology ecosystem here. We understand that a lot of start-ups have the core engineering idea for a piece of new technology but needs help to scale and transition it into a mass producible product. They sometimes need lawyers, accountants, analytical laboratories, prototyping laboratory, manufacturing support, and general logistics help. The Science Park does a good job of playing the role of an incubator for these companies, as well as connecting them with the key stakeholders in the industry.

Our goal is to educate the importance of fundamental understanding of engineering and science, as well as the idea of product liability to mainly convey two messages: Firstly, making a reliable and high quality product is not a fluke – you have to understand the science behind why things work and don’t work so you can make objective and independent decisions based on facts; and secondly, the safety risk of a product can make or break a million dollar idea – there are consequences in different markets when your product fail. If your product ends up causing harm or becomes unsafe, your market share could vanish instantly. Exponent is well positioned to advise on these two areas since we have seen a lot of mistakes in the field. We are also very aware of the consequences of having to deal with government safety agencies in the United States. So, our goal is to arm the local companies with the right tools to compete on a global level.

As Exponent Hong Kong continues to grow, so has our client range. By now, not only have we consulted with biomedical engineering and life science companies, we expanded our service offerings to cover the mechanical, electrical and material science and engineering issues. We look forward to offering an even wider range of product services moving forward, echoing the growing interest of our customers here in Asia.

What is your assessment of the opportunities that Exponent can capitalize on from the Greater Bay Area Initiative?

Hong Kong has a strong and growing culture both in engineering and legal. In order for the GBA to fully benefit from the whole ecosystem, this culture and mindset must spread. The companies in GBA should also be adaptive to the good lessons learned from successful companies around the world.

There are many mature manufacturing capabilities and many new products being developed on a daily basis in mainland China, with experts being able to execute on plans in a very short amount of time. However, we see this as a double-edged sword, since on one hand, you are able to capture profit very quickly by flooding the market with very similar products, but on the other hand, the life-cycle of these products can be very short and not always sustainable due to price competition or inconsistent hardware reliability.

A “unicorn” is not only able to spin out new products at a good pace but recognizes the need for developing a good platform for other mutually beneficial technologies to jump in. For example, Uber started out as a pure ridesharing platform but is now developing their own flying taxi as part of the ecosystem Uber was able to identify. Tencent started out as a messaging app, but they now are the largest gaming and social media company because of the ecosystem they establish to connect people. These companies put a lot of emphasis on intellectual property, product liability, technical due diligence, user experience and has a very proactive culture to develop products with the highest quality and reliability.

In order for the GBA initiative to take off, this culture needs to become the norm. There are great opportunities, and we offer this support of integration and the resources for the technology in this area.

How do you attract and retain the best talent?

This year we have had very good success in attracting local talent, with universities in Hong Kong ranking high on a global scale in terms of academic achievement and innovation. It is my belief that we are privy to an untapped goldmine of talent, with great professors, students, and culture.

The key strategy is not only to focus on attracting talent who are strong in terms of academics, but also good at communication. We want out consultants to be good storytellers and to be able to explain a complicated technical concept in a simple, logical and straightforward way that a layman would understand, which is not a trivial thing to do.

We have a great momentum with some key hires in the Hong Kong office, we hope to further this trend and continue to find people who will one day become principals of the firm.

What sets Exponent apart from your competition, making you the partner of choice for your clients?

Our client portfolio ranges from start-ups to established companies, and the reason behind their loyalty to our consulting expertise is because they are able to use our data and make good, reliable decisions. We strive for our data and argument to be based on scientific and engineering principles, which is extremely important because some of the key business decision makers may not necessarily have the technical expertise, so it becomes our job to advise them in a neutral, objective and logical manner for them to make the most educated decision possible.

Furthermore, the quality of Exponent's staff also sets ourselves apart from our competitions. We do not simply present the data, but instead, incorporate the physical data we obtained from experiments into the overall business and engineering context to tell a good story about why things behave the way they do. The value we are able to provide to our clients may be in terms of revenues, quality or other intangibles. We recognize our client's needs and remain transparent throughout, whilst offering the best value for money.

What is the most exciting part of your job?

Exponent offers a unique opportunity to see the not-so-glamorous side of consumer electronics and gadgets. A lot of impressive ideas and products cross our path but there is always something missing that does not allow them to take off. So, we have taken on as part of our mission to support these new ideas and to help create more unicorns in the Science Park, in Hong Kong, and in the Southeast Asia region, whether this is in the form of prototyping, manufacturing failure analysis, due diligence or working with lawyers.

I have a very optimistic outlook for the biomedical devices and life sciences industry, as people are recognizing the types of resources they need in order to scale their technologies. Although Hong Kong does not have as many unicorns as does in Silicon Valley, Hong Kong definitely has the leverage and resources in order to be successful. At Exponent, we have the opportunity to interact with these companies and help them in the best way we know how. This experience and interaction is phenomenal.

See more interviews