

Hong Kong Mobile Apps Industry Survey 2017

21 June 2017



WTIA
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CREATEHK

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Introduction



- A unique Mobile Apps Industry Survey conducted in Hong Kong for the 4th time
- Commissioned by Hong Kong Wireless Technology Industry Association (WTIA)
- Conducted Independently by Hong Kong Productivity Council (HKPC)
- Understand the trend of the Industry in 2017
- Identify needs of the Industry
- Offer recommendations to the Industry and policy makers

Methodology



- The data was collected from 8 May 2017 to 5 June 2017
- Target: Management level of IT companies with mobile apps development
- Means: Online Questionnaires/ Telephone Interviews/ Face-to-face Interviews
- 124 replies were received

Situation in Hong Kong

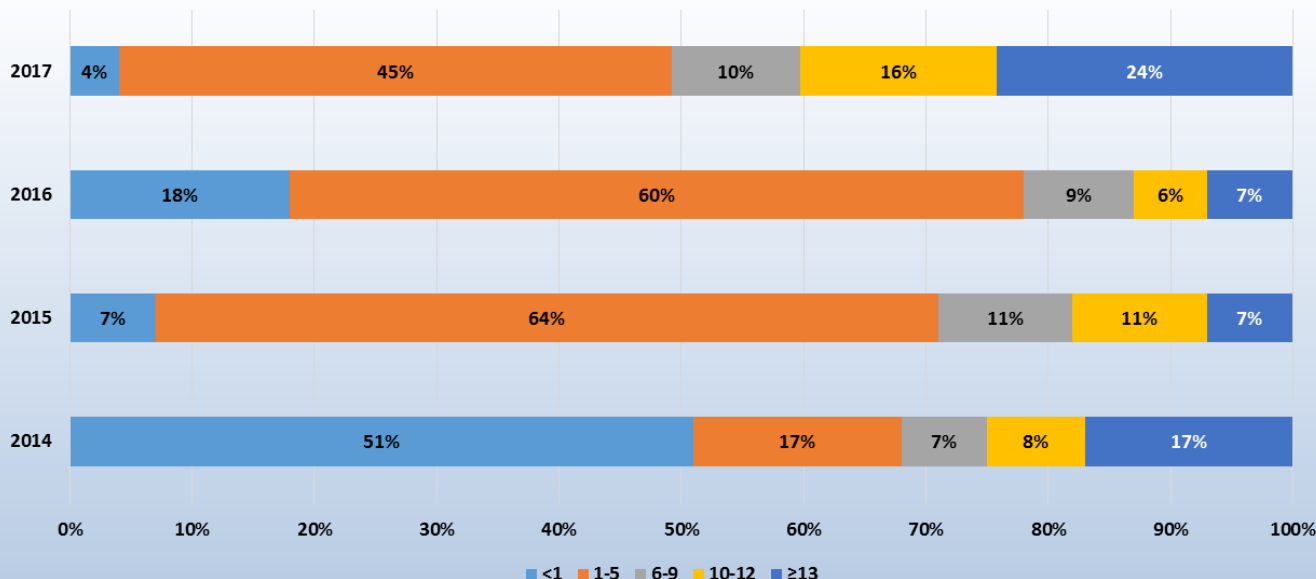
Company Overview



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Years of business



- In 2017, the majority of the respondents operates 1-5 years (45%)
- Comparing to 2015 and 2016, the practitioners become more mature as the ratio in “<1 year” decrease significantly to 4% while “≥13” years increased to 24%

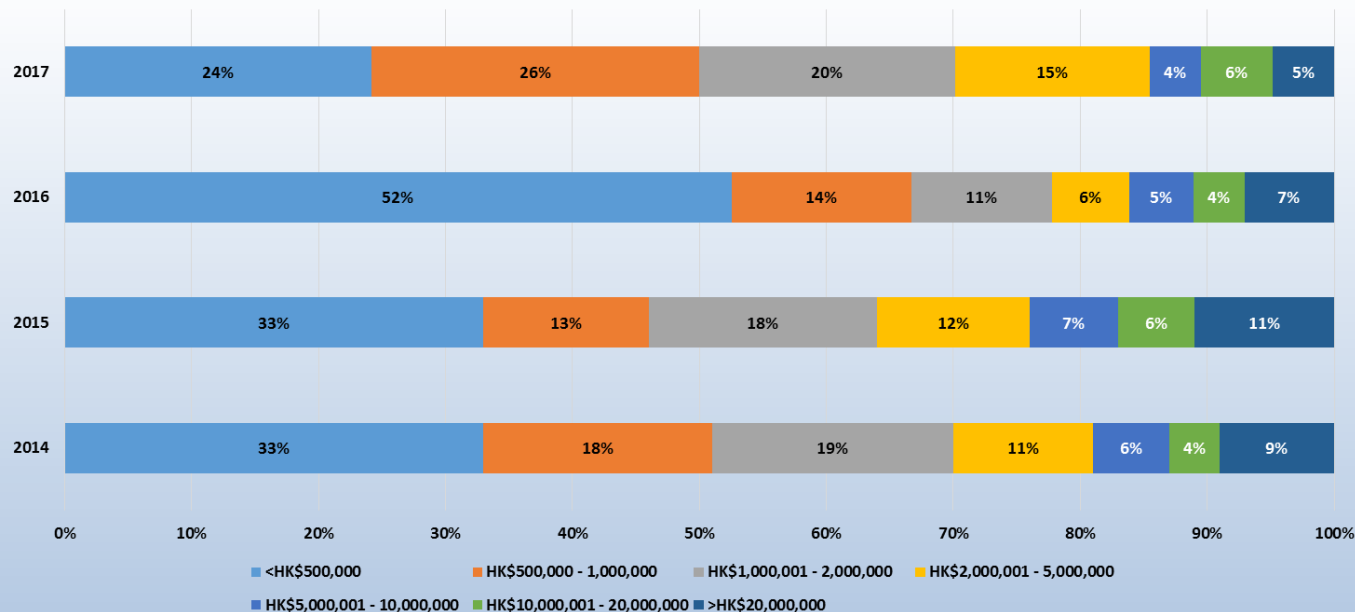
Company Overview



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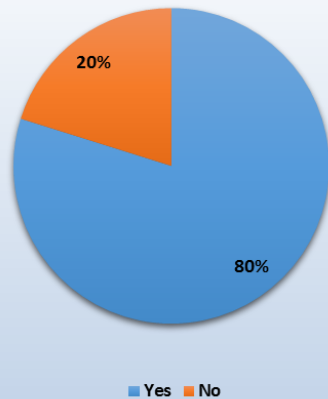
Annual Revenue of Company



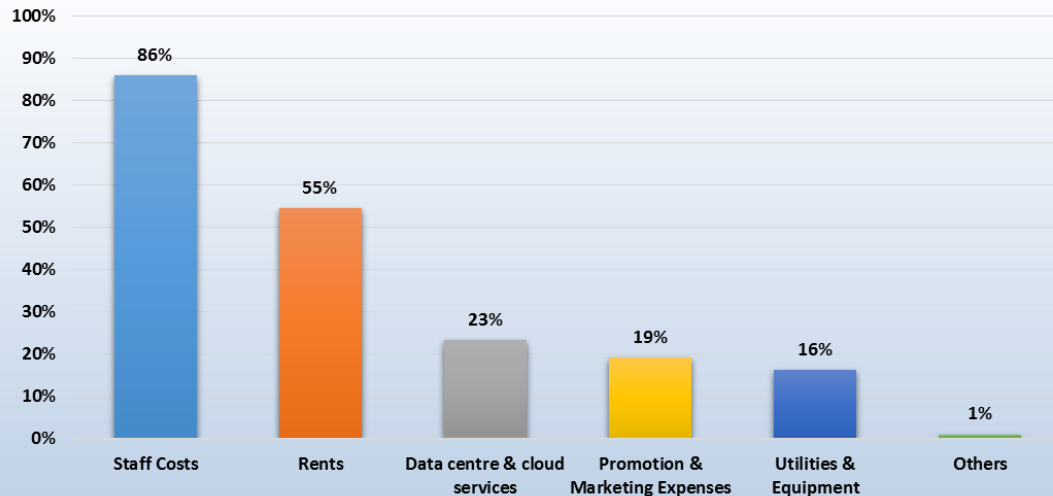
- In 2017, the majority of the respondents are with annual revenue “HK\$500,000-1,000,000” (26%)
- Comparing to 2016, the number in “<HK\$500,000” is significantly reduced, suggesting a better business environment and rebounded to situation in 2014 and 2015

Company Overview

Operational cost increased during previous year



Major cost increasing pressures



- During 2016/17, 80% of the mobile apps industry practitioners are experiencing an increase in operational cost
- The major cost increasing pressures comes from “Staff Costs” (86%), following by “Rents” (55%)

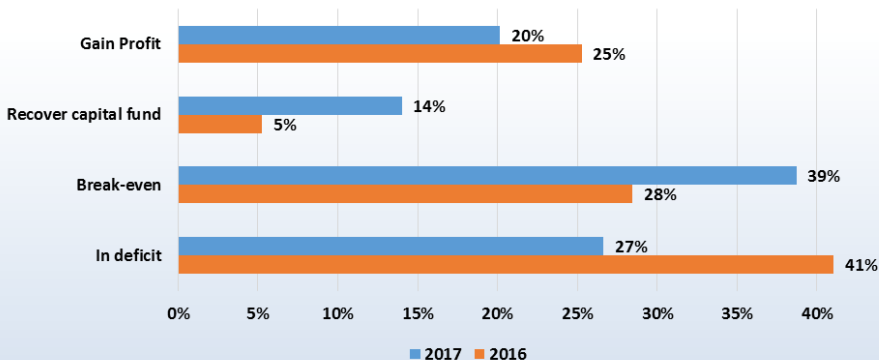
Company Overview



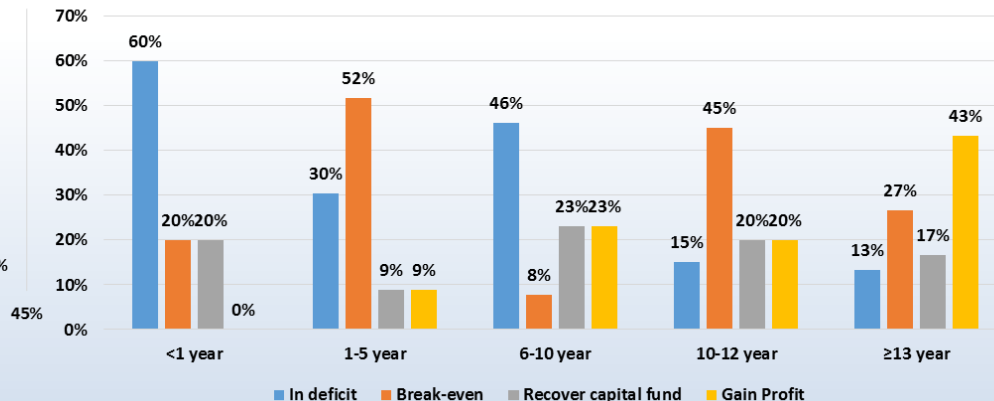
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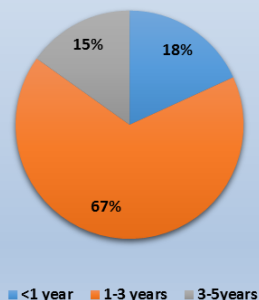
Financial Status of Company in 2016 and 2017



Financial Status of Company by Year of Business Operation



(If in deficit) Expected number of years towards Break-even



- In 2017, the number of companies that are “in deficit” significantly reduced to 27% when compare to 2016 (41%)
- This echos the previous founding that number of “operating <1 year” reduced in 2017
- For those who are in deficit, majority of them expect it may take “1-3 years” (67%) towards break-even.

Company Overview

Prospect of Hong Kong mobile apps industry Subjective Views from Industry Practitioner

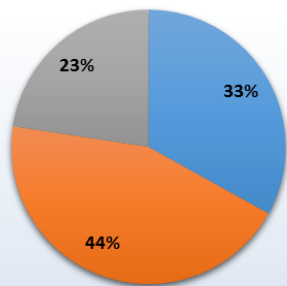
Rating of the prospect of Hong Kong mobile apps industry (Most Pessimistic 0-10 Most Optimistic)	
In deficit	5.6
Breakeven	6.2
Recover capital fund	6.3
Gain Profit	6.0
Average*	6.0

**Each respondents are asked to rate the prospect of Hong Kong mobile apps industry based on their experience, the average rating is the average score of 124 respondents*

- The prospect of Hong Kong Mobile Apps Industry is on-the-track with average rating at 6.0 out of 10.0
- Even for those are in deficit rated 5.6, over the passing mark of 5.0

Human Resources

Situation of shortage of manpower over Previous Year



■ Serious ■ Fair ■ Not lacking

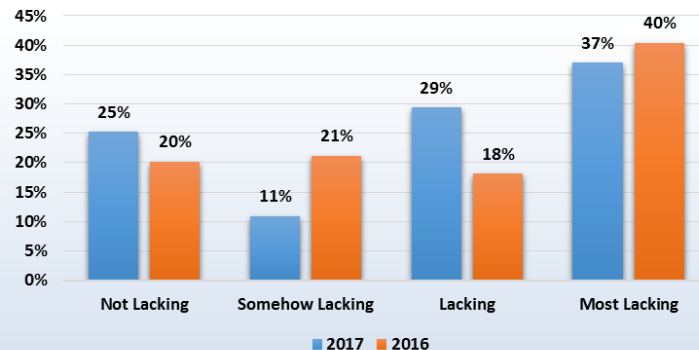
- Over 33% of the respondents rated the situation of shortage of manpower over previous year as serious
- When compare with 2016, technical staff remains the most lacking position, following by sales staff, although the % is dropped to 11% from 18% in 2016
- For sales staff, 50% of the companies responded that they are not lacking in this position, 20% higher than the situation in 2016



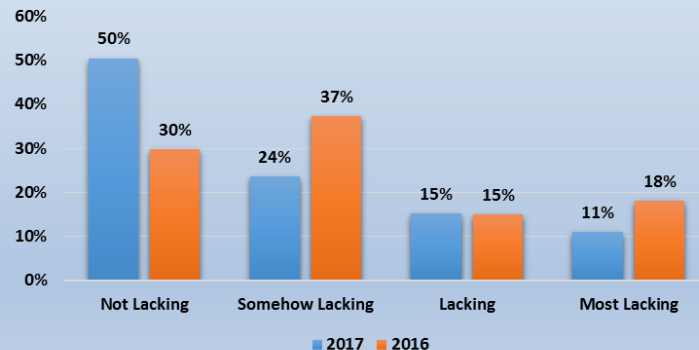
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Technical staff



Sales staff



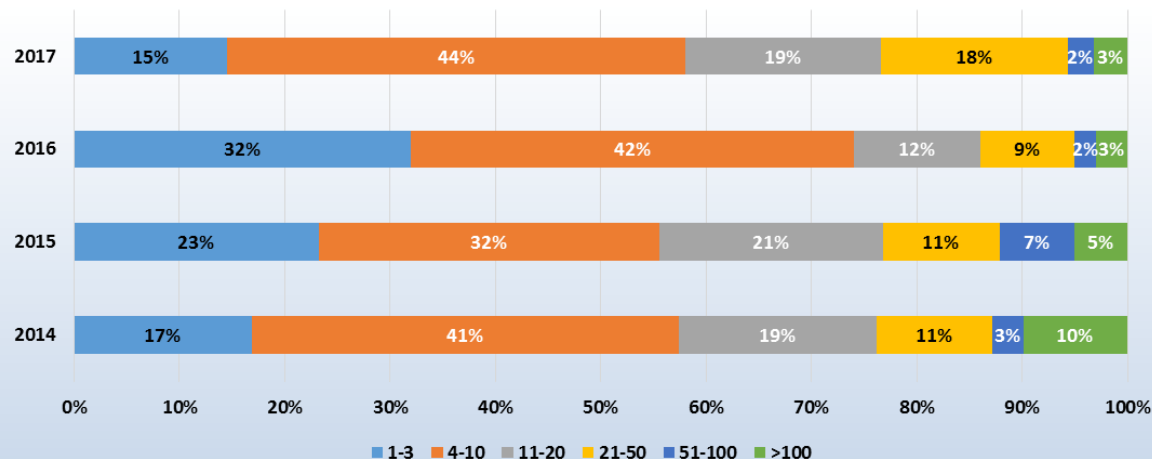
Human Resources



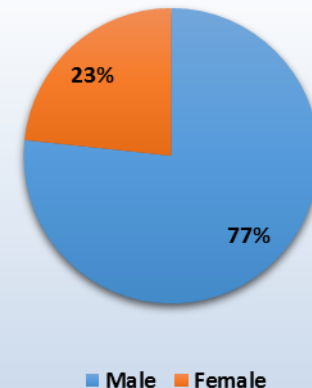
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Number of Staff Hired



Ratio of Staff by Gender



- In 2017, the number of companies with “1-3 staff” dropped to 15%, echos the previous founding that the practitioners become more mature
- The industry is still dominated by Male (77%)

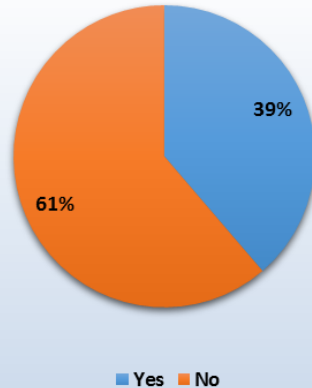
Human Resources



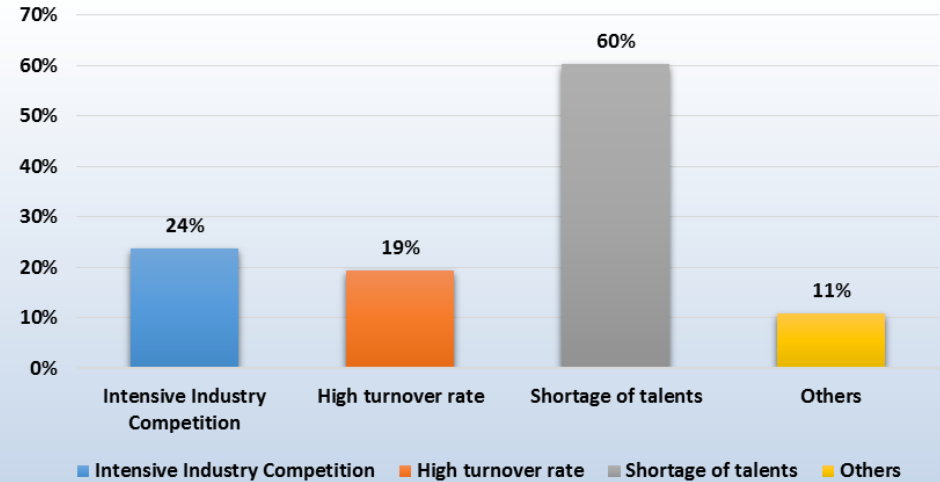
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Turning down deal due to shortage of manpower



Major reasons of shortage of manpower



- Around 40% of the respondents reflected that they had turned down deal due to shortage of manpower
- The major reason of shortage of manpower is shortage of talents (60%) – the people cannot meet their requirements

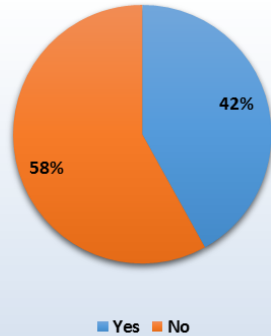
Human Resources



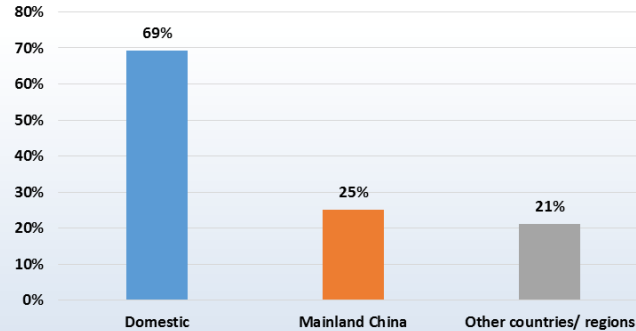
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Use of out-sourcing service



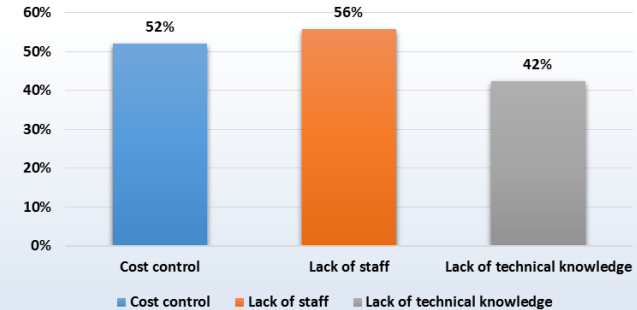
Location of Out-sourcing Service



Other countries/ regions include

- Japan/Taiwan/America/Germany/India/Eastern Europe

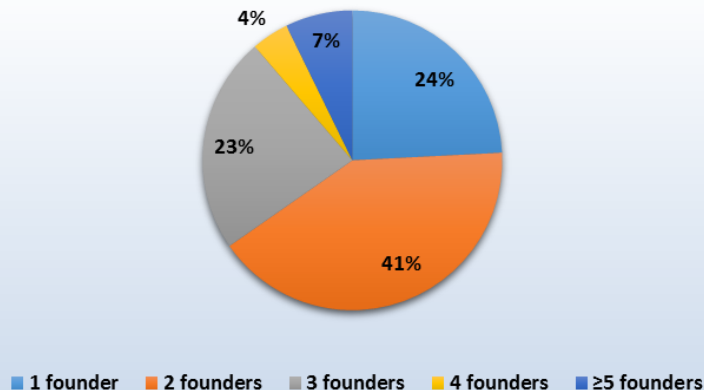
Major reasons of out-sourcing



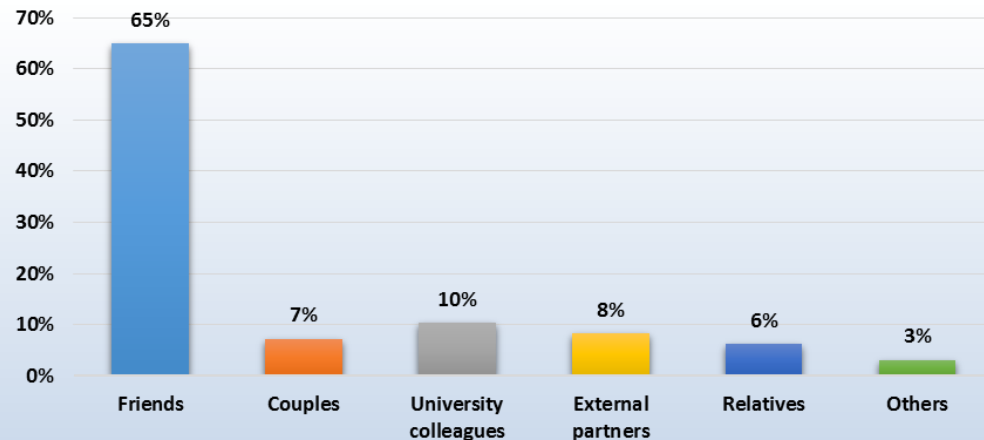
- Around 42% of the respondents had used out-sourcing service, with domestic companies being the most popular choice (69%)
- Around one-fourth and one-fifth of the respondents use out-sourcing service from Mainland China and Other countries/ regions respectively
- The major reason of out-sourcing is lack of staff (56%), following by cost control (52%) and lack of technical knowledge (42%)

Start-ups

Number of Founders



The relationship between founders



- Most of the companies are founded by 2 or more partners (76%)
- Most of them are friends (65%), following by university colleagues (10%) and external partners (8%)

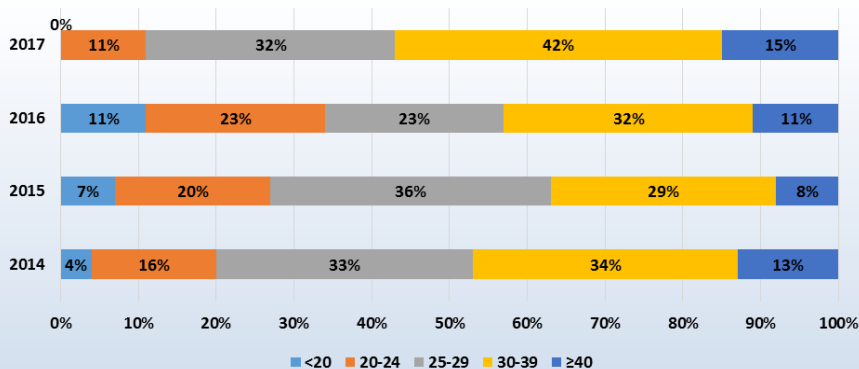
Start-ups



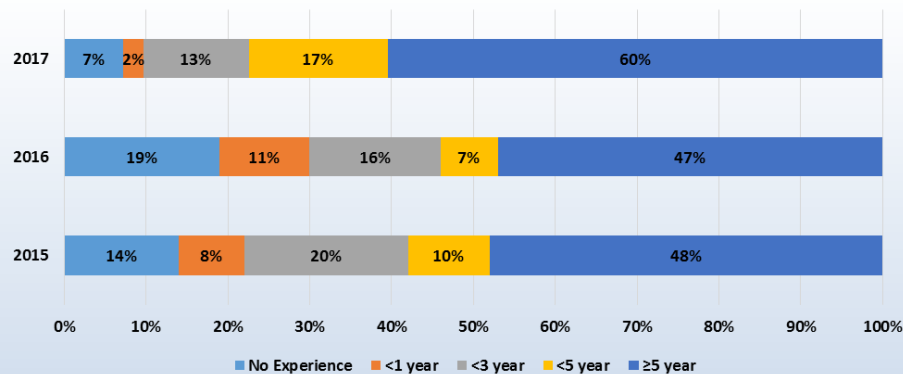
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Average Age of Founders



Average Working experience of founder(s)



- The average age of founders increased, with the category of “<20” dropped to 0%, which again echos the previous founding of the practitioners become more mature
- The average working experience of founder(s) also increased accordingly, with “≥5 years” up 13% to 60% when compare to 2016

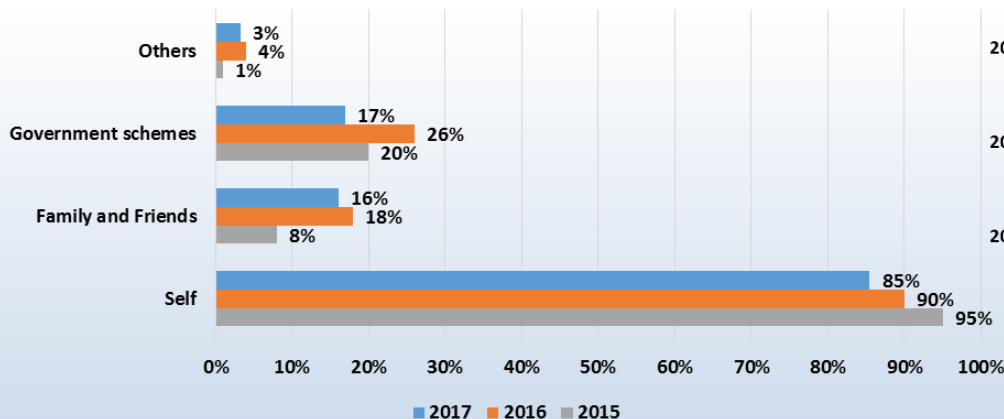
Start-ups



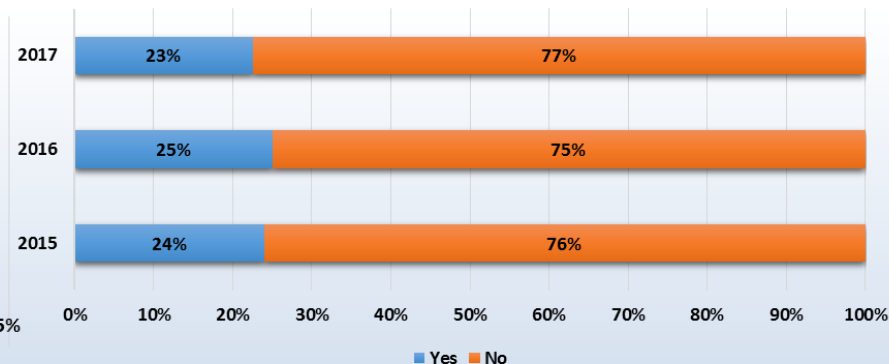
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Sources of funding for starting the business



Additional funding after starting the business



Average Funding Amount (2017): HK\$6,240,000*

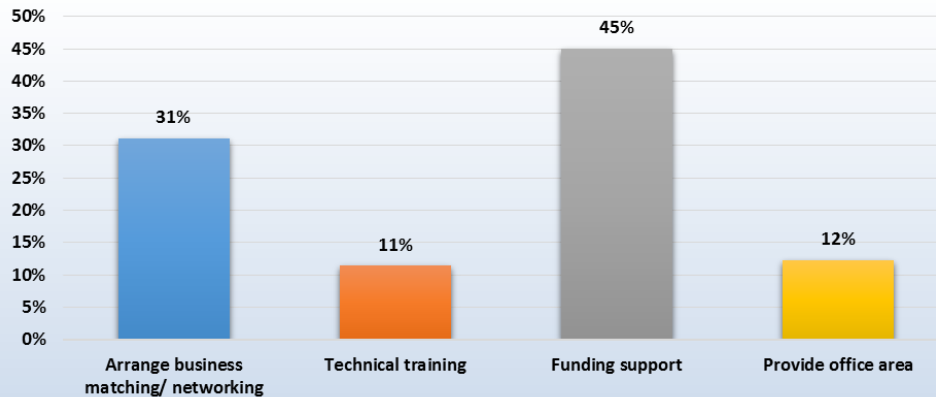
*based on 15 information disclosed

Average Funding Amount (2016): HK\$2,500,000

- Similar to previous years, “Self” (85%) being the most important funding source for starting the business
- The usage of “Government Schemes” (17%) dropped when compare with 2016 (26%) and 2015 (20%)
- 23% of the companies acquired additional funding after starting the business, similar to 2016 and 2015. However, the amount of average funding increased to HK\$6,240,000

Start-ups

Most Wished Support for Company Development



- Funding support (45%) being the most wished support for company development
- However, “Arrange business matching/ networking” (31%) is also very important for their development apart from purely providing office area (12%) or technical training (11%)

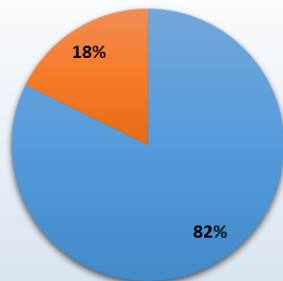
Products & Services



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Allocated resource in R&D/ Product Development in previous year



■ Yes ■ No

Average Amount (2017):
HK\$ 2,135,000 *

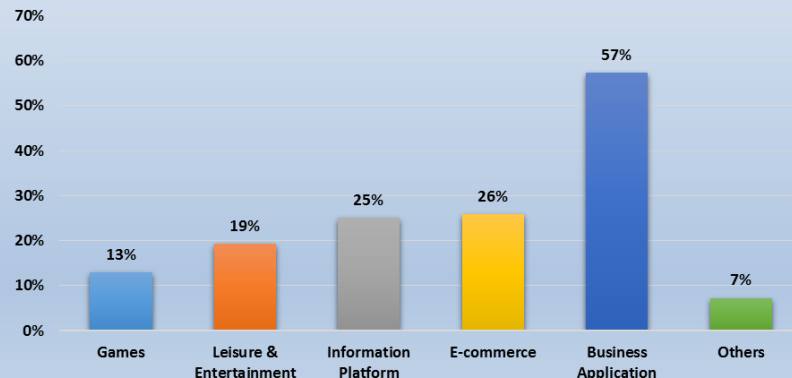
*based on 97 information disclosed

- 82% of the companies allocated resource in R&D/ product development, with average amount at HK\$ 2,135,000
- The use of technologies – “Augmented reality”(22%) and “Near field communication”(21%) has increased in 2017 over 2016 (9%) and (10%) respectively. This may due to the introduction of popular AR game – “Pokemon Go” and the NFC e-payment services in Hong Kong
- Business Application (57%) is the most popular app products, following by e-commerce (26%)

Technology Adopted in Mobile Apps

	2016	2017	Diff
Location based services	35%	36%	+1%
Bluetooth low energy	17%	25%	+8%
Augmented reality	9%	22%	+13%
Near field communication	10%	21%	+11%
Virtual reality	N/A	10%	N/A
Wearable device	12%	10%	-2%
Ultrasound	5%	4%	+0%
Others	13%	28%	+15%

Type of mobile app products



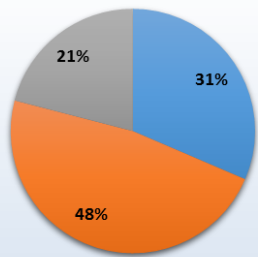
Products & Services



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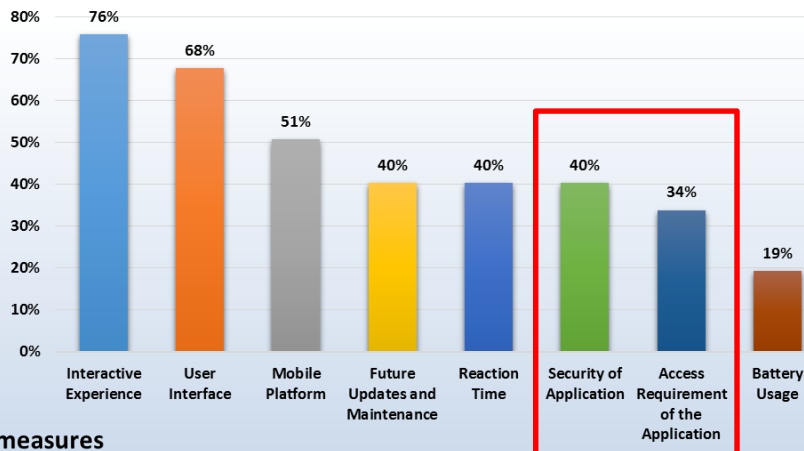


Use of online free code in product development



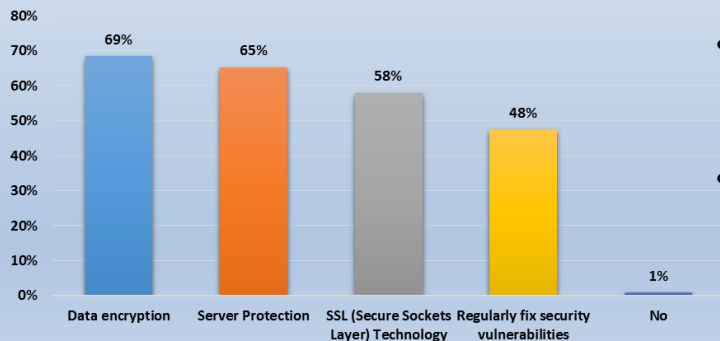
■ Usually ■ Occasionally ■ No

Most important factors considered during product development



- Around 80% of the companies are using online free code in product development
- The most important factors considered during product development are: “Interactive Experience” (76%), following by “User Interface” (68%) and Mobile Platform (68%).
- “Security of Application” (40%), “Access Requirement” (34%) and “Battery Usage” (19%) being the least considerations

Additional data protection measures



- Majority of the companies (99%) have some sort of additional data protection measures
- Data encryption (69%) is the most popular measures, following by server protection (65%), SSL Technology (58%) and Regularly fix security vulnerabilities (48%)

Business Environment



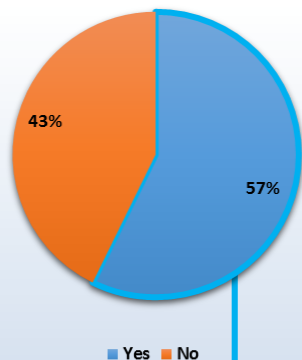
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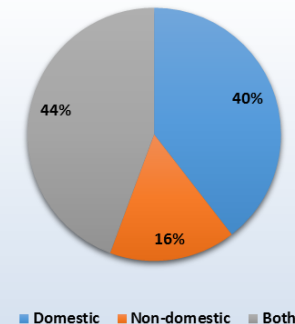
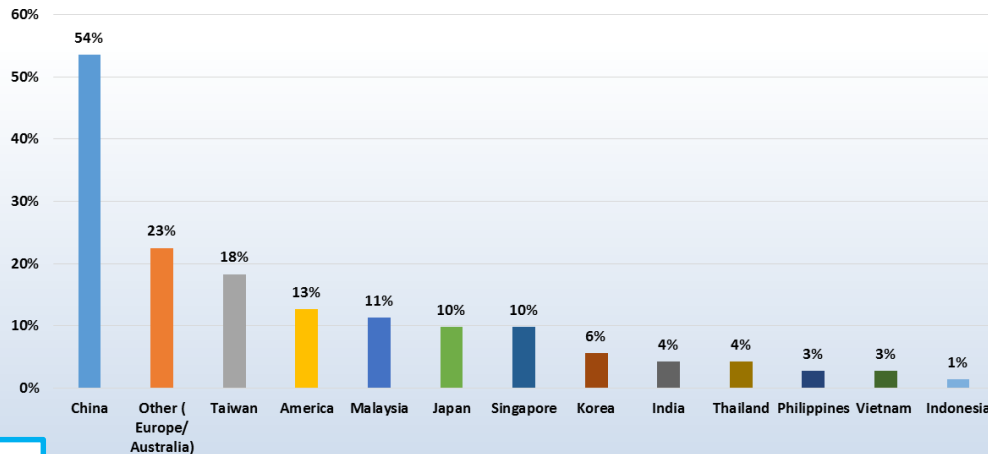
With non-domestic business

Major non-domestic regions

Geographic target for business development in coming year



Business Ratio -
Domestic **8:2** Non-domestic



- 57% of the responded companies operated non-domestic business, with an average business ratio of 8:2
- The major non-domestic regions include “China” (54%), following by “Other - Europe/Australia” (23%), “Taiwan” (18%)
- Around 60% will target non-domestic business in coming year, indicated the saturation of Hong Kong market and importance of exporting service in Mobile App Industry

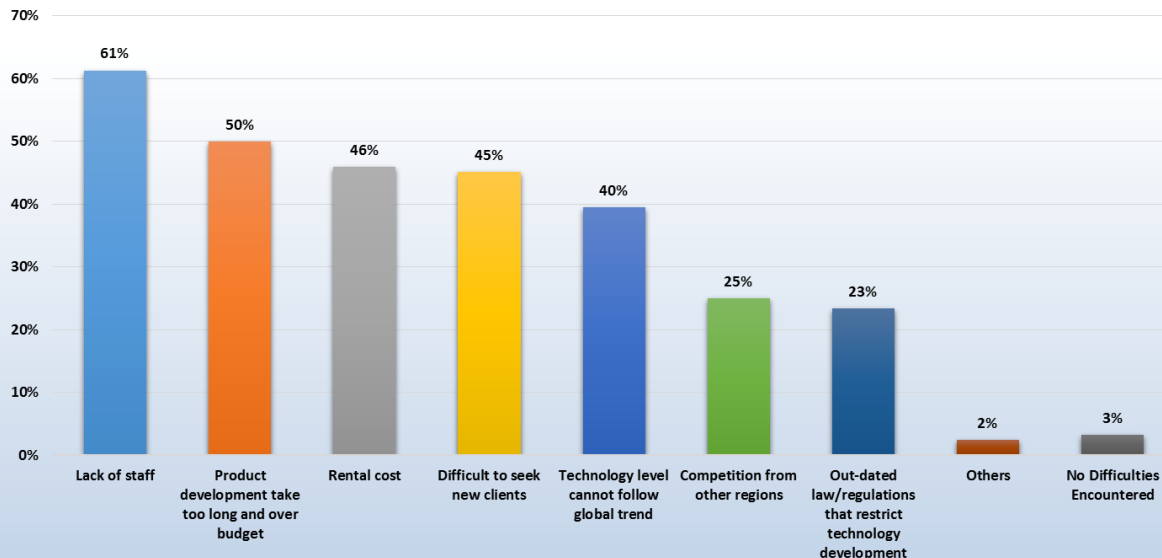
Business Environment



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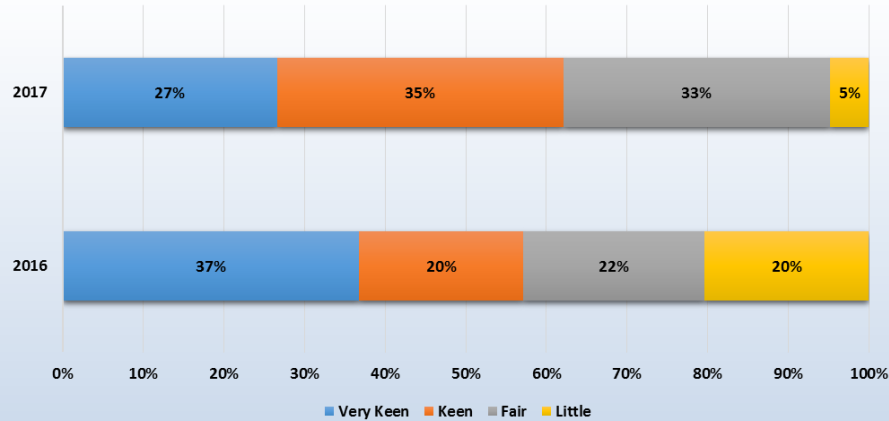
Operating difficulties encountered in last year



- The major operating difficulties encountered in last year include – Lack of Staff “61%”, “Product development take too long and over budget” (50%) and “Rental Cost” (46%)
- “Out-dated law-regulations that restrict technology development” (23%) being the least one, this may due to the developer generally avoid “destructive development” and keep their creativity with the current legal framework

Business Environment

Competition from China



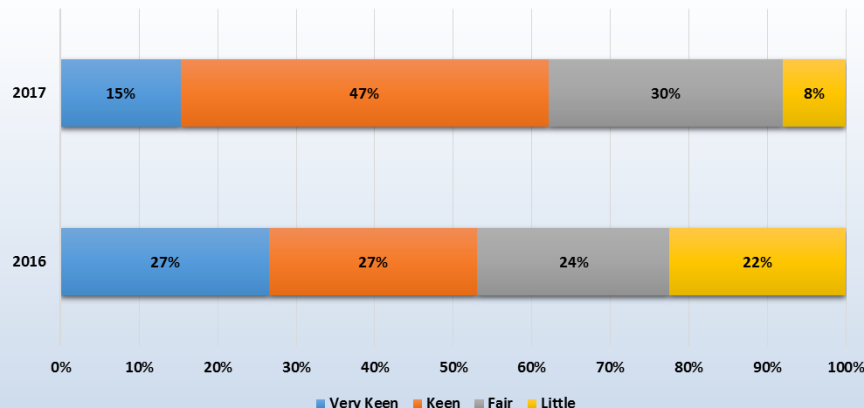
Advantages of Hong Kong companies over China



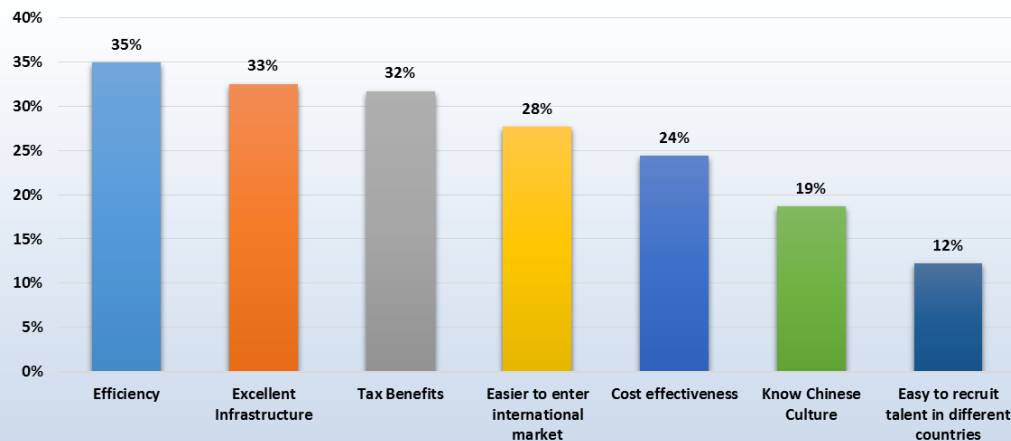
- More competitions is coming from China, with 62% (Very Keen/ Keen) in 2017 when comparing with 57% (Very Keen/ Keen) in 2016. However, the severity is lower with percentage of “Very Keen” dropped to 27% from 37% in 2016
- International outlook (51%), Legal system (39%) and “Product Quality” (29%) are the advantages of Hong Kong, while “Talents” (12%) is the weakest link of Hong Kong

Business Environment

Competition from Other Regions



Advantages of Hong Kong companies over other regions



- More competitions is coming from Other regions, with 62% (Very Keen/ Keen) in 2017 when comparing with 54% (Very Keen/ Keen) in 2016. However, the severity is lower with percentage of “Very Keen” dropped to 15% from 27% in 2016
- Efficiency (35%), Excellent Infrastructure (33%) and “Tax Benefits” (32%) are the advantages of Hong Kong, while “Easy to recruit talent in different countries” (12%) is the weakest link of Hong Kong

Comparison with South-east Asia

Comparison with South-east Asia



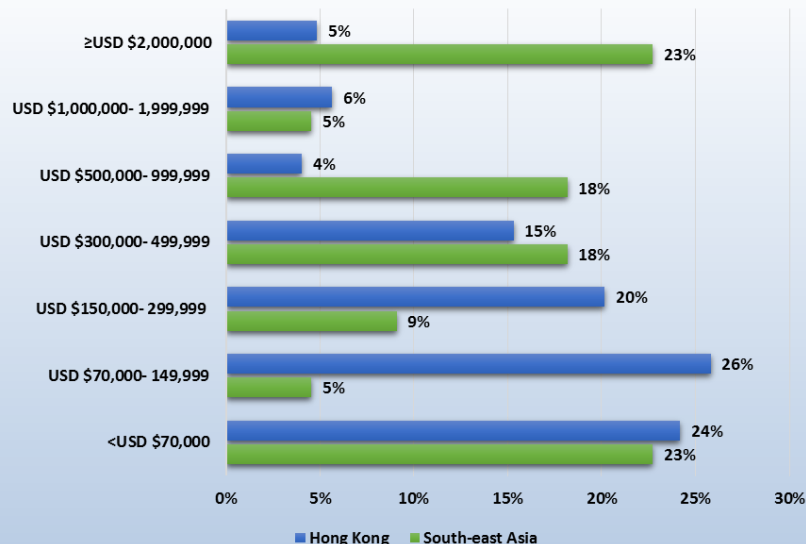
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- 22 data were collected from Mobile Apps Industry Practitioners in South-east Asia
- The countries/regions include
 - Japan
 - Korea
 - Malaysia
 - Taiwan
 - Thailand

Annual Revenue

Annual Revenue of Company



- The performance in South-east Asia outranged Hong Kong with nearly all the upper range of annual revenue surpass Hong Kong, especially in “≥USD\$2,000,000” (5% vs 23%) and “USD\$500,000-999,999” (4% vs 18%)

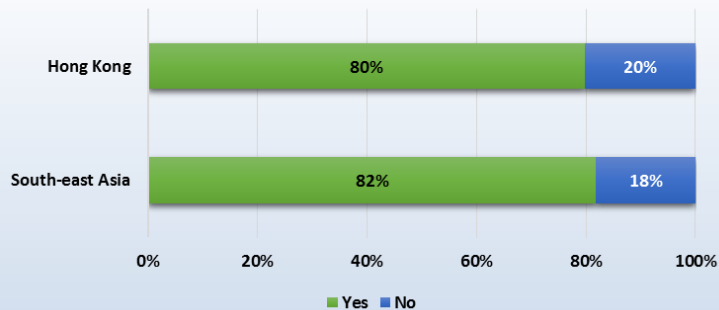
Operational Cost



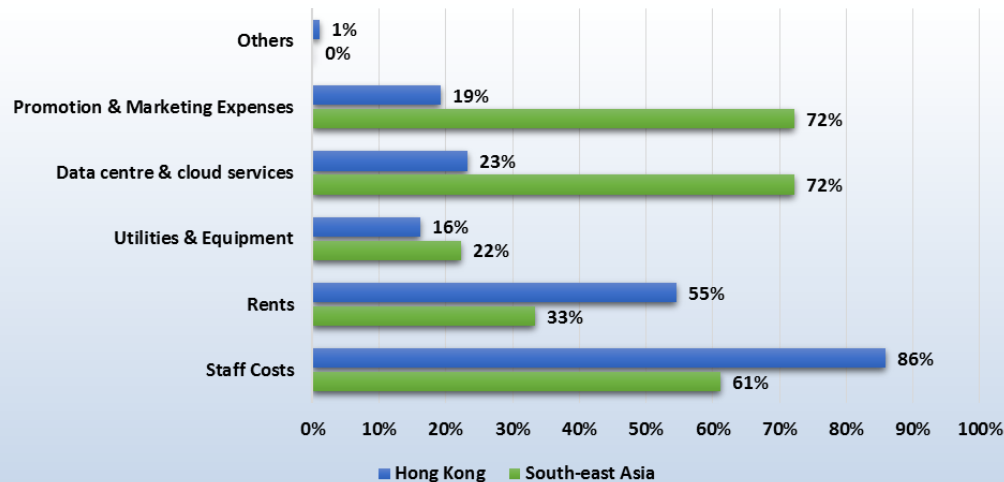
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Operational cost increased during previous year



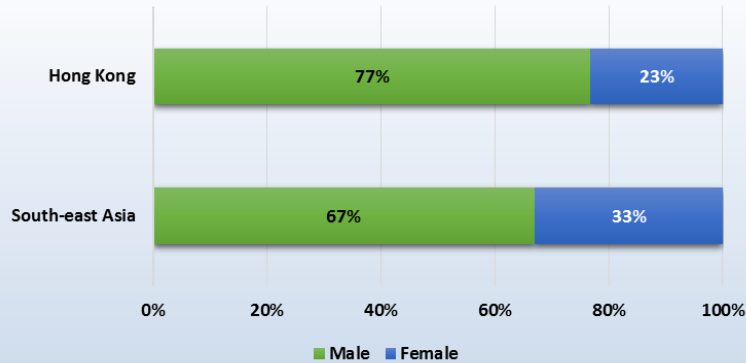
The cost increasing pressure comes from



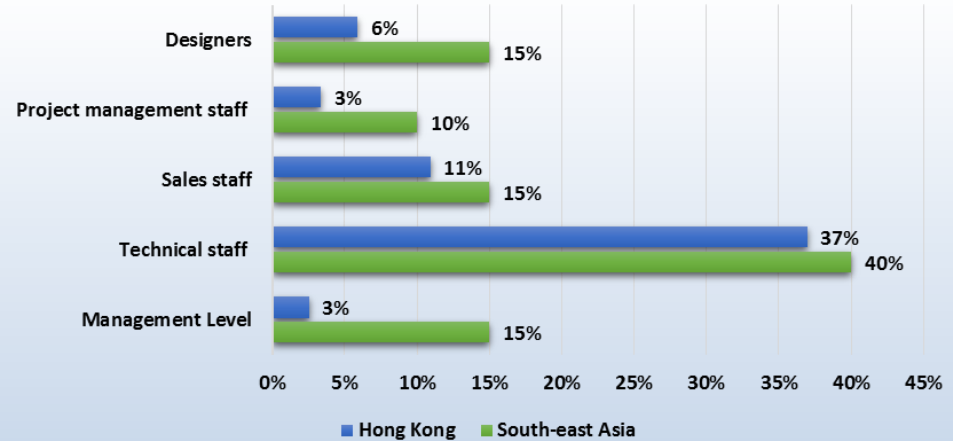
- The situation of operational cost increased during previous year is similar in Hong Kong and South-east Asia (80% vs 82%)
- However, the cost increasing pressures are quite different that South-east Asia is generally investing more and more in “Promotion & Marketing Expenses” (19% vs 72%) and “Data centre & cloud services” (23% vs 72%), while “staff costs” being the most important factor in Hong Kong

Human Resources

Ratio of Staff by Gender



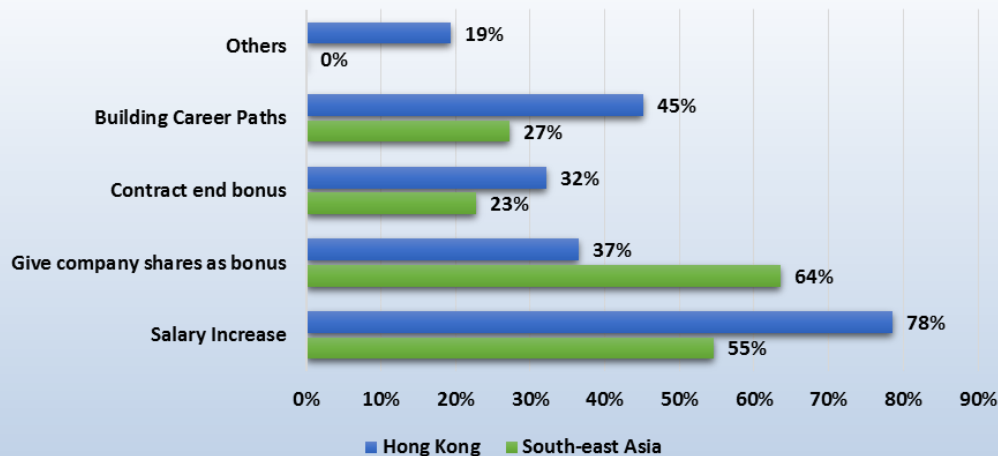
Most shortage position



- South-east Asia (33%) is hiring more female staff than Hong Kong (23%)
- The structure of most shortage position is similar for Hong Kong and South-east Asia, with technical staff being the common most shortage resources

Human Resources

Ways to attract and retain employees



- In South-east Asia, “Give company shares as bonus” (64%) is quite common to attract and retain employees while Hong Kong is still relying on “Salary Increase”

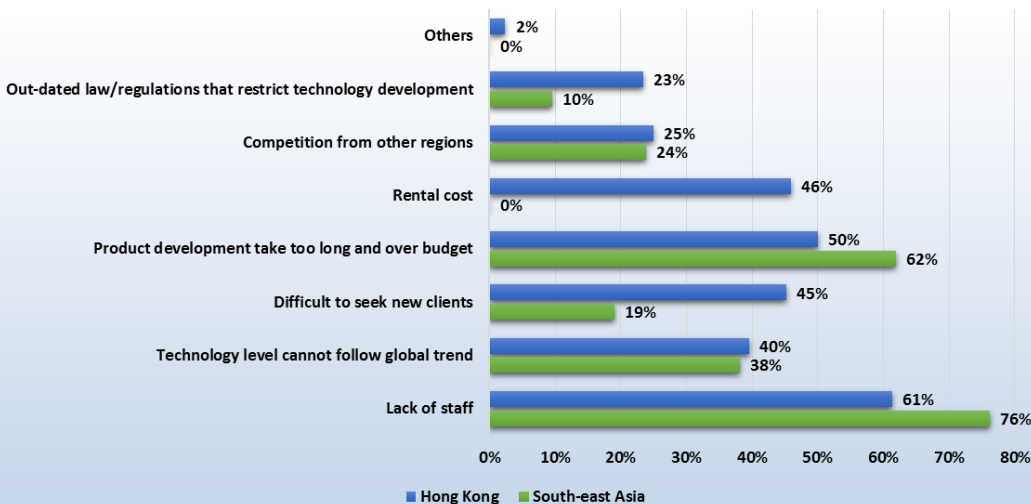
Business Performance



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Operating difficulties encountered in last year



Prospect of Mobile Apps Industry Subjective Views from Industry Practitioner (Most Pessimistic 0-10 Most Optimistic)

	Hong Kong	South-east Asia
Average	6.0	5.7

- Lack of staff is the common difficulties for Hong Kong and South-east Asia
- Rental cost is not a problem for South-east Asia (0%)
- The prospect of Mobile Apps Industry in Hong Kong (6.0) is better than in South-east Asia (5.7)

Acknowledgements



- All participants in the study
- Hong Kong Cyberport Management Company Limited
- Hong Kong Science and Technology Parks Corporation

End-of-Report

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