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Artificial Intelligence and Business Ethics: An Integrated Course-Design Framework

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Abstract: The last few years have witnessed significant integration of technology, particularly Information and Communication Technology (ICT) in both content as well as delivery of business courses in higher education. On the one side, the contents related to technological applications are increasingly expanding the space in business education curriculum while on the other hand the mode of delivery has also been significantly influenced. The teaching of business ethics involves a number of distinct issues, often challenging the educators to plan and deliver the course effectively. The current chapter, which is based on review of literature as well as authors' own experiences in teaching business ethics in university courses, critically examines the role of technology as enabler of business ethics course delivery. The Chapter also provides a framework of how the technology can be used to link the teaching, research and participative community action in enhancing the relevance of business ethics teaching in a given context. The chapter provides conclusions for deans, course leaders and faculty members in order to manage change smoothly.

Keywords: Technology, Business Ethics, Action-Learning, AI, Pedagogy, Education

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Introduction

The Arm 2020 Global AI Survey (AGS, 2020) reports a number of benefits of AI, as expected by customers in different areas like automated automobile, healthcare or smart homes, etc. This implies the significant growth in AI-based products and solutions for consumers. Already, we can see the rapidly increasingly penetration of AI-driven solutions in our daily lives. Business application of AI is also increasing sharply in different business





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functions and business processes ranging from logistics and manufacturing to customer relationship management and automated complaint handling. However, despite the increasing use of AI, the research on ethical implications of AI does not appear to be at the same pace as its' applications and thus, resulting into many unanswered ethical questions.

The ethical issues related to use of AI in business can be broadly classified in two categories in terms of time horizon: first, the short-term of immediate impact; and second, the long-term impact. These issues must be examined and clearly analyzed by the executives and decision-makers who recommend or decide upon of AI integration in the products, services or in-house business processes. For example, in recent years, many countries have witnessed increasing application of AI-based algorithm in social-media data analytics in influencing the electoral process through customized promotional messages. While the sophisticated technological algorithms have created good results for successful political groups or their respective consulting companies, its' long-term implication is yet to be tested with the time. Similarly, how the increasing use of technology will result into physiological, psychological or behavioural changes is yet another area, which will require significant long-term research and analysis by interdisciplinary research teams and scholars.

In this chapter, we focus on business ethics education in the age of AI. We mainly explores the main ethical issues relating to AI integration that a graduate or executive education participation must be sensitized about. We also propose a framework for effective and contextually relevant business ethics teaching framework that will address the issue of selecting the content as well as the pedagogy in business ethics teaching and research at the time of AI. While developing the chapters, in addition to secondary source reviews, we draw insights based on more than 45 years of combined learning in teaching ethics and moral values to the graduate and executive education students.

2.0 Ethical Issues Linked to AI Applications in Business

The application of AI has both short-term and long-term implications. From the perspective of business, the fundamental assumption in integration of AI is that it will help in enhancing value for business in one way or another. This may help in cost-reduction or enhancing some other benefits for example; precision in quality, speed or efficient customer relationship management. However, the long-term impact of AI on different stakeholders as well as on society and economy, appears to be often ignored.

LaPlante (2019) identifies two main risk areas in context of AI applications which include:

- i. Issues related to the model: Interpretability of the results and transparency in terms of how the results are generated, as this may lead unintentional biases.
- ii. Issues related to the data: Issues related to non-traditional data sources like social media and IoT (Internet of Things) technologies as it may involve data like race, disability status, and religious affiliation, etc.





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which may be seen as unethical as well as raises issues related to customer's data usage and privacy rights.

In addition to other wider ethical issues related to impact of AI like job-loss or wealth-inequality, a Kambria (2019) blog article highlights the issues including: Errors and mistakes caused by AI; Self-Learning and updating of algorithm; and Ethical issues in treatment of AI (roboethics).

The ethical issues related to the AI can be classified in three broader categories

- A. AI Interface and Response, which includes the data use, algorithm transparency and consequent undesired and unintentional consequences emerging from application of AI.
- B. Long-Term AI Impact, which may include long-term economic and social consequence due to likely imbalance produced by the increase application of AI like job-loss, wealth inequality, etc.
- C. Limit for Responsible Use of AI, which includes policy making and ethical control on how the AI should be used and for what purpose.

In an interesting article, Jonathan Tarud (2018) observes: "... technologies like this often begin with good intentions. Nuclear technology was developed as a cheap power source, with implications toward people and the environment discovered later. AI represents many great commercial opportunities, but what will be the longer-term effects?"

Therefore, in context of business ethics, the first and foremost issue is to sensitize the managers and leaders about the contextual implication of the AI. One must understand both short-term and long-term issues relating to the use of AI not only related to the business results but also in terms of wider stakeholder considerations and long-term social-economic impact.

Business Ethics – AI Issues Interface from Teaching Perspective

It remains a major question how should the practically relevant and contextualized ethics teaching be planned and delivered. Tripathi (2013) in context of applied ethics teaching summarized the following attributes for an effective ethics course:

- Value-Linkage Focus: Should be able to condition the learners' values by harmonizing the desired core managerial values and ethical values.
- b. Holistic Approach: While delivering the anti-corruption issues, the method should the able to relate to the existing functional area knowledge and provide the total picture of the corruption





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causes and solutions.

- c. Participatory: Should encourage learners' involvement in the process of teaching-learning.
- d. Context-Specific: Should offer flexibility to customize the contents as per the local demand and need without diluting the fundamental purpose of the course.
- e. Real-Time Knowledge Creation: Should provide opportunity for creating the knowledge contents by synchronizing the teaching and research function during the course delivery.
- f. Internalization: Should facilitate the internalization of the values that would provide foundation for bringing anti-corruption perspective required for managerial decision-making ethical behavior.

Developing and delivering a course with the above suggested attributes require careful planning in terms of desired course outcome, contents and delivery methods. How to decide about the course learning outcome of an ethics course, particularly with focus on degree of AI related content integration is the starting point of a purposeful ethics course in any given context. CTE (n.d., a) suggests that while designing of a course, one should address questions relating to context, desired learning goals, content, methods and assessment. Based on CTE (ibid.), here are some of the suggested questions for consideration in ethics course design:

- What knowledge regarding AI and ethics we want our students to develop?
- Are the intended learning outcomes in terms of knowledge, skills and attitudes relating to ethical considerations of AI are reasonable in the given context?
- How best we can align the content and methods to ensure that the students accomplish the desired learning goals?
- Are learning outcomes linked to theory or skill or both i.e. knowledge about ethical issues linked to AI
 as well as decision making ability in relation to responsible integration of AI.
- Are the learning outcomes specific, achievable, and measurable?
- The understanding of the context of the course would involve the analysis regarding target learning
 group as well as the positioning in the programme in which the course is planned to be offered. Some
 of the important issues regarding contextual issues could be summarized as under:
- Who are my students i.e., executive with experience or fresh graduates admitted to MBA or other Masters' level course?
- Why do they need knowledge about AI and ethics?
- What skills do they need in terms of analyzing and deciding about the ethical implications of AI in the businesses where they may work in future?
- What are the differences within my class in terms of culture, gender and age?
- Do they need to have any pre-requisite skill for learning AI and ethics course?
- What should be level of coverage regarding AI related content i.e., a complete ethics course or a
 module in the course?

The Taxonomy of Educational Objectives, also popularly referred as Bloom's Taxonomy (Bloom, 1956) provides a framework which educators often use to create learning outcomes, as it not only helps in adequate





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coverage of the subject matter but also focuses on in-depth learning which a students should achieve (Anderson & Krathwohl, 2001).

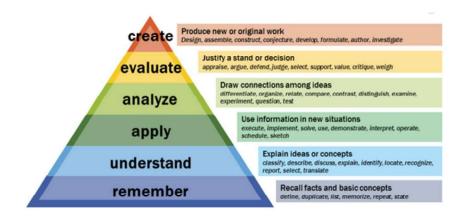


Figure 1. A Conceptual Framework for AI-Ethics Course in Graduate Level Management Programmes Source: CTEUF (n.d.)

Based on the Bloom's Taxonomy, the learning outcome for AI and ethics related course can be planned. Depending on the contextual factors, as discussed in preceding paragraphs, the different knowledge, skill and attitude related outcomes can be conceptualized. Some of the suggested outcomes as per the different levels in Bloom's Taxonomy, and with special emphasis on AI and Business ethics, are presented in Table 1.0. The AI related ethical analysis involves both the theoretical foundations in ethics as well the analytical, decision-making skills in application of ethical theories in the given context. The student, at advanced level of learning, should also be able to create the solutions for ethical and responsible integration of AI in the given context.

Table 1. Examples of learning outcomes related to AI and Ethics

Bloom's	Example of AI and Ethics Learning Outcome
Taxonomy Level	
Remember	Ability to display foundation level knowledge related to ethics theory
Understand	Understanding of ethical issues involved in integration of AI
Apply	Ability to apply the different ethical approaches to identify possible consequences of
	AI integration in the given context.
Analyze	Skills in analyzing ethical implications (using different ethical approaches) of AI
	integration in the given context.
Evaluate	Ability to critically examine the different types/ levels of AI integration in the given
	context
Create	Develop a solution for responsible AI integration in the given business context.





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Reeves (1990) links the Cognitive and Affective domains of Bloom's Taxonomy (Bloom, 1956, op. cit.; CTE, n.d.,b) to teaching of business ethics. The article (Reeves, 1990, op. cit.) explains the six levels of the cognitive domain and illustrate how the six cognitive levels might be used and tested in the classroom using six-steps case method. Upon deciding the course outcome, the content of the course as well as the pedagogy can be decided in view of the target learning group characteristics, course positioning and other contextual factors.

A Framework for Business Ethics Education with AI Perspective

The business ethics course development requires a holistic perspective in terms of understanding the contextual issues. The ethical implications of relatively new innovations like AI are yet to be tested over time, which will set the direction for slow evolutionary changes. Constant adaptations will be key.

The immediate effect of the AI integration on the different stakeholders must be analyzed carefully. This is quite evident that the AI integration will influence the different constituencies and stakeholders with varying intensity. The varying influence on stakeholder groups remain one of the main issues in analyzing ethical impact of the AI. If one stakeholder group is benefitted at the cost of another stakeholders' loss, how to balance or optimize the benefits? This is particularly challenging when we apply ethical approaches that suggest 'zero tolerance' on ethical compromise. It is not always the situation of 'utilitarian' consideration and, therefore, the ethical analysis of AI application becomes a very important as well as sensitive issue. In view of the importance the first major decision regarding ethics and AI course is linked to the broader purpose of the course, which will eventually be influenced by the contextual factors as discussed in the preceding section.

Once the purpose of the course is agreed, its' positioning within the programme needs to be decided. One can integrate the ethical issues in every course of subject of study or one may design a complete stand-alone course on ethics and AI integration. Based on the positioning and preferred format, the course learning outcomes as well as other related decisions can be made. One important issue related to the AI and ethics is the lack of research-based information regarding the ethical implications of AI, however, this can also be considered as an opportunity in course design with active action-learning and research components. The integration of research will not only help in developing better understanding about the ethical issues in AI use but will also support the knowledge creation on the issue. A suggested framework for AI and ethics course development in business programmes is conceptualized in Figure 2.0 below.

The research component can be integrated as a part of learning methodology and can be linked to coursework assessment. Making the research as a continuous formative assessment component will help in enhancing the action-learning. This will also help in creation of evidence-based contents related to the course topics and the same can be used in classroom. The integration of the research as an embedded process will help in co-creation i.e. students will be participating in building the knowledge while at the same time learning for the desired course outcomes.





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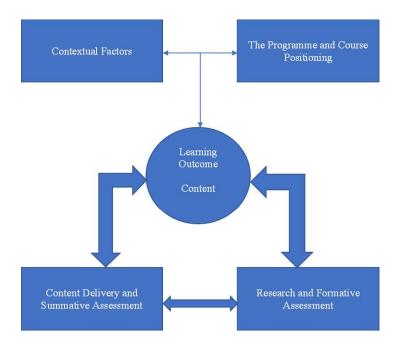


Figure 2. A Conceptual Framework for AI-Ethics Course in Graduate Level Management Programmes

The class-room delivery of the course, which can be linked to the course-end assessment or summative assessment, also needs to be planned carefully. While integration of teaching with the research through action and experiential learning will make the learning quite innovative, the class-room delivery methods should also be participative and as well as engaging. For example, the students can be given group tasks and projects involving ethical reasoning and decision-making related to different AI integration situations.

The stakeholder impact analysis part could be covered through field research or secondary research. Given the increasing use of technology in research activities, the participants can be effectively engaged in stakeholder research even without visiting the stakeholders and organizations physically. /use of innovative and tailored pedagogy would be critical in the success of the course in terms of the level of learning outcome accomplishment by the students.

This is important that course should be revised every time with the new group of students. The students are major influencing contextual factor. Given the highly research-intensive nature of the proposed ethics course, the tailoring of the course to the participating student characteristics will help in enhancing the course impact significantly. The suggested framework is conceptual in nature. The framework is neither prescriptive nor it is sequential, i.e., many activities related to course planning can be undertaken simultaneously.





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Conclusions

The increasing use of AI is giving rise to many ethical concerns in the society and economy in general. It has been observed that the AI can be integrated both with the product/ service or in the process of the business. Irrespective of where and how it is used, the integration of AI triggers many ethical issues. In addition to other factors, the ethical issues related to AI can be due to algorithm, patterned learning by the machine or the use of private data. Depending on the degree and context of AI integration, the impact would be varying on different stakeholders and, therefore, optimization of positive stakeholder impact is one of the primary concerns in the ethical analysis of the AI integration.

Due to the importance of the theme, it is proposed that AI and Ethics course should be integrated with graduate level management programmes. Although, the content and pedagogy of the course would change according to context and programme positioning, a conceptual framework has been proposed to systematically design and deliver a contextualized ethics course in the given context. The framework suggests application of Bloom's Taxonomy in course learning outcome design. Also, the research and teaching is proposed to be aligned to foster the knowledge co-creation on the subject theme.

There is an additional layer of implications and conclusions. It raises the question to what extent faculty members and their institutions have the skills to readily master such course design and curricula adaptation processes? Two further considerations matter. First, is a course design or redesign also used as an opportunity to create an innovation which is merely me-too or cutting-edge? The process of designing and redesigning courses should, therefore, be linked to the overall strategic positioning of the school as either a thought and quality leader or an efficiency-focused, reactive institution. The latter may well differentiate in either dimensions or focus on an operational model which lower ambitions. Yet, there is a need to for any course designer to understand the bigger organizational context.

If there is ambiguity in this regard, faculty members and program directors have unique opportunity to create 'pocket of excellence', i.e., an area which may well be ahead of other departments or teams in the organization. A fresh course design could inspire others to uplift the quality of their offerings, which in turn could foster a culture of innovation and constant and never-ending improvements. In this context, it helps if faculty members and course leaders are fully aware of their own strengths and aspirations.

Organizations should not keep them too busy to notice what aspirations and talents exist. Mere busyness does not productivity as it could also signal a mere lack of capacity. What applies to course participants and graduates in terms of the obligation to develop self-awareness, also holds for faculty members and course leaders. They have agency to not only understand themselves better but to carry out a certain job crafting to shape the workplace, at least to some extent, in a way that is most conducive for them.

This has implications for business school and higher education governance. Deans should ensure the institutions





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have a clear winning recipe in place, i.e., a solid understanding what the unique contribution of the institution is and how to win in a marketplace relevant to them. This includes idea on how graduates and researchers can win, too. Next to ensuring an institutional strategy exists, organizational governance must add value. The helm of the business school, or more generally put the helm of the higher education institution, must add value. Key questions for reflections include the following. What is currently at stake and is the current organizational leadership and institution overall effective in mitigating any threats while securing opportunities?

If this is not the case, deans ought to adapt their roles dynamically. In terms of AI, there are tremendous upsides and downsides. If we merely advance technological capabilities in societies without clarifying responsibilities, we miss opportunities to construct a better future. Deans should equally explore to what extent there are talents on board which need empowerment and decentralization to not only stay motivated but also add their own value and self-actualize. Talent management is not just a key responsibility for leaders in the corporate world. Also business schools and management education are fields in which talent attraction, motivation and retention matters significantly.

COVID-19 represents a period for many countries and institutions, which may well have been without precedence. Digitalization efforts often saw boosts, while internationalization of student bodies slowed down. International travel and face-to-face networking possibly catalyzing research got inhibited. COVID-19 was a critical event in the development of institutions. Naturally, past approaches to operational models had to be revisited. It is in those moments of critical events, during which institutions could trigger change more easily. Therefore, from a change management point of view, institutional leaders should reflect on their own change management acumen and monitor what the best conditions for organizational change are.

In the context of AI, a special summit, a social media-friendly dialogue between powerful CEOs arguing about AI, a breakthrough innovation, or a scandal in the news could ensure the relevant attention and awareness to bring about change. Change leaders then merely need to ensure the necessary sense of urgency in their organizations and units in order to trigger effective change with a lasting impact. In other words, critical events can represent unique opportunities to orchestrate change. Once more, the self-awareness of a change agent's transformation skills should be identified proactively and within business schools or higher education institutions, such change acumen should equally be built proactively.

In addition, it is essential to clarify how emerging ethics courses link to the other parts of programs. Pure ethics programs as a stand-alone offering may well entail limited commercial success and would not allow for a truly holistic education. Ethics courses should not be isolated in a program. They should not be perceived as an artificial ad-on. In turn, ethics courses should be fully integrated into a curriculum. It should be a natural element of a high-quality program to reflect upon not only knowledge but the skills needed in order to bring management and AI solutions to life. It should make sense intuitively that beyond knowledge and skills, courses address the being and becoming level.





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Being allows for discussions on what type of leader or manager someone aspires to be. Nowadays, a number of psychometric tests exist to find out more about essential values in life and what genuine strengths exist amongst diverse talents. Case studies, YouTube videos, exercises, and simulations can equally help clarify one's values and skill levels already in place to deal with ethical dilemmas. Academic networks, such as the Academy of Management, offer a plethora of experts and resources on how to construct relevant, high-impact learning interventions. Faculty development workshops exist in different parts of the world as well. There is no excuse for not embarking on a learning journey on how to construct unique learning journeys – at reasonably low cost.

Moreover, the becoming level of learning fosters a dialogue about the growth trajectories over time. Like organizations and other organism in nature, course participants must understand how to evolve further over time in order to best cope with environmental complexity. Not everyone is likely to be born with the sufficient skills to direct AI projects with mitigated ethical dilemmas. There are project management skills to be mastered, communication skills to be added, and complexity skills to be honed. If participants of courses and graduates know how to be a role model team member, team leader and project director, they can add the right value at the right point in time.

Finally, the core point of our conclusion is the link of opportunities to change with the responsibility to trigger them. It is in business schools and higher education facilities where current and future leaders are educated. This is where their normative programming takes place. Once working on AI strategies in their companies, they might not have the time for deep reflections on ethics. Gaining clarity about what business must accomplish and who drives positive change must be discussed and clarified in the formative years. This helps avoid that the complexity of ethical discussions across value, process, and outcome ethics does not overwhelm when in frantic action.

This does not mean that learning stops with the end of a course or program as life-long learning will be inevitable. Yet clarity on what and how to develop as for the next skills can offer value. Institutions must understand in this context that not all learners are equal. Some learners like and even insist they drive their own learning from a control and decision-making perspective. Others are more open to others influencing their journey. Faculty members must move beyond a one-size-fits-all approach to managing learners and programs.

There is substantial potential in simplifying ethical discussions by deciding to have humanism as a North Star. Humanism in business simply inquires if a solution and an individual foster human dignity as an outcome of action? Of course, any solution should contribute to efficiency and effectiveness but should do so with an eye on protecting and furthering humanism in business. Human dignity has somewhat of a local connotation and, therefore, must be interpreted in each context individually. Yet doing so improves the quality of decisions and actions.





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