



LABOR MARKET INFORMATION

Information Technology – Business Process Outsourcing

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IT-BPM SECTOR - BUSINESS PROCESS OUTSOURCING

AS OF DECEMBER 2018

I. Background

- The Philippines ranks **seventh among the world's top outsourcing destinations**, according to the 2017 A.T. Kearney Global Services Location Index. The country ranking is based on financial attractiveness, people skills and availability, and business environment.
- It is considered as the world's undisputed call center capital—overtaking closest rival India—with 16% to 18% of the global market share.
- The Philippines is home to 851 registered BPO companies, more than half of which are call centers (429), based on the latest Philippine Statistics Authority (PSA) data. Almost 400 (46.2%) firms provide computer or IT-related services. Twenty are medical transcription businesses, while nine are animated films and cartoon production houses.
- Latest PSA data (2016) on BPO industry shows that the industry employs 575,600 workers, with a majority (87.6%) in call centers. Nearly 12% work in computer or IT-related firms, 0.5% in medical transcription, and 0.3% in animated films and cartoon production.
- The Philippine Employment Projections Model (PEPM) has identified the employment projection for the following BPO-related occupations:

Employment Projection for the BPO Industry using the PEPM 2013-2022		
Occupations	Employment Projection	
	Net Employment (In Thousands)	Growth Rate
Call centers and other office administrative, support and other business support activities	432.2	3.4
Computer programming, consultancy and related activities, and information service activities	136.5	3.3
Publishing activities, motion picture, TV, programming, broadcasting, and telecommunications	250.0	2.8
Total	818.7	-

Sources:
Philippine Employment Projections Model, JobsFit 2022 Regional Reports,
and Various industry consultations conducted by TESDA



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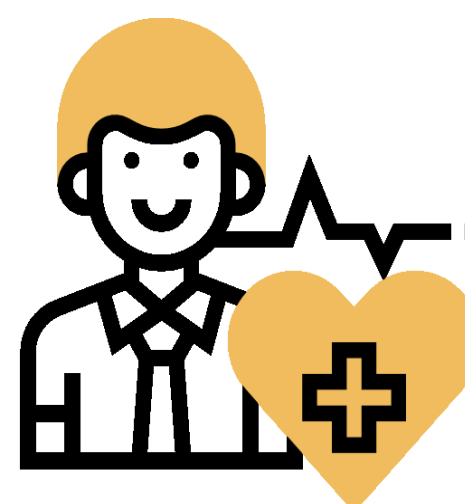
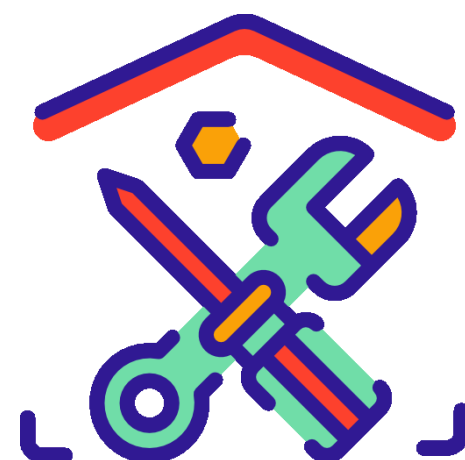
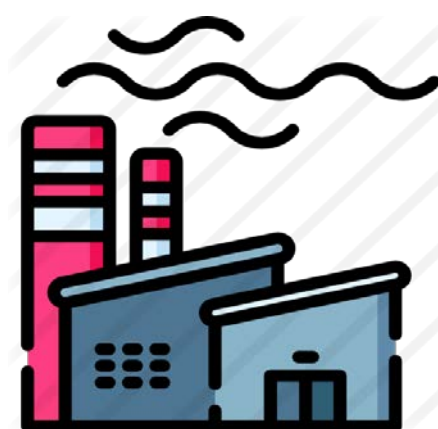
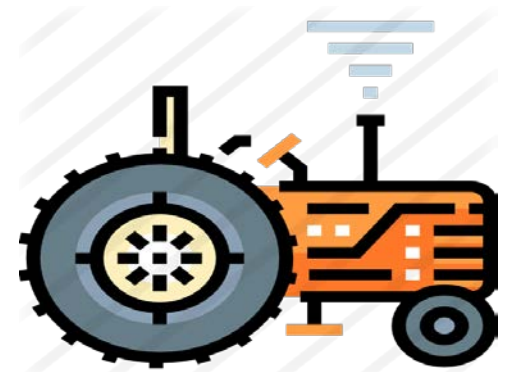
- The Net Employment for *Call centers and other office administrative, support and other business support activities* alone is already at 432.2 and is considered the highest of all the sectors. The BPO sector as a whole has a Net Employment of 818.7.
- According to the DOLE Project JobsFit 2022, the significant occupations to the BPO industry are as follows:

In-Demand and Hard-to-Fill Occupations in the BPO Industry		
Industry	In-demand Occupations	Hard-to-fill Occupations
BPO (IT-BPM)	<ul style="list-style-type: none"> * Animator * Autocad Designers and Operators * Call Center Agents * Customer Service Representative * Software Developers * Technical Support * Virtual Assistants * Web Developer * Computer Transcriptionist * IT Specialist/Staff * Graphic Artists * Programmer * Other Business Process Outsourcing related jobs 	<ul style="list-style-type: none"> * Animator * Autocad Designers and Operators * Call Center Agent * Customer Service Representatives * Software Developers * Technical Support * Virtual Assistants * Web Developer * Game Developer * IT Developer

Source: DOLE Project JobsFit 2022

Philippine IT-BPM Sector's Roadmap 2020

- According to the Philippine IT-BPM Sector's Roadmap 2020, the major issues the industry faces are **shortfall of supply, skills mismatch and staff attrition** which are also true in the case of BPO. For an industry whose service output largely hinges on the quality of its human capital, this is a major problem.
- As the sector mostly attracts fresh graduates who are about to start their professional careers, the industry plans to **strengthen the development of a career progression path and skill mapping** as it is a great way to change potential BPO job-seekers' view from BPO jobs being transitory toward having a long-term career in the sector.
- The roadmap also made mention of the industry's move to **upskill its workforce from low to mid and from mid to high skills** which means that there is a need for higher level qualifications.



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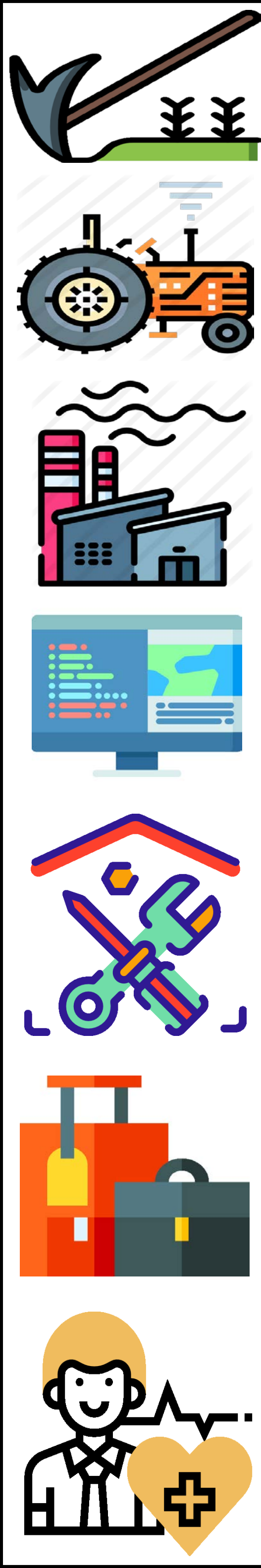
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- With the requirement for higher skills for the BPO workforce, the roadmap also highlighted the need to **focus on Science, Technology, Engineering and Mathematics (STEM)** as it is a major foundation needed to understand the new technology trends such as artificial intelligence, Internet of Things and virtual reality.
- The skills needs in IT-BPO are rapidly changing thanks to the convergence of the four (4) major trends brought about by the Fourth Industrial Revolution (4th IR) namely:
 - Big Data and Analytics (BDA)
 - Internet-of-Things (IoT)
 - Automation and Artificial Intelligence
 - Cloud Computing

Four Major Trends in the 4 th Industrial Revolution	Corresponding TRs
Big Data and Analytics (BDA)	- Not available -
Internet-of-Things (IoT)	
Automation and Artificial Intelligence	
Cloud Computing	

- The roadmap specified that due to operational efficiency brought about by the 4th IR, there is a growing demand for IT services in the following sectors:
 - Banking, financial services and insurance (BFSI)
 - Manufacturing
 - Telecom/Hi-Tech
 - Healthcare
 - Utility
 - Oil and gas
 - Education Government
- However, as the new technology trends enables the sector to move up the value chain, the reduction in low-skill jobs in the sector will be more than compensated by significant employment opportunities in mid- and high-skilled services.
- The survey conducted in the roadmap revealed that the IT-BPM workforce in the Philippines is currently (2016) involved in the following roles:
 - Low-skilled 45.8%
 - Mid-skilled 39.4%
 - High-skilled 14.7%

The slight skew in favor of mid-skilled roles is due to the service mix of contact centers which has the highest weight in terms of service type in the IT-BPO industry.



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- According to experts, it is estimated that in the next three years, one out of three low-skilled IT-BPM tasks have a 40% to 60% likelihood of automation by 2020.
- According to the roadmap, the following BPO roles have the highest propensity to be automated:
 - Medical transcription
 - Simple contact center services
 - Basic 2D animation services
 - Parts of IT technical support
 - Transactional mid and back-office process

BPO roles with the highest propensity to be automated (According to Philippine IT-BPM Sector's Roadmap 2020)	Corresponding TRs
Medical transcription	<ul style="list-style-type: none"> • Medical Transcription NC II
Simple contact center services	<ul style="list-style-type: none"> • Contact Center Services NC II
Basic 2D animation services	<ul style="list-style-type: none"> • 2D Animation NC II • Animation NC II
Parts of IT technical support	<ul style="list-style-type: none"> • Web Development NC III • Game Programming NC III • Programming (.Net Technology) NC III • Programming (Java) NC III • Programming (Oracle Database) NC III
Transactional mid and back-office process	<ul style="list-style-type: none"> • Medical Transcription NC II • Medical Coding and Claims Processing NC III



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Emerging Skills

- One major issue faced by the BPO sector are the emerging skills brought about by the Fourth Industrial Revolution. According to the sector's roadmap, most of the skills needed are higher level skills highlighting the need for low to mid and mid-to-high trainings/reskilling of its workforce.
- On the right are the core competency areas according to the LinkedIn's 2019 Emerging Jobs in the Philippines Report:
- All emerging skills requires mid to higher level qualifications. According to the LinkedIn report, despite the demand for employees with digital competencies, the local supply of qualified workers remains low. The report recommended that companies should invest in "upskilling" workers by training them to progress their skills.

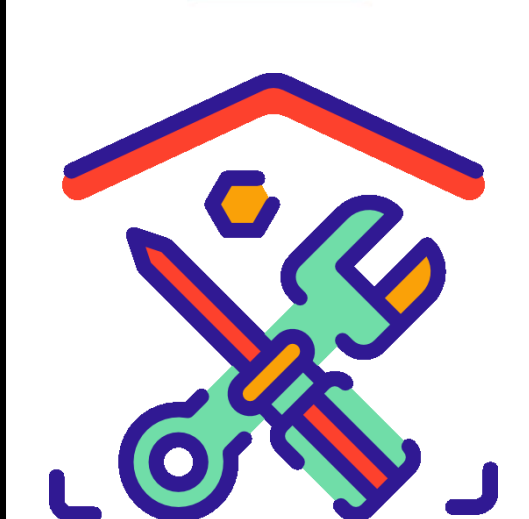
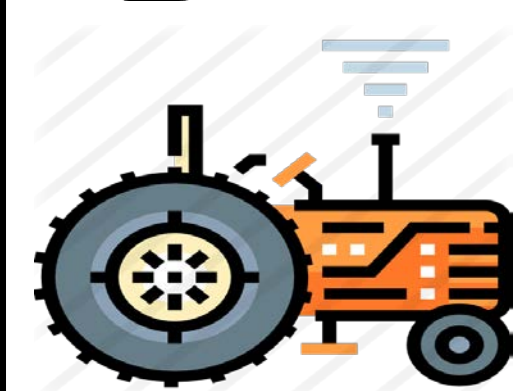
Core Competency Areas
Data Analytics
Cyber Security
Blockchain
Digital Commerce
Financial Technologies (FinTech)

II. TVET Capacity

Registered Programs

- The existing related TRs were also identified based on the In-Demand and Hard-to-Fill Occupations in the DOLE Project JobsFit 2022 above:

Skills	Sector	Corresponding TRs
Animator	IT-BPM	<ul style="list-style-type: none"> • 2D Animation NC III • 3D Animation NC III • Animation NC II
Autocad Designers and Operators	Construction Metals and Engineering	<ul style="list-style-type: none"> • Technical Drafting NC II -Prepare computer-aided drawings • CAD/CAM Operation NC III -Create drawing using CAD software -Apply CAD/CAM program
Call Center Agents	IT-BPM	<ul style="list-style-type: none"> • Contact Center Services NC II
Customer Service Representative	IT-BPM Wholesale and Retail Trading Sector	<ul style="list-style-type: none"> • Contact Center Services NC II • Customer Service NC II

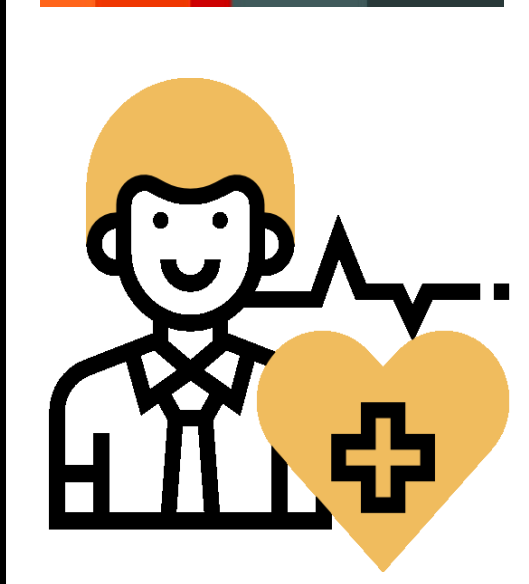
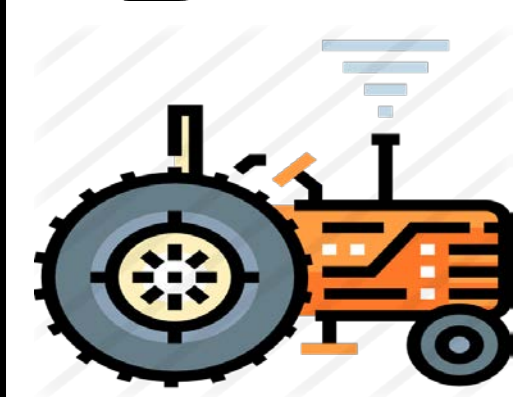


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Skills	Sector	Corresponding TRs
Software Developers	IT-BPM	<ul style="list-style-type: none"> • Web Development NC III • Game Programming NC III • Programming (.Net Technology) NC III • Programming (Java) NC III • Programming (Oracle Database) NC III
Technical Support	Wholesale and Retail Trading Sector	<ul style="list-style-type: none"> • Customer Service NC II
Virtual Assistants	NA	<ul style="list-style-type: none"> • No available TRs
Web Developer	IT-BPM	<ul style="list-style-type: none"> • Web Development NC III
Computer Transcriptionist	IT-BPM	<ul style="list-style-type: none"> • Medical Transcription NC II • Contact Center Services NC II
Graphic Artists	IT-BPM	<ul style="list-style-type: none"> • 2D Animation NC III • 3D Animation NC III • Animation NC II • Visual Graphic Design NC III
Programmer	IT-BPM	<ul style="list-style-type: none"> • Game Programming NC III • Programming (.Net Technology) NC III • Programming (Java) NC III • Programming (Oracle Database) NC III
Game Developer	IT-BPM	<ul style="list-style-type: none"> • Game Programming NC III • 2D Animation NC III • 3D Animation NC III • Animation NC II
IT Developer	IT-BPM	<ul style="list-style-type: none"> • Web Development NC III • Game Programming NC III • Programming (.Net Technology) NC III • Programming (Java) NC III • Programming (Oracle Database) NC III



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Top 10 Most Registered BPO-related Program

RANK	PROGRAM	NO. OF REGISTERED PROGRAMS
1	Contact Center Services NC II	224
2	Visual Graphic Design NC III	210
3	2D Animation NC III	61
4	Animation NC II	52
5	3D Animation NC III	44
6	Medical Transcription NC II	34
7	Programming NC IV	27
8	Web Development	18
9	Web Development Level III	18
10	Creative Web Design	15

In terms of Registered Programs, Contact Center Services NC II leads as the qualification with the highest number of registered programs. Visual Graphic Design NC II is not far behind.

Number of BPO-related Registered Programs, TVIs and Assessment Centers by Region

REGION	Registered Programs	TVIs	Assessment Centers
NCR	158	8	6
CAR	10	6	4
I	26	16	16
II	0	0	0
III	133	9	5
IVA	90	6	5
IVB	7	5	3
V	35	6	4
VI	0	4	5
VII	35	5	3
VIII	5	3	1
IX	0	5	4
X	25	5	2
XI	0	5	3
XII	5	3	1
CARAGA	18	4	4
ARMM	7	3	2
TOTAL	599	109	84

NCR has the most with 158 registered BPO-related programs followed by Regions III and IVA with 133 and 90 respectively.



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❑ Training Regulations

There are 12 BPO related Training Regulations. These are the following:

Training Regulations in the BPO Sector

SECTOR	QUALIFICATIONS
Information and Communication Technology (19 Qualifications)	Contact Center Services NC II
	Medical Transcription NC II
	2D Animation NC III
	3D Animation NC III
	Animation NC II
	Visual Graphic Design NC III
	Web Development NC III
	Game Programming NC III
	Programming (.Net Technology) NC III
	Programming (Java) NC III
	Programming (Oracle Database) NC III
	Medical Coding and Claims Processing NC III

Source: QSO

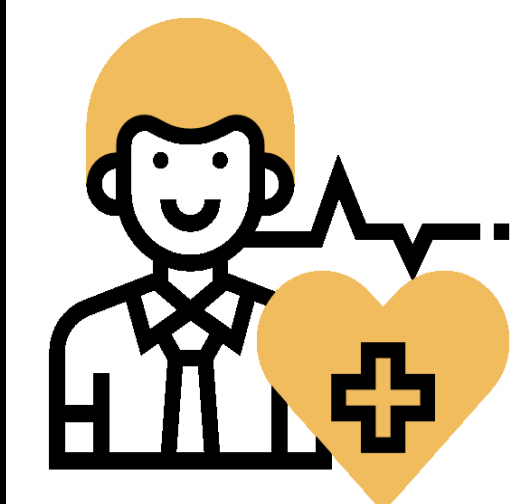
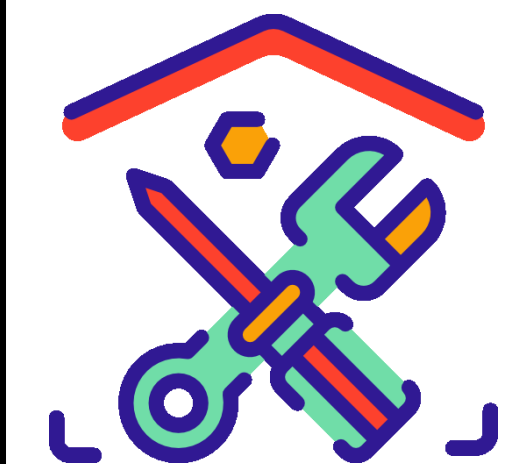
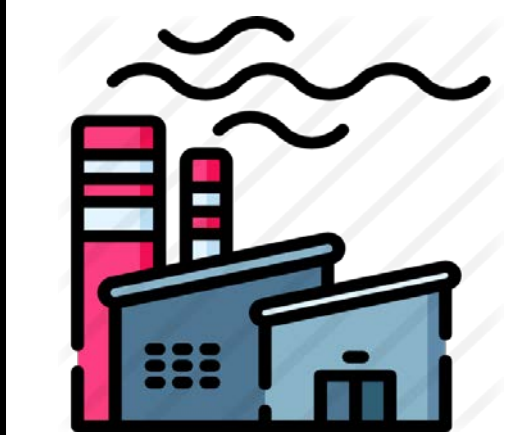
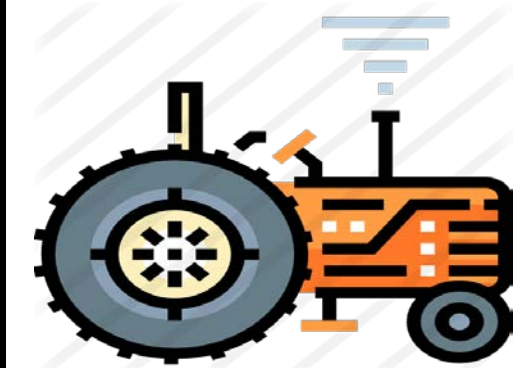
According to TESDA's Qualification and Standards Office, Medical Coding and Claims Processing NC III has replaced Medical Coding and Billing NC II while Programming NC IV has now been broken down into three (3) training regulations (TRs) namely: Programming (.Net Technology) NC III, Programming (Java) NC III, and Programming (Oracle Database) NC III.

❑ Enrolled and Graduates on BPO Related Programs

Enrolled and Graduates on BPO-related Qualifications 2014 – December 2018

INDICATOR/YEAR	2014	2015	2016	2017	2018
ENROLEES	68,752	40,634	35,614	34,582	37,336
GRADUATES	51,340	31,098	37,403	32,835	38,593

The number of enrollees and graduates in BPO-related TVET programs is decreasing from 2014-2017. However, in 2018 there is a 7.9% increase in enrollees and 17.5% in graduates compared to the previous year.



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Top 10 Qualifications with Most Number of Enrolled and Graduates
on BPO Related Qualifications
January – December 2018

RANK	PROGRAM	ENROLLED	GRADUATES
1	Contact Center Services II	20895	22189
2	Visual Graphic Design III	8942	8880
3	2D Animation III	2827	2894
4	Animation II	1987	2215
5	3D Animation III	1267	1114
6	Programming IV	877	720
7	Medical Transcription II	472	497
8	Game Programming III	37	32

Contact Center Services NC II is the TR with the most enrollees and graduates. This may be due to the increase in the demand for call center agents which is also evident in the PEPM 2013-2022.

Assessed and Certified on BPO Related Programs

Assessed and Certified on BPO-related Qualifications
2014 – December 2018

INDICATOR/YEAR	2014	2015	2016	2017	2018
ASSESSED	6,209	16,155	17,465	17,257	61,580
CERTIFIED	3,939	10,176	12,340	13,491	49,420

The number of assessed is increasing though it fluctuated a little in 2017. On the other hand, the number of certified in BPO-related TVET programs is steadily increasing. The increase in both assessed and certified in 2017-2018 is also very noticeable.

The ranking for qualifications that are most assessed and certified in the BPO sector are as follows:

Top 5 Qualifications with the Most Number of Assessed and Certified
on BPO Related Qualifications
January – December 2018

RANK	PROGRAM	ASSESSED	CERTIFIED
1	Visual Graphic Design NC III	40,438	32,666
2	Animation NC II	9,936	7,872
3	2D Animation NC III	7,698	6,192
4	3D Animation NC III	2,310	1,756
5	Medical Transcription NC II	1,136	896



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Number of Trainers (NTTC Holders) and Assessor

NTTC Holders and Accredited Assessors by Region
As of December 2018

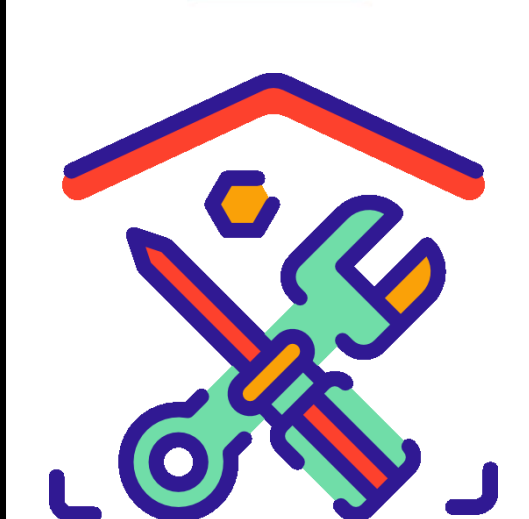
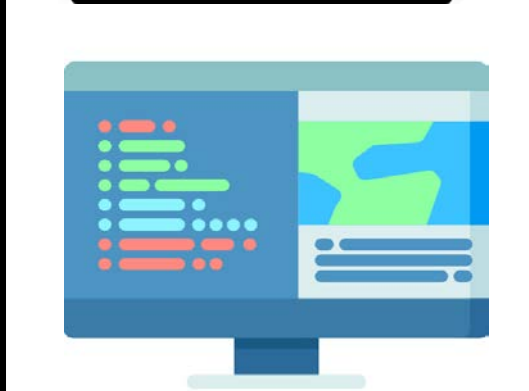
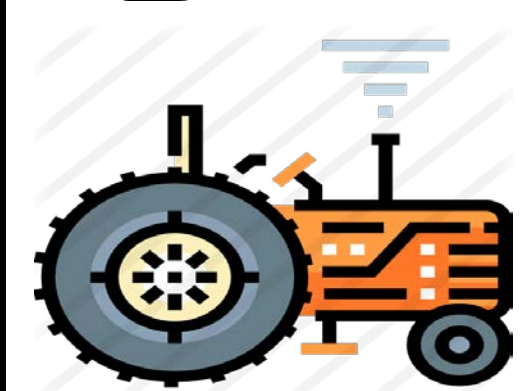
REGION	NTTC HOLDER	ASSESSOR
NCR	242	6
CAR	18	4
I	75	16
II	1	16
III	125	6
IV-A	123	5
IV-B	14	3
V	10	4
VI	48	3
VII	41	2
VIII	4	1
IX	88	4
X	31	2
XI	123	4
XII	19	2
CARAGA	30	3
ARMM	8	2
TOTAL	1000	83

There are 1,000 trainers and 81 assessors on BPO related programs all over the country. Majority of the trainers and assessors are in regions NCR, III, IVA and XI. Considering the number of individuals need to be trained, the current capacity of TVET in terms of assessor and training is not sufficient.

Top 5 Qualifications with the Most Number of NTTC Holders on
BPO Sector and Other Related Qualifications
January - December 2018

No.	Qualification	NTTC Holder
1	Visual Graphic Design NC III	1286
2	2D Animation NC III	280
3	Animation NC II	192
4	3D Animation NC III	132
5	Medical Transcription NC II	100

Source: Certification Office



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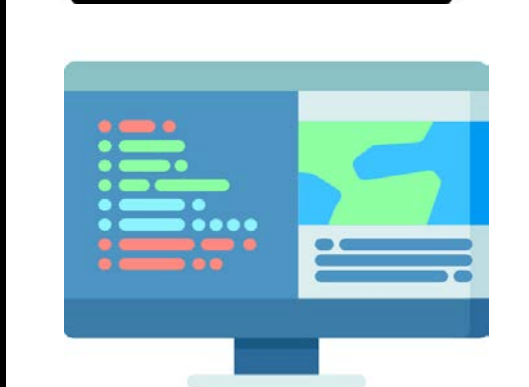
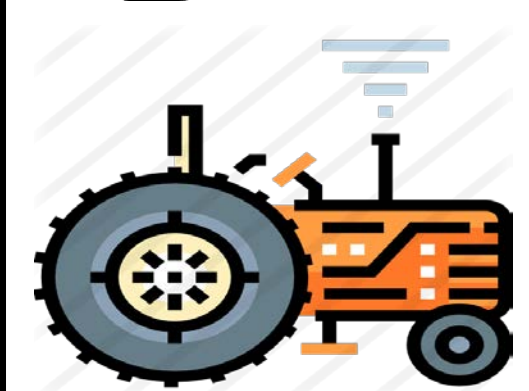
Top 5 Qualifications with the Most Number of Assessor on
BPO Sector and Other Related Qualifications
January - December 2018

No.	Qualification	Assessor
1	Visual Graphic Design NC III	298
2	2D Animation NC III	100
3	Animation NC II	60
4	3D Animation NC III	34
5	Medical Transcription NC II	32

Source: Certification Office

TESDA Initiatives

- To expand the number of trained individuals in the BPO-related programs, TESDA has undertaken the following initiatives:
 - National TVET Enrollment Day for IT-BPO Sector;
 - Established partnership with industries, like the Information Technology and Business Process Association of the Philippines (IBPAP), and
 - Free assessment for workers which includes the IT-BPO sector.
- Also, TESDA is currently in the process of conducting the **Workplace Skills Survey (WSS)** with the goal of identifying the future skills needs of industries in the country. The survey intends to determine the employers' desired skills and competencies from its workers as well as to determine their satisfaction on the competencies and performance of TVET graduates in the workplace. The analysis of the results of the survey will provide information to bring TVET programs in line with the needs of the labor market/industry. One of the pilot sectors for the survey is the IT-BPM (IT-BPO) sector.
- In terms of Scholarship, TESDA also has the IT-BPM (which includes IT-BPO) industry as one of its priority sectors. This means more funding for IT-BPM related TVET programs.
- The National Technical Education and Skills Development Plan (NTESDP) 2018-2022 has also identified IT-BPM (which includes IT-BPO) as one of the country's Key Employment Generators (KEGs) as the sector has a large employment base and is steadily growing. The sector is also part of the Action Programming being done for the NTESDP.



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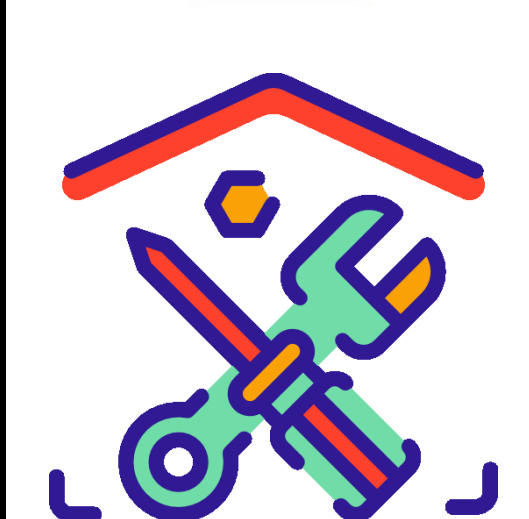
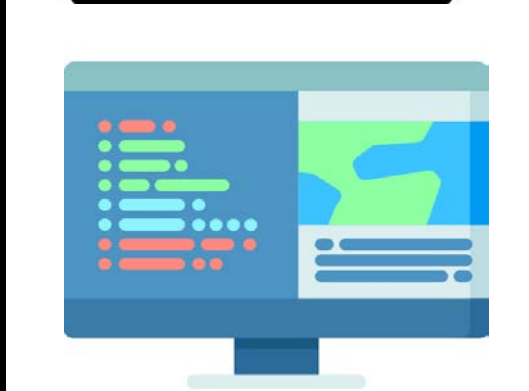
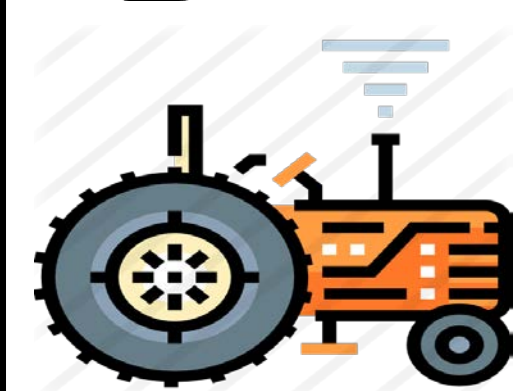
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III. Analysis

- In general, the future skills requirements shows that the IT-BPM Sector will move towards from low to mid and mid to high skills requirements. The BPO industry which is under this sector will be affected with the changes in the industry requirements brought by the Fourth Industrial Revolution.
- Automation will tend to affect the following occupations: 1) *medical transcription*, 2) *simple contact center services*; 3) *basic 2D animation services*; 4) *IT technical support*; and 4) *transactional mid and back-office process (medical coding and claims)*. This indicates that workers on these areas will possibly be displaced and need to be trained on other fields with available employment opportunities. On the other hand, this situation may also consider in the development of higher level qualifications wherein new skill sets will be covered.
- Skills on ICT, Science, Technology, Engineering and Mathematics (STEM) will be deemed critical in the BPO industry. These fields are already part of the existing standards, however, there is a need to give emphasis, broaden the scope and update based on current trends.
- Skills requirements for the BPO industry will also affect other sectors, these are: 1) Construction, 2) Metals and Engineering, 3) Wholesale and Trading Sector, and 4) Social, Community Development and Other Services. Inclusion and emphasis on the identified fields, specifically ICT and STEM skills is also critical in related qualifications.
- There are emerging skills in the BPO industry such as data analytics, cyber security, blockchain, digital commerce, and financial technologies that seems to be totally new and will direct to new development in the existing standards.

IV. Recommendations

- With the new requirements of the BPO industry, TESDA has to develop higher level qualifications to address the industry's move from **low to mid and mid to high skills requirements**.
- As the industry requires higher skills requirements for their workforce, it is essential for TESDA to strengthen the focus on the foundational capabilities in **STEM and ICT** in BPO-related TVET programs.
- There is a need to start **discussion with industries and conduct of studies** to determine the skills requirements on the identified emerging skills.
- The trend will require **stronger industry linkages** in the delivery of training. The industry players can be encouraged to register programs on the identified skills requirements as they already have the expertise and up-to-date facilities needed for the workers to keep up with industry needs.



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Policy Research and Evaluation Division - Planning Office
Office of the Deputy Director General for Policies and Planning
Technical Education and Skills Development Authority
TESDA Complex, East Service Road, South Luzon Expressway (SLEX)
Fort Bonifacio, Taguig City 1630, Metro Manila
Land Line: (+632) 817-2675 / 893-1966 / 888-5652
www.tesda.gov.ph | contactcenter@tesda.gov.ph