



Bridging Industry 4.0 Amidst The Pandemic

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Abstract

Changes in alert levels in different parts of the Philippines change from time to time, and we do not know when they will stop for good. The majority of the industry sector suffered from the devastating effect of the pandemic problem and the war between Ukraine and Russia. Many of the constituents lost their jobs because the majority of the companies suffered from closure. The government should think back on how the economy of the Philippines may survive and recover by strengthening the facilities for Industry 4.0 by connecting factories and government institutions to all transactions. By proposing this kind of project, the government can strengthen the enactment of the Work from Home Law and, at the same time, we can do online, real-time transactions including virtual conferences, training, bank transactions, and other transactions that can be done online. The benefits of Industry 4.0 will be able to help our economy by bridging and connecting all business sectors on one platform. With this, it will be a big help to the Philippine economy.

Keywords

Industry 4.0, bridging, realtime

Abstrak

Perubahan tingkat peringatan di berbagai bagian Filipina berubah dari waktu ke waktu, dan kami tidak tahu kapan akan berhenti untuk selamanya. Mayoritas sektor industri menderita akibat dampak buruk dari masalah pandemi dan perang antara Ukraina dan Rusia. Banyak konstituen kehilangan pekerjaan karena sebagian besar perusahaan mengalami penutupan. Pemerintah harus memikirkan kembali bagaimana perekonomian Filipina dapat bertahan dan pulih dengan memperkuat fasilitas Industri 4.0 dengan menghubungkan pabrik dan institusi pemerintah ke semua transaksi. Dengan mengusulkan proyek semacam ini, pemerintah dapat memperkuat pemberlakuan UU Work From Home dan sekaligus dapat melakukan transaksi online real-time termasuk konferensi virtual, pelatihan, transaksi bank, dan transaksi lainnya yang dapat dilakukan. dilakukan secara online. Manfaat Industri 4.0 akan dapat membantu perekonomian kita dengan menjembatani dan menghubungkan semua sektor bisnis dalam satu platform. Dengan ini, itu akan sangat membantu perekonomian Filipina.

Keyword

Industri 4.0, Menjembatani, Waktu Sebenarnya

Introduction

Changes in alert levels in different parts of the Philippines change from time to time, and we do not know when they will stop for good. The majority of the industry sector suffered from the devastating effect of the pandemic problem and the war between Ukraine and Russia. The cause and effect of those tragedies affected the business-economic sector and resulted in the closure of businesses. Most of the workers suffered from layoffs and lost their jobs. The government should think back on how the economy of the Philippines may survive and recover by strengthening the facilities for Industry 4.0 by connecting factories and government institutions to all transactions. The pandemic has accelerated society's digital transformation towards Industry 4.0 (the fourth industrial revolution). The technologies of this transformation can be predicted to be raised in the economic sector, (Moosavi, Javad, & Igor, 2021)

By implementing this kind of project, the government can strengthen the enactment of the Work from Home Law and, at the same time, we can do online, real-time transactions including virtual conferences, training, bank transactions, and other transactions that can be done online. The benefits of Industry 4.0 will help

our economy by bridging and connecting all business sectors on one platform. With these, it will be a big help to the Philippine economy. Industry 4.0 technologies will increasingly develop more intelligent products and assets that can capture more information and integrate more deeply into the new normal of business processes amidst the pandemic (Umbarkar, Serafin, & Betti, 2021)

Objectives

1. Determine the challenges brought up by the pandemic in the Sectorial industry
2. Determine the advantages of using Industry 4.0 amidst the pandemic.

Methodology

The researchers use a case study type of research and the sampling size is composed of 20 respondents randomly selected from the different parts of the province of Zambales, Philippines. The interview will be done online using Google Form, and the data collection process will be tallied immediately once the process is completely conducted.

Results and Discussions

Challenges brought up by the pandemic in the Sectorial industry

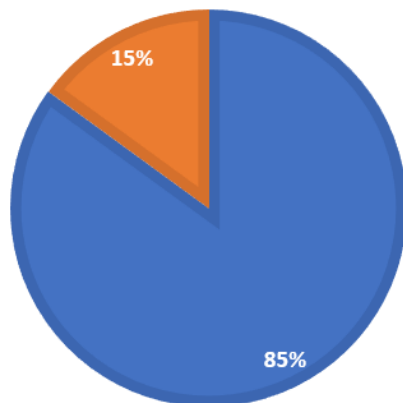


Figure 1. Challenges brought up by the Pandemic

Figure 1 shows that 85% of the respondents say that there are lots of challenges brought up by the pandemic in different sectorial areas like business transactions were forced to implement industry 4.0 in the fields of healthcare, agriculture, and education. The challenges were further evaluated through the expert opinion of Industry 4.0 systems experts to gauge business sectors interest in Industry 4.0 technologies to solve the current pandemic situation. (Hussain, 2021)

The advantages of using Industry 4.0 amidst the pandemic.

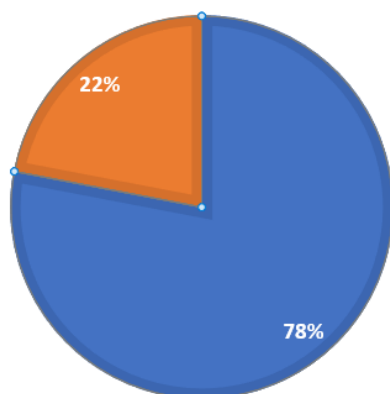


Figure 2. Advantages of using Industry 4.0 amidst the pandemic



Figure 2 shows that 78% say that there is a big advantage in implementing Industry 4.0, especially in times of pandemic.

Conclusions

Finally, Industry 4.0 caters to the current trends of information technology enabled manufacturing technologies, which include cyber systems, the Internet of things, and cloud computing technology (i-SCOOP, 2022). This will help to boost the economy and create more jobs in our constituents areas during this difficult time. These are examples developed during the COVID-19 Pandemic in response to the Industry 4.0 requirement to continue the processes of global economic problems that we are facing right now. According to this author (Mobo & Garcia, 2020)

Recommendations

There is a need to strongly recommend to the different industry sectors that the implementation of Industry 4.0 must be immediately addressed.

References

- Hussain, A. (2021). COVID-19 Challenges: Can Industry 4.0 Technologies Help with Business Continuity? . *MDPI*.
- i-SCOOP. (2022, April 12). *Industry 4.0 and the fourth industrial revolution explained*. Retrieved from i-Scoop: <https://www.i-scoop.eu/industry-4-0/>
- Mobo, F. D., & Garcia, A. R. (2020). Using Automated Contact Tracing System App with QR Code to monitor and safeguard Parishioners against COVID-19 at St. Anthony of Padua Parish. *American Research Journal of Computer Science and Information*, 1-4.
- Moosavi, J., Javad, B., & Igor, M. (2021). The application of industry 4.0 technologies in pandemic management: Literature review and case study. *Healthcare Analytics*, 1-11.
- Umbarkar, A., Serafin, N., & Betti, F. (2021, 11 4). *FOURTH INDUSTRIAL REVOLUTION*. Retrieved from How fourth industrial revolution tech helped companies survive the COVID crisis: <https://www.weforum.org/agenda/2021/11/how-fourth-industrial-revolution-tech-helped-companies-survive-covid-19/>

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