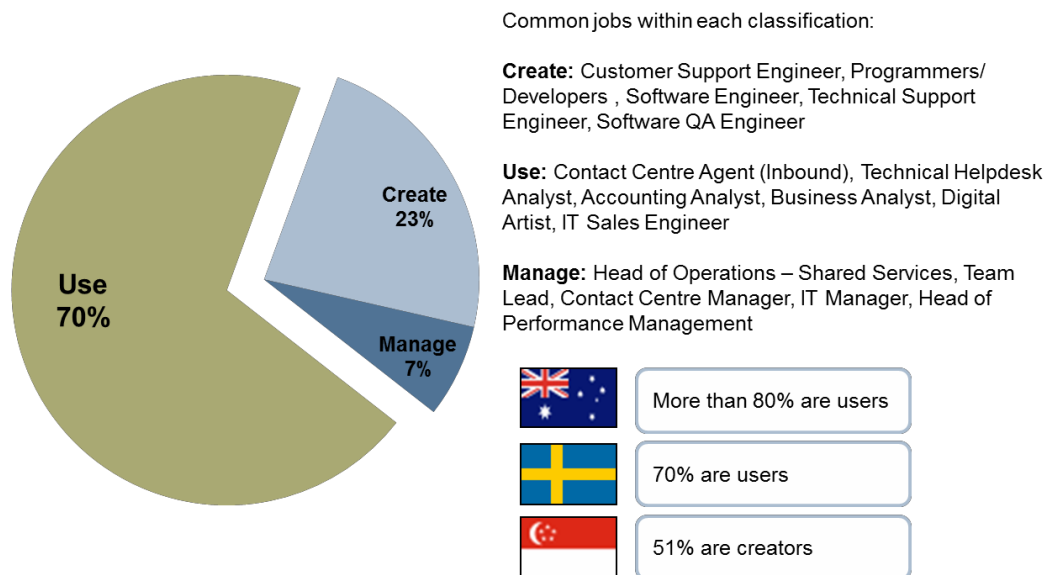# Digital Talent Report MDEC

2017

1. 2017 Talent Indicators

As at 2017, an estimated 355,119 employees are engaged in the digital industry in areas such as ICT services, telecommunications, content, and media. The figure excludes employment in ICT manufacturing and trade as the study coverage is in line with MDEC's focus areas. More than 88% of current talents in digital industry are local; with majority having more than 3 years of experience.

Foreign Talents 12%
Local Talents 88%

2017 Workforce 355,119

More than 3 years experience 65%
1-3 years experience 23%
Less than 1 year experience 12%

Supporting Staff 37%
Business Delivery Staff 63%

37%
63%

2. 2017 Job Functions Trend

Currently 70% of jobs are related to the user group.

Use 70%
Create 23%
Manage 7%

Common jobs within each classification:

Create: Customer Support Engineer, Programmers/ Developers , Software Engineer, Technical Support Engineer, Software QA Engineer

Use: Contact Centre Agent (Inbound), Technical Helpdesk Analyst, Accounting Analyst, Business Analyst, Digital Artist, IT Sales Engineer

Manage: Head of Operations – Shared Services, Team Lead, Contact Centre Manager, IT Manager, Head of Performance Management

More than 80% are users

70% are users

51% are creators

3. 2017 Fresh Graduates Average Monthly Salary Trend

Average monthly salary offered to Fresh Graduates in 2017 was between RM2000-RM2750. Top three areas offering highest average salary for fresh graduates include companies in BDA, GBS and Software/ Hardware Development

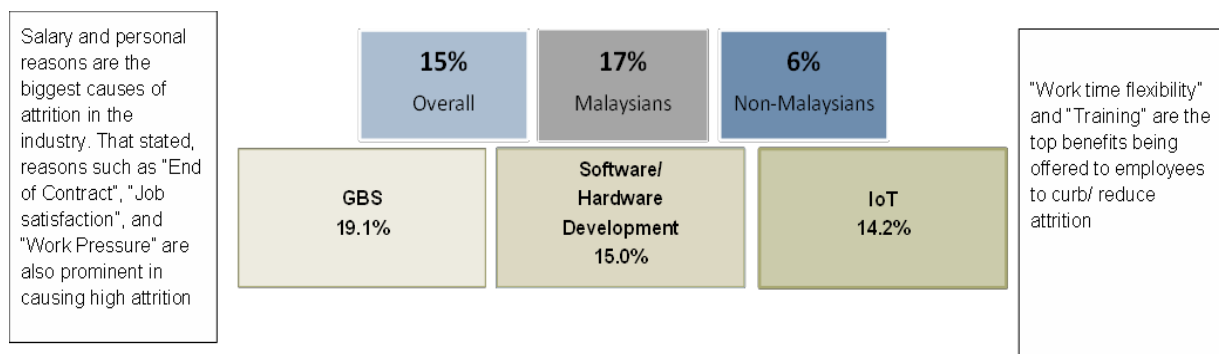|		
BDA RM 2750	**GBS** RM 2470	**Software/ Hardware Development** RM 2450

4. 2017 Salary Increment Trend

The average increase in salary for 2017 is estimated at 5.1%. Cybersecurity sector is expected to offer the highest increment rate followed by FinTech and GBS.

Cybersecurity 6.2%	**Fintech** 5.8%	**GBS** 5.7%

5. 2017 Attrition Trend

Average attrition rate was 15% in 2017 and GBS companies recorded the highest followed by companies under Software/ Hardware development and IoT. Interestingly in terms of nationality, there is a lower attrition rate among foreigners compared to locals

Salary and personal reasons are the biggest causes of attrition in the industry. That stated, reasons such as "End of Contract", "Job satisfaction", and "Work Pressure" are also prominent in causing high attrition

15% Overall	**17%** Malaysians	**6%** Non-Malaysians
GBS 19.1%	**Software/ Hardware Development** 15.0%	**IoT** 14.2%

"Work time flexibility" and "Training" are the top benefits being offered to employees to curb/ reduce attrition

6. 2017 Recruitment Criteria

While years of experience are key criteria for hiring staff, CGPA is important for recruiting fresh graduates.

Recruitment Criteria for Overall Workforce

Years of Experience

Field of Study

Interpersonal skills

Recruitment Criteria for Fresh Graduates

CGPA

Field of Study

Interpersonal skills

Technical Knowledge

7. Additional Jobs in 2020

Strong government commitment is a critical driver in propelling Malaysia's digital scene. Talent requirement to grow by 15% over the next three years to reach over 540,000 jobs by 2020s due to business expansion and a favourable economic outlook driven by five focus areas.

GBS: 21%

Additional jobs by 2020
185,443

FinTech: 21%

CCT: 20%

E-Commerce: 18%

IoT: 19%

8. 2020 Skills Demand Trend

By 2020, 50% of the companies would require talent related to software development, followed by database management and networking and network security.
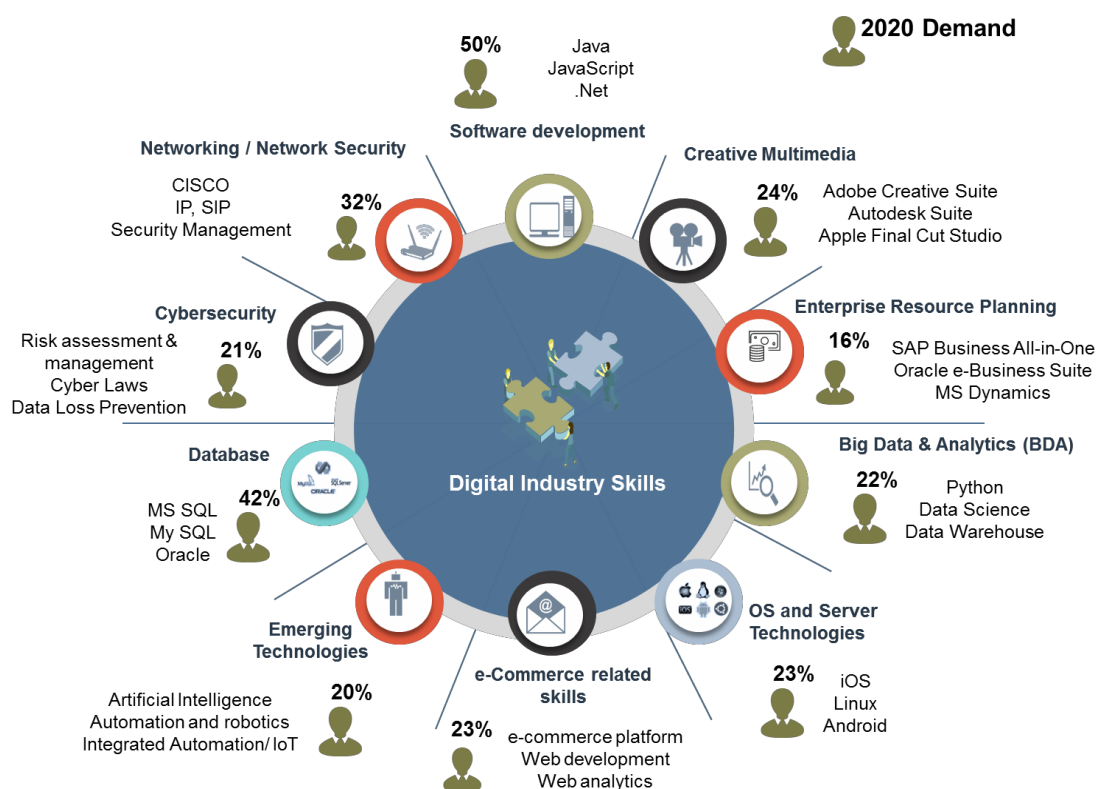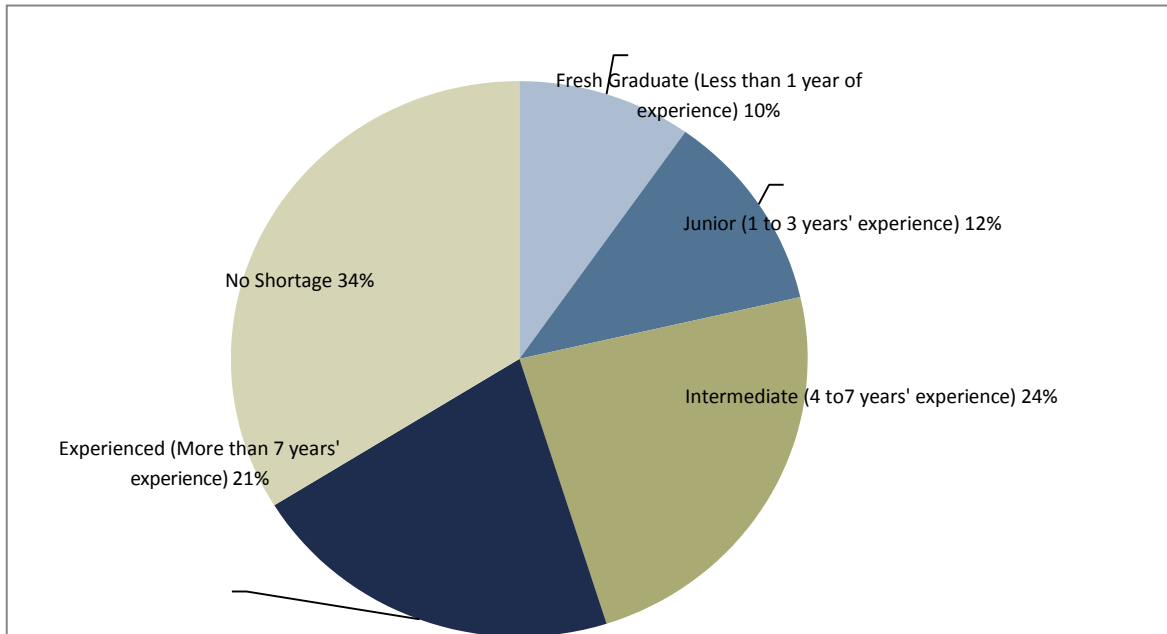

9. 2020 Job Functions Trend

Job Titles that might be difficult to fill up in 2020

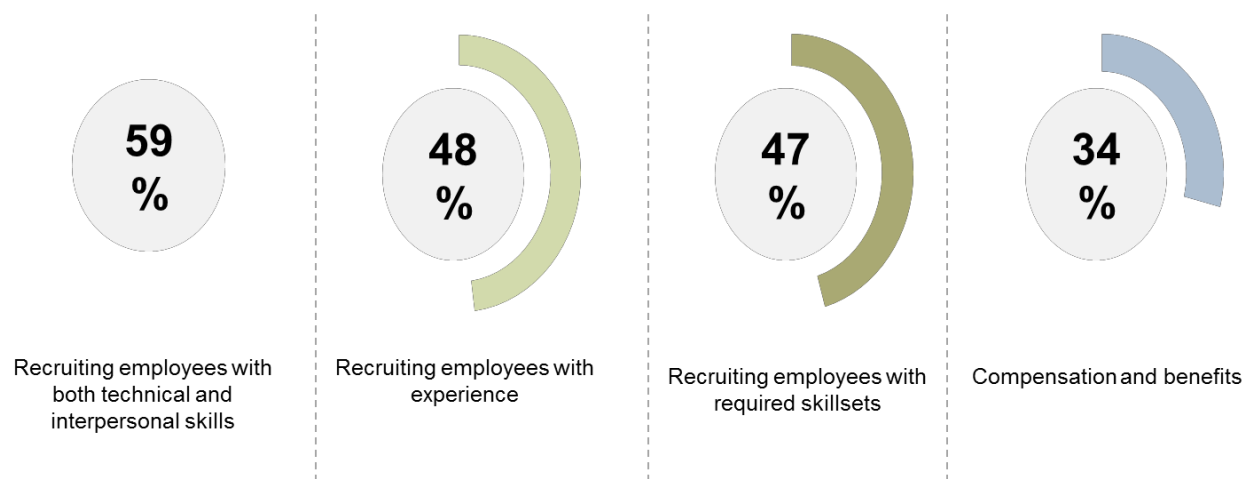| Focus Area	Job Title	Job Title	Job Title
GBS	Contact Centre Agent (Inbound)	Accounting Analyst	Financial Analyst
Infotech	Programmers/ Developers	Solution Architect	Software QA Engineer
CCT	Digital Artist	Animator	3D Modeler
Cybersecurity	Security Specialist	Security Analyst	Incident Responder
BDA	Programmer/ Developer	Data Analyst	Software QA Engineer
IoT	Software QA Engineer	Solution Architect	Programmer/ Developer
FinTech	Technical Helpdesk Analyst	Customer Support Engineer	Programmer/ Developer
E-Commerce	Programmer/ Developer	Database Architect	Software QA Engineer
Cloud/ Datacentre	Network Engineer	IT Security Specialist	Computer Operator

10. Employee Group that will most likely face Shortage

66% of the companies estimated to face talent shortages mostly in intermediate, four to seven years' experience, (24%) and experienced, more than seven years' experience, category (21%).

Fresh Graduate (Less than 1 year of experience) 10%

Junior (1 to 3 years' experience) 12%

No Shortage 34%

Intermediate (4 to7 years' experience) 24%

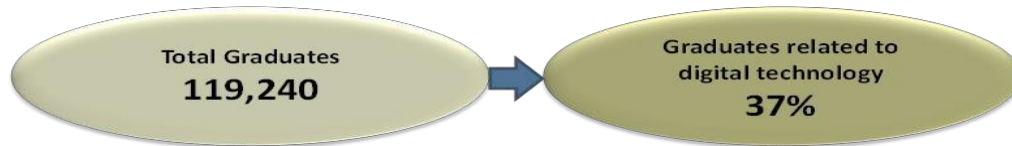Experienced (More than 7 years' experience) 21%

11. Challenges with Recruitment

Getting candidates with required technical and interpersonal skills, compensation and benefits are the main HR challenges.

59% Recruiting employees with both technical and interpersonal skills

48% Recruiting employees with experience

47% Recruiting employees with required skillsets
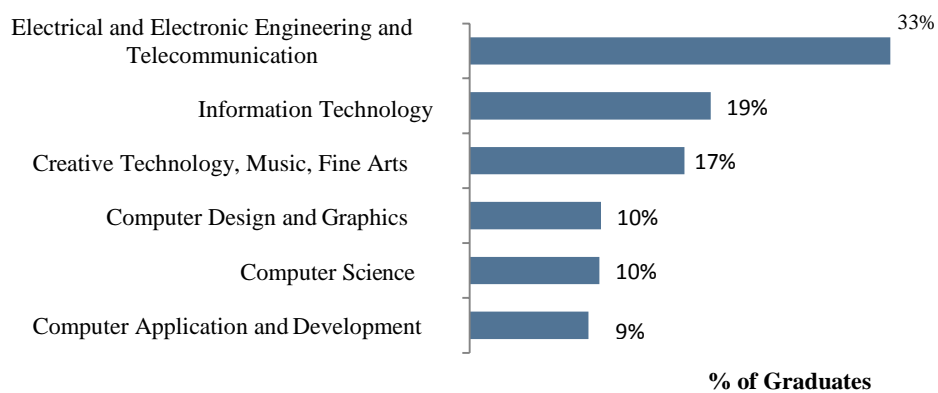
34% Compensation and benefits

12. 2017 Supply of Fresh Graduates Related to Digital Technology

Of the total graduates in 2016, 44,219 were from digital technology programmes. Majority of digital technology talents are qualified in electrical and electronics engineering, IT, and creative technology/arts.

Breakdown of graduates by field of study related to digital technology

Field of study	% of Graduates
Electrical and Electronic Engineering and Telecommunication	33%
Information Technology	19%
Creative Technology, Music, Fine Arts	17%
Computer Design and Graphics	10%
Computer Science	10%
Computer Application and Development	9%

% of Graduates

13. Gap in Fresh Graduates Supply and Demand in 2020

In 2020, a surplus in supply is estimated due to large influx of graduates from business studies field of study.

IT/ CS Shortage in Supply -1,200	**Business Studies** Surplus in Supply 17,800
Engineering Shortage in Supply -2,900	**Creative/ Arts** Shortage in Supply -4,900

Surplus Supply
8,800
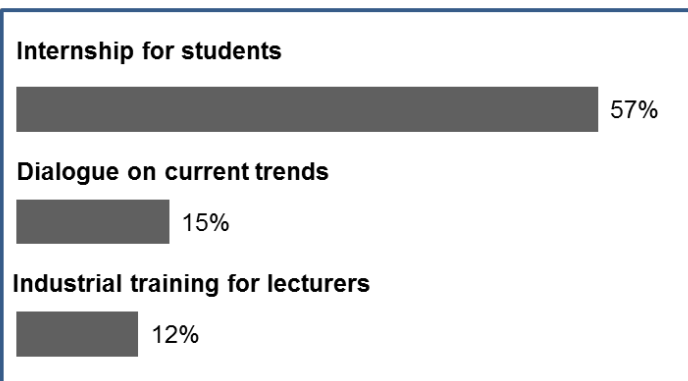
Demand 60,900 — Supply 69,700

Top 3 Areas that is estimated to have supply shortage in future are emerging technologies, software/ hardware development and OS and Server Technologies
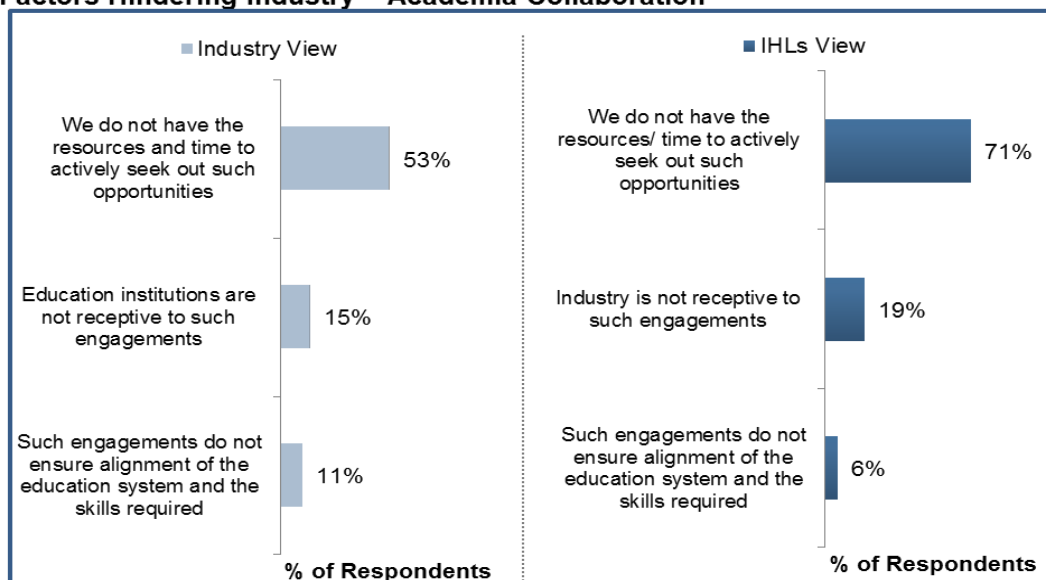
14. Industry – Academia Collaboration

The most common form of industry collaboration with education institutions is hosting internship programmes for students

Current Forms of Collaboration

Internship for students
57%

Dialogue on current trends
15%

Industrial training for lecturers
12%

Factors Hindering Industry – Academia Collaboration

■ Industry View ■ IHLs View

We do not have the resources and time to actively seek out such opportunities — 53%

We do not have the resources/ time to actively seek out such opportunities — 71%

Education institutions are not receptive to such engagements — 15%

Industry is not receptive to such engagements — 19%

Such engagements do not ensure alignment of the education system and the skills required — 11%

Such engagements do not ensure alignment of the education system and the skills required — 6%

% of Respondents   **% of Respondents**

Ways to Strengthen Industry-Academia Collaboration

Industry View

Internship for students
59%

Dialogue on current trends
35%

Real world case studies assignment
30%

IHL View

Dialogue on current trends
58%

Real world case studies assignment
48%

Develop course materials together
45%