

SHARIAH STANDARD FOR THE ADOPTION OF ARTIFICIAL INTELLIGENCE NANNY: AN ANALYSIS OF POTENTIALS AND CHALLENGES

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ABSTRACT

Artificial Intelligence as the contemporary advanced technology is been gaining recognition in every sphere of life in recent times. The increasing economic activities of households have triggered demands for house maid as more people wanted the service of a house made to sustain their social family structure needs. Family experts have suggested that people's demand for house maid depends on the value of their time. A hirer whose time is worth \$10 per hour can afford to hire a house helper for \$5 per hour. At this juncture, hiring a nanny has become a household necessity for many families due to busy schedules, dual-income lifestyles, physical limitations, specialized skill needs, caring for elderly or disabled family members, frequent travel, or enhancing the overall quality of life by outsourcing domestic tasks. However, the disruptive AI nanny may offer consistent monitoring, personalized education, house routine, and childcare assistance. It can also provide remote parent monitoring and emergency response; how-

ever, ethical and privacy considerations remain crucial to many households perceiving AI as a complement, not replace, traditional caregiving. This study used the doctrinal approach of the qualitative method to critically analyze fundamental shariah standards required for the adoption of AI nannies. The study found that AI humanoid nannies in the contemporary can be considered as general items that can be adapted based on certain fundamental Shariah standards such as the intent of the operators, the social status of the AI nanny, the economic scale of producing AI nanny, the legal capacity of AI nanny and the physical features of AI nanny.

Keywords: *Artificial Intelligence, Nanny, Shariah standard, potentials, challenges*

INTRODUCTION

Artificial intelligence is been gaining attention in recent times as a disruptive technology in the home care sector (Kalaivani A. et al., 2023). In light of the assertion that a real robot nanny is set to dominate the market, (Joanna, J. B. & Ronny B., 2021), especially for people who have a high interest in getting home care services done with precision but are still concerned about whether the artificial intelligent nanny is sustainable considering the ethical and fundamental legal compliance issues around AI nanny (Lambèr Royakkers and Rinie Van Est, 2015). The artificial intelligent nanny is a robotic mechanism that is supported by automatic control based on sensory intelligence. Human nannies or caregivers are often associated with several challenges, especially in dealing with the instruction of the client or their master. The purpose of hiring house help and nannies is to act as a child nurse, housekeeper, or caregiver for an elder person. The common challenge is that many hired nannies do not observe the instructions of the job or rather create other problems that make the master feel the services are not justified (Catrina Kronfli, 2013).

Moreover, common health and social relationships of the human caregivers and the home of the master have frequently triggered several cases such as theft, child abuse, and other social challenges in the home of the masters. Additionally, the recent world health situation and relationships in society have added to the interest of the rich in exploring the services of artificially intelligent nannies in their homes (Alharbi, 2023). For instance, since the outbreak of the coronavirus across the globe, medical and healthcare givers have increased their efforts in artificial intelligent nannies and healthcare givers. The introduction of artificial intelligence nannies and caregivers has

several merits to the modern social system (Guy Maddalone, 2017). The AI nanny seems less challenging in terms of household work and taking instructions. Although the AI caregiver might be more expensive, more clients are becoming concerned about the dangers in health and social interaction from hiring human nannies for household, babysitting, and elder caregiver jobs (Egon L. van den Broek, 2014).

Despite the boom in the future market of artificial intelligent nannies, shariah compliance-conscious customers and producers are concerned about the guidelines and fundamental principles that relate to the production and end user of artificial intelligent nannies. Therefore, the remaining part of this paper has five sections. The first section explicates the concept of artificially intelligent nannies. The second section highlights the potential opportunities for artificially intelligent nannies and the third section explains the challenges in the application of artificial intelligent nannies. The fourth section explores the Shariah standards for the application of artificially intelligent nannies and the final section presents the sum of the findings and the conclusion.

THE CONCEPT OF ARTIFICIAL INTELLIGENT NANNY

An Artificially intelligent nanny was in existence almost a century ago. The AI nanny is a baby monitor robot that is designed childcare assistance device. For instance, Bakelite Zenith Radio Nurse has been on sale as far back as the 1930s as the first electronic baby monitor in the world as an immediate response to a general fear of baby kidnapping at that time (Chris Roberts, 2019).

Although the innovation of Bakelite Zenith Radio Nurse later became washed up many parents can now monitor their kids on camera through their cell phones rather than hiring human babysitters which is likely to cost more. There is presently another AI equipment by a Turkey-based start-up Invidyo which can monitor the baby and the babysitter at the same time. Some users suggest that the AI-Invidyo device has helped to reduce anxiety among parents hiring babysitters at least the parents can have a recording of all that transpired in the home for example, it gives a special alarm to the parents with the video of the period when the babies cry or smiles (Cynthia Trope, 2023).

The devices notify the parents through their smartphones whenever an unauthorized person comes closer to the house and the baby. Although users rely on AI nannies will help surveillance parenting, especially among white-collar parents in gauging the quality of childcare have argued that AI-devised babysitter-helper might be wrong in judgement especially when it signals to

alarm the parents about the number of smiles and cries suggesting a judgment about the quality of child care and wellness of the baby (Chris Roberts, 2019).

There are related challenges in surveillance parenting, AI-assisted childcare is perceived to be a headache when it gives the parents the data of events and situations of the child but the actual decision of next action remains with the helicopter surveillance parents away from home or at work (Chris Roberts, 2019). However, there is an emerging market to pave the way for AI nannies that could babysit the child itself. This advance aims at alleviating the challenges of merely transferring information to the helicopter parents away from home, but the AI nanny will do what needs to be done to precision. A potential AI-nannies developed as humanoid can monitor the activities of the kids at home from a far distance, make conversation with children, entertain kids plus basic surveillance of their activities in the house and immediate compound. The awareness about robot nannies is increasing daily among an average household especially in America because of the expected functionality in helping to handle day-to-day routines and mundane activities easily and seamlessly (Jonathan Sim, 2023).

Apart from the general concern of skepticism from some parents to allow a robot to take care of their children, the cost implication of purchasing a robot nanny attracts some parents because once it is purchased, the owner might only need to pay for maintenance, unlike human nannies that keep replacing one after the other (Amanda Moore, 2020). In recent times, increased awareness about the potential benefits of AI nannies in the prospect has triggered the quest for the legal implications of using AI nannies, especially among potential users and manufacturers. The next section of this paper will discuss the potential benefits of AI nannies to the producers, dealers, and especially the end users (Houlin Zhao, 2018).

THE POTENTIAL OPPORTUNITIES IN ARTIFICIAL INTELLIGENT NANNY

An artificially intelligent nanny is called a humanoid because it is a robot that can do many things a human nanny can do. Although AI nanny can prepare meals, clean the house, sing, dance play games, and serve as security for the kids, yet, many parents argue that they cannot take care of the kids as a human nanny (Muhak Gupta, 2016). Since AI nannies are robots with assisted devices, they cannot exhibit unconditional love and affection towards the kids just like dad, mum, and babysitter will do. There are inbuilt AI nannies that allow the kids access to their parents through online chatting without

prior permission most especially when the kids need additional attention and parental supervision (Stephen Chen, 2022). The AI nannies have the capability of learning the likes and dislikes of the kids and adjusting over a period, unlike a human babysitter who has the potential to violate the wishes of the kids and their parents. The AI nanny helps children to grow intellectually by giving answers to basic questions about their environment. For instance, the AI nanny can answer the question; Why is the sun hot and the rain cold? (Noel Sharkey and Amanda Sharkey, 2014).

It is interesting to note that AI nanny is been developed to alleviate routine challenges of white-collar parents especially the bedtime and early morning routines such as hygiene of the kids from waking up, taking bath, brushing their teeth, washing their germs and getting dressed up and served their meal at the appropriate time (Mary Hughes *et al.*, 1993). A popular AI nanny; AvatarMind is capable of detecting the emotion and feelings of the children based on its inbuilt devices to detect and mirror the mood of the child to their parents through their mobile (Kim Lachance Shandrow, 2016). Many parents are not ready to bear the challenges and troubles of human nannies while there a devices that can do the task.

According to the British Academy & the Royal Society (2018), the modern artificial intelligent nanny has several potential benefits especially its economic, societal community, and individual benefits. One of the reasons why many professional parents get out of their jobs is the challenge of parenting their kids. Although, their options of hiring a human babysitter, many people still have social issues and troubles of past experiences with them. The artificial intelligence nanny has increased the potential economic participation of parents in the workforce by taking up official jobs while the robot is responsible for the household routine (British Academy & the Royal Society, 2018). Moreover, the emergence of artificial intelligent nanny might give birth to advances in the production of mildly artificial intelligent superhumans designed with a surveillance power to finally eradicate singularity with the capacity to protect against any future destructive technology in the future (Ben Goertzel, 2012).

CHALLENGES IN THE APPLICATION OF ARTIFICIAL INTELLIGENT NANNIES

The potential benefit of artificial intelligent nanny is not substituting the challenges it poses to the entire economy especially unemployment for the lower-class citizens that rely on babysitting to sponsor their family, education, and pay other bills. Experts have continuously suggested that AI nanny is a

potential economic disruption and will have continuous effects on human employment in the long run (Riddhi Doshi, 2023). According to the public dialogue report of the public The British Academy & the Royal Society (2018), over 7% of the respondent on British social attitudes in 2017 believe many of the jobs currently done by humans will soon be taken over by the robot including the babysitting and household routine work. On the other hand, investors in information technology have also identified artificial intelligence applications and business niche that is likely going to rule the economy till the next century (British Academy & the Royal Society, 2018).

Shariah Standard for the Application of Artificially Intelligent Nanny

In recent time, an an increase in the prospect of artificial intelligent nanny have triggered the quest for the legal implication of using AI nannies, especially among potential users' manufacturers. This study therefore aims to explore the shariah standards for activating artificial intelligence nannies. This study will rely on the Islamic thresholds by analyzing the related and contemporary juristic rulings (fatwa) on the application of AI nannies by manufacturers and end users.

Firstly, the manufacturer of artificial intelligence is capital Information technology industry with potential economic benefit by producing AI products for all sectors of the economy. The producers of AI nanny like other artificial intelligent products should observe the follow shariah standards to comply with shariah requirements and regulations.

The initial Shariah ruling on the application of artificial intelligent nannies is that everything is permissible based on the basic rule and principles of Shariah except that which violates the Shariah compliance principles.

Islamic legal maxims state thus:

Al-Aşlu fi al-Ash yā al-Ibāḥa illa ma ḥallala al-haram aw haram al-halal

“All things are permissible except what involves an Islamic prohibition..”

“It is He who created for you all of that which is on the earth.”

(Surah al-Baqarah, 2: 29)

“And He has subjected to you whatever is in the heavens and whatever is on the earth - all from Him. Indeed, in that are signs for a people who give thought.”

(Surah al-Jathiyah, 45: 13)

Human beings were created by Allah to serve Him while other creatures were subjected to humanity to ease our affairs in fulfilling the purpose of creation which is servitude to Allah. Islamic law is meant to ease the affairs of the human not to increase their burdens, hence, the production and application of artificial intelligent nannies is categorise as a disruptive technology to ease the affairs of people in getting daily home routine tasks done and for babysitting their kids especially for the white collar parents (Hadi Akbar Dahlan, 2018).

“Ibn ‘Abbas (May Allah be pleased with them) said: I heard the Messenger of Allah SWT saying, whoever that draw a picture will be commanded on the day of judgment to breath in it a soul.”

(Sahih Bukhari, 2002, no. 5607)

“When the prophet returned from expedition, It was narrated that ‘Aishah, the wife of the Prophet [SAW], saw the curtain in the house with pictures of trees then he said: “Indeed, the owner of this picture will be punished on the day of judgment saying to them, can you breath in it life.”

(Sahih Bukhari, 2002, no. 5951).

“We had a curtain on which there were images at the entrance to the house, so the prophet (pbuh) expressed dislike to it, ‘Aishah, then remove it, and made from it two pillowcases.”

(Sahih Muslim, 2006, no. 2108)

According to the Ghāyatu-l-Murīd Sharḥu Kitāb-l-Al-Tawḥīd; Al-‘Aql, (2017) explicates that the hadith has several interpretations, even though there are opinions that every picture and statue are forbidden, yet, there are juristic opinion that differentiate between purposeful pictures and images. Moreover, the prime intent of the law giver is to forbid creating pictures and images with the purpose of contesting the creation of Allah which is considered as As-Shirk (associating partners with Allah) (Abdurahman bin AbdulAziz, 2017).

Therefore, it is fair to say that artificial intelligence nanny is permissible, but with a few shariah-compliant conditions and regulations upon application either as a producer or an end user. Firstly, the underlying intention for activating artificial intelligent nanny, secondly, the social status of the AI nanny, thirdly it is economic of scale as a protection of wealth, fourthly, the legal capacity of the AI nanny from Shariah perspective.

1. The Underlying Intent for activating the Artificial Intelligent

In Islamic jurisprudence of contractual agreements, there is a consideration for the intention and meaning above words and forms. The contractual intention behind production and purchase is given attention over the words and contractual formation. The intentions must not be to violate the basic Shariah intents of protection of religion, protection of life, protection of intellect, protection of progeny, and protection of wealth (Buerhan Saiti and Adam Abdullah, 2016).

The hadith of the Prophet (PBUH) specifies the position of intention in relation to the action. “*Actions are (judged) by motives (niyyah), so each man will have what he intended*” (Al-Bukhari, 1994, no.1).

Ibn Rajab, (2011), highlights that anyone who intends good will get good and benefit result in endeavor while the one that intends bad and harm will get same in final endeavor. The human intention must follow the will and command of Allah and the legacy of the Prophet (PBUH).

Al-Umūr bi maqāṣidī ha

“Matters are determined according to intentions.”

(Mustafā Zuhailī, 2006).

The underlying intention of the producer and end user to activate AI nanny should not violate any fundamental principles in Shariah. For instance, if the intention of activating AI nanny is to cause harm might trigger social issues such as sensual abuse will be considered non-shariah compliant for the producer and the user (Dahlan, 2018).

2. Social Status of Artificial Intelligence Nanny

Social status and relationship with artificially intelligent nannies are also significant in shariah requirements. AI nanny operators need to consider the social relation for instance, AI nanny in the form of female shape should cover aura private parts or not. Moreover, the owner should be careful of sensual or sexual abuse with the AI nanny even though it is not a real human, however, a sexual relationship with an AI nanny is considered an unaccepted relationship with an alien partner (Dahlan, 2018).

“And tell the believing women to reduce [some] of their vision and guard their private parts and not expose their adornment except that which [necessarily] appears thereof and to wrap [a portion of] their headcovers over their chests and not expose their

adornment except to their husbands, their fathers, their husbands' fathers, their sons, their husbands' sons, their brothers, their brothers' sons, their sisters' sons, their women, that which their right hands possess, or those male attendants having no physical desire, or children who are not yet aware of the private aspects of women. And let them not stamp their feet to make known what they conceal of their adornment. And turn to Allah in repentance, all of you, O believers, that you might succeed"

(Surah al-Nur, 24: 31)

According to the injunction of the Quran certain parts of the aurah are only permitted to close relatives, as stated thus: In al-Quran, Surah An-Nur stated that a woman's aurah is limited to blood relatives and servants which include male servants free of physical needs. Potential users need clarification about their relationship with AI nanny most especially when it represents a male or female outlook. Hence, the services derived from the AI nanny should not trigger lust or sexual relationships.

Also, the intent for producing or acquiring an artificially intelligent nanny should not be to replace the presence and relationship with the deceased person. A personal trend in some households might be to buy an AI nanny that looks like a deceased family member or relative. Although the social impact of missing a deceased companion might be significant in the partner's life, it is morally and spiritually discouraged in Islamic law to replace the presence of a deceased person with an AI nanny (Dahlan, 2018).

3. Economic of Scale in the Production of AI Nanny

Unlimited human wants in economics have led to the assumption of the scarcity of resources. Although people might lack certain things at a particular time, that does not translate to scarcity of natural resources because Allah SWT has created what should be sufficient for human and animal use on the surface of the earth. However, the level of knowledge, personal interest, selfishness, abuse, and other uncharitable actions might trigger a lack of sufficient resources (Hamid *et al.*, 2021). Therefore, public interest, personal gain, and accumulation of wealth are permissible in Islam but based not at the expense of others.

"Seek by means of the wealth that Allah has granted you the Abode of the Hereafter, but forget not your share in this world and do good as Allah has been good to you and do not strive to

create mischief in the land, for Allah loves not those who create mischief.”

(Surah al-Qasas, 28: 77)

According to Ibn Kathir, (1999), the Quran instructed everyone to utilise the acquired resources and wealth for the sake of Allah and to seek the pleasure of the creator. Ownership, production, and utilization of human and capital resources should not be for the benefit of self alone but rather include humanity, animals, and the environment.

Islam promotes the protection of wealth as one of the fundamental Shariah intents either at the hierarchy of essential (*Darūriyyah*) necessity (*Hajiyyah*) and embellishments (*Tahsiniyyah*). Production and acquisition of AI nannies should give economic advantages to the end user. Although the cost of a potential AI nanny in the store is very expensive, however, the services provided should be a money back compared to hiring a human nanny (Ibn Ashur, 2013). The Protection of wealth is an essential element of the public interest enjoined by the Quran for an average household thus:

“And do not give the weak-minded your property, which Allah has made a means of sustenance for you.”

(Surah al-Nisa’, 4: 5)

According to the exegeses of Ibn Kathīr, (1999), the act of giving an unwise person the freedom to act on wealth is prohibited in Islam, rather a guardian should act on behalf in making major financial decisions like financial contractual agreements. The interdiction of the right to act on property and wealth is a result of the incapability of making wise, human, and mature decisions in the case of an insane person, erratic behavior and low intellectual capacity to comprehensive messages.

4. Legal Capacity of the AI Nanny

The natural person in law is the person himself or herself that enjoys the legal personality, as fit to acquire rights and assume responsibilities. However, artificial persons like a company, entity, or institution (charitable societies) can also enjoy a moral or legal person conferred on it by law. Scholars have discussed the potential possibility of offering AI Nanny a similar artificial personality amid Shariah compliance with other fundamental issues (Busari *et al.*, 2019). The legal personality of an artificial person should fulfill four main components of Islamic law:

First, legal personality to an artificial legal personality is offered to Independent financial cooperation based on the provision of the endowment in Islamic law (As-Sharbinī, 2000).

A legal person in Shariah must have Ahliyyah (eligibility), that is the ability to own right and responsibility in the society (Az-Zarqa, 2004). Thirdly, the right to litigation in Islamic law offers endowment institutions the right to litigation, to sue and be sued in the law court because it is considered a juridical person (Az-Zarqa, 2004). Lastly, an artificial personality must have an independent domicile such as an Islamic endowment that is not linked to the Waqf administrator. Hence, the domicile of waqf is the exact place of its existence (Hayatullah Laluddin, *et al.* 2021). However, there are still scares details about whether offering legal capacity of corporation and entities can be interpolated into artificial legal nanny, suggesting the need for juristic verdicts especially from international bodies like Shariah Academy of Organisation of Islamic corporation (OIC) and Accounting and Auditing Organization for Islamic Financial Institutions (AAIOFI).

5. Physical Features of the AI Nanny

The physical features of the AI Nanny are significant considerations towards Shariah compliance. The Islamic legal maxim explicates that: *Hukm 'alā Shyain faru' an Tasawuruhi*, (Ruling on a matter depends on its descriptive information) (Al-Uthaymin, 2002). One of the Shariah issues with AI humanoid is the human physical feature that is replicated which might trigger sensual or sexual abuse. Another concern about AI humanoid is the prohibition of statues in Islam. Although there are contending views among scholars about the legality of making statues in Islam. Some scholars viewed statues are generally forbidden based on the evidence that Allah is:

“He is Allāh, the Creator, the Producer, the Fashioner;”

(Surah al-Hashr, 59: 24)

Also, the hadith of Aishah RTA which reported that: *“The most severely punished people with Allah on the Day of Resurrection are the photographers”* (Ṣaḥīḥ Al-Bukhārī, 2002, no. 5950)

This evidence shows that photographs and statue likes are prohibited in Islam because it most likely leads a person to worship the images as gods. Imam Nawawi, (1994), explicates that forbidden photographs in this context encapsulates pictures of animals in objects like clothes, plates, and other but inanimate pictures are not prohibited. Abu al-Fathi, (2010), further explains

that the meaning of *Mutasawirūn* (photographers) in this context are those that that assume Allah has a photographic shape and not the regular photographer for remembrance, official, and legal purposes.

There is another hadith of Aishah that suggest the permissibility of statue or photograph when it is purpose based: “*I used to play with girls in the house of the Prophet, may God’s prayers and peace be upon him, and I had friends who played with me. come to me and play with me*”.¹

Some jurist interprets the aforementioned hadith indicating that photographs and statues that is meant for useful purposes such as official registration, education, and legal identity are permissible. The prohibition of statues and photographs falls under the situation of the purpose of warships and rituals.

CONCLUSION

Artificial intelligent nanny is one of the disruptive technologies in modern times. There are varying benefits the adoption of AI nannies will give to the producers and end users. Shariah is divine guidance that is relevant irrespective of time and space. Although the AI nanny is a new phenomenon in technological advancements, yet, the position of shariah on its application is not far-fetched and continuous as issue issues unfold its usage, especially among the end users. Despite the opinion that prohibits statues and photographs, AI humanoid falls under general things that seems in Shariah except other evidence suggest otherwise when shariah compliant issue is triggered. Therefore, in contemporary issues that are not expressly mentioned as permissible or prohibited like AI nanny, shariah compliant standards such as the underlying intent in AI humanoid adoption, social status of the AI nanny, economic of scale in the production of AI nanny, legal capacity of AI nanny and the physical features of the AI nanny. The use and adoption of AI humanoids must not violate Shariah principles and must be human-centered.

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¹ Ṣaḥīḥ Al-Bukhārī, 2002, no. 6130

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