

Group Digital Life

We know that it is not enough to just rely on and improve our core services. As the landscape begins to radically shift towards a data-driven digital economy, we must pursue other growth drivers while capitalising on our core telco assets. This presents new emerging opportunities for us to capture. Hence, we continue to invest in three distinct digital business strands, besides funding and developing new digital services that have the potential to go global.



Digital Marketing

[a.mo.bee]

Brand Intelligence helps clients such as Microsoft, Lexus and Fiat engage customers better



Geoanalytics

DataSpark

intelligently interprets location-based mobile data to generate commercial and public sector insights



Accessing Innovation

^{Singtel}
innov8

gives the Group early access to leading innovations through investments



Mobile Video Streaming

HOOQ

provides 35,000 hours of premium Hollywood, Asian and local entertainment to customers in emerging markets



Group Digital Life

Group Digital Life is focused on three specific areas: digital marketing, advanced data analytics and intelligence, and premium over-the-top (OTT) video to lead our push into the digital economy. We also drive innovation through our corporate venture capital fund Singtel Innov8, which has access to cutting-edge technologies globally.

Digital innovation requires more than an agile mindset and passion for experimentation. Singtel's competitive edge is derived from our extensive customer datasets and relationships with more than half a billion customers across Asia, Africa and Australia. This unparalleled level of market insight enables us to deliver scalable technology breakthroughs and spearhead innovation in conjunction with our regional mobile associates.

THE FUTURE OF DIGITAL MARKETING

Brands and advertisers are increasingly choosing digital marketing channels to reach consumers. Total digital ad spending is forecast to reach US\$301 billion by 2020, according to eMarketer, with Asia set to enjoy the largest percentage growth. The shift in advertising dollars reflects the changing content consumption habits of audiences, who are spending more time on their mobile devices for information and entertainment

than traditional channels such as television and radio.

Amobee, our global digital marketing arm, is positioned to seize these opportunities. The Amobee Brand Intelligence platform analyses and correlates more than 60 billion content engagements daily across the web, social media, video and mobile. With unique insights into their target audience, Amobee's brand and agency clients can optimise


media strategies in real time to increase brand awareness and engagement rates. Amobee INK, a proprietary technology, makes this more precise by allowing clients to overcome the challenge of audience fragmentation across multiple devices to effectively identify and engage consumers with the right impressions.

In 2015, Amobee took significant steps to extend its reach and

“Companies are cracking their heads to reach customers in the brave new world of digital advertising. At Amobee, we have a nifty Brand Intelligence platform that will give them the insights they need to raise their brand awareness and customer engagement levels.”

– Karen Adayo,
Campaign Manager, Amobee





DataSpark

Sharper Insights. Smarter Decisions.

Managing mobility and human dynamics through real-time cellular data analytics



capabilities. For example, Amobee Locate enables clients to target mobile and tablet devices using location and audience data from North America. A further innovation is Amobee OutStream, which targets audiences with interactive video ad formats that are seamlessly embedded within relevant editorial content and only play when the ads are in view. This is achieved through a semantic-level understanding of editorial content using Brand Intelligence technology.

Amobee also signed marketing partnerships with Instagram and Pinterest, in addition to existing Ads API integrations with Facebook and Twitter. Clients can use Brand Intelligence technology to drive customer engagement across the world's four most popular social media platforms.

GENERATING INSIGHTS FROM ADVANCED ANALYTICS

DataSpark leads our efforts to interpret the rich and unique customer data through geoanalytics to give governments and businesses the clarity and confidence to act on insights and make more effective decisions. All data used by DataSpark is encrypted, anonymised and aggregated to protect customer privacy.

For businesses, the anonymised location data helps focus their marketing efforts in areas with high footfall, while governments can plan better for transport, housing, healthcare, education and emergency services.

During the year, our telco affiliates started to use DataSpark's advanced analytics tools for the first time

to optimise network and retail shop planning, and enhance their marketing efforts.

In Singapore, DataSpark is helping clients in the public sector improve mobility and urban planning. By providing planners with insights on residential and commercial districts and the commuting patterns of the population between these areas, we are contributing towards Singapore's Smart Nation vision.

The priority that DataSpark places on data science is reflected in the seven geoanalytics patents filed in 2015. DataSpark has also significantly improved the configurability and scalability of its software, enabling it to handle a more versatile range of large datasets.

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MAKING MULTIMEDIA ACCESSIBLE

Digital video consumption is surging, especially in Asia where the proliferation of affordable mobile devices and a growing middle class are allowing consumers to access content anytime. It is estimated that by 2020, there will be more than 100 million paying digital video users in Asia (ex-China), creating a market worth S\$1 billion.

HOOQ, Singtel's premium OTT video solution, was launched with Sony Pictures and Warner Bros. Entertainment to capture this fast-growing market and help diversify our revenue streams. HOOQ recently launched in Indonesia, adding to its presence in India, the Philippines and Thailand. As subscriptions continue to grow, we aim to become the largest OTT

provider in Asia Pacific through close collaboration with our regional mobile associates. This service will also help them to drive mobile data adoption in their markets.

HOOQ offers affordable access to more than 35,000 hours of Hollywood, Asian and local video content, supplemented this year by hit TV shows such as Mad Men and Supergirl. Customers can enjoy unlimited streaming on any connected device or choose to download their favourite shows when it is convenient and watch it uninterrupted – a helpful feature in markets where mobile networks are not able to support 4G speeds yet. In addition, viewers can enjoy HOOQ content on their television screens via Google Chromecast.

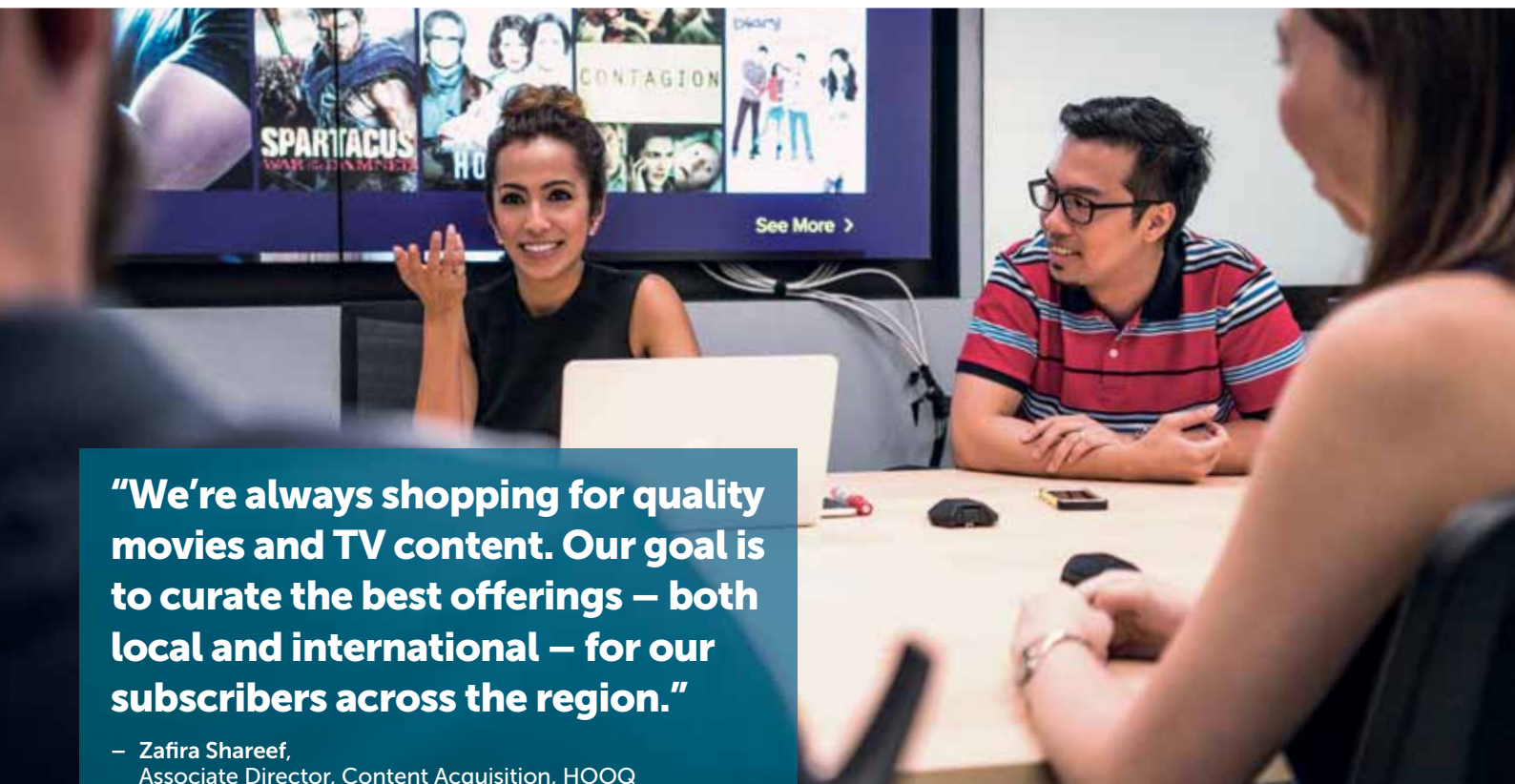
We make billing easier for HOOQ subscribers through our associates'

carrier billing facility, a vital factor in countries where credit card penetration is extremely low. In India, HOOQ has signed innovative distribution and payment partnerships with Snapdeal, Paytm and Tapp.

INVESTING IN INNOVATION

Singtel's success hinges on continuous innovation. Complementing our in-house efforts, our US\$250 million corporate venture fund Singtel Innov8 (Innov8), focuses its investments in innovative start-ups around the world with technologies and solutions that enhance the Group's capabilities, giving us access to emerging technologies.

Innov8 works closely with the ecosystem of leading innovators, developers, government agencies, R&D and capital providers to bring



“We’re always shopping for quality movies and TV content. Our goal is to curate the best offerings – both local and international – for our subscribers across the region.”

– Zafira Shareef,
Associate Director, Content Acquisition, HOOQ



“I love being a data scientist and the thought that my work in geoanalytics can help urban planners make traffic congestion a thing of the past anywhere in the world. How cool is that?”

– Vinutha Raghavendra,
Senior Data Engineer, DataSpark

cutting-edge technologies and solutions to the various markets we operate in. Its portfolio start-ups have the opportunity to access our mobile customer base and enterprise customers from both developed and emerging markets across 25 countries. In addition, start-ups are also able to leverage Innov8’s presence in the global innovation hubs of Singapore, San Francisco and Tel Aviv, as well as its partnerships across the globe to accelerate their growth.

For example, in FY 2016, Innov8 invested in HOPE Technik, a leading Singapore-based engineering company that delivers solutions for industries involved in all aspects of the supply chain. Its portfolio includes the design and manufacture of drones, fire-fighting and classified vehicles, automated guided vehicles and space plane demonstrators. HOPE Technik and our subsidiary, NCS, are now collaborating on government and enterprise projects designed to further Singapore’s Smart Nation initiative such as the use of drones and automated guided vehicles as part of emergency response systems.

A number of Innov8’s portfolio companies have been acquired during the past year. Notably,

industry-leading cloud-based Internet of Things (IoT) platform Jasper was acquired by Cisco.

In January 2016, Innov8 launched the Innov8 Connect programme, which aims to bring start-ups and Singtel together to create innovative solutions for business challenges faced by the Singtel Group. Innov8 Connect provides start-ups the opportunity to collaborate directly with Singtel’s business units to tackle real-world business challenges and validate their solutions at the same time. Successful solutions may lead to commercialisation and start-ups will also have the opportunity to seek funding from Innov8 and tap

into its network of co-investors and partners across the globe.

Innov8 also formed a partnership with the innovation arms of Orange, Telefonica and Deutsche Telekom in 2015 to bridge the start-up ecosystems across Southeast Asia, Africa, Europe, Latin America and the Middle East. Branded Go Ignite, the alliance aims to better provide go-to-market support to eligible start-ups beyond their home market. This will give start-ups the opportunity to tap on the resources and network of four leading communications companies, as well as their collective enterprise and consumer customer base of over one billion mobile customers across five continents.

