Transformation of Family Roles and Dynamics in Adjusting to the Industrial Revolution 4.0 for Prosperity in Digital Era

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Abstract. The fourth industrial revolution has brought about major changes in how we live and labor, specifically affecting family dynamics. This abstract explores how families adjust to these changes to maintain productivity and well-being in the digital age. We concentrate on the effects of technology adoption on the labor market and the necessary skills, including automation, artificial intelligence, and the Internet of Things (IoT). Adapting abilities to stay professionally relevant and maintain social-emotional balance in the face of evolving digitally affected interaction patterns is a major problem for families. This study emphasizes how crucial it is for families to adjust quickly in order to acquire new skills and maintain up good communication. We demonstrate how families can prosper in the digital age by effectively adapting. Families that recognize and solve these issues will be able to maintain their well-being in the face of swift global change.

Keywords: Fourth Industrial Revolution Digital Literacy, Family Adaptation, and Socio-Emotional Health.

I. INTRODUCTION

Families often face difficulties and inconvenience amidst the rapid advances in technology and information. Intense materialism changes the lifestyle and behavior of husbands, wives and children. Excessive materialism often causes unhealthy behavior and problems in life (Yorke et al., 2022).

Current social and cultural changes have a broad impact on various aspects of people's lives, including the family sphere. The influence of industrialization, globalization and modernization, as well as advances in science and technology have resulted in a shift in the socio-cultural values of the family. These changes include morality, ethics, religious standards, teaching children at home, relationships and marriage. Society is transforming from an initial socio-religious lifestyle to become more individualistic, secular and materialist. This situation is urgent to be discussed and responded to constructively, with the aim of producing a new perspective that has a more progressive understanding of family formation in the era of the Industrial Revolution 4.0.

According to data from the Central Statistics Agency, the number of divorce cases in Indonesia will reach 516,334 in 2022, an increase of 15.31% from the previous year. The majority of divorces are lawsuits filed by the wife, reflecting complex social dynamics. On the other hand, child marriage is still a serious problem that hampers the rights and potential of the younger generation. The government, through various initiatives, is trying to prevent and overcome this problem, as expressed in a coordination meeting in East Java Province (Watanabe, 2017).

Infidelity, as a problem in the household, is also a focus of attention. Studies show that infidelity occurs in all genders, but men tend to be involved more often. This shows the complexity of interpersonal relationships that require deeper understanding and handling(Wang & Pulizzi, 2022).

II. METHODS

The author applies the "Documentation Method of Searching for Information Through Written Objects", which includes searching and analyzing document materials, notes, reports, books and other archives related to the research subject.

III. DISCUSSION AND RESULTS

A. Discussion

Understanding "family" in the context of sociology (Family in English) refers to a social unit that is formed based on marriage relations or blood ties (nasab). According to the Big Indonesian Dictionary, "Family" is defined as mother, father and their children; a fundamental unit of kinship in society. The structure of society consists of a family which is built on the basis of marriage or matrimony and generally consists of father/husband, mother/wife and children (Utoyo, 2020).

In understanding the family, there are two important aspects. A family first consists of a group of people who are interdependent through blood relations and marriage. Furthermore, the family is described as a "household", where the existence of kinship ties and economic unity is also emphasized. According to Law no. 10 of 1992 concerning Population and Prosperous Families, the family is the smallest unit in society consisting of husband, wife and children, or father and mother.

However, the term "Industrial Revolution 4.0" comes from the advanced technology strategic plan carried out by the German government which focused on the computerization of factories. At the 2011 Honnover Fair, this term became popular again. The Working Group on Industry 4.0 provided advice to the German federal government in October 2012. The members of this team are considered the founders and pioneers of Industry 4.0. Information Technology (IT) created a road map or roadmap called "Making Indonesia 4.0", which marks a four-generation industrial revolution. The use of steam engines marked the first generation of industrial revolution, and mass production and electric power marked the second generation of industrial revolution. Family problems in the era of Industrial Revolution 4.0 (Schneider &Kreyenfeld, 2021).

The challenges faced by families in the Industrial Revolution 4.0 era are very complex and varied. Population, as the government's ability to predict and control population numbers, is key in overcoming phenomena such as unemployment, poverty, inequality, crime and environmental crises (Rotkirch, 2018). A qualified population, especially of working age, is an important asset. However, a large population with little education, less skills, and poor health can be disastrous for development.

Population is a strategic factor in development. They are the subjects and objects of development, which must be encouraged and developed so that they become the motor of development. Successful development is one that can improve the welfare of the population as a whole. However, Indonesia, with its position as a country with a large population, faces its own challenges. High population growth rates, an increasingly narrow world of work, and changes in social behavior are crucial issues.

The Industrial Revolution 4.0 brings new challenges, especially related to the use of technology by individuals and families. Failure to understand technology can create social, economic and cultural disparities. A quality family is the key in facing this era. They must be mentally and intellectually ready to face change, by understanding and accepting these changes (Porter, 2018).

The current generation, which is 'digital native', has different needs, desires and challenges than previous generations. On the other hand, 'digital immigrants' need to adapt to technological developments. Indonesia has opportunities in this era, especially with the 'demographic bonus'. However, challenges in relationships between family members and the spiritual role of the family in educating children according to moral and social values are becoming increasingly important.

Families must be able to develop media and information norms and literacy. A democratic family communication model needs to be developed, prioritizing effective interaction and communication. The government and industry must see the millennial generation as potential family makers, not just as workers. Programs such as the First 1000 Days of Life (HPK) and family development for various stages of life are important in building quality human resources (National Cancer Institute, 2020).

In this context, families must adapt to the changes brought by the Industrial Revolution 4.0 in order to remain productive. The impact of socio-economic changes on family welfare in the digital era is the main focus. The title "Transformation of Family Roles and Dynamics in Adapting to the Industrial Revolution 4.0 for Prosperity in the Digital Era" reflects the urgency and complexity of the challenges families face in facing this change.

1. *Transformation of Family Roles and Dynamics in the Digital Era*

In the era of Industrial Revolution 4.0, families are faced with the challenge of adapting to rapid and significant changes. This adaptation is not only limited to technological aspects but also includes broader socio-economic changes. To ensure productivity and well-being, families must change the way they communicate, interact, and function. By understanding and adapting to these changing dynamics, families can not only survive but also thrive in the face of new challenges.

2. Improve Communication and Understanding

In facing the challenges brought by the Industrial Revolution 4.0, improving communication and understanding

within the family is more important than ever. In this digital era, where information and interactions occur quickly and continuously, families must utilize technology to strengthen bonds and understanding between members. Effective communication is not just about talking and listening, but also about understanding each other's perspectives, emotions, and needs. This involves opening a safe space for dialogue where each family member feels comfortable to share their thoughts and feelings without fear of judgment. In this context, it is important to develop empathy and active listening skills, in which family members truly seek to understand and respond constructively to what others share(Garcia et al., 2019).

In addition, in this digital era, families are also faced with the challenge of navigating the flood of information and distinguishing between what is useful and what can be annoying. Therefore, it is important to educate family members, especially children, about digital literacy and how to use technology responsibly. Developing a shared understanding of how and when to use digital devices can help prevent misunderstandings and conflict.

Finally, to improve communication and understanding, families must commit to continuing to learn and grow together. This may involve holding regular family meetings to discuss and adjust to changes as they occur, attending workshops or family counseling, and actively seeking resources to improve family dynamics. By investing in communication and understanding, families can build a strong foundation that not only helps them survive challenges but also thrive and prosper together in the digital age.

3. Adaptation of Roles in the Family.

In facing the Industrial Revolution 4.0, role adaptation is crucial for each family member. These changes are not just limited to aspects of work but also include the way we interact, learn and support each other. Parents, for example, may need to learn new digital skills to stay relevant in the workplace or even to help their children with their education. They must also model positive adaptation, demonstrating openness to learning and change(Ahmed, 2020).

On the other hand, children and young people should be encouraged to develop skills that will help them in the economy of the future, such as problem solving, critical thinking and creativity. They also need to learn how to collaborate effectively, both in person and via digital platforms. Additionally, traditional gender roles may need to be reviewed and adjusted to reflect new needs and realities. All family members should feel free to pursue interests and careers that suit their talents and desires, without being limited by old expectations.

Thus, role adaptation in the family is not just about keeping up with external changes but also about embracing personal growth and supporting each other in the process. With a proactive and adaptive approach, families can ensure that each member not only survives but also thrives in facing the challenges and opportunities brought by the Industrial Revolution 4.0.

4. *Managing Socioeconomic Impacts*

In facing the Industrial Revolution 4.0, families are faced with significant socio-economic changes that require careful and proactive management. These changes can affect all aspects of life, from job structure to financial stability. To manage these impacts, families need to adopt a comprehensive approach. First, financial management becomes critical; families must plan and adjust their budgets to accommodate potential income fluctuations and ensure financial security. This may involve saving more, investing wisely, and avoiding unnecessary debt.

Second, ongoing education and training is important. With the ever-changing job market, family members must continue to hone their skills and may need to consider re-education or additional training to remain relevant and competitive.

Third, building a strong support network is important. This may mean strengthening relationships with family, friends, and community or seeking professional resources such as financial or career counselors. This network can provide emotional support during difficult times and practical advice for navigating change. Fourth, families must stay informed and proactive. Keeping up with the latest trends, understanding their rights as workers or consumers, and planning for the future with worst-case scenarios in mind can help them make the right decisions in time.

By effectively managing these socioeconomic impacts, families can not only protect their current well-being but also lay a strong foundation for future generations, ensuring that they can thrive in this ever-changing and often uncertain environment.

5. Creating Work Life Balance

Creating work-life balance in the context of the Industrial Revolution 4.0 is becoming increasingly important as the boundaries between work and personal life become increasingly blurred. Technology that allows us to work from anywhere and at any time can lead to longer working hours and pressure to always be available. Therefore, it is important for families to actively set clear boundaries between work time and personal time. This might mean setting specific work hours at home, turning off work notifications after certain hours, or even designating a dedicated space for work that is separate from the relaxation area.

Prioritizing time together as a family, such as having dinner together or spending weekends together, is also

important for strengthening bonds and ensuring that each family member feels valued and important. Additionally, the use of technology must be considered carefully; while it can increase efficiency and flexibility, it is also important to ensure that it does not replace valuable human interaction and necessary downtime.

By creating a healthy work-life balance, families can not only increase productivity and job satisfaction but also maintain their emotional well-being and the quality of their relationships. This is an important step in ensuring that families can thrive in facing the challenges and opportunities brought by the digital era.

6. Prioritize Mental and Emotional Health

In facing the challenges brought by the Industrial Revolution 4.0, it is important for families to not only focus on technological and socio-economic adaptation but also on mental and emotional health. Rapid change and the stress of constant adaptation can affect the psychological well-being of family members. Therefore, it is important to create a supportive environment where family members feel comfortable sharing their feelings and concerns. Families should encourage open dialogue about stress, anxiety, and other issues, and seek professional support when needed. Practices such as mindfulness, meditation, and regular exercise can help maintain emotional balance and reduce stress. Additionally, ensuring quality time together, such as family dinners or recreational activities, can strengthen bonds and provide a sense of security and support. By prioritizing mental and emotional health, families can build the resilience needed to face the challenges and take advantage of the opportunities offered by the digital era, ensuring that each member feels supported and empowered to thrive.

7. Socioeconomic Impact on Family Welfare

The socio-economic impact of the Industrial Revolution 4.0 on family welfare is multifaceted and complex, affecting various aspects of family life. The following is a discussion of the socio-economic impact:

1) Economic Prosperity:
    a. New Job Opportunities: Industrial Revolution 4.0 creates jobs in new sectors and requires different skills. Families whose members can adapt and acquire these skills may experience increased income and economic stability.
    b. Economic Inequality: On the other hand, there is a risk of increasing inequality. Families who do not have access or the ability to adapt to new technologies may be left behind, deepening economic and social disparities.
    c. Job Flexibility: Many jobs now offer greater flexibility in terms of work hours and location. This can be beneficial for families, allowing them to more easily fit work around family responsibilities.
2) Health and Wellbeing:
    a. Access to Health Services: Digital technologies enable better access to health services, including online consultations and health information. This can improve the well-being of families by making health care more accessible and affordable.
    b. Mental Health: Changes in the way you work and the pressure to constantly adapt to new technology can lead to stress and mental health problems. Poor work-life balance can also affect family well-being.

3) Education and Lifelong Learning:
    a. Access to Education: Technology has made education more accessible, allowing family members of all ages to learn and develop new skills. This can improve long-term economic prospects and prosperity.
    b. Digital Divide: However, there is a significant digital divide. Families who do not have access or the ability to use these technologies may be left behind, limiting their educational and economic opportunities.
4) Family Dynamics:
    a. Roles and Responsibilities: Industrial Revolution 4.0 can change roles and responsibilities in the family. For example, more parents may be working from home, changing the way families interact and organize their daily lives.
    b. Connectivity vs. Connectivity Isolation: Although technology can improve connectivity, too much time in front of screens and online interactions can lead to social isolation and reduce quality time spent with family.
5) Resilience and Adaptation:
    a. Resilience to Change: Families that can adapt to economic and social changes tend to be more resilient to stress and uncertainty. They are better able to take advantage of new opportunities and face challenges.

Adaptation Strategies: Families may need to develop new adaptation strategies, including continuing education, flexibility in family roles, and utilizing support networks to maintain well-being.

IV. CONCLUSIONS

The Industrial Revolution 4.0 has significantly changed the landscape of family life and work. The changes brought by technologies such as AI, automation, and IoT require adjustments in skills, professionalism, and social-emotional balance. Families who successfully navigate this transition not only survive the changes but also find ways to thrive, using technology to strengthen bonds and enhance shared well-being. Rapid adaptation in developing new skills, a deep understanding of digital trends, and effective communication are key in ensuring family continuity and prosperity amidst rapid global transformation.

This transformation not only affects work and social interactions but also demands new approaches to education, childcare, and family financial management. Apart from that, families also face challenges in creating a balance between work time and personal life in an era where these boundaries are becoming increasingly blurred. Emotional and mental wellbeing is also a priority, given the pressure and stress that can arise from this rapid and constant change.

Suggestion

The author realizes that this article is not free from weaknesses and errors. For this reason, constructive criticism and suggestions are highly expected to improve this work. It is hoped that this article will be useful, especially for teenagers now and in the future, to be more careful and limit their use of social media, so that there is no dependency. The author hopes that this article can provide insight and become food for reflection, and would like to thank all those who have provided support. Finally, I hope we all get maghfiroh and always be in the grace of Allah SWT.

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