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UNRAVELLING THE
IMPACT OF DISRUPTIVE
INNOVATION FOR INDUSTRY 4.0

EDITOR'S NOTE

As 2018 kicks off to an exciting start, we look back on some of our end-of-year endeavours, and their impact on RP staff and students, as well as industry partners.

Tied closely to technological trends governing contemporary times, the use of "Disruptive Technology" is of utmost concern to us. The theme of this issue, "Disruptive Technology" is featured extensively in the In-Depth (page 14) and In Conversation (page 22) sections. Our industry partner, Riverwood shared with us their experiences in leveraging Disruptive Technology to simplify company work processes, while Dr Lim Boon Whatt, Director of RP's Office of Technology Development (OTD) contributed insights into the exciting future prospects of Industry 4.0 respectively.

We strive to ensure that RP stays constantly relevant and competitive via industry participation — be it through collaborations or inter-institutional competitions. Keep updated on our latest happenings (from page 3 to 5) that serve to strengthen the industry focus that has always been RP's priority.

RP is proud of the many partnerships we have garnered and enjoyed these years. Find out more about these exciting partnerships from page 6 to 13. We would hereby also like to thank some of our industry partners, both existing and new — Stratagem Group, Philippines' Department of Tourism, CW-Aero Services, MRSS, NTUC, Maxus Communications, The Logistics Alliance, and *SCAPE — for all your enduring support to further enhance industry ties and capabilities.

Here's wishing all our supportive partners a fruitful, purposeful, and wonderful new year!

From the incoRPorate editorial team

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Exploring New Ground with Applied Science

On 12 September 2017, selected students had the opportunity to showcase their scientific projects at the Industry Day of Republic Polytechnic's (RP) School of Applied Science (SAS). The day commenced with a Memorandum of Understanding (MOU) signing with new partner Shrimp Improvement Systems (SIS) and an MOU renewal with BASF respectively.

The new partnership with SIS creates industrial participation opportunities among students of RP's Diploma in Marine Science and Aquaculture (DMAC) through collaborative research projects. With programmes such as internship and volunteer positions at the SIS genetic research facility in Hawaii, this 36-month MOU will focus on R&D like genetic mapping of shrimp broodstock.

The MOU renewal sought to enhance the existing RP-BASF Pharmaceutical Technology Laboratory that was established in 2008, with co-development plans under way. Further joint research projects and hands-on training with the chemical firm is set to benefit students of Pharmaceutical Sciences.

We also officially launched the SkillsFuture Earn and Learn Programme (ELP) for the Institute of Technical Education (ITE) graduates leading to a part-time Diploma in Applied Science (Pharmaceutical Sciences). The programme aims to help graduates deepen their skills and knowledge for careers in the development, manufacturing, marketing, and dispensing of pharmaceuticals.

Food and Beverage (F&B) retailer Mr Bean's new product launch concluded the ceremony. The company's "Soy Granola Bar", a nutrition-packed snack made from high fibre soy pulp, is an improved recipe that resulted from a joint study with our students and lecturers.



Mr Yeo Li Pheow, Principal/CEO, RP and Mr Loh Jwee Poh, Executive Director, Super Bean International



Fourteen new partnerships were established between RP School of Hospitality and industry players

School of Hospitality Keeps Up with Changing Times

Themed “Ready Employers, Ready Employees”, RP’s School of Hospitality (SOH) Industry Day 2017 unveiled new initiatives and 14 new partnerships in a bid to drive innovation and develop a future-ready and sustainable talent pipeline for the hospitality sector.

In his welcome address at the event, Mr Seto Lok Yin, Deputy Principal (Industry Services), RP, highlighted the importance of industrial partnerships, citing two-way benefits. One example was Singapore’s first front-of-house Autonomous Guided Robot, developed through RP’s Hospitality Solutions Centre.

Affectionately nicknamed the Automated Room-service Associate (AURA), it was a collaborative effort with existing RP partners — the info-communications service provider StarHub and the robotics firm Savioke. The relay robot was

successfully deployed at M Social Singapore as part of an industry process-improvement project to optimise organisational workflow.

As part of RP’s continual effort to equip students and staff with the latest knowledge and skills to cope with dynamic industry needs, the Diploma in Wellness, Lifestyle and Spa Management (DWLSM) has since been renamed the Diploma in Wellness and Hospitality Business (DWHB) — a move that accommodates recent expansion and rising skilled labour demand of the wellness sector. The diploma will also be updated with new modules to equip students with relevant skills and up-to-date knowledge on wellness industry trends.

To commemorate RP’s 15th Anniversary, a coffee table cookbook titled **Great Food, Great Health: 25 Recipes for Happy Living** was launched on the Industry Day. A collaboration with RP School of Sports, Health and Leisure (SHL), the cookbook features easy-to-prepare recipes with useful health tips, nutritional facts and analysis, and recommended exercises.



Visitors were treated to demonstrations on the latest RP developments for the hospitality sector

Doing Good Digitally: Empowering Social Enterprises

An expansion of e-commerce has sparked significant efforts to make Singapore a cashless society. With this in mind, the National Pushcart Challenge, organised by RP's Diploma in Social Enterprise Management (DSEM), was renamed the Digital Business Challenge.

Held on 27 August 2017, the competition heavily featured digital payment platforms in line with the theme "Social Entrepreneurship in the Digital Age". Participating vendors included Carousell, DBS PayLah!, and ezbuy, which enabled patrons to pay at the student-run businesses via digital means.



Students presenting their merchandise at the Digital Business Challenge, to Guest-of-Honour Dr Janil Puthucheary, Senior Minister of State, Ministry of Communications and Information, Ministry of Education

About 160 students from 23 secondary schools participated in the event, collaborating with Voluntary Welfare Organisations (VWOs) and social enterprises such as the Singapore Association of the Visually Handicapped (SAVH) and Dignity Kitchen.

The day's overall winning team from Junyuan Secondary School walked away with a cash prize of S\$1,200, while proceeds from the sales went to the various VWOs and social enterprises. In the past decade, this RP event has drawn more than 1,600 students from 83 secondary schools.

Success for RP's Team DIEM at the Singapore MICE Challenge 2017

The Singapore MICE Challenge (SMC) 2017 at the MBS Expo and Convention Centre saw a four-student team — Hannah Faruk Alkaff, Muhammad Haikal bin Ahmad Samar, Law Chian Thye, and Ong Wen Xiang — from RP's Diploma in Integrated Events Management (DIEM) clinch First Runner-up on 28 July 2017.

The team, with the presented proposal titled "Learning Differences Global Conference 2018", sought to engage caregivers and industry players to deepen the understanding regarding challenges faced by individuals with learning difficulties. Besides conceptualising a conference, the team also included documentaries, roadshows, school talks, social media campaigns, and workshops as part of their proposal.

Inaugurated in 2015, SMC is organised by the Singapore Association of Convention & Exhibition Organisers & Suppliers (SACEOS) in



Representing RP, the four-member team showcased its proposal titled "Learning Differences Global Conference 2018"

partnership with the Professional Convention Management Association (PCMA).

The achievement came with a fully-sponsored trip by SACEOS to join the PCMA Convening Leaders 2018 conference in Nashville, Tennessee. The team showcased their winning proposal, and got to witness first-hand the effort and coordination that goes into making such as large-scale event work, while networking with over 4,000 industry practitioners from around the world.

"Being flown out to the States to present at an international conference was something I never saw coming. I'm honoured to have been given the opportunity to not only represent RP but also Singapore these last few days. It has been four wonderful days here and I am extremely grateful for everything. This was definitely an eye-opening experience!" - Hannah Faruk Alkaff, team member



RP-STRATAGEM MOU: ANSWER TO INNOVATION IN AVIATION COMPOSITE TECHNOLOGY

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INCORPORATE

As the aerospace sector shifts towards the use of composite materials, composite repair, and maintenance skills are becoming highly coveted in the industry. In light of this technological trend, RP's very own aerospace engineering team bagged the 2017 Polytechnic Student Research Programme Award with its breakthrough repair method for damaged aircraft composite aerostructures.

Led by Dr Hamid Saeedipour, Senior Lecturer, School of Engineering (SEG), RP, who had won the 2017 MOE Outstanding Inventor Award and was conferred the 2017 IPS Crescendas Medal for Outstanding Applied Physics Research, the team successfully developed a premixed healant that spiked in-situ composite repair efficiency by 79.3% at a valuable reduced repair time for aircraft.

In a bid to advance this field, RP and Stratagem Group B.V. signed a Memorandum of Understanding (MOU) on 28 September 2017. Under this MOU, both parties will jointly establish the Aerospace Composite Learning Lab – a solution to meet the growing industry demand. This collaboration is aimed at boosting research and training capabilities among the staff and students from from School of Applied Science (SAS) and SEG.

Apart from RP's existing Aerospace Hub, which provides the latest equipment for practical training, the Learning Lab is projected to facilitate enhanced training opportunities, joint programmes and projects with industry partners.

Fronted by Mr Paul van IJsselstein, CEO, Stratagem Group B.V., who has more than three decades of aerospace industry experience under his belt, Stratagem





01

Group is set to complement RP with additional expertise in the development of new training courses and teaching methodologies through this partnership.

New professional certification courses and techniques are being formulated for aerospace engineers as part of this agreement, particularly in the area of aviation composite material technologies.

Prospective students of these new courses can expect a shorter course duration that will allow them to join the aerospace maintenance workforce sooner, in view of improved SAR-66 curriculum corresponding to the Singapore Airworthiness Requirements (SAR).

This MOU also serves to further existing achievements of the institution through practical learning frameworks and continuous strengthening of research innovation in which Stratagem Group excels.

01. Mr Seto Lok Yin, Deputy Principal (Industry Services), RP (front left) gave a tour of the RP campus to visitors (front center) Mrs Margriet Vonno, Ambassador of The Netherlands to Singapore and Brunei, and (front right) Mr Paul IJsselstein, CEO, Stratagem Group B.V.

02. Students from RP's Diploma in Aerospace Engineering (first and second from right) are expected to be the direct beneficiaries under the RP-Stratagem MOU

03. (From left to right) Mr Seto Lok Yin, Deputy Principal (Industry Services), RP and Mr Paul van IJsselstein, CEO, Stratagem Group B.V



02



03

RP, TP, AND DEPARTMENT OF TOURISM (PHILIPPINES) FORGE TIES IN CEBU



01

01. (From left to right)
Hon. Hilario P. Davide III,
Cebu Governor; Mr Yeo Li
Pheow, Principal/CEO, RP;
Ms Alma Rita D. Jimenez,
Undersecretary of Tourism
Regulation, Coordination
and Resource Generation
and Mrs Lay-Tan Siok Lie,
Deputy Principal, TP

Republic Polytechnic (RP) and Temasek Polytechnic (TP) signed a 36-month MOU with the Department of Tourism, Philippines and the Province of Cebu on 28 September 2017. The new Tourism and Hospitality Capability Development Programme arising from this three-way agreement is supported by Temasek Foundation International – a Singapore-based non-profit organisation.

With a firm track record in philanthropic activities in Asia and beyond, the Foundation will dedicate a S\$488,085 grant to the programme under this MOU. Co-funded by the Department of Tourism in the Philippines and the Province of Cebu, this collaboration will cement inter-governmental

ties on a cross-industry and multi-institutional level.

The signing of this MOU is a bid to facilitate sharing of the best tourism industry practices and strategies, with RP contributing its trademark Problem-based Learning pedagogy, which has benefited both full-time students and adult learners from diverse fields. Such a partnership is also expected to encourage collaborative academic research among all parties involved, bolstering socio-economic and cultural diversity in the process.

Being a destination offering both natural and man-made recreational activities, Cebu Province accounts for about 35% of foreign visitors in the Philippines, with its hospitality and tourism industry still rapidly expanding. Playing host to the new programme, Cebu's distinguished reputation in community-based sustainable tourism provides a practical and authentic learning environment for polytechnic students participating in overseas visits and internships.

Part of the programme also includes the Singapore's Best Practices in Tourism Development module, which the two polytechnics will jointly conduct. The teaching of this module is also supplemented by study trips to Singapore, where the Filipino programme participants will learn about the country's tourism industry.

The same signing ceremony held at the Cebu Provincial Capitol also saw RP and TP ink separate MOUs with the University of San Carlos and the University of San Jose-Recoletos. These inter-institutional ties enable joint research opportunities and overseas exchanges for students and staff to expand their horizons.





“The year 2017 has been declared the International Year of Sustainable Tourism for Development by the United Nations. This programme is an excellent opportunity for Cebuanos to learn Singapore’s best practices in tourism development and hospitality management.”

*Hon. Hilario P. Davide III,
Governor of the Province
of Cebu*

Photo: Department of Tourism, Philippines

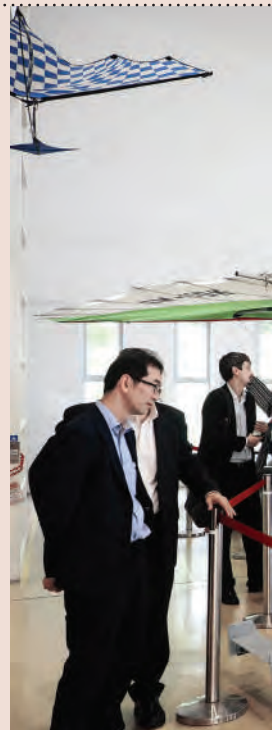
RP-CW AERO SERVICES TO BRIDGE CONNECTIONS WITHIN AVIATION MAINTENANCE

Sparked by recent growth in Singapore's aviation industry, the RP-CW Aero Services MOU was inked on 8 November 2017 to build a skilled workforce for the sector. This is a strategic move towards meeting the growing demand for aviation professionals by leveraging the RP talent pool.

CW Aero Services was formed in 2016 as a branch of CW Singapore Pte Ltd (established in 1979). The former, with its specialisation in aircraft equipment, repair, and

maintenance, has recently launched a facility in the Seletar Aerospace Park, catered specifically to aircraft and avionics equipment repair.

The CW equipment and expertise supplement The Aerospace Hub (The Arch) at RP, in addition to three aircraft purchased to promote hands-on training for aerospace students. The Arch houses state-of-the-art virtual aerodrome, B747 aircraft simulator, aircraft systems and testing equipment, comprising actual aircraft tools and parts for practical training purposes.





01



02



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Making Constructive Connections

Complementing our pursuit in the industry, this partnership is a major pedagogical and knowledge-sharing platform that bolsters RP's newly conferred SAR-66/147 Stage 1 status towards an "Approved Maintenance Training Organisation". Awarded by the Civil Aviation Authority of Singapore (CAAS), the final stage of this status will qualify us for expedited training of licensed aircraft engineers.

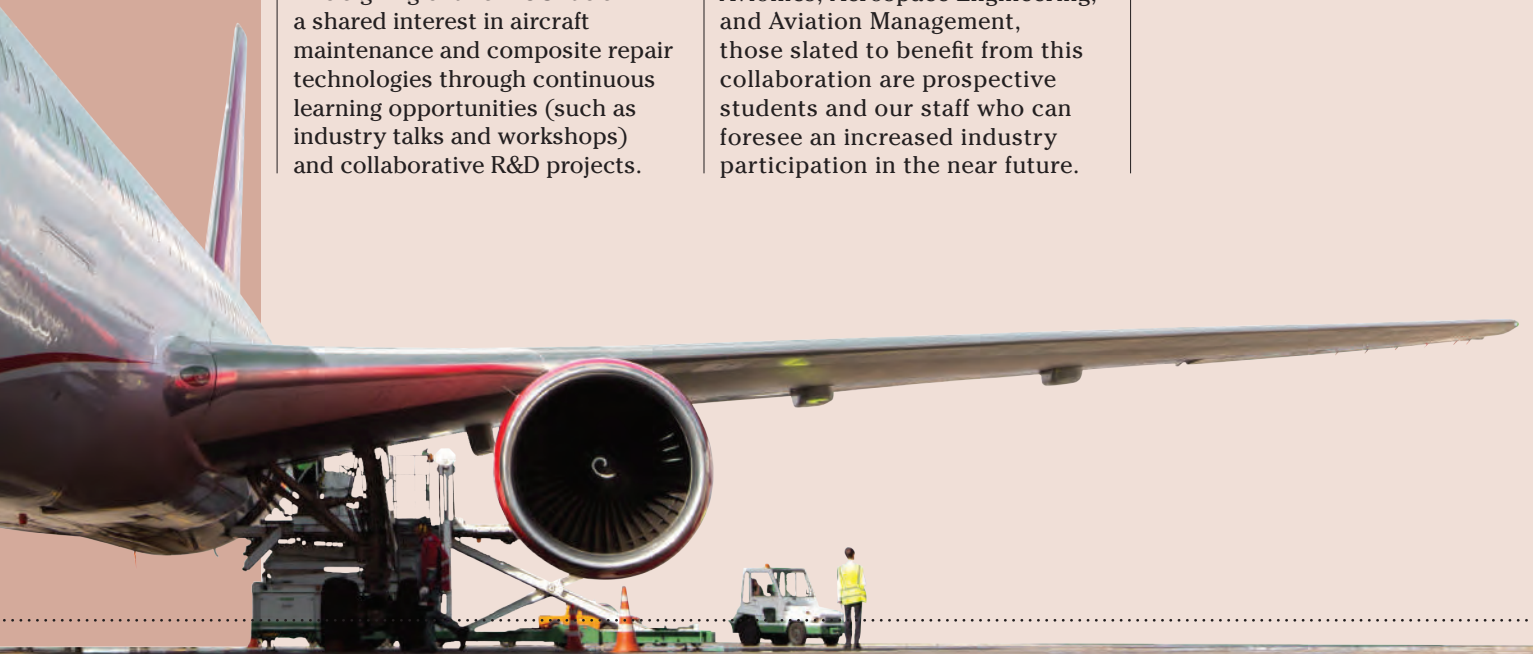
The signing of this MOU fuels a shared interest in aircraft maintenance and composite repair technologies through continuous learning opportunities (such as industry talks and workshops) and collaborative R&D projects.

This cooperation takes the form of student final-year projects and internships, alongside staff industrial attachments.

These endeavours come amidst three existing joint research projects partially sponsored by CW Aero Services, regarding composite repair, testing equipment, and maintenance technologies.

Besides current RP students from the fields of Aerospace Avionics, Aerospace Engineering, and Aviation Management, those slated to benefit from this collaboration are prospective students and our staff who can foresee an increased industry participation in the near future.

01–03. Delegates from CW Aero were treated to an afternoon tour of the Arch, getting a first-hand view of the latest in composite repair and non-destructive testing technologies at RP



ELEVATING MARKET RESEARCH WITH MRSS- NTUC MOU

On 16 October 2017, we inked an MOU with the Market Research Society Singapore (MRSS) and National Trades Union Congress (NTUC) to launch Singapore's first Advanced Certificate in Market Research Programme.

The signing ceremony was graced by Mr Heng Chee How, Deputy Secretary-General, NTUC and Senior Minister of State, Prime Minister's Office. This new four-month programme is a one-of-a-kind Continuing Education and Training programme, aligned with the SkillsFuture movement, and aimed at developing future-ready business professionals skilled in market research.

Co-delivered by RP and MRSS, the programme encompasses studies of business analytics, as well as the latest research methodologies and technologies used in qualitative and quantitative research. It will also involve real-world case studies in Asia, allowing participants to learn to make strategic regional decisions that propel businesses. With no minimum entry requirements, non-market research industry executives looking for career switch can also benefit from enrolling into the programme.

Besides the new programme, the tripartite collaboration includes joint industry projects, talks, and learning attachments for our students and staff to enhance their skills and career development prospects.

MARKETING DIGITAL DISRUPTION WITH RP-MAXUS COMMUNICATIONS SINGAPORE MOU

On 15 August 2017, we signed a three-year MOU with Maxus Communications Singapore. The signing was graced by Mr Seto Lok Yin, Deputy Principal (Industry Services), RP.

The MOU was mooted by Mr Desh Balakrishnan, Managing Director, Maxus Communications Singapore, when he attended the Youth Marketing Summit in November 2016. The event had showcased expertise from RP's Diploma in Consumer Behaviour and Research (DCBR), which inspired Mr Balakrishnan to collaborate with RP over the past year, such as getting Maxus Communications Singapore involved in the DCBR student leadership camp.

Through extensive joint curriculum development, students will be well-equipped to cope in the new economy of communications. This will include training in areas such as digital marketing communications, research, and content delivery.

In doing so, we hope to nurture resilient individuals able to cope in a dynamic, ever-changing digital world.



BOOSTING INNOVATION WITH THE LOGISTICS ALLIANCE MOU

The importance of collaboration for industry-wide capability development was the highlight of the Logistics Alliance MOU, sealed on 24 July 2017. The Logistics Alliance will work towards anchoring Singapore as a global Logistics Hub, underpinned by operations excellence, innovation, and a strong Singaporean core.

The members of the Logistics Alliance include SPRING Singapore, RP's Centre of Innovation for Supply Chain Management (COI-SCM), Container Depot and Logistics Association (CDAS), Singapore Air cargo Agents Association (SAAA@Singapore), Singapore Logistics Association (SLA), and Singapore Transport Association (STA).

The Logistics Alliance's Innovation workgroup is led by COI-SCM. It focuses on identifying and addressing common industry challenges with innovative process and technology solutions. COI-SCM is also a member of the Productivity and Talent Development workgroups.



BREAKING THE MILLENNIAL CODE AT *SCAPE

To celebrate RP's 15th anniversary, the Diploma in Social Enterprise Management (DSEM) organised a forum on 15 September 2017 entitled, "Breaking the Millennial Code". Speeches highlighting the anniversary were given by Associate Professor Faishal bin Ibrahim, Senior Parliamentary Secretary for the Ministry of Education and the Ministry of Social and Family Development and Mr Seto Lok Yin, Deputy Principal (Industry Services), RP.

The event was attended by some 200 people, including our students, staff, as well as industry and social enterprise partners at The Ground Theatre, *SCAPE.

In line with the 15th anniversary, a lively panel discussion led by Professor Faishal, alongside five outstanding industry partners, delved into the challenges in activating millennial audiences to tackle social issues through entrepreneurship. Attendees also gained 15 takeaways from research conducted by DSEM on the millennials' involvement in the social innovation scene. One such takeaway was that these millennials are equally drawn to niche issues such as animal welfare and the environment, alongside traditional causes such as that of needy groups and health. In time to come, these research findings will provide a better understanding of what motivates youth towards socially innovative projects. The forum also featured 15 RP student-industry projects.

One of the day's highlights was the renewal of a three-year MOU with *SCAPE for further collaboration. *SCAPE will extend its resources towards assisting students with their final year projects, as well as secure internship positions in social enterprises and related areas. ▀

01. The MRSS-NTUC MOU presents exciting opportunities for anyone looking to market themselves with an edge
02. Representatives of the Logistics Alliance with Mr Seto Lok Yin, Deputy Principal (Industry Services), RP (third from right), pleased with the newly signed MOU
03. The mood was optimistic at RP's Market Research Lab as key industry partners pushed forward with the next step in marketing and communications
04. Industry partners drew inspiration and advice from the panel discussion led by Associate Professor Faishal bin Ibrahim, Senior Parliamentary Secretary for the Ministry of Education and the Ministry of Social and Family Development (left), which tapped on the experience and expertise of notable entrepreneurs

03



04



IN-DEPTH

ISSUE 7/2018

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INCORPORATE

AHEAD *of the* CURVE

DISRUPTIVE INNOVATION COMES TO RP

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Future” was the buzzword at this year’s RP Tech Day, where the focus was squarely on the increasing prominence and impact of disruptive technology. Attracting more than 300 industry professionals from diverse sectors, and involving over 200 RP staff, the full-day event boasted an engaging line-up of industry speakers, panel discussion, seminars, and cutting-edge technology demonstrations.

Themed “The Future of Work — Preparing for a Disruptive World”, RP Tech Day 2017 gave participants unique insights into technological trends that are shaping today’s world. The event kicked off with welcome remarks by Mr Yeo Li Pheow, Principal/CEO, RP and a Keynote Address by Mr Tan Choon Shian, Chief Executive, Workforce Singapore.

Industry professionals shared their vast experiences through talks: Mr Sachin Chitturu, Associate Partner, McKinsey & Company (The Future of Disruptive Technologies); Mr Dileep Rangan, Program Director, IBM (Artificial Intelligence from Capability to Solution); and Mr Darryl Parrant, Country Leader, Talent & Rewards, Singapore, South Asia Leader, Future of Work, Willis Towers Watson (Future of Work in a Disruptive World).

To wrap things up on a high note, a panel discussion was held. Involving a lively back-and-forth with participants, the speakers allayed fears and doubts about disruptive technology, and reiterated its many advantages.



Participants at Republic Polytechnic Industry Centre (RPIC), Level 2 for a presentation by Mr Teh Kim Yew, Senior Lecturer, Diploma in Supply Chain Management, School of Engineering, RP, who introduced the vast potential of robotics and automation in the supply chain industry

“It’s not a question of if, but how disruptive technology affects work.”

Mr Tan Choon Shian, Chief Executive, Workforce Singapore





A WORLD OF DISRUPTIVE TECH



60%
of occupations
could have **30%** of
tasks automated

Surplus of
90-95 million low-
skilled workers
and **Deficit**
of **38-40 million**
skilled workers



US\$2 trillion
of global eCommerce
Sales in 2016

SUCCESS IN STORE

For companies to take full advantage of disruptive technologies, they must adopt an open mindset towards change. No one else knows this better than Mr Syafiq Yussoff, Director of logistics company Riverwood, whose innovative business model has secured them a role as logistics provider for Singapore's Amazon Prime Now, alongside other clients such as DHL. We spoke to Mr Yussoff and Mr Jumadi bin Mohamed Yosope, Riverwood's HR/Finance Manager, about their thoughts on disruptive technology.

Disruptive technology — what does it mean to you?

Syafiq: To me, the word “disruptive” has a negative connotation to it. But, to put positivity into disruption is to actually have a sense of innovative thinking. It creates, or rather, it forces those involved, all parties involved, to go along with the disruption.

Jumadi: It's interesting to see how machines can reduce manpower but increase productivity. When I talk about cutting manpower, I'm talking about cutting out irrelevant manpower. It is the learned worker who will have a higher impact on productivity and the company as a whole.



Keen to take Riverwood to the next level, Mr Syafiq Yussoff, Director, Riverwood (right) and Mr Jumadi bin Mohamed Yosope, HR/Finance Manager, Riverwood are continually searching for innovative and collaborative opportunities

What is your key takeaway from RP Tech Day?

Syafiq: To start off, the follow-me technology; it wasn't new to me, but it really blew me away when I saw it and how efficient it was. It amazed me too, how we can have our pick-and-pack staff, who literally just pick and pack, instead of pushing the trolleys. It's simple technology, but it can strip away a lot of the cumbersome-ness of their job.

DATA-DRIVEN INDUSTRY

Recognising the potential of disruptive technology, RP has collaborated with StarHub to open the RP-StarHub Data Analytics Joint Laboratory. This new facility will leverage on telco and open-sourced data — for example, consumer data from social media, online gaming, and mobile apps — to determine new insights that can help companies identify business opportunities.

How Is This Achieved?

The Common Interest Segmentation Engine (CISE), a predictive analytics system jointly developed by RP students and StarHub data scientists, uses artificial intelligence and Social Network Analysis (SNA) techniques to predict and segment common user interests in real-time. This is based on open-sourced data, and in the near future will be combined with StarHub's Telco data.

"It's able to correctly predict user interest for Food and Drinks, Technology, Sports and News, and Entertainment," said Dr Ng. "Such intelligence gleaned from open sourced data can aid organisations to better tailor or customise their market campaigns towards different segments."

"Across most industries, start-ups and established competitors alike are using big data-driven strategies to uncover intelligence to up their business value, create new markets, and improve existing market shares."

—
Dr Ng Foo Meng, Senior Manager (Data Analytics Technology Centre), School of Infocomm, RP



Dr Ng Foo Meng, Senior Manager (Data Analytics Technology Centre), School of Infocomm, RP, demonstrating the visual display of CISE; the coloured groups indicate similar user interests

"We see in Republic Polytechnic's faculty and students a vibrant culture ripe for innovation. It is a natural step for us to deepen our collaboration with Republic Polytechnic to boost talent development and meet Singapore's Smart Nation needs."

—
Dr Chris Choy, Assistant Vice President of SmartHub, StarHub ♥

ENGAGING GENERATIONS Y TO Z

At RP's School of Management & Communication (SMC) Consumer Insights Lab, two research initiatives have been conducted to identify youth behaviour towards social media, and how this would impact brand marketing strategies. One of them is known as the Youth Panel Research. The Youth Panel is a current dynamic youth community comprising over 2,000 youths in Singapore between 18 and 35 years of age. This group provides leading and timely opinions towards brands, products, and services to industry partners through participation in surveys and polls to influence critical business decisions and policies.

INSIGHTS

INTEREST and **PURPOSE** are two major factors that affect youth's choice of social media

TOP **5** most popular social media platforms:

29.02%
Instagram

23.28%
Snapchat

17.98%
Facebook

TIPS TO ENHANCE YOUR SOCIAL MEDIA IMPACT

1. INCREASE YOUR COMPANY PRESENCE ON SOCIAL MEDIA

The time that youths spend interacting with your brand is directly proportional to how much they enjoy it.

2. RESPECT PERSONAL SPACE

Youths cherish their privacy on social media and prefer less intrusive and respectful marketing.

3. BE BRIEF AND EYE-CATCHING

Concise taglines and appealing images are the most memorable for youths, who tend to have a short attention span and high instant gratification needs.

4. USE BITE-SIZED INFORMATION

Ready-to-go content, like emoticons and pictures, have the advantage over time-consuming downloads that demand more patience.

5. AUTHENTICITY IS KEY

Connect your corporate website to your social media page, so that your youth audience can verify the authenticity of your marketing.

50.48%
of youths spend one to three hours on YouTube daily, as compared to >one hour on TV

5.90%
Tumblr

18.80%
Twitter

Interested to survey/poll the Youth Panel?

Please contact nah_seok_ling@rp.edu.sg

GIVING THANKS TO THE S R NATHAN EDUCATION UPLIFTMENT FUND



At the tea session, the student beneficiaries also talked about their personal interests, volunteer projects, part-time work, and aspirations for life after graduation



ABOUT THE FUND

The S R Nathan Education Upliftment Fund was extended to RP in 2013 by former President of Singapore, the late Mr S R Nathan. It provides financial aid for eligible Institute of Technical Education (ITE) graduates who are currently pursuing RP's diploma programmes. To date, 33 RP students have been awarded, with more set to receive it in the future.

At the S R Nathan Education Upliftment Fund tea session on 30 October 2017, student beneficiaries got the chance to personally thank Mrs S R Nathan and guests. They shared how their lives had changed as RP students, especially the positive impact that timely financial support had on themselves and their families.

Award recipient Tan Zhong Yao remarked, "With this award, I would be able to focus more on my studies rather than spending more of my time working to supplement my day-to-day expenses in school."

There was also shared feelings of paying the favour forward. Another recipient, Alicia Goh said, "Because of the help I am receiving now, I aim to give back to society and the needy in future when I am capable of doing so." Nur Hidayah Bte Razalee, an award recipient from RP's Diploma in Industrial and Operations Management (DIOM), concurred, citing her aspiration to "use [her] skills and knowledge in the engineering industry to help the company achieve success."

In a show of their gratitude, the students also presented Mrs Nathan with a flower bouquet and a specially prepared video montage.

LL **SOMETIMES, THE SMALLEST THINGS
TAKE UP THE MOST ROOM IN YOUR HEART.**

**Tang Zhi Quan, S R Nathan Education Award,
Academic Year (AY) 2017 recipient**



*Scan the QR code
to find out how
you can lend
a hand to our
students in need.*

FIGHTING DIABETES WITH SPOTTI



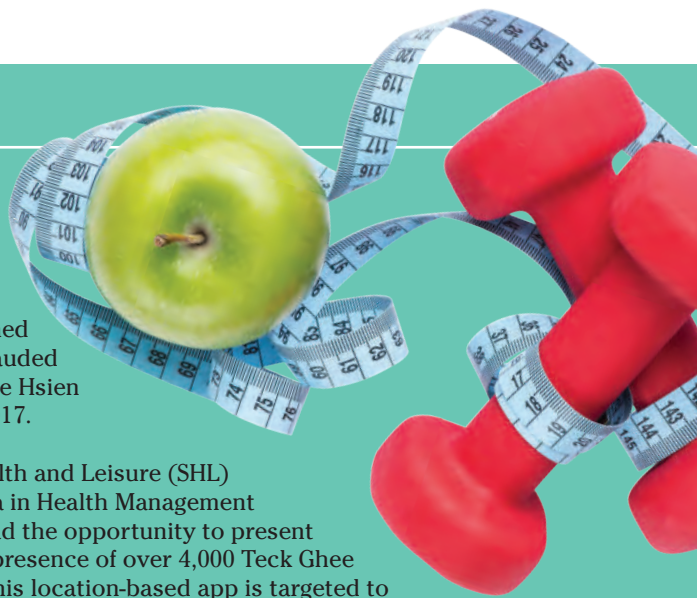
The atmosphere was electric as Prime Minister Lee Hsien Loong watched the SPOTTI demonstration with great interest

SPOTTI, an interdisciplinary student-led mobile application aimed at battling diabetes, was lauded by Prime Minister (PM) Lee Hsien Loong on 30 September 2017.

Two School of Sports, Health and Leisure (SHL) students from the Diploma in Health Management and Promotion (DHMP) had the opportunity to present SPOTTI to PM Lee, in the presence of over 4,000 Teck Ghee Constituency residents. This location-based app is targeted to fight diabetes by enabling users to locate healthier food options and exercise programmes near them while supplemented by exercise video demonstrations – a significant effort to educate residents on correct exercise methods using facilities in their neighbourhood.

SPOTTI is the creation of an interdisciplinary Final-Year Project (FYP) involving students from School of Applied Science (SAS), School of Infocomm (SOI), School of Management and Communication (SMC) and SHL students.

Taking two semesters to create, this FYP is an industry collaboration with Teck Ghee Constituency in which most of the exercise videos were filmed. Prior to this, the team had also been invited by the Active Aging Carnival Organising Committee to make more exercise videos in Ang Mo Kio Group Representation Constituency (AMK GRC) with elderly residents as models.



DSEM STUDENTS HONOUR PIONEERS



Madam Halimah Yacob, then MP of Marsiling-Yew Tee GRC, graced the Parents' Day 2017 event as Guest-of-Honour at Marsiling Community Club with DSEM Students

On 30 July 2017, the mood at Marsiling Community Club was brightened up by a team of 30 RP's Diploma in Social Enterprise Management (DSEM) students. Through various traditional games like Five Stones and Pick-up Sticks, the team warmed up to about 80 elderlies and rekindled fond memories from the latter's childhoods.

In collaboration with 20 People's Association Youth Movement (PAYM) volunteers, the event included the painting of National Day-themed planks which were displayed at SunLove Home in Marsiling. Mr Warren Wang, Former Director, School of Management and Communication (SMC), RP, stated that such a move gave recognition to individuals who had contributed to significant growth among families, workplaces, and consequently the nation's development.

Guest-of-Honour Madam Halimah Yacob cited the values of such programmes in appreciating the contributions of our parents while upholding the spirit of National Day. Participants also had positive experiences from the event — one Year 2 DSEM student, Christine Grace Luna Librojo Ganaban, described the event as “fun and meaningful”.



RP STUDENTS PLAY THEIR PART IN THE CAR-LITE CAUSE



RP students engaging diverse members of the public at activity booths on Car-Free Sunday SG

On 29 October 2017, around 500 RP students participated in Car-Free Sunday SG, a community initiative that aims to promote the car-lite message and enliven Singapore's streets. Led by the Urban Redevelopment Authority (URA), the event helped to raise awareness on the benefits of utilising roads in different ways that support socially responsible activities.

Students from RP School of Sports, Health and Leisure (SHL), spent a month in developing the programmes, planning the fitness booth layout and procuring the equipment required for this event. The range of activities organised included strongman, powerlifting, and high-intensity interval training, callisthenics tryouts, speed and agility challenges, healthy food cooking demos, interactive nutrition games, mental health awareness exhibitions, and the very popular and well-received Zumba and KpopX Fitness mass exercise sessions. The students' involvement formed part of an authentic learning experience in their Health and Wellness module.

RP's contributions did not stop there — Mr Aaron Chen Angus, Assistant Programme Chair for RP's Diploma in Health Management and Promotion (DHMP), led the students in sharing health tips to over 2,000 event participants from the public.

"Our students had the opportunity to conceptualise the activities, put up proposals for fundraising and lead the execution of the event," Mr Chen said. "After conducting field research, students continued to refine their event plan to ensure that the activities were suitable for event participants of various age groups." ♥



Mr Aaron Chen Angus, Assistant Programme Chair, Diploma in Health Management and Promotion, School of Sports, Health and Leisure, RP (left) and First Year Diploma in Health Management and Promotion student Joel Ooi (third from right), taking part in a tug-of-war challenge with members of the public on Car-Free Sunday

ONE STEP CLOSER TO INDUSTRY 4.0

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Industry 4.0 — a combination of machines, vehicles, and facilities embedded with smart sensors and connected by the Internet to form a cyber-physical system, where big data analytics, cloud computing, and machine learning are used to drastically improve the efficiency of manufacturing and business. To leverage fully on these technological advancements, RP is collaborating with industry partners through the Office of Technology Development (OTD).

We spoke to Dr Lim Boon Whatt, Director of OTD, about how the department is adapting to Industry 4.0, and what companies can expect from an RP partnership.



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Cyber-physical
System

+



Big Data Analytics
Cloud Computing
Machine Learning

“We value strong collaboration between industry and RP in areas such as consultancy projects, joint projects, and joint laboratories. It is a win-win partnership as it allows companies to tap on our expertise to develop their own capability.”



Dr Lim Boon Whatt started his career with RP in 2008 and was seconded to the Ministry of Education (MOE) Higher Education Division as its Assistant Director from 2012 to 2014. He joined OTD upon his return to RP and has been the Director of OTD since 2015.

Q What are some ways that various stakeholders, like industry partners and RP students and staff, can work with OTD? How can they benefit from such collaborations?

A We value strong collaboration between industry and RP in areas such as consultancy projects, joint projects, and joint laboratories. It is a win-win partnership as it allows companies to tap on our expertise to develop their own capability. For RP, our staff can use the opportunity to keep up-to-date with the industry and at the same time, involve students in some of these industry projects as part of their learning process.

Q What are your thoughts on the current trends of disruptive innovation, such as big data and the Internet of Things (IoT), and how do you think such disruptive innovations and technology will transform the industry landscape 10 years from now?

A Disruptive innovations are constantly evolving and the pace of change in areas such as machine learning, robotics and big data will increase exponentially. We are expected to have 30 billion connected devices by 2020, with each person having 10 of these devices. So, you can imagine the amount of data that will be collected, and the challenge is how to make meaningful sense out of these data. I think companies should be using data to address operational issues, create new business opportunities and as a competitive advantage.

Nobody can accurately predict how things will be like in 10 years' time. However, going by current trends, I expect big data, IoT,

augmented reality/virtual reality (AR/VR), machine learning and robotics to continue to disrupt the industry and we need to adapt to these changes. We should also see technology not just as a disruptor but also an enabler that can transform people and the entire organisation. However, the biggest challenge is still changing mindsets of individuals to embrace new ways of doing things and to leverage on these disruptive innovations.

Q This year's RP Tech Day focused on the Future of Work. How does RP prepare our students for an ever-changing field of work and how is RP adopting and preparing for this disruptive change as a Lifelong-learning Institute?

A The Future of Work is of particular interest to us and in order for RP to prepare our students and adult learners for jobs in the future, our academic staff will need to stay on top on current trends and constantly updating the curriculum so that our learners are future-ready. We recently set up a Robotics and Artificial Intelligence Task Force to precisely look at how to prepare RP for changes in disruptive technologies. We are now looking at ramping up curriculum changes, staff training, and capability development, as well as workshops and bite-size modules for students and adult learners to appreciate emerging technologies.

As an organisation, we also have to stay nimble and be adaptable to changes. Having a culture of experimentation is also useful when we respond to new things and ideas. When our staff have the right mindset, they can then inculcate it in our students and encourage them to embrace new changes and lifelong learning. ▀

Keeping Up to Date

Initiatives for Industry



Technology Day



Monthly sharing session with RP's Centre of Innovation for Supply Chain Management (COI-SCM)



Exhibitions



Conferences

Initiatives for Staff



Annual Staff Discovery Forum



Technology Day



Tech Road Show



Industry 4.0 Training Series



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