

EVOLVING OCCUPATIONS AND SKILLS IN A DIGITAL AGE

In this report, we explore how jobs and skills are evolving in the era of digitalisation in Hong Kong

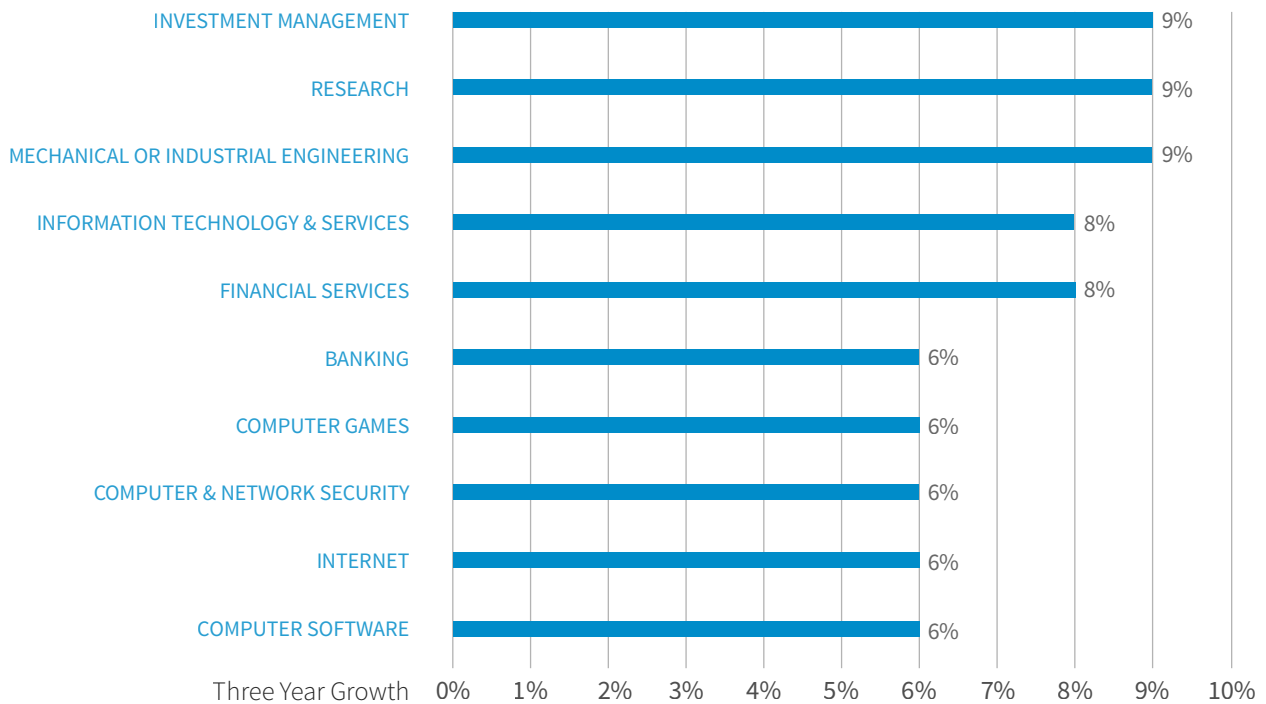
UNEVEN GROWTH IN DIGITAL CAPABILITIES ACROSS INDUSTRIES

The rate of digitalisation has exploded in the past decade. From taking consumer experiences mobile to automating warehouse operations, there are countless instances of processes going digital. This trend is perhaps best characterised by the growth of digital occupations – after all, human capital is a key building block of an economy.

THE FASTEST GROWING OCCUPATIONS IN HONG KONG

Digging into the network of over 1 million LinkedIn profiles in Hong Kong, we tracked the growth of digital-related skills as listed on these member profiles. Not surprisingly, technology-related industries like IT & Services feature prominently in the top 10, with the fastest growing digital capabilities. Digital skills are the foundation of these industries, and as the digitalisation trend intensifies, these sectors will provide crucial support for the rest of the economy.

FIGURE 1: FASTEST GROWING OCCUPATIONS IN HONG KONG



Source: LinkedIn (Dec '13 – Dec '16)¹

Technology-related industries aside, three out of the top 10 industries involve finance-related industries, namely investment management, financial services and banking.

Hong Kong has historically been a financial hub for the region, it is good to note that the finance industries in Hong Kong are taking the lead in embracing the digital wave and building their digital capabilities.

¹To Determine the growth rate of an occupation, we looked at the number of LinkedIn members in each occupation in December 2016 and compared that with December 2013.

EVOLVING COMPETENCIES WITHIN INDUSTRIES

Looking at the growth of digital capabilities at an industry level is only a part of the puzzle if we want to understand how business models and functions are transforming. A more telling way is to observe what digital competencies are building up over time.

For this article, we take a deeper look at two non-tech industries that are undergoing massive digital transformations – [Financial Services](#) and [Research](#).

FINANCIAL SERVICES

VISUAL BASIC FOR APPLICATIONS (VBA)

With the constant push towards automating processes and daily tasks, Visual Basic for Applications (VBA) maintains its popularity as the fastest growing digital skill in this industry. This is also a reminder that digitalisation is not just about mobile apps and engineering; VBA is widely used in non-tech functions such as risk management and back office operations.

SOFTWARE DEVELOPMENT LIFE CYCLE (SDLC)

Still, the rise of digital platforms and interface often requires custom application design and development. Thus, a knowledge of Software Development Life Cycle (SDLC) is rightly becoming an increasingly important skill.

MACHINE LEARNING

Machine Learning is also trending up quickly, with a wide range of applications from automated recommendations for product engineering, risk management and fraud analytics, among others.

PYTHON

Python is probably one of the hottest programming languages in financial services today. Financial institutions use Python for various programs in risk management platforms, trading systems, and more.

RESEARCH

Research institutes and think-tanks need to be at the forefront of the latest developments, so it is not surprising that they have the need to grapple with the data explosion with a range of data mining and analysis skills.

SQL

At the top of the list is SQL, a database query language that remains evergreen as better extract, transform and load (ETL) techniques have contributed to a growth in the data available in databases.

PYTHON

Python, being a more general-purpose programming language that can handle various data types and provide a front-end for the end user, has also been increasing in popularity in this industry sector.

WEB PROGRAMMING

The need to utilise and showcase data analysis results in attractive ways has also given increasing importance to web programming skills like JavaScript and PHP. These skills are vital in the last leg of the analytics cycle, such as presenting the insights from the data to end users.²

² Job data is based on jobs listed on LinkedIn.com as of March 30

OPPORTUNITIES FOR GROWTH

Having seen the type and scale of growth in the market-leading industries, we now turn to industries where the growth of digital capabilities is lagging behind - and where the opportunities for growth are perhaps the largest across Hong Kong.

INDUSTRIES WITH THE SLOWEST GROWING DIGITAL CAPABILITIES

Import and Export	Civil Engineering
Real Estate	Hospitality
Textiles	Luxury Good and Jewelry
Food & Beverage	Law Practice
Construction	PR and Communications

Despite the seemingly disparate group of industries listed, there is much room of digitalisation and innovation across a range of sectors.

For example, the real estate industry could be disrupted by innovative listing platforms that simplify the process for users. Digital services for the hospitality industry could move beyond simple online booking, to the provision of a seamless travel experience for customers. Even in law, the application of machine learning could improve the efficiency of much of the routine work done today.

WHAT DOES THIS MEAN FOR BUSINESSES?

The rapid pace of transformation has left numerous companies struggling to keep up, yet digitisation is happening at an ever faster pace. Companies need to embrace this trend and seriously consider what it means to be in, or out. One thing is for sure - digital skills are not confined to the tech sector - and no industry is immune to the sweeping tide of digitisation.

WHAT ROLE DOES THE RECRUITMENT INDUSTRY PLAY?

Agencies can play an important role in helping businesses navigate the uncertainties and changing talent landscape that is critical for success. Those that can partner with organisations to help craft strategies to find, attract and hire the right talent will ultimately be successful – but they need to go beyond simply recruitment alone.

Agencies need to be at the forefront of understanding digital talent, and how and where disruption occurs, as well as how it can be best navigated to help build organisations for digital success.

This is part of the Hong Kong Insights series that aims to uncover important trends by leveraging LinkedIn data.



ABOUT THE AUTHOR

Evon Low

Insights Analyst
LinkedIn Talent Solutions

Evon is an analyst on the Insights team at LinkedIn, where she leverages the rich dataset on the LinkedIn platform to help companies carve the right talent strategy.

ABOUT LINKEDIN TALENT SOLUTIONS

LinkedIn Talent Solutions offers a full range of recruiting solutions to help organisations of all sizes find, attract and engage the best talent.

Founded in 2003, LinkedIn connects the world's professionals to make them more productive and successful. With over 500 million members worldwide, LinkedIn is the world's largest professional network.

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