

# MAPPING PHILIPPINE WORKERS AT RISK OF AUTOMATION IN THE FOURTH INDUSTRIAL REVOLUTION

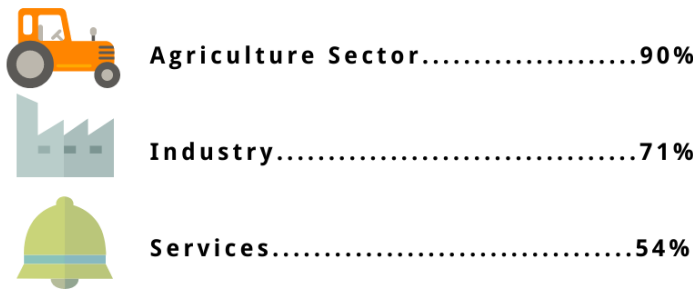
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The Working Paper of the Asian Institute of Management (AIM) mapped the Philippine workers at different levels of automation risk across eight categories: economic sector, age, gender, educational attainment, income, type of organization, nature of employment, and administrative region. The study adopted the probabilities of automation by Frey and Osborne and assigned them to equivalent Philippine occupations. Below are the highlights of the results of the study:

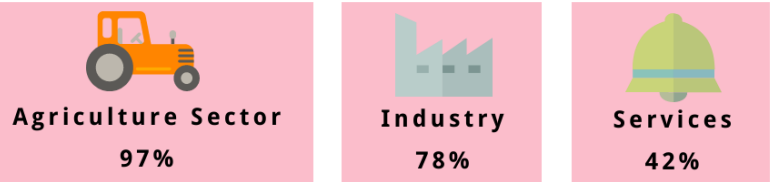
## JOBS

Overall, jobs in the Philippines have an average probability of 67.9% of being automated.



## WORKERS

64.8% of Philippine workers are employed in jobs that have high risk of automation.

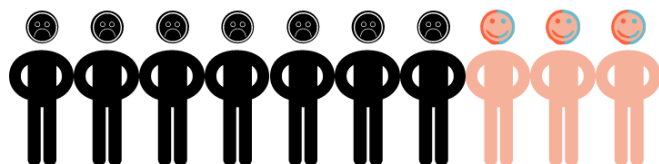


In terms of workers per sector, the following percentages per sector represent those who are employed in jobs that have high risk of automation.

## AGE

Jobs of workers aged 15-24 years old face the greatest risk of automation at 76%.

72% of workers aged 15-24 are at high risk of being automated.



## GENDER

Jobs held by women face a lower probability of being automated at an average of 60%

55% of female workers are in jobs that are at high risk of being automated

Jobs held by men face a higher probability of being automated at an average of 73%

71% of male workers are in jobs that are at high risk of being automated



# REGION

## JOB



### Highest risk of automation

II.....	76%
ARMM.....	75%
XII.....	71%
CAR.....	71%

### Lowest risk of automation

NCR.....	60%
IV-A.....	64%
III.....	64%

## WORKERS



### Largest share of workers in high risk jobs

ARMM.....	77%
II.....	76%
CAR.....	71%

### Lowest proportion of high risk jobs

NCR.....	55%
III.....	55%
IV-A.....	58%

The study also reports that there are three task characteristics that serve as bottlenecks to automation as these skills have not been acquired by robots and computers:



### Perception and manipulation

Depth and breadth perception skills have not been learned by robots, and perception skills are important in tasks that require manipulation.



### Creative Intelligence

Creative intelligence is required if the tasks are to generate novel and valuable ideas, as well as sensible combination of ideas.



### Social Intelligence

Social intelligence is critical to jobs requiring negotiation, persuasion, care, and other forms of human interaction.

#### Reference:

Francisco, J., Flores, S., Canare, T., Caboverde, C., Borja, B., & Monterola, C. (2019). Mapping Philippine Workers at Risk of Automation in the Fourth Industrial Revolution. Makati City: Asian Institute of Management.

For more information, the document is available in the Research and Knowledge Materials section of the AIM website at this link: <http://policy.aim.edu/research-and-knowledge-materials/working-papers>.

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