

**LAMPIRAN 1**  
**NEW STRAITS TIMES (BUSINESS) : MUKA SURAT B12**  
**TARIKH : 6 JUN 2018 (RABU)**

RISING INCOME

## BioAlpha upbeat on health supplement sector

**BANGI:** BioAlpha Holdings Bhd is well-positioned to benefit from the growing health supplement industries in Malaysia, Indonesia and China as they are its key operating markets, said chairman Tan Sri Abdul Rahman Mamat.

"Malaysia's health supplement market is forecasted to grow at a compounded annual growth rate (CAGR) of 6.3 per cent to RM4.5 billion by this year, driven by rising household income and improved health awareness."

"Indonesia saw its economy expand 5.1 per cent last year, with household consumption the main driver of its economic growth," said Abdul Rahman in its 2017 annual report.

He added that the market there was projected to register CAGR of 12.7 per cent or US\$2.1 billion (RM8.3 billion) this year due to the growing middle-income population and increasing interest in health products.

"In China, the health supplement market is expected to increase to US\$221.6 billion this year, underpinned by rising disposable income, a rapidly ageing population and changing lifestyles," he said.

Abdul Rahman said the company's prospects continued to be



bright as it executes its expansion plans in view of a more favourable market sentiment.

"Domestically, Malaysia's manufacturing and retail pharmacy businesses are expected to do well in the coming year. We will continue to expand the group's products base to sustain interest with periodic rollouts of products."

"For our retail pharmacy business, we expect to franchise more 'Constant' pharmacy outlets outside of the Klang Valley and ex-

pand from our current network of 16 outlets. As for herbal farming, land clearing and planting activities have started on the 356ha land in Pasir Raja Herbal Park. We aim to fully cultivate the area with various plants and harvest 2,000 tonnes of raw herbs by 2020," he added.

BioAlpha's net profit of RM7.9 million for its financial year 2017 was 7.4 per cent lower than the previous year's net profit of RM8.5 million.

The company said the drop was

mainly due to non-operational expenditures incurred during the year, including higher deferred tax arising from origination and reversal of temporary differences of RM1.7 million.

Its financial position remained solid as at December 31, with deposits, cash and bank balances jumping to RM25.7 million from RM5.9 million the year before, attributed to internally-generated cash from operations and unutilised portions from a rights issue.

*Science, Technology and Innovation Ministry secretary-general Datuk Seri Dr Azhar Yahya (centre) and BioAlpha Holdings Bhd chairman Tan Sri Abdul Rahman Mamat (second from right) at a presentation in University of Malaya in March.*

**LAMPIRAN 2**  
**UTUSAN MALAYSIA (MEGA SAINS) : MUKA SURAT 18**  
**TARIKH : 6 JUN 2018 (RABU)**

NTUK mencapai status negara maju dan berdaya saing, Malaysia harus mempunyai sumber tenaga mahir dalam pelbagai bidang antaranya termasuklah bidang teknologi maklumat.

Untuk tujuan itu, kerajaan sekjak beberapa tahun yang lalu giat memperkasa bidang sains, teknologi, kejuruteraan dan matematik (STEM) dalam kalangan pelajar untuk membentuk masyarakat yang cekal dengan kemajuan teknologi.

Turut memberi sokongan terhadap usaha tersebut, Telaga Biru Sdn. Bhd. baru-baru ini telah melancarkan buku memahami pengaturcaraan dan mikropengawal bertujuan untuk memupuk minat pelajar dalam bidang STEM dengan kebersamaan Universiti Kabangsaan Malaysia (UKM) dan syarikat teknologi robotik dari China, Makeblock.

Ketua Jabatan Telaga Biru Education, **Nor Azri Jalel** berkata, ia juga selaras dengan misi kerajaan dalam mendepani cabaran Revolusi Perindustrian 4.0 (IR 4.0).

Buku yang ditulis oleh Pensyarah Fakulti Kejuruteraan dan Fakulti Alam Bina UKM, **Dr. Hafizah Husain** itu diterbitkan untuk memberi pengetahuan dalam pengaturcaraan dan asas

# STEM pupuk minat pelajar

Oleh INTAN SUHANA  
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pengawal mikro (*micro controller*) serta sistem mekatronik menggunakan *mBlock*, papan *mCore* dan robot *mBot*.

"Ini adalah pendekatan terbaru yang kita ambil untuk memperkasa bidang pendidikan STEM terutama dalam kalangan pelajar sekolah rendah dan menengah."

"Kalau kita tak mula menerapkan pendidikan ini dari peringkat awal, kita akan terkebakalang dan kettinggalan dalam bidang teknologi dan inovasi," kata Nor Azri ketika ditemui pemberita selepas majlis

pelancaran buku berkenaan di ibu negara baru-baru ini.

Tambahnya, usaha ini juga bertepatan dengan moto Telaga Biru Sdn. Bhd. iaitu *Kreatif, Inovatif dan Dinamik*.

Ini bermakna mereka bukan sahaja memupuk penerbitan berbentuk keagaman semata-mata, tetapi turut memerluri perkembangan semasa dalam menuju revolusi dan dunia inovasi.

Menariknya, buku tersebut didatangkan sekali dengan medium praktikal *Inventor Kit* sebagai kit pendidikan untuk pelajar atau kanak-kanak yang berminat.

Sementara itu, Dr. Hafizah menjelaskan, tahap pemahaman dan penggunaan pelajar dalam bidang pengaturcaraan yang masih rendah menyebabkan beliau terpanggil untuk menulis buku mengenai kaedah tersebut dengan cara yang lebih mudah difahami.

Katanya, buku-buku pengaturcaraan yang sedia ada mempunyai penerangan yang agak kompleks hingga menyulitkan pelajar untuk memahami bidang pengaturcaraan dengan baik.

"Kami lihat pelajar pelajar yang menyambung pelajaran ke peringkat universiti mempunyai pengetahuan yang terhad dalam bidang pengaturcaraan memandangkan mereka menganggap bidang tersebut sebagai sesuatu yang susah untuk dipelajari."

"Jadi, kami menggunakan pendekatan papan *mCore* yang lebih tegap untuk memudahkan pelajar memahami bidang pengaturcaraan dengan mudah, sekali gus menarik minat mereka untuk menerokainya



NOR AZRI JAEL (kanan) bersama Dr. Hafizah Husain (dua dari kanan) dan Arya Xie (dua dari kiri) menunjukkan robot hasil gabungan Telaga Biru dan Makeblock selepas pelancaran buku *mBlock* dan *mCore* di ibu negara baru-baru ini.

dengan lebih luas," ujarnya.

Menariknya, buku berkonsepkan teknikal tersebut ditulis dalam bahasa Melayu dan memuatkan penerangan mengenai pengawal mikro dan papan pembangunan yang terdapat dalam pasaran pada halaman awal buku.

Seterusnya, ia dibahagikan kepada bahagian perisian dan perkakasan, iaitu pembelajaran atas pengaturcaraan dimulakan dengan algoritma dan carta aliran selain memberikan penerangan berkaitan cara memulakan dan menulis ar-

cara menggunakan perisian *mBlock* yang diasaskan daripada bahasa pengaturcaraan Scratch.

Dalam pada itu, Pengurus Jualan Makeblock, **Arya Xie** berkata, kerjasama ini dilibat sebagai satu perantara untuk membangunkan generasi muda yang cekal teknologi dan kompeten pada masa hadapan.

Katanya, syarikat yang telah beroperasi selama lapan tahun dan berpangkalan di China itu akan sentiasa memberikan sepuh komitmen untuk membantu memperkasa teknologi dalam kalangan

pelajar supaya lebih banyak inovasi-inovasi terbaru yang bakal terhasil.

"Ini selaras dengan objektif awal penubuhan syarikat ini iaitu untuk mengubah cara pendidikan untuk menjadi lebih kreatif dan menarik melalui penciptaan robot pintar."

"Dengan adanya aktiviti menarik yang boleh dilakukan bersama robot akan membuatkan pelajar lebih memahami bidang pengaturcaraan selain meningkatkan interaksi antara mereka dengan guru," jelasnya.

DR. HAFIZAH HUSAIN (kiri) dan Nor Azri Jalel pada majlis pelancaran buku *mBlock* dan *mCore* di ibu negara baru-baru ini.

# Alibaba incubates new risk for investors

Health unit wakes from long hibernation, soaring 58% in 2 weeks

**BEIJING:** Jack Ma just sowed the seed of another decacorn – a startup worth more than US\$10bil – on the Hong Kong stock exchange.

Largely ignored by analysts, Alibaba Group Holding Ltd's health unit suddenly woke from a long hibernation last month, soaring 58% in two weeks to reach a market value of US\$8.7bil.

Most of the rally came before Alibaba Health Information Technology Ltd announced the US\$1.4bil purchase of healthcare assets from its parent.

That deal aside, the surge probably has something to do with Ali Health's bid to attract institutional investors. Last week, its management attended Morgan Stanley's China Summit in Beijing, seeking one-on-one meetings with investors.

Earlier, mainland Chinese fund managers received a business presentation from the firm.

Such a manoeuvre is highly unusual for a mid-cap company that doesn't even hold quarterly earnings calls. But once Ma, Alibaba's chairman and founder, convinces professionals to pile in, Ali Health could well be transformed into a blue chip.

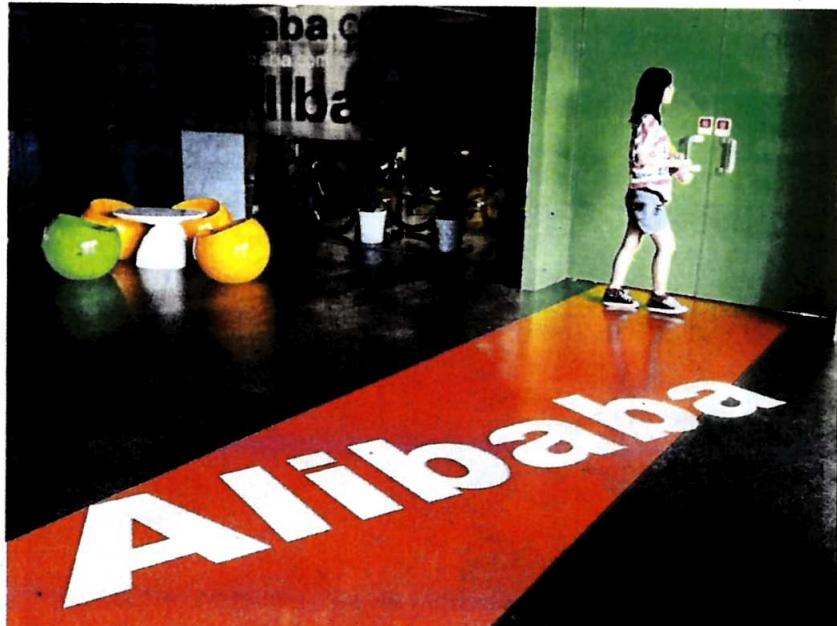
The company, whose online pharmacy accounts for 88% of revenue, painted a rosy picture in its presentation. Currently, hospitals sell about 68% of drugs in China, whereas in developed countries, the bulk of distribution is done through retail channels.

By 2020, hospitals will outsource 260 billion yuan (US\$41bil) of drug sales to online and offline pharmacies, Ali Health reckons. That's a big market for a firm that generated only 2.4 billion yuan of sales in its latest fiscal year ended in March.

The pitch looks opportunistic. Healthcare is showing by far the best return among sectors on China's stock market this year, as investors shun industries with any debt and go looking for the next Pfizer Inc.

Wuxi AppTec Co, a biologics manufacturer, soared to a US\$20bil market cap after going public in Shanghai in early May. Such gains can only burnish the appeal of owning a slice of China's largest e-pharmacy.

But Ali Health has a troubled past. Its parent's 2014 investment in the shell company that was the vehicle for the unit's backdoor



**Hidden gem:** An Alibaba employee walks through a communal space at the company's headquarters in Hangzhou. Largely ignored by analysts, Alibaba's health unit suddenly soared in two weeks to reach a market value of US\$8.7bil. — AFP

listing breached Hong Kong takeover rules, a panel under the city's Securities and Futures Commission ruled in April 2016. (Alibaba said it believed it had fully complied.)

Investors who piled into Ali Health shares during the 2015 stock market frenzy – when speculation was rife that the healthcare unit would be folded into the parent – would have lost two-thirds of their money within three months if they bought at the peak.

Alibaba, meanwhile, did very well. By consolidating Ali Health in 2015, the e-commerce giant managed to book a non-cash gain of US\$2.9bil, boosting net income at a time when global investors were questioning the health of China's economy and had pushed its shares below their IPO price.

The future may be no less fickle. Ali Health

is talking up using artificial intelligence to improve diagnostic efficiency. But the hot spot for healthcare this year is biotech rather than AI.

Case in point: Ping An Healthcare and Technology Co, an Ali Health competitor, is now below its IPO price, while biotech firms Sino Biopharmaceutical Ltd and 3SBio Inc have soared.

For investors, there's also the risk that Ali Health will sell more stock to take advantage of its ballooning valuation.

3SBio and Genscript Biotech Corp fell more than 7% in Hong Kong yesterday morning after share placements. Both firms had rallied more than 40% this year.

This stock fever should perhaps carry a health warning. — Bloomberg