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SMEs gain a foothold with technology

Invest in infocomm technology — with the Government's help — and take your business to the next level

Perhapsyou are frustrated with the operational bottlenecks your company is experiencing on a daily basis. Tasks like keeping track of inventory accurately or organising customer data are taking up too much time and manpower. Or your headache could be caused by the amount of paperwork, often duplicated manually, that goes into essential duties such as managing the payroll.

Infocomm technology (ICT) could just be your solution.

By driving product and service innovation, streamlining existing processes, increasing cost efficiency and boosting productivity, technology could provide the advantage you need to gain an edge over competitors.

Computerising the operational elements of your business could free up time for you to focus on bigger plans for your company, while consolidating essential data into one easy-to-access system also speeds up crucial decision-making processes. With help, you could eventurn an idea for an IT innovation into reality and boost your company's bottomline.

However, ICT implementation may seem too daunting for some, perhaps because of the initial outlay, the lack of know-how, or simply because you think your business is too small to need it.

Well, think again. In the upcoming pages, we explore the schemes and initiatives open to SMEs for ICT implementation, as well as the available financial and practical support that will greatly simplify the processes for your business.





Mr Edwin Low, Director of SME Infocomm Enabler and Strategic Capability Divisions, IDA

Whole-of-Government synergy

ICT has been identified by the Government as one of the key productivity strategies to help businesses address challenges like the rising cost of doing business and manpower issues.

To encourage its adoption, the Infocomm Development Authority of Singapore (IDA) and SPRING Singapore have taken the lead to offer support for SMEs and drive the innovative use of ICT solutions. Numerous schemes and initiatives, including several collaborative projects, have been launched over the last few years to increase the accessibility of ICT to the SMEs and to increase the impact of ICT to their businesses.

"Infocomm is a key enabler of business innovation and transformation. We hope to give our SMEs a leg up in the race to stay ahead and be globally competitive. We are

working in close partnership with SPRING to equip as many SMEs as possible with productivity-enabling ICT tools," said Mr Edwin Low, Director of SME Infocomm Enabler and Strategic Capability Divisions in IDA.

The schemes offered cover a wide spectrum of possibilities for SMEs, ranging from enterprise-specific to cross- and even multisector projects. This means that whether you own an engineering firm, a retail shop or a restaurant chain, or whether you're looking for ICT solutions to boost your business sector as a whole, there is an answer to your problem.

"In 2011, there were about 160,000 SMEs in Singapore, making up 99 per cent of all registered enterprises. It is important for SMEs to leverage on technology through the various schemes available, so as to improve their



Mr Fung Mok Wing, Director of Technology Innovation, SPRING Singapore

processes and in turn, increase their business productivity," said MrFung Mok Wing, SPRING's Director of Technology Innovation.

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Find the right ICT solution for your business

iSPRINT: An integrated scheme for all SMEs

Launched in 2010 in collaboration with SPRING Singapore and the Inland Revenue Authority of Singapore, IDA's iSPRINT is a comprehensive scheme aimed at helping SMEs improve their technological capabilities. Since its inception, iSPRINT has lent support to close to 5,000 SMEs. In 2011, the scheme received S\$85.5 million from the National Productivity Fund to support ICT adoption until March 2016.

Being a broad-based scheme, iSPRINT offers a range of ICT tools for businesses of different natures, scales and sizes. To encourage ICT adoption, the application processes have also been simplified to shorten turnaround time and increase accessibility.

PACKAGED SOLUTIONS FOR INDIVIDUAL SMES

iSPRINT's ready-to-use packaged solutions were developed to facilitate easy implementation. There are more than 150 iSPRINT Packaged Solutions to choose from. Intermediate sector-specific applications such as the Clinic Management System (seen in the case study on page 30) are also available. A full list of available solutions can be found at www.ida.gov.sg/sme/ITPackages.

If you're looking for something more specific for your business, iSPRINT also supports customised solutions such as the Enterprise Resource Planning system.

SECTOR-WIDE ICT ADOPTION FOR ECONOMIES OF SCALE

iSPRINT also seeks to drive collective sectorwide ICT adoption so that SMEs can benefit from economies of scale and lift the overall productivity level of the sector.

In line with this, IDA has engaged with industry organisations such as the Spa and Wellness Association Singapore (as seen in the case study on page 31) to provide support for projects that help catalyse ICT adoption among SMEs. Projects carried out include the development of solutions catering to specific sector needs and deploying these solutions on Software-as-a-Service (SaaS) platforms— scalable software solutions that SMEs can employ at an affordable cost.



BETTER SUPPORT FROM THE GOVERNMENT

In August, it was announced that all SMEs adopting ICT solutions for processes that are currently manual would be eligible for up to 70 per cent grant support of the qualifying costs. The grant cap for the purchase of Packaged Solutions has also been doubled to \$\$20,000.

A new category of Specialised Software for ICT SMEs is now also available to ICT solution providers. These companies are eligible for up to 70 per cent grant assistance, capped at S\$25,000.

RESOURCE CENTRES PROVIDE TRAINING AND CONSULTANCY

SME Infocomm Resource Centres are located at Singapore Polytechnic and the Singapore Chinese Chamber of Commerce and Industry. At nominal or no charge, interested business owners may participate in seminars, workshops and business clinics. Industry veterans are also on hand to address the queries from SMEs.

Technology Innovation Programme (TIP): Develop your technology capabilities

Started by SPRING Singapore in 2006, the programme provides resources to help companies upgrade their technology capabilities. Under TIP, businesses embarking on projects that involve the application of technology to develop or improve products or processes can receive a grant from SPRING to defray up to 70 per cent of qualifying costs.

One SME that has benefitted is environment solutions provider Hydroemission. With funding from TIP, the company scaled up the manufacturing process for its proprietary controlled release so that it could be applied to a wider variety of fields. Hydroemission now holds international patents on its core technology and plans to expand beyond business-to-business into the business-to-consumer market by launching its own product lines.

was committed to TIP and more than 2,500 SMEs have benefitted. In 2011, another S\$320 million has been injected into the scheme to drive technology innovation till 2015.

Part of these funds goes towards the Technology Enterprise Commercialisation Scheme (TECS), which provides seed money for viable technology start-ups with projects that prove to be of sound concept and value.

To help SMEs that are uncertain about how to proceed, SPRING also offers an Innovation and Capability Voucher (ICV) scheme. SMEs are provided with S\$5,000 vouchers that can be redeemed for services that allow them to take the first step towards building technology capabilities.

Mr Fung said: "Adopting technology helps SMEs to increase productivity, efficiency and customer satisfaction, which is key in today's increasingly competitive market. SMEs can tap on SPRING Singapore's TIP and leverage on technology innovation as a key enabler to grow their businesses."

CENTRES OF INNOVATION FOR TARGETED INDUSTRIES

In addition, SMEs can seek help from Centres of Innovation (COIs) that SPRING has set up in partnership with polytechnics and research institutes. These are store centres are

institutes. These one-stop centres provide laboratory facilities, technology consultancy and training courses for SMEs to test and develop technology projects. There are currently six COIs covering the electronics, supply chain management, environmental and water, food, marine and offshore and precision engineering industries.

Under TIP, SMEs can also engage



Multi-agency efforts help boost SME productivity

To further advance ICT adoption in SMEs, government agencies have been coming together to maximise the usefulness and accessibility of ICT to businesses. Take, for instance, the Call-for-Collaboration (CFC). This mechanism generates real projects that can be funded by the various grants offered by the different agencies.

Under this scheme, ICT solution providers and end-users band together to produce one proposal that only needs to be submitted to the CFC body, rather than to the individual agencies. Funding will then be channelled to eligible proposals.

An example of this is the Mobility Solutions Call-For-Collaboration (CFC) led by IDA, in collaboration with SPRING Singapore, the Singapore Tourism Board and NTUC's Employment and Employability Institute (e2i). This multi-agency effort has catalysed the adoption of infocomm solutions on mobile platforms by over 150 user companies in the retail, food and beverage, hotels and attractions sectors.

IDA has also launched a CFC to develop high-impact sector-specific Software-as-a-Service (SaaS) solutions in partnership with SPRING Singapore, the Ministry of Social and Family Development, the Ministry of Education and e2i. This CFC aims to spur the demand for SaaS solutions that will address sector-specific requirements, bring about mass adoption among SMEs, and more importantly, deliver productivity gains to various sectors.

In the next few pages, learn from case studies of companies and industries that have benefitted from ICT adoption to see how the vast array of software programmes and solutions can be adapted to the size and scale of your company.



If you are an SME owner who would like to use infocomm to improve productivity and competitiveness, you can call either IDA's iSPRINT hotline at 6211 1212 or SPRING's EnterpriseOne hotline at 6898 1800.

Dishing out success with infocomm

With technology, PUTIEN streamlined operations and improved productivity

As a company grows, managing inventory and human resources becomes a more demanding affair. Effective handling of these areas is key to running daily operations smoothly and ensuring competitiveness and success.

The transition from a start-up model to one with hundreds of employees and multiple branches, such as in the case of PUTIEN Restaurant, can be complex.

To thrive in the competitive food and beverage industry, it is essential for the Chinese restaurant chain to maintain consistent quality across its eight branches. This is where infocomm technology (ICT) comes in. Strategically used, ICT solutions can greatly benefit small and medium enterprises (SMEs) experiencing rapid growth. What's more, ICT processes can be customised to the different needs and growth stages of companies for optimal benefits.

Here, we take a look at the different challenges PUTIEN faced and what they did to overcome them, with the help of ICT adoption.

HAVING INVENTORY DATA AT YOUR FINGERTIPS

At PUTIEN's central kitchen, ingredients for up to 60 per cent of its dishes on the menu are prepared before they are delivered to the restaurants to be cooked and served to customers. With eight restaurants, a large amount of fresh produce and ingredients are

sent in and out of the central kitchen daily. This means that the old method of ordering ingredients and manually keeping track of inventory with paper invoices and purchase orders is no longer feasible.

Previously, purchase orders and invoices were delivered by hand to the finance department monthly for consolidation. If there were delays or lost paperwork, financial reports could not be completed on time and that also meant the finance staff would have to work overtime.

With help from SPRING Singapore's Technology Innovation Programme (TIP), PUTIEN implemented an Enterprise Resource Planning (ERP) system that integrated its finance, purchasing and HR management functions, to streamline and improve their operational efficiency. With this, it is able to keep track of what the central kitchen is using daily. Employees can find out with a few taps of the keyboard what ingredients need to be replenished and key in orders using the same system.

With a better grasp of how much resources are being consumed, it became easier for PUTIEN to keep track of supplies, source for better suppliers and get more accurate quotations. As a result, the company saw a decrease in its operating costs by streamlining its operations and improving efficiency.

MANAGING HR MATTERS IS A BREEZE

With close to 200 employees scattered over different locations in Singapore, it became inefficient for the company to keep track of its employees' working hours with a punch card system. In addition, the tabulation and



Biometric finger scanning and the ERP system have been implemented for improved productivity.



Mr Fong Chi Chung, founder and owner of PUTIEN. PHOTOS KOH MUI FONG

distribution of monthly wages was a long and tedious process for the human resource department.

PUTIEN replaced its punch cards with a biometric finger scan system, eliminating problems that arose from situations such as missing cards, employees forgetting to bring their cards or employees helping their colleagues to punch the cards. With a finger scan, working hours were automatically and meticulously recorded into an electronic central system, and employees need not worry about wage disputes or overtime work not being reflected.

It now only takes one day instead of three for the finance department to complete the company's wage accounting and distribution processes. Productivity and staff morale were boosted and employees' effectiveness at work increased.

ENTERPRISE RESOURCE PLANNING (ERP)

The system integrates internal and external management information such as finance and accounting, inventory and customer relationship management across the organisation. With a centralised software application, flow of data is seamless and easily accessible.

Boosting the bottomline

Thanks to ICT, customers of this TCM clinic are now happier

The thought of implementing infocomm technology (ICT) for your business can seem intimidating. But ICT solutions are not just for big companies, as traditional Chinese medicine (TCM) clinic Long Zhong found out.

Any small and medium enterprise (SME) with a business plan and an eye on the future can customise ICT processes to the scale and growth stage of their business.

Here, we examine how ICT adoption has improved Long Zhong's operational efficiency and paved its way for further success.

FASTER AND MORE ACCURATE

At Long Zhong, there are as many as 700 types of medicinal herbs, and the same kind of herb can sometimes also be found in powder, pill, liquid or cream form.

Staffhave to dispense the herbs according to Mr Zhang Mao Ji's prescriptions — a formidable task since the senior TCM physician's handwriting was sometimes hard to read.

Previously, only a couple of more experienced staff were able to read his handwriting quickly and accurately. This presented some difficulty when they were not around, especially since this was a task with zero tolerance for errors.

Tabulating what to charge the patients presented another challenge, as each herb had its own price and each prescription had to be manually totalled item by item which translated to long waiting times. Additional data entry clerks had to be employed for accounting purposes.

Things changed when the Clinic Management System was implemented, with financial support from the Infocomm Development Authority of Singapore (IDA) under the iSPRINT scheme.

The customised software programme records on a central system all the available herbs in the clinic and tracks what is being used each day and what needs to be replenished.

Mr Zhang is now able to key prescriptions directly into the system. Outside the consultation room, employees can print out the prescription and immediately start to put it together without having to wait for the session to end and the patient card to be passed to them.

The cost of each patient's prescription is automatically calculated and staff need not worry that they might make a mistake when tabulating how much to charge a customer.

Previously, it took up to 30 minutes to tabulate a patient's prescription and bill. Now, it takes no more than 15 minutes.

What's more, inventory can now be checked



Employees at Long Zhong TCM clinic have embraced infocomm solutions. PHOTOS KOHMUI FONG



Mr Zhang Mao Ji was convinced ICT adoption would benefit his business.

with a few taps on the keyboard, eliminating tedious daily manual stock takes and taking the guesswork out of ordering stock.

LESS WAITING FOR CUSTOMERS

Under the Clinic Management System, an Electronic Patients Record Management module took the place of physical patient cards. Patient records became easily accessible and it was possible to pull out information such as medical history or the last prescribed medicine immediately.

While there had been mistakes when appointments were manually scribbled in a book, they could be made without error

now and referred to at a glance, thanks to an instantly updated electronic calendar.

Along with the increased speed with which prescriptions could be filled, customers no longer had to waste precious time waiting for their medication and to make payment.

Located at Duxton Road, the clinic is busiest at lunch time and this system allows Mr Zhang and his patients to be more productive and to see more patients within the time frame.

AGEIS NO BARRIER

Mr Zhang, who is in his 60s, is by no means a tech expert. But he was convinced that

CLINIC MANAGEMENT SYSTEM

This stock and patient record management system has different modules that allow the clinic to take care of appointment booking, patient data, stock management, and billing and invoicing under one centralised setup. An import and export feature allows easy compilation of management reports. Similar systems can be customised and deployed for use in other sectors and industries.

ICT adoption will benefit his business, and he decided to be open about picking up IT skills and familiarising himself with the system.

"I wasn't confident at first, but I needed to find ways to get over the mental hurdle. For instance, I would get my assistant to help key in prescriptions initially, and practise typing Chinese characters on my smartphone."

Clinic employees in their 60s have also embraced the new system, relishing their new efficiency. Without the fear of making mistakes while deciphering handwritten prescriptions or billing errors, they are also more relaxed and confident at work.



Different modules on the WESS platform.

Smoothing the way

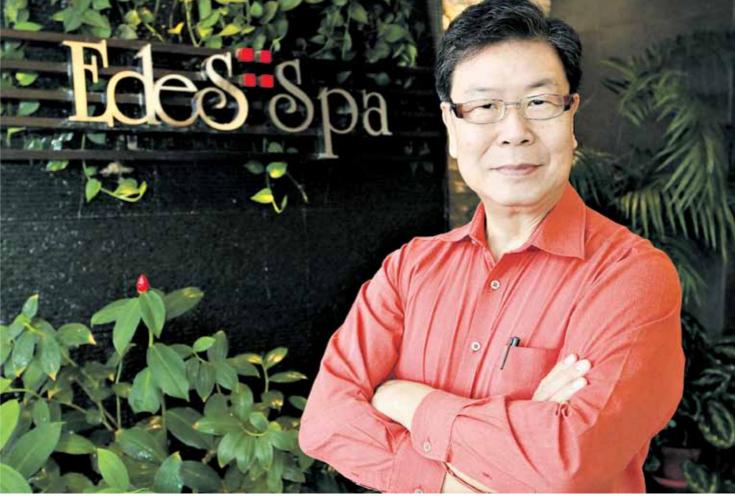
Smaller players in the spa industry boost competitiveness with the help of technology

Singapore's beauty and wellness industry has close to 18,000 players, including spas, beauty salons, slimming centres, nail salons and gyms. With increased tourism, strong purchasing power and more male customers seeking spa and grooming services, the industry is a booming one that currently sees an annual revenue of S\$2 billion.

In a competitive market with vast potential, a boost in productivity can lead to enormous returns. Small and medium enterprises (SMEs) may, however, find the process of implementing an effective technological system daunting. Yet, infocomm technology (ICT) can be customised to companies of different scales and sizes.

The Spaand Wellness Association Singapore (SWAS) took it even further. With the help of the iSPRINT scheme under the Infocomm Development Authority of Singapore, it championed the development of a software tailored to the operational needs of the spa and wellness industry.

Designed to be affordable, modular and scalable, the Wellness Enterprise Resource Planning as a Service (WESS) platform supports functions such as customer relationship management, appointment booking and inventory planning. The system is aimed at helping the company respond in a timely manner to changes in Government



Mr Edward Wong, Director of Edes Spa PHOTOS KOHMUIFONG

regulations and more importantly, increase productivity and competitiveness. As a system that operates in the cloud, it can be implemented in expensively—a bonus for small businesses.

Twenty companies were selected as the pioneer batch to adopt the WESS software platform, including Edes Spa. SWAS' objective is to allow industry-wide adoption to become a viable option.

MORE TIME FOR CUSTOMERS

To provide top-notch service in a spa so that customers can relax and leave rejuvenated, there are lots of small details to take care of. Tasks such as managing inventory or organising customer data require meticulous attention and take up time that employees could be spending with customers.

With WESS, each company can reduce administrative time by up to 60 per cent and save as much as 900 work hours annually. At Edes

Spa, this translated to improved productivity and reduced costs. More importantly, spa consultants can now focus on each treatment session without being interrupted by other duties. The result is happier customers who visit the spa more regularly over a longer period, as they develop trusting relationships with the therapists who attend to them.

The consumer modules built into WESS give customers the ease and convenience of managing their appointments and sussing out new treatments and products on the go.

CONTROL INVENTORY, BOOST SALES

Edes Spa handles a staggering number of products, both for use on-site and for sale to customers. For instance, there are more than 10 types of facial cleansers being used for treatments. Add an endless list of moisturisers, serums and masks that cater to different skin conditions and stock taking becomes a time-consuming and complex affair.

With WESS, stock movement is instantly updated with a scan of a barcode, and inventory levels can be instantly accessed, making it easier to make decisions about replenishment. What's more, buying trends can be studied and out-of-stock situations, especially for popular items, are now problems of the past.

Most importantly, the purchasing records for each customer offers a wealth of information. Not only do consultants have a better understanding of their client's treatment history, they are in a better position to recommend products or simply remind customers that they may be running out of certain items at home. This attention to detail is a boost to customer service and also to sales figures.

HAVE DATA AT YOUR FINGERTIPS

At Edes Spa, books and document binders

WELLNESS ENTERPRISE RESOURCE PLANNING AS A SERVICE (WESS)

A modular and scalable IT platform that addresses the needs of spa and wellness businesses while being affordable and easy to adopt, WESS supports customer relationship management, appointment booking, inventory planning, point of sales functions and cash flow management. Businesses can opt for only the modules they need and and to adopt the flexible system one outlet at a time as they expand.

for making appointments and filing data have disappeared from the reception and treatment areas, making the decluttered space more pleasant for customers.

What's more, with the information in the cloud, data can be accessed by management anywhere via their tablets or mobile phones, greatly enhancing the ease of decision making.

Mr Edward Wong, Director of Edes Spa, said: "Business operation costs are escalating in Singapore. Labour costs are already very high and still increasing. ICT helps reduce labour costs while enhancing operational efficiency and management effectiveness. It is the only way to go."



Adopting technology has shaved time off operational tasks



Mr Ho Yap Kuan, Head of Operations, PSA Corporation. PHOTOS KOH MULFONG

Drivers know exactly where to go once they enter.

Advancing as an industry

Sector adoption of ICT boosts industry productivity

Being the largest container trans-shipment hub in the world, local port operator PSA Corporation (PSA) handles approximately 15 per cent of the global container transshipment. As the centre of a wide network of trade routes and connected to more than 600 ports in over 120 countries, maritime services are a crucial sector for Singapore.

With such a large volume of cargo being handled, efficient and seamless connectivity in inter-modal transportation services such as seato-air or sea-to-land is critical to productivity. Poor technology adoption and the inefficient deployment of resources were some of the biggest challenges for small and medium enterprises (SMEs) within this sector.

TIGHTENING OPERATIONS FOR SEAMLESS TRANSFERS

Previously, memo paging and walkie talkies were the communication channels used among the ports, warehouse operators and logistics companies. There was no way of knowing where a truck was at any time, leading to frequent miscommunication and the inability to plan jobs. Also, the logistics company had to constantly call its driver for location updates.

Mr Ho Yap Kuan, Head of Operations,

PSA, said: "The logistics companies were not equipped to fully make use of PSA's technology implementation and computerised system. This resulted in miscommunication and inefficiency."

To resolve this issue, the Container Depot Association (Singapore) (CDAS) worked with a few pilot member companies before 2006 and, with help from SPRING Singapore, developed the Container and Traffic System (CTS).

With support from the Singapore Logistics Association and Singapore Transport Association, CTS was rolled out to the first batch of companies for adoption in 2007, under SPRING Singapore's LEAD Programme. Many users benefited from the system, as CTS provided real-time integration between the stakeholders, live monitoring of the location of vehicles via GPS, and better communication channels with the drivers via GPRS messaging.

To encourage more transport companies to leverage on the IT system for work efficiency and to improve productivity, CDAS and PSA sought the support of the Infocomm Development Authority of Singapore (IDA) in 2010

With CTS, PSA knows exactly when a truck is arriving at the port, facilitating entry. Details of where a driver should proceed for the loading or unloading of cargo are immediately provided. Staff at the port can also check and prepare for the task ahead, minimising delays and waiting time. This

simplifies the planning and scheduling processes and smoothens the flow of vehicles in and out of the ports, resulting in higher efficiency and increased productivity.

RETAINING EMPLOYEES AND BETTER FLEET MANAGEMENT

With GPS tracking, traffic controllers are able to monitor vehicle locations and job statuses, and better deploy drivers.

In the past, only one job can be assigned at a time and drivers were sometimes given routes that had them driving across the island multiple times. Not only was this a waste of time, it prevented them from picking up more jobs. With poor visibility and a lack of real-time status updates, problems arose when it came to assigning last-minute jobs.

Now, assignments could be better arranged to prevent duplication of routes. Drivers are more efficient and able to make extra trips in a day. On top of increased productivity, this resulted in higher job satisfaction for both the traffic controllers and drivers.

According to Mr Andrew Ang, General Manager from Speedway Logistics, one of the companies that had adopted CTS, too much time and manpower were spent on coordination processes in the past. With so much focus on daily operations, the company was not able to concentrate on bigger issues like expansion and exploring new markets. Worse, there was a time when five trucks were sitting unused as it was difficult to employ drivers willing to take up such a demanding job.

Since CTS was implemented, employee morale has greatly improved. What's more,

CONTAINERISED TRAFFIC SYSTEM (CTS)

CTS is a vehicle tracking and fleet management system designed for mass adoption and developed by the Container Depot Association of Singapore with support from IDA, as well as the Singapore Logistics Association and Singapore Transport Association. The programme provides real-time vehicle tracking and enables data communication among multiple parties, including truck drivers, port operations and in-house traffic controllers. This allows for the efficient transmission of time-sensitive information and optimises resource scheduling. CTS is widely adopted by 210 companies and some 2,800 prime movers are now equipped with the system.

better route scheduling has led to a decrease in monthly fuel cost. On the whole, time spent on daily operational tasks had been cut by 25 per cent while the amount of cargo handled by the company had increased by 10 per cent. PRODUCED BY THE TODAY SPECIAL PROJECTS TEAM