Redefining Productivity: Integrating Itqan for Precision, Purpose, and Ethical Value in Industry 4.0 and Education 4.0

S. Ahmed[*1], M. S. Ashraf[2], M. A. Imam[3], S. Ullah[4]

[1] *Minhaj University Lahore, Pakistan*
[2,3] *Universiti Putra Malaysia*
[4] *Air University Islamabad, Pakistan*

Abstract. This study examines Itqan - an Islamic principle rooted in precision, purpose, and ethical responsibility—as a transformative framework for redefining productivity within the contexts of Industry 4.0 and Education 4.0/5.0. Traditional productivity metrics, predominantly focused on output and efficiency, often neglect the ethical and societal dimensions critical for achieving sustainable growth. By integrating Itqan principles, this research proposes a holistic productivity model that harmonizes technological advancements with human-centered values, fostering a paradigm shift from material-centric to value-oriented outcomes. The study explores the potential of Itqan to enhance productivity through digital innovation, data-driven decision-making, and personalized learning, aligning measurable outputs with ethical and societal considerations. From both theoretical and practical perspectives, the implications of Itqan are analyzed in relation to workplace culture, employee development, and educational frameworks. The paper introduces an Itqan-driven productivity model, supported by actionable metrics emphasizing ethical adherence, societal impact, and holistic achievements. This research advances Islamic management theory and contemporary productivity studies, positioning Itqan as a critical framework for value-based productivity in modern industrial and educational landscapes.

Key words: Itqan, productivity, Industry 4.0, Education 4.0, Islamic management, value-driven, human-centered productivity, lifelong learning, ethics.

1   Introduction

In contemporary discussions of productivity output and efficiency have long been highlighted as the main performance indicators by conventional metrics. This emphasis has its origins in early industrial and managerial paradigms where productivity was defined as the capacity to maximize output in the least amount of time and with the fewest resources. These metrics primarily focused on the measurable frequently prioritizing observable results over the intangible effects of labour (Noviana, 2022). But as digital and human-centered revolutions like Industry 4.0 Education 4.0 and Education 5. 0 take shape a more complex view of productivity

---

*Corresponding author.
Email: sajjad@mul.edu.pk

that transcends conventional measures is required. Today it is essential to redefine productivity to include values like ethical responsibility societal impact and human potential because technology and human agency are intricately intertwined (Arief et al., 2023).

Central to this redefinition is the concept of Itqan, the idea of Itqan is based on excellence and accuracy in one's work and frequently translated as "perfection" or "excellence" denotes a dedication to diligence sincerity and purpose directing both deeds and intentions toward the highest standards. Islams teachings emphasize this idea urging people to adopt a work ethic that prioritizes honesty excellence and spiritual fulfilment over petty accomplishments (Wahab and Masron, 2020). In the Islamic framework productivity encompasses more than just short-term material gains it also includes moral contributions and long-term advantages for society. Therefore, the concept of Itqan offers a distinctive perspective for analysing productivity in modern settings where tangible results are frequently valued more highly than the caliber and intent of deeds (Helmi et al., 2023).

This study looks at how Itqan can advance productivity metrics that combine precision and purpose by redefining productivity within the frameworks of Industry 4.0 Education 4.0 and Education 5.0. Together Industry 4.0 and Education 4.0-5. 0 symbolize a shift toward technological empowerment human-centred values and sustainable growth with the potential to increase productivity into fields beyond tangible outputs. This paper contends that Itqan reflects values consistent with these changes putting forth a revised productivity model that strikes a balance between the need for output and the significance of moral commitment and societal contribution. Two guiding research questions for this study are: (1) How does Itqan affect productivity metrics within the transformative landscapes of Industry 4.0, Education 4.0, and Education 5.0? (2) Is Itqan capable of bringing a paradigm shift from merely material outcomes toward value-oriented productivity goals with emphasis on ethics, responsibility, and human empowerment? The answer to these questions will lie in the comparative analysis of extant productivity models in such fields, to see whether it can accommodate principles of Itqan within the framework of technology-driven and human-centered models.

The article has been set to provide an in-depth knowledge of the impact Itqan has on productivity. The following section reviews some relevant literature, where one looks at traditional Islam's perspectives on work ethics and productivity and modern concepts that have come with Industry 4.0, Education 4.0, and Education 5.0. After that, the article proceeds by giving a thorough understanding about the idea of Itqan, defining it, identifying its importance, and describing its relevance in the new productivity measures. The following sections outline the emerging productivity paradigms for both industrial and educational purposes, in the context of the values being developed at Itqan in both areas. Finally, this paper shall suggest an integrative framework for productivity based on Itqan, including some key metrics and implications for theory and practice. In that way, the study should help in an evolving productivity discourse by proposing Itqan as a transformative principle in order to achieve the well-balanced, value-oriented approach in the technologically advanced yet morally complex 21st century landscape (Ahmed et al., 2015).

Through this, the paper is of the opinion that Itqan can change the productivity into a different level that can be beyond the frame of material output; it could do well with a general sense of vision, especially if it incorporates the element of integrity, purpose, and contribution to society (Ahmed et al., 2015). This article aims to bridge the gap between the traditional measures of productivity and the ethical imperatives called for by Industry 4.0, Education 4.0, and Education 5.0, providing a model where human dignity, responsibility, and excellence lie at the heart of evaluating productivity.

2 Literature Review

Islam provides a holistic and all-encompassing viewpoint on labour and output based on values that transcend worldly success to include commitment to excellence purpose and ethical responsibility. In Islamic teachings the idea of Itqan—often translated as excellence or precision is essential because it denotes a dedication to ethical diligence and meticulousness in one's work. From the root qawna which means to make firm or solid Itqan emphasizes not only the Caliber of one's work but also a commitment to honesty and integrity. Itqan emphasizes two responsibilities: maintaining ethical standards and aiming for the highest standards in one's work.

Islamic teachings emphasize that when done with sincerity and in accordance with moral principles work can be a kind of worship. The belief that every action is answerable to Allah is established by Allah's statement in the Quran and say Do good work for Allah will see your deeds and so will His Messenger and the believers. This was further supported by the teachings of the Prophet Muhammad (PBUH) who said in fact Allah loves that when any one of you does a job, he should do it with excellence. Purpose and dedication should be at the centre of one's endeavours as this profound realization redefines productivity beyond output and efficiency (Usman et al., 2023).

Taqwa or piety is a key component of Islamic work ethics and acts as an internal compass that guides people to carry out their responsibilities in an honest fair and just manner. In both the professional and everyday spheres this ethical framework promotes a sense of accountability. A dedication to honesty and moral behaviour will be strengthened by the knowledge that all actions including those taken in the course of ones career will be held accountable on the Day of Judgment (Sobirin and Khasanah, 2023). The Prophet (PBUH) advised that each of you is a shepherd and is responsible for his flock (Sahih Bukhari) and Quranic verses like in fact Allah commands you to render trusts to whom they are due and to judge with justice place a great deal of emphasis on carrying out obligations in an honourable and moral manner (Surahman et al., 2022).

Furthermore, Itqan broadens the definition of productivity by arguing that efficiency is not solely determined by output but also by how well a person aligns their actions with excellence and the good of society. The Quran frequently stresses equality and justice in interpersonal and professional relationships as evidenced by the verse and do not deprive people of their due and do not commit abuse on the earth. These guidelines establish Itqan as a link between traditional Islamic values and modern ideas of value-driven work by forming a productivity model that strikes a balance between tangible results and moral integrity (Abbasi et al., 2010).

2.1 Current Concepts of Productivity in Industry and Education

Through the use of cutting-edge technologies Industry 4.0 has revolutionized conventional production methods transforming productivity into a complex interaction between automation digitalization and data analytics. This paradigm maximizes efficiency by minimizing human error and downtime by utilizing technologies such as artificial intelligence (AI) robotics and the Internet of Things (IoT) to facilitate autonomous operations and real-time monitoring. In keeping with Itqan Industry 4.0 emphasizes exacting efficient procedures that boost productivity while promoting excellence and precision—albeit through technology.

Data-driven decision-making which involves analysing sizable datasets to guide strategic choices is essential to Industry 4.0. This strategy reflects the Islamic emphasis on accountability

which views every action as intentional and motivated by a purpose. In Industry 4.0 advanced data analytics helps businesses to predict operational failures and streamline processes which results in a more effective use of resources. And we have certainly honoured the children of Adam the Quran says encouraging us to seek knowledge and clarity in our actions. Al-Quran implying that deliberate knowledge-based behaviour is consistent with Islamic principles of diligence and responsibility (Arif and Abd Aziz, 2023).

Furthermore, without compromising efficiency or quality Industry 4.0 enables flexibility and customization enabling production lines to quickly adjust to individualized demands. The verse and whatever good you put forward for yourselves you will find it with Allah Intiana et al. (2023), which highlights quality and excellence in one's work exemplifies how the Quran promotes deliberate and exact action. This viewpoint supports Industry 4.0s focus on empowerment where workers are trained to manage and optimize technological systems rather than just working as labourers. This increases overall productivity by having a workforce that is knowledgeable (Husamah et al., 2022).

Education 4.0 and Education 5.0 mirror the digital advancements of Industry 4.0 but adapt these for a more personalized, ethically conscious educational landscape. Education 4.0 integrates digital tools and individualized learning models to support flexible and efficient learning. The Quran underscores the importance of knowledge, stating, "Say, 'Are those who know equal to those who do not know?'" , which reflects an emphasis on the pursuit of knowledge. By utilizing AI and data analytics, Education 4.0 enables students to follow personalized learning paths, enhancing their engagement and allowing them to achieve their full potential (Duriat et al., 2021).

Experiential learning, a key component of Education 4.0, encourages students to engage practically with their studies through virtual simulations and project-based tasks. This focus on practical application resonates with Itqan, as it aligns with the Quranic principle of meaningful engagement and high-quality output: "And that there is not for man except that [good] for which he strives". Here, productivity is defined not just by the volume of knowledge acquired but by the quality and relevance of skills gained, reinforcing that productivity should be measured by the applicability and ethical alignment of knowledge (Hamzani).

In Education 5.0, productivity is further refined to encompass lifelong learning and ethical development, with a focus on cultivating empathy, critical thinking, and a commitment to social responsibility. This paradigm resonates with the Quranic teaching that knowledge should be applied thoughtfully, as in "And cooperate in righteousness and piety, but do not cooperate in sin and aggression". Education 5.0 moves from cognitive only to a holistic framework where productivity is measured by the overall development of the individual, preparing students to contribute positively to the society.

Furthermore Education 5. 0 places a strong emphasis on moral and socially conscious education which is highly compatible with the Islamic principles of Taqwa (piety) and Amanah (trust). Productivity is viewed from this angle as a multifaceted concept that encompasses moral and ethical accomplishments. You are the greatest nation created. For mankind the Quran declares, you believe in Allah, what is right and forbid what is wrong, reaffirming that moral integrity and knowledge should be fostered in education. Education 5.0 supports a productive society based on lifelong learning adaptability and a solid ethical foundation by seeing productivity as inclusive of ethical behaviour which is similar to Itqan.

2.2   Convergence of Islamic and Contemporary Productivity Models

Combining Islamic concepts like Itqan Taqwa and Amanah with Industry 4.0 Education 4.0 and Education 5.0 points to a single cohesive approach to productivity that combines advancements in technology with moral foundations. Islamic teachings and Education 5.0 stress the importance of moral and social considerations emphasizing that true productivity balances output with ethical responsibilities while Industry 4.0 and Education 4.0 place a higher priority on efficiency and the digital transformation of productivity. Productivity examined through the lens of Itqan offers a nuanced perspective in which moral obligations improve material results in line with the wisdom of the Quran and Allah is with those who are patient, which reflects that purpose and perseverance are just as important as outcomes (Mohamed et al., 2021).

In conclusion this review of the literature highlights the frameworks that Itqan can use to rethink productivity in both industry and education. When compared Itqan provides a productivity framework that prioritizes purpose and quality over quantity. Itqan offers a balanced model for productivity by fusing the human-centered ethos of Education 5.0 with the accuracy of Industry 4.0. This model is both practically advantageous and spiritually fulfilling as the Quran emphasizes: Whoever does righteousness it is for his own soul. According to this integrative lens productivity goes beyond financial gain and is highly compatible with an Islamic viewpoint that values morality purpose and the well-being of society (Aravik et al., 2022).

2.3   The Concept of Itqan: Excellence and Precision

The term Itqan which comes from the Arabic word "qawna" which means to make firm or solid denotes a strong dedication to excellence accuracy and hard work in all undertakings whether they be personal or professional. Itqan exemplifies both technical mastery and a strong commitment to guaranteeing the greatest caliber of work in every endeavour. The idea of Itqan is emphasized in the Quran by a number of verses that stress the importance of being thorough such as Surah Al-Mulk which asks Who created seven heavens in layers? No inconsistency can be found in the Most Merciful creation. According to this verse believers are encouraged to emulate this divine standard of accuracy and excellence in their lives by considering Allah's creation which was carried out with perfect balance and care as the ultimate example of Itqan. Regarding individual behaviour Itqan includes a dedication to honesty and accountability. In his words Allah loves that whenever anyone of you does something he should do it with Itqan Prophet Muhammad (PBUH) summed up this principle (Sunan Al-Bayhaqi). Here the Prophet emphasizes that Itqan is a quality that Allah values not just as a talent but also as a reflection of honesty hard work and moral dedication. By striving for Itqan people transform their daily activities into spiritually significant deeds highlighting the significance of carrying out every obligation no matter how unimportant with a dedication to excellence. Itqan is therefore a fundamental component of Islamic work ethics and a standard for both professional and personal integrity since it turns labor into an act of worship.

2.4   Itqan as a Multidimensional Value

Itqan has many sides with excellence and perfection as its pillars. Perfection is the pursuit of constant improvement not to be flawless but to strive for it precision means commitment to accuracy and attention to details. The highest form of Itqan excellence is to go beyond expectations in one's work and conduct.

All these principles together make Itqan a concept that goes beyond technical skill and emphasizes accountability, commitment and diligence in everything one does. Itqan affects the social and economic spheres as well as personal development. With high standards of integrity and hard work a society based on Itqan values will produce people who contribute to social cohesion and productivity (Lee et al., 2023).

By increasing the Caliber and dependability of their work people who prioritize Itqan in their careers boost economic productivity and build trust in both their professional networks and society at large. By saying and do good indeed Allah loves the doers of good. The Quran encourages believers to instil excellence and goodness in all of their deeds. According to this verse Itqan is about more than just achieving personal goals its also about how one's integrity and diligence affect the larger community.

Additionally, Itqan encourages a mindset of accountability and self-improvement which fosters personal growth. On a personal level Itqan motivates people to pursue education hone their abilities and consistently strive for personal growth. Islam encourages followers to live up to Itqan in all that they do understanding that every individual's growth advances society. Itqan influences how people approach work in professional contexts encouraging them to prioritize quality over quantity and match their work with both social welfare and personal ethics. Since one's excellence has a direct impact on society's overall progress Itqan thus combines social responsibility with personal development (Prasetyo et al., 2023).

2.5 Implications of Itqan Beyond Material Outcomes

Itqans value goes beyond tangible accomplishments it emphasizes an ethical framework that combines social responsibility with meaningful labor. Itqan highlights that every action has inherent value when done with care and intention regardless of its scope or visibility. The Prophet Muhammads (PBUH) teaching that the best of people are those who bring the most benefit to others (Daraqutni Hasan) is consistent with this viewpoint. These teachings imply that Itqan ought to represent an ethical consciousness that benefits society rather than being limited to the pursuit of personal or financial gain.

By putting purpose and moral intent at the forefront of all activities Itqan also redefines productivity. "Do not deprive people of their due and do not commit abuse on earth spreading corruption" Al-As mentioned in the Quran is a statement that highlights this viewpoint. In this case the emphasis switches from maximizing outputs to making sure that one's contributions advance social justice and ethical behaviour. According to Itqan this viewpoint encourages people to think about the bigger picture when making decisions and to strive for excellence in order to fulfill their obligations to Allah and humanity.

Moreover, Itqan promotes a culture of moral and social responsibility acknowledging that genuine excellence encompasses beyond the current task. Itqans emphasis on the value of moral mindfulness is consistent with the Islamic idea of Amanah (trust) which holds that people have a duty to take care of Allah's creation. As evidenced by the Prophet Muhammads (PBUH) emphasis on trust and accountability in his saying Every one of you is a shepherd and every one of you is answerable with regard to his flock the dedication to Itqan entails making sure that work is done with integrity and serves a beneficial purpose (Sahih Bukhari).

Last but not least, Itqan is a model of excellence and precision that goes beyond technical skill to include moral uprightness social responsibility and spiritual meaning. It promotes a holistic approach to productivity where individual and professional goals align with moral standards and the good of society. Those who practice Itqan redefine success as a combina-

tion of material and moral excellence turn productivity into an ibadah and make a big and all-encompassing contribution to personal and societal growth (Rezky et al., 2021).

2.6   Measuring Productivity in Terms of Purposeful and Socially Responsible Outputs

A characteristic contribution of Itqan to Industry lies in its support for measuring productivity in terms of socially answerable and purposeful results. Instead of only assessing success based on productivity or competence, organizations guided by Itqan reflect the communal and ethical influences of their production. For example, a company that applies Itqan in its operations would measure success not only that much it produces but by how responsibly it uses resources, guarantees fair labor practices, and reduces environmental influence (Osman and Ismail, 2022).

In arrangement with the Quranic leadership to "not commit abuse on the earth, spreading corruption". Industry companies that accept Itqan prioritize accountable outputs that profit society. This method fundamentally redefines productivity, transmuting it from a transactional measure to a all-inclusive estimation of the company's aids to ethical and maintainable practices. By integrating Itqan as a standard, industries shift from a profit-centric focus to a purpose-driven example, balancing material productivity with standards that promote the security of society and the environment (Husamah et al., 2022). Itqan offers a compelling framework for redefining productivity in Industry, highlighting fineness, ethical executive, and societal responsibility. By bring into line the accuracy and standards of Itqan with advanced technological processes, industries can stand-in a productivity model that not only attains material success but also supports the broader values of social and environmental stewardship, thus creating a maintainable and ethically sound industrial scenery. An education brings into line with the technological progressions of Industry 4.0, directing on using digital tools, data analytics, and modified learning to prepare students for a fast-evolving world. At its core, an education pursues to redefine productivity through tailored, student-centred learning approaches. Integrating Itqan into this outline adds a layer of exactness, personalization, and ethical thoroughness to technology-driven education, safeguarding that students are not only well-prepared for a lively job market but also instilled with a sense of purpose and fineness (Satibi et al., 2021).

2.7   Precision and Personalization in Digital and Experiential Learning

In education Itqan can uplift the level of personalised learning by instilling accuracy and attention to the educational process. In the present day, with digital platforms and tools for data engineering being embraced, education has the scope of being able to provide customized learning patterns. Though, Itqan does stress that personalization should not only be reactive towards student performance measures but also be proactive in developing their diverse abilities, interests and capabilities (Aravik et al., 2022).

Say, for example, AI based relevant educational resources which are learning about students with the students' learning patterns can be focused, under the leadership of Itqan, on strength-based learning rather than on standardized testing of students with quality assurance and individual growth in sight. It is noted with the Quran and its teachings the understanding of education is not to be passive but to act and that actions have consequences for the knowledge to be enrolled by one person and to serve the entire community.As such, the principle can be applied to Education 4.0 where personalization of learning must come with desirable outcomes

for the society. In an introduction to Islam for the Western-oriented viewer who is curious to learn more about the role of Islam in global Muslim politics. This is something that you can do without being too big or mature. If someone screams at you or hurls insults at you for being or greeting with a smile, that is not so much the adverse impact of your encouraging relationship. There are people of faith and conviction and can be understood in a far much better light than it has always been regarded. This shouting match may not be for everyone and doing it in a certain manner is sure to garner many fans (Tutty et al., 2013).

Islam expected its followers to take due care in explaining its message and conveying it to others. Gradually over the years, many people have left the fold of Islam and have crossed over to other religions. Islam is a religion, and Islam is more than just a religion; it is a way of life. Many Muslims possess the ability to be progressive and can be inclined towards modernism and radicalism at the same time depending on a person's life experiences. So, combining both our experiences along with the doctrine of Islam which is in its pristine form and there are no interpretations available regarding it, further strengthen and positively enhance the image of Islam to the masses out there and this can be seen in the following definition and it has been described really well (SURYANINGSIH, 2023).

2.8   Itqan in Education 5.0: Human-Centered and Lifelong Learning

Education 5.0 builds upon the goals set by Education 4.0 with the addition of employing human skills, compassion, and ethics. In this regard, Itqan presents itself as a model that fosters balanced human beings who see ethics and the welfare of the society as greater than their own benefits. So, whilst education 4.0 prepares the youth for thriving in a high-tech world, education 5.0 seeks to build educated individuals that are flexible, accountable, and have a thirst for dependable knowledge (Duriat et al., 2021).

Itqan as a concept is also relevant to the themes of Education 5.0, which combines human empathy, relationships, and ethical responsibility as its core. Within the framework of Itqan, success in education goes beyond acquisition of the cognitive and technical skills, but rather, encompasses the ability to address broad and complex societal challenges. For instance, a curriculum that includes community projects or the ethical dimension of technology studies helps students to assess the potential impact of what they do, in line with the Islamic commands to foster good and avert bad.

Education 5.0, with Itqan at its core, Pullmans students to see outside conventional success metrics, sympathetic their roles as donors to societal wellbeing. This method highlights that education should develop individuals who order honesty and community well-being, bring into line with Islamic values that call for a balanced hunt of personal and societal benefit (Lee et al., 2023).

2.9   Developing Responsible, Well-Rounded Individuals

Itqan believes that Education 5.0 is integrating an inclusion aspect that targets the teaching of responsible beings. Itqan redefines productivity by adding moral items to the list, offering values like accountability, honesty, and empathy. Such education would aim at creating graduates who see their work as a noble mission. This is vital for society as such graduates will always take decisions based on what is good for society even if it inconveniences their narrow objectives (Raheem et al.). One area of exercise that could perhaps extend to such health sciences would involve not just the students' clinical knowledge but also compassion and ethical respon-

sibility toward patients. It is consistent with Itqan because it creates an urge, a sense of moral duty in learners to always give their best in serving people and to do so in a socially conscientious manner. And this sort of training is consistent with the teaching of Prophet Muhammad (PBUH): "The best of people is those most beneficial to mankind" (Azz, 2023). When Education 5.0 is approached this way, such a sense of collective welfare is bound to ensure that graduates of such institutions are not just professionals but socialists as well.

2.10   Measuring Educational Productivity Beyond Academic Achievements

The successful application of the Itqan framework in Education 4.0 and 5.0 enhances its productivity by moving away from measuring success through test scores and completion rates. Instead, it should also capture purposeful and morally responsible achievements aimed at bettering society through Integrity engineering (Rosa).

In the Itqan context, achievements in education extend beyond educational pursuit in the narrow conception to character building, social awareness and responsibility, and prospects for lifelong learning. In Education 4.0 and 5.0, students' productivity also encompasses engagement within a community, doing the right things, and utilizing knowledge for social cause. This may include an examination of whether an engineering student has been taught how to incorporate design considerations for an ethical and environmentally friendly project (Latifah et al., 2020).

Such a situation requires a change of heart that emphasizes the totality of students as opposed to education as an end in itself. Rather, productivity focuses on the overall enhancement of an individual enabling them to be richly valuable individuals to the society. This brings into line with the Quranic principle of determined for comprehensive fineness, as in Surah Al-Mulk, which praises those who fulfill their duties with care and attention.

2.11   Promoting Itqan in Educational Institutions: Potential Applications and Implications

To fully move toward an Itqan-sharp focus in productivity, it would be pertinent to create an active cross-fertilization between establishments of education. It is possible for universities to enhance their programs by incorporating community service projects that have an Itqan focus and help students interact with community concerns. At the same time, through these participations, students comprehend better the notion of social responsibility, using what they learn in the classroom to perform duties that encourage empathy and interaction with the community. This approach not only helps in developing technical and analytical abilities but also ensures that learning conforms to the Itqan ideals of excellence and is relevant to the society.

More particularly, medical and healthcare related organizations would gain a lot by having a more wholesome integration of the concept of Itqan. They can do so by preparing their students for future healthcare practice where patient care, social ethics and responsibility come first, before clinical intervention. Itqan oriented medical schools would also advocate for employ of productive means as involving ethics in the right context whilst placing great emphasis on the welfare of patients. Such an approach develops graduates who do not just view themselves as medical practitioners but moral protectors of human health and dignity.

Institutions adopting such does would not only improve their educational products but also serve as exemplars of how Itqan principles can alter educational efficiency into an attempt that is purposeful, ethically informed, and intensely impactful (Surahman et al., 2022). In Education 4.0 and Education 5.0, introducing Itqan reorients the concept of productivity from being a narrow

indicator of educational achievement, or technology competence, to a much broader measure that considers appropriate ethical practices and social impact. Adopting Itqan in technological and humanistic education, educators can prepare their students to be highly competent professionals, but also people with moral and empathic capabilities necessary for a sophisticated global environment. ITQUAN rediscovers the central idea of education as concern for the society by introducing transformation that goes beyond material, covering elements of social awareness, responsibility and constructive contribution. The table 1 highlights the distinctions and overlaps between the Itqan framework and other productivity frameworks in Industry 4.0 and Education 4.0:

Table 2.1: Comparative Analysis

Dimension	Itqan Framework	Lean/Agile Manufacturing (Industry 4.0)	Personalized Learning/Education 4.0
Core Principles	Focuses on ethical adherence, precision, societal impact, and purpose-driven productivity. Balances technological advancements with moral responsibility.	Focuses on efficiency, waste reduction (Lean), and adaptability to change (Agile). Minimal emphasis on ethical or societal dimensions.	Emphasizes personalized, technology-driven learning. Prioritizes adaptability and efficiency, but lacks explicit integration of ethical and societal values.
Ethical Considerations	Central to the framework. Productivity is measured not only by output but also by ethical compliance and societal contributions.	Secondary or absent. Ethical dimensions are often considered external factors or afterthoughts, not embedded in core metrics.	Limited focus. Ethical concerns are occasionally addressed in broader societal contexts, such as promoting equity, but not as a core principle of productivity measurement.
Technological Integration	Encourages precision-driven use of technologies such as AI, IoT, and data analytics, ensuring they align with ethical and societal goals.	Highly dependent on automation, IoT, and AI for efficiency and scalability. Ethical implications of technology use are not central to the framework.	Embraces advanced digital tools such as Learning Management Systems (LMS), AR, and VR to enable personalized and experiential learning. Focuses on efficiency and adaptability.
Societal Impact	Explicitly prioritizes outcomes that benefit society, focusing on sustainability, fairness, and long-term contributions to human well-being.	Minimal focus on societal impact. Frameworks like Lean or Agile are designed for operational success rather than addressing broader social or ethical concerns.	Encourages some level of societal contribution through educational outputs, such as preparing students for socially responsible roles, but lacks a comprehensive focus.
Metrics	Combines quantitative (output, efficiency) and qualitative (ethical adherence, societal impact) measures to evaluate productivity.	Relies on quantitative measures like defect rates, time-to-delivery, and process optimization. Lacks integration of qualitative metrics.	Uses metrics such as student engagement, test scores, and completion rates but often neglects qualitative measures like ethical literacy and social awareness.
Holistic Approach	Integrates spiritual, moral, societal, and technological dimensions, redefining productivity beyond material outcomes.	Focuses on tangible outcomes like efficiency and adaptability. Does not address spiritual or moral dimensions in productivity.	Focuses on improving learning outcomes through technology but does not explicitly link these to moral or spiritual growth.

3 Integrative Framework: Itqan-Driven Productivity Model

The Itqan-Driven Productivity Model focuses on the central principles of accuracy, importance, ethical considerations, flexibility and social implications of the processes and allows for a more inclusive redefinition of productivity. It introduces the Islamic notion of Itqan, or Excellence and Precision, and redefines productivity to be the interconnectivity of result achievement with value creation. Therefore, the organizational productivity can be enhanced by emphasizing Itqan twinning industrial and educational institutes.

3.1 Key Principles of the Itqan-Driven Productivity Model

1. Precision: The principle at the core of Itqan is the attention to detail and correctness in each of the Asisi. This principle helps in raising standard and rooting out mediocrity, thus stating that there can only be productivity in the real sense of it when one is doing things with a high level of precision and attention.

2. Purpose: With the Itqan method, for instance, it is no wonder every job or duty performed has something bigger placed behind it. This transforms performance evaluation rather from activities with capital consumption to activities with more end expansion considerations towards the vision of the organization or society.

3. Ethical Responsibility: The model makes it clear that ethical considerations are important toward useful actions, that ethical consideration free actions are against the long term good of any society. This one is very important in both the industries and the educational sector, where Itqan nurtures all the practitioners and learners to use ethical means in accomplishing their work.

4. Adaptability: The last part drives home the point that, in a world that is ever changed, the potential to learn and grow is a core necessity. Itqan promotes that in so many ways, as no one skill set is good in isolation, therefore encouraging people to remain versatile in order to accept new standards without losing quality and focus.

5. Societal Impact: Last but not least, the Itqan approach makes it possible to broaden the framework for the definition of productivity concepts to the notions of social contribution. This gives the approach aimed at development a new look, whereby the primary focus is on productivity, which also includes contributions.

3.2 Applying the Model in Both Industry and Education

In Industry 4.0, the Itqan-driven productivity model starts with focusing and monetizing on technology and automation capabilities. Organizations can formulate standard operating procedures for the incorporation of Itqan in the future-oriented-clearness, Just Data and Information Quality (DQ and IQ) and ethical frameworks. For example, companies can use AI-powered solutions which not only improve efficiency but also adhere to ethical forces enhancing the notion of productive order. Furthermore, organizational development training should help employees to be precise and conscious of ethical issues and how these intertwine with their productivity. In Education 4.0 and 5.0, it can be done by promoting Itqan within environments where students learning is individualized but with specific objectives. Some of the concrete steps are embedding ethical learning modules such that students appreciate the utility of the components of

knowledge to real life problems. Itqan may further be promoted by institutions of education through inculcating the ideals of a growth and a change culture, which encourages students to go beyond examination and grades, harnessing their learning towards bringing positive contributions to society. It would also be useful to incorporate the attributes that measure the impact of student projects to community enabling students to understand the importance of their work.

The Itqan-centred approach to productivity presents some positive implications, especially in terms of the overall enhancement of the outputs and their ethics. Organizations that promote and practice these GSB principles are more willing to develop trust with their stakeholders due to their higher regard for ethical aspects of practice and the contribution to society. In addition to that, this approach is also in line with the global movement towards enhancing business ethics, which makes organizations more competitive and adaptable. Similarly, educational institutions also reap the rewards of having graduates who are not only competent but are also responsible and objective oriented, ready to make meaningful contributions to society.

On the contrary, the application of Itqan also entails some difficulties, above all, with regard to the transfer from quantitative productivity criteria that are customary. Both industries and educational institutions have to start somewhere as there is limited experience of working with qualitative and ethical measures of productivity on an enterprise basis. In industry, this may require substantial investments in both technology and training so that appropriate standards of accuracy and ethical principles are achieved. In education, the emphasis on student and their unique purpose driven learning may present difficulties in the routine form of assessment, thus requiring new strategies how might Itqan principles result in biased Outputs of industry and educational institutions?

3.3   Proposed Metrics for Evaluating Itqan-Based Productivity

An Itqan-ambitious model requires a blend of both quantitative and qualitative metrics to capture the full range of productivity. Conservative measures of production and efficiency are balanced with values-based assessments, highlighting ethical honesty, societal influence, and quality.

1. Quantitative Metrics: It is worth to mention that for the industry, other metrics than efficiency, output, and defect counts relevant with the passing time, are process precision and its relations to ethical conducts. While in education, traditional parameters, such as grades and completion rates, are still relevant, these should be supplemented with the monitoring of the application of such competences, through practices and community served hours.

2. Qualitative Metrics: In order to measure Itqan's conformity to its purpose, it is worth using qualitative measures. In the industry, purpose and ethics can be measured through employee feedback, while customer opinion can determine ethics and social purpose impact. In education, possible measures ... qualitative assessments, socially relevant student project assessments, service-learning impressions, ethical literacy on student's outcome.

3. Impact Metrics: Impact measures add value to conventional metrics by showing the effect of an Itqan approach on society in practice. Whereas in industries, these may be graphs of communities impacted by their products or services in a positive manner, or degree of concern towards the environment. In education, it is expected to assess alumni community involvement in long-term society related contributions.

The Itqan Driven-Predictivity model provides a framework that is in keeping with Islamic principles as well as the changing requirements of the industry 4.0 and 5.0 Education. Through focussing on intention, impact, responsibility, agility and the benefit of the society, this model goes beyond physical measures of productivity to include meaningful and value-added results. The institutions practicing Itqan principles do not only assist in the achievement of set goals but most importantly, nurture practices that are sustainable, ethical and have positive social impacts. The Itqan centred model in the end becomes a template of how to approach productivity in the contemporary world so that it integrates physical accomplishment with moral and social obligations to form a clear picture of advancement.

4   Implications for Theory and Practice

The Itqan concept is valuable in the sense that it presents a and productive construction, instead of merely a target achievement. The productivity focuses concept has often been defined in very narrow terms, coving only various the quantitative aspects of some results within industrial and education sectors. In this regard, Itqan posits quality, accuracy, and duty along with the more traditional characteristics of productivity. This theoretical shift on the other hand, brings an Islamic dimension to productivity.

Critically speaking, Itqan enhances Islamic management theory by allowing work to be considered a form of worship which comes with obligations before the Creator. This view promotes a culture of excellence, ethics, and accountability. That is, Itqan helps in linking personal aspirations to that of the organization by emphasizing on the end goals as being the ethical and root cause of personal and technical expertise. In addition, drawing from educational theory, Itqan corresponds with the current trends of education 4.0 and education 5.0 models which look at education as a continuous journey with a purpose in the current rather being a monotonous concept. This idea calls for educational institutions to embrace models that combine skills and social and moral responsibility to produce well rounded individuals who are ready to cope with ethical challenges of the present world.

The use of Itqan has significant consequences on the social relations in organizations, employee training, and pedagogy. In workplaces, the infusion of Itqan into the cultural identity of the organization should help employees to pursue excellence with ethics thus creating a culture where employees take pride in intelligent and value-based work.

For instance, organizations can use Itqan's principles by including ethical practices in performance evaluations and reaching targets which also involve high ethical practices and quality in addition to the output. Itqan can also be used in the development of employees where technical training is complemented by the understanding of the nature and importance of ethical practices, the need for responsibility and how the work they do impacts the society. Such a holistic approach helps the employees to see their jobs as part of a bigger picture which fosters loyalty and minimizes the chances of employees seeking jobs elsewhere.

In educational institutions, adopting the Itqan as a central theme when designing learning processes would improve the general education by introducing closely related factors of precision, moral obligation and the need for continued education. Institutions can incorporate Itqan principles by fostering experiential and service-based learning where the students participate in projects that are beneficial to communities and the students are made to appreciate the ethics of their profession. Such programs could motivate students to exercise their knowledge in a responsible manner where self-accomplishment is secondary to fulfilling the needs of the society.

Itqan-oriented educational strategies can also be instrumental in the development of curricula focusing on profes-textices including empathy, teamwork, moral judgement in the practice of Education.

Policy recommendations for the organizations and educational institutions may give attention on how the Itqan principles may be incorporated in the existing productivity measures and training. Such policies integrating ethical decision making, quality controls and community concerns in the workplaces and educational systems would integrate the Itqan principles, thus motivating purpose-based productivity in the society. In addition, governments and industry regulators may also explore the possibility of introducing Itqan principles within the national productivity frameworks to help the industries' move away from concentrating on tangible outputs only. Though it is a very powerful concept in its own, the assimilation of Itqan within a society may be opposed by the prevailing cultural and contextual forces especially within societies that are accustomed to traditional productivity concepts. The cultural context of the Trika has significant bearings on the perception of Itqan principles, for example, people's views on ethical obligations and bottom-line orientation in productivity vary in the context of different people. Some work cultures may regard productivity to be in efficiency and output in which case Itqan principles would struggle to apply such a model. output, in which case it would be challenging to adopt a value-based model.

Also, organizations may find it conflicting to pursue the conservative productivity concepts and Itqan principles in the same context, developing frameworks to harmonize both objectives will be essential, as organizations must continue competitive while adopting Itqan principles. In educational settings, limits may arise from rigid programs that order examination consequences over ethical and holistic learning, necessitating a shift toward more adaptable, ethically beached learning copies.

5   Conclusion

This article has demonstrated how Itqan, as an Islamic concept of precision, purpose, and excellence, offers a transformative approach to productivity that covers beyond conventional material conclusions. By inserting Itqan principles into industry and educational circumstances, productivity can be re defined to stress not only the quantity of outputs but also the quality, ethical value, and societal impact of these efforts. The addition of Itqan encourages a productivity model that is supportable, ethically grounded, and associated with social responsibility, importance the relevance of Islamic values in modern productivity paradigms.

To further discover the potential of Itqan in re defining productivity, future research should include experiential studies on Itqan impact within organizational and educational settings. Such studies could appraise the palpable effects of Itqan-driven productivity replicas on employee engagement, workplace ethics, and overall performance. Moreover, examining Itqan in cross-cultural settings would provide vision into its applicability across various cultural and religious settings, contributing to a larger understanding of value-oriented productivity models worldwide.

In conclusion, Itqan signifies a powerful shift in how productivity is understood, moving beyond mere efficacy and output to include purpose, accuracy, and ethical responsibility. By accepting Itqan-cantered output models, both industries and educational institutions can re define success in ways that are ethically and socially maintainable, development an environment where individuals struggle for excellence with resolution. The concept of Itqan thus holds trans-

formative possible, offering a pathway to a more comprehensive and expressive approach to productivity that bring into line with the developing demands of today's consistent world.

5.1   Potential Challenges

Integrating Itqan principles necessitates a substantial cultural transformation within organizations, which may encounter resistance from stakeholders accustomed to conventional productivity metrics that prioritize efficiency and output. Aligning these principles with advanced technological frameworks, such as Industry 4.0, demands significant investments in technology, employee training, and the restructuring of processes to incorporate ethical and societal considerations. Traditional productivity models predominantly focus on tangible outputs, whereas the Itqan framework emphasizes qualitative dimensions such as societal impact, ethical adherence, and precision. The development and implementation of metrics to effectively evaluate these qualitative outcomes pose considerable challenges due to their inherent complexity.

Furthermore, the consistent application of the Itqan framework across diverse cultural and economic contexts may introduce biases, as its principles might be interpreted differently in non-Islamic or secular environments. Integrating Itqan within existing industrial and educational systems, which are traditionally structured around efficiency and cost-effectiveness, may result in conflicts or inefficiencies during the transition phase. Additionally, businesses and educational institutions could face significant challenges in reconciling ethical and societal objectives with financial sustainability, particularly in competitive markets or under resource constraints. Scaling the Itqan-driven framework across a broad spectrum of organizations may also prove difficult, given the diverse interpretations of its principles and the varying levels of organizational readiness to adopt such a comprehensive and value-oriented model.

5.2   Future Research

Future research on the Itqan framework could significantly enhance its theoretical foundations and practical applications by exploring several key areas. Empirical validation within organizational and educational settings would provide critical evidence on the framework's effectiveness in improving productivity, workplace culture, and learning outcomes, thereby refining its implementation strategies. Additionally, examining the cross-cultural applicability of Itqan principles in non-Islamic and secular environments could expand its global relevance, addressing potential cultural and contextual challenges. Future studies could also investigate the integration of Itqan with emerging technologies, such as Artificial Intelligence (AI), the Internet of Things (IoT), and advancements in Industry 5.0, to ensure that ethical considerations and precision remain central to technological innovation. Sector-specific research could further tailor the framework to industries such as healthcare, manufacturing, and education, offering actionable insights for practitioners and policymakers. Moreover, the development of robust metrics and evaluation tools would enable organizations to measure ethical adherence, societal impact, and holistic productivity outcomes effectively. Longitudinal studies could assess the long-term effects of the Itqan framework on organizational performance, employee satisfaction, and societal benefits, providing deeper insights into its sustainability. Comparative analyses with established productivity models, such as Lean or Six Sigma, would highlight the unique contributions of Itqan and identify potential synergies with other approaches. Finally, research into policy recommendations could inform national and organizational strategies, integrating Itqan values into broader productivity and educational frameworks. These avenues of future

research would not only enhance the academic discourse on Itqan but also ensure its adaptability and relevance in addressing contemporary ethical and societal challenges.

References

Abbasi, A. S., Rehman, K. U., and Abbasi, S. H. (2010). Welfare and protection model for organizational management: The islamic perspective. *African Journal of Business Management*, 4(5):739–747.

Ahmed, Z., Bilal, K., Khan, A., and Riaz, N. (2015). The impact of emerging technologies on human values. *International Journal of Core Engineering & Management*, 1:11–58.

Aravik, H., Amri, H., and Febrianti, R. (2022). The marketing ethics of islamic banks: a theoretical study. *Islamic Banking: Jurnal Pemikiran Dan Pengembangan Perbankan Syariah*, 7(2):263–282.

Arief, H., Agung, N., and Safa'ah, N. (2023). Usability evaluation on educational chatbot using the system usability scale (sus).

Arif, M. and Abd Aziz, M. K. N. (2023). Islamic religious education learning model in the 21st century: Systematic literature review. *Indonesian Journal of Islamic Education Studies (IJIES)*, 6(2):237–262.

Azz, I. K. H. (2023). *Peran Religious Elaboration Achievement Leadership Dalam Meningkatkan Kinerja Organisasi*. PhD thesis, Universitas Islam Sultan Agung (Indonesia).

Duriat, F., Ayyub, B. J. M., and Mustafa, M. (2021). Holistic transformative development amid global pandemic-singapore's journey: Pembangunan transformatif holistik di tengah pandemik global–perjalanan singapura. *International Journal of Interdisciplinary and Strategic Studies*, 2(3):168–177.

Hamzani, A. I. Afzalur rahman's thinking contribution to the islamic economy from epistemological aspects to the concept of wages in islam (cek similarity).

Helmi, S., Setyadi, B., and Aryasari, D. (2023). Strategy of the school principal in increasing

the quality of humanistic perspective human resources management. *QALAMUNA: Jurnal Pendidikan, Sosial, dan Agama*, 15(1):111–124.

Husamah, H., Suwono, H., Nur, H., and Dharmawan, A. (2022). Innovation integration of islamic values in learning environmental themes in biology education. *JINoP (Jurnal Inovasi Pembelajaran)*, 8(1):1–19.

Intiana, S. R. H., Prihartini, A. A., Handayani, F., Mar'i, M., and Faridi, K. (2023). Independent curriculum and the indonesian language education throughout the era of society 5.0: A literature review. *Al-Ishlah: Jurnal Pendidikan*, 15(1):911–921.

Latifah, E., Sy, S., and Ak, M. (2020). *Pengantar Bisnis Islam*. Penerbit CV. SARNU UNTUNG.

Lee, U. H. M. S., Ahmad, N. A., Ismail, A., and Muda, F. L. (2023). Measuring the impact of coworker support on job satisfaction and organizational citizenship behaviour: An islamic perspective. *I-iECONS e-proceedings*, pages 431–437.

Mohamed, H. A.-B., Jalal, B., Ahmad, A., Basir, S. A., Mohamad, M. H. M., Ab Ghani, S., Saudi, N. S. M., and Hamid, N. S. (2021). Caring values and its significance to shariah-based quality management system (ms 1900) implementation among malaysia's university employees. *Zulfaqar Journal of Defence Management, Social Science & Humanities*, 4(2).

Noviana, A. R. (2022). *WORK ENGAGEMENT DITINJAU DARI JOB DEMANDS DAN RESILIENSI PADA PERAWAT RUANG ISOLASI COVID-19 RSUD DR. H. ABDUL MOELOEK PROVINSI LAMPUNG*. PhD thesis, UIN RADEN INTAN LAMPUNG.

Osman, S. and Ismail, N. F. M. (2022). The influence of korean pop culture on purchasing behavior of korean products among consumers in klang valley. *International Journal of Academic Research in Business and Social Sciences*, 12(10):12–29.

Prasetyo, M. A. M., Bashori, B., and Lailisna, N. N. (2023). Beyond conventional boundaries: A literature study on madrasah management and the

construction of online learning innovations. *Al-Ta lim Journal*, 30(2):170–185.

Raheem, R. A., Shareef, A. F., Latheef, M., Mohamed, M., Waheed, F., Naila, A., Riyaz, A., Rahman, A. S. A., Kinaanath, M., Didi, K. I., et al. Maldives national journal of research.

Rezky, A., Upu, H., et al. (2021). Implementation of computer visualization media as an effort to growth development of noble children of vocational school students. In *International Conference on Educational Studies in Mathematics (ICoESM 2021)*, pages 531–536. Atlantis Press.

Rosa, S. L. Oil well monitoring system based on iot technology and machine learning. *ICIC Artikel*.

Satibi, I., Duriat, A., et al. (2021). Implementation of the role of mayor expert staff in supporting strengthening policy analysis in government bandung. In *2nd International Conference on Administration Science 2020 (ICAS 2020)*, pages 293–299. Atlantis Press.

Sobirin, M. and Khasanah, K. (2023). The pesantren scholars' fatwa on global warming and climate change: An integrative analysis of islamic law, theology, and environmental sciences on the practice of multidisciplinary ijtihad. *Cogent Arts & Humanities*, 10(1):2193023.

Surahman, S., Irmayanti, I., Haekal, T., Cakranegara, P. A., Putra, P., et al. (2022). Psychological impacts for elementary age children in learning pai during the covid-19 pandemic. *Edukasi Islami: Jurnal Pendidikan Islam*, 11(03):997–1012.

SURYANINGSIH, F. (2023). *Pengaruh Pembelajaran Metakognitif Berbasis Keislaman Terhadap Kemampuan Berpikir Kreatif Matematis Berdasarkan Habits Of Mind Siswa SMP*. PhD thesis, UNIVERSITAS ISLAM NEGERI SULTAN SYARIF KASIM RIAU.

Tutty, L. M., Ogden, C., Giurgiu, B., and Weaver-Dunlop, G. (2013). I built my house of hope: Abused women and pathways into homelessness. *Violence against women*, 19(12):1498–1517.

Usman, M., Harmen, H., Rakhmawati, L., Farid, F., and Suryani, A. I. (2023). The role of islamic leadership in vitalizing high morale in the workplace. *Journal of International Business, Economics and Entrepreneurship*, 8(2):32–41.

Wahab, M. A. and Masron, T. A. (2020). Towards a core islamic work value. *Journal of Islamic Accounting and Business Research*, 11(1):179–200.