Impressive Journal of Management and Social Sciences
ISSN: 3043-6311 (Print); 2006-7976 (Online)
Volume 3, Issue 2
September 2026

From Word Processing to Workflow Processing: A Framework for Teaching Intelligent Automation in Office Education

AWAK, Rhoda Sarki
Department of Office Technology and Management, Federal College of Education (Technical), Gombe Nigeria
Email: rhodasarkina@gmail.com
https://doi.org/10.33003/ijmass-2026.v1i1.72.462-9876432

Abstract
Office technology education has historically centres on discrete software competencies, most notably word processing, spreadsheets, and presentation design. Yet the contemporary office is no longer defined by document production but by the orchestration of digital workflows in which tasks, data, and decisions move across platforms and increasingly across human–machine boundaries. This conceptual paper argues that office education must undergo a corresponding epistemic shift: from teaching word processing as an end in itself to teaching workflow processing as a core professional competency. Drawing on recent scholarship on intelligent automation, robotic process automation (RPA), and artificial intelligence (AI) integration in Office Technology and Management (OTM) education, the paper proposes a four-dimensional pedagogical framework encompassing process literacy, automation design, intelligent augmentation, and ethical governance. The framework is grounded in the recognition that intelligent automation is not merely a new set of tools to be added to the curriculum but a new object of study that reframes what office professionals need to know, do, and judge. The paper discusses pedagogical strategies aligned with the framework; including low-code automation projects, process-mining simulations, and critical incident analysis, and addresses infrastructural and professional-development challenges that condition its implementation. It concludes that the future relevance of office education depends on its capacity to move beyond application training toward workflow thinking, thereby preparing graduates not simply to use office technologies but to design, govern, and analyze the automated processes that increasingly constitute office work.
Keywords: *Office Technology Education; Intelligent Automation; Workflow Processing; Pedagogical Framework; Process Literacy; Ethical Governance*

Introduction
Office technology education has long occupied a distinctive position within vocational and professional curricula: it is the domain entrusted with preparing students for the practical, technological, and administrative demands of the workplace. Traditionally, this mandate translated into instruction in shorthand, typewriting, filing systems, and secretarial procedures, and in more recent decades into proficiency with word processing, spreadsheets, databases, and presentation software. The logic of the curriculum was additive: as new software packages achieved workplace dominance, corresponding instructional units were appended, while older units were retired or marginalised. This model produced generations of graduates who could operate the tools of the office with facility, but it also entrenched a conception of office competence as the sum of discrete application skills. That conception is now under strain. The proliferation of cloud platforms, collaboration suites, and AI-driven productivity tools has altered the unit of office work itself. The question is no longer whether a graduate can format a document or construct a spreadsheet formula,

but whether they can comprehend, map, redesign, and govern the sequences of tasks, data exchanges, and decision points through which organisational work is accomplished (Bhardwaj & Kumar, 2025). In other words, the center of gravity has shifted from word processing to workflow processing. Word processing concerns the production of a discrete artefact; workflow processing concerns the architecture of how artefacts, information, and approvals travel through a socio-technical system, and increasingly how portions of that travel can be delegated to software agents. Intelligent automation, understood as the integration of RPA with AI, machine learning, natural language processing, and decision engines, represents the leading edge of this shift (Bhardwaj & Kumar, 2025; Kedziora et al., 2026). The urgency of this shift is underscored by labour market evidence. The International Labour Organization (ILO, 2026) reports that clerical and administrative occupations exhibit among the highest exposure to AI-enabled automation, while Businessday NG (2026) documents the displacement of clerical, customer service, and junior professional roles in the Nigerian context. Adecco (2025) similarly describes office jobs as being "in transition," with routine administrative tasks increasingly absorbed by digital systems. Yet the same evidence points toward reconfigured rather than eliminated roles: Robert Half (2026a) observes that as AI reshapes administrative roles, the human touch becomes more critical, and Robert Half (2026b) documents strategies by which administrative leaders are integrating technology upgrades into workplace practice. The implication for office education is clear: graduates must be prepared not for the vanishing tasks of the past but for the emerging work of designing, supervising, and governing automated workflows. The implications for office education are profound. If intelligent automation is simply treated as another application to be taught, the curriculum will reproduce the additive logic that has already left graduates underprepared for digitally transformed workplaces. What is required is a framework that treats workflow processing as the organizing center of the curriculum and intelligent automation as both a subject of instruction and a lens through which office practice is understood. This paper proposes such a framework. It begins by tracing the conceptual distinction between word processing and workflow processing, situates intelligent automation within the trajectory of office technology, and then develops a four-dimensional pedagogical framework—process literacy, automation design, intelligent augmentation, and ethical governance—intended to guide curriculum reconstruction in office education. It concludes by examining the conditions, challenges, and limitations that attend the framework's implementation.

From Word Processing to Workflow Processing: Mapping the Conceptual Shift

The distinction between word processing and workflow processing is not merely technical; it is epistemological. Word processing is an operation performed upon a bounded object, typically a document, within a single application. Its pedagogy is correspondingly object-centered: students learn to create, format, edit, and save files; assessment focuses on the fidelity of the artefact to a specification. Workflow processing, by contrast, is an operation performed upon a process that spans applications, roles, and time. A workflow may begin with an email enquiry, proceed to a data-entry step in a customer relationship management system, trigger an approval in a collaboration platform, and culminate in the generation and dispatch of a document. To process a workflow is to understand the dependencies among these steps, the rules that govern transitions, the data that must be carried forward, and the points at which human judgement is required (Bhardwaj & Kumar, 2025; University of Hamburg, 2025).

This distinction matters for office education because the competencies it implies are qualitatively

different. Word processing proficiency is largely procedural and individual; workflow processing competence is systemic and relational. It requires what may be termed process literacy: the ability to represent a work process, identify its inputs and outputs, recognise bottlenecks and failure points, and communicate its logic to others. It also requires an orientation toward design rather than mere operation. The office professional who can operate a word processor is a user of technology; the professional who can analyse a workflow and propose an automation strategy is a designer of technology-mediated work. Scholarship on curriculum improvement in OTM programmes has repeatedly identified the gap between the operational skills taught in institutions and the systemic, design-oriented competencies demanded by employers (Adamu et al., 2025). The shift from word processing to workflow processing is one way of naming that gap. Intelligent automation sharpens the stakes of the shift. Classical automation, including first-generation RPA, excelled at rule-based, repetitive tasks: data entry, form processing, report generation, and the like (Bhardwaj & Kumar, 2025; Kedziora et al., 2026). These are precisely the tasks that have historically constituted the content of office technology instruction. When such tasks are automated, the instructional rationale for teaching them as ends in themselves weakens. What remains valuable is the capacity to identify which tasks are automatable, to design the rules and exceptions that govern automation, to supervise the automated process, and to intervene when the automation fails or produces anomalous results. Intelligent automation, by incorporating machine learning, natural language processing, and cognitive decision-making, extends automation beyond deterministic tasks into domains that were once considered the exclusive preserve of human judgement (Bhardwaj & Kumar, 2025; UPT, n.d.). The office professional is thus repositioned not as a displaced operator but as an orchestrator, auditor, and exception-handler within an automated workflow ecology (IEEE, 2026).

The literature on AI integration in OTM education has begun to register this repositioning. Ndidi (2026) argues that AI-driven technologies, including intelligent automation systems, virtual assistants, and machine learning applications, are reshaping office operations globally and that OTM education must evolve beyond traditional office procedures to embrace digital competencies aligned with these workplace realities. Similarly, pedagogical frameworks for AI-driven administrative management emphasise the development of advanced digital reasoning and critical awareness in relation to AI-supported administrative work, rather than mere tool proficiency (Springer, 2026). Policy analyses reinforce this orientation: the OECD (2026) calls for building an AI-ready public workforce, and OECD/UNESCO (2024) highlights the transformation of work in the public sector, while the International Telecommunication Union (ITU, n.d.) explicitly identifies teachers and school administrators as key populations for AI competency development. Government trials have demonstrated the productivity gains at stake: Gov.uk (2025) reports that a landmark AI trial could save civil servants nearly two weeks a year. These contributions converge on a common insight: the object of office education is no longer the application but the process, and the process is increasingly intelligent and automated.

Intelligent Automation as the New Content and Context of Office Educationn

Intelligent automation denotes the convergence of RPA with artificial intelligence and related cognitive technologies to automate processes that involve unstructured data, judgement, and adaptation (Bhardwaj & Kumar, 2025; UPT, n.d.). Where traditional automation follows explicit rules, intelligent automation can analyse data, identify patterns, make probabilistic decisions, and learn from interactions. Its components include software robots that interact with user interfaces or

application programming interfaces, workflow designers that allow processes to be modelled and executed, optical character recognition for document processing, natural language processing for text and speech, and machine learning algorithms that optimised process performance over time (Bhardwaj & Kumar, 2025; Kedziora et al., 2026). The educational significance of this technological ensemble lies not in the list of tools but in the kind of work it makes possible and the kind of judgement it demands. For office education, intelligent automation functions simultaneously as content and context. As content, it comprises a body of knowledge and skill that graduates should possess: familiarity with automation platforms, understanding of process modelling notations, ability to configure simple automations, and awareness of the limitations and risks of automation. As context, it reshapes the environment in which office work is conducted and therefore the competencies that office education must cultivate indirectly. A graduate who understands automation only as a set of platform-specific commands will be ill-equipped when platforms change; a graduate who understands automation as a design discipline grounded in process analysis will be able to adapt. The distinction is analogous to the difference between teaching a particular word processing package and teaching document design principles: the former dates quickly, the latter endures (Chalmers University of Technology, 2026; TU Dublin, 2026). The integration of intelligent automation into OTM curricula has been advocated on the grounds of employability and workplace relevance. Ndidi (2026) notes that AI integration can improve instructional delivery, administrative efficiency, digital communication skills, data management, and decision-making processes, thereby enhancing graduates' prospects. UNIJERPS (2026) similarly documents the integration of artificial intelligence in OTM education as a response to digital workplace transformation. Yet the same literature cautions that integration cannot be reduced to the acquisition of tools. The ADRI-CEL framework, for instance, positions AI-supported administrative reasoning within a broader structure of digital competence, ethical reflection, and community-engaged learning (Springer, 2026). This suggests that intelligent automation education must be embedded in a pedagogical architecture that cultivates critical judgement alongside technical facility. The framework proposed in the following section attempts to provide such an architecture.

A Four-Dimensional Framework for Teaching Intelligent Automation

The framework proposed here comprises four interrelated dimensions: process literacy, automation design, intelligent augmentation, and ethical governance. These dimensions are not sequential stages but overlapping orientations that together constitute the competence profile of the workflow-processing office professional. Each dimension has implications for curriculum content, pedagogical method, and assessment.

Process Literacy

Process literacy is the foundational dimension. It refers to the capacity to perceive, represent, and analyse office work as process rather than as a collection of discrete tasks. A process-literate student can construct a workflow map showing the sequence of activities, the roles responsible for each activity, the data and documents that flow between activities, the decision points at which the process branches, and the exceptions that may disrupt the normal flow. This competence draws on business process modelling conventions (University of Hamburg, 2025) but is not reducible to them; its purpose is to cultivate a habit of mind that sees office work systemically.

Pedagogically, process literacy is best developed through structured observation and representation

exercises. Students might shadow an administrative process in a partner organisation, document it using a simple modelling notation, and present the model for critique. Alternatively, they might analyse a case study of a familiar process—such as student enrolment, expense reimbursement, or meeting scheduling—and identify its implicit rules, handoff points, and failure modes. The objective is not to produce technically elaborate process diagrams but to enable students to recognise that every office task is embedded in a network of dependencies and that the design of that network determines efficiency, quality, and job satisfaction. Process literacy thus provides the conceptual substrate on which automation design can proceed (Bhardwaj & Kumar, 2025; Celonis, 2026).

Automation Design

Automation design is the dimension most directly associated with intelligent automation as a technical field. It encompasses the ability to determine which process steps are candidates for automation, to select appropriate automation technologies, to configure workflows using low-code or no-code platforms, and to test and refine automations against realistic scenarios. The pedagogical emphasis should be on design judgement rather than platform-specific button-pushing. Students should learn to ask: What are the criteria for automatable work? What are the trade-offs between rule-based automation and machine-learning-based automation? How should exceptions be handled? What human oversight is required?

Low-code automation platforms offer a productive vehicle for this dimension. Jurczuk (2025) demonstrates that low-code tools for intelligent automation can strengthen digital skills for Industry 4.0 and Society 5.0 among students, while Hof University (2025) provides a documented case of how Make, a low-code automation platform, helps students stand out in the job market. University of Bocconi (n.d.) offers foundational instruction in intelligent process automation and applications of low-code tools, and Kucińska-Landwójtowicz et al. (2025) show how learning through the development of a digital manufacturing system in a learning factory using low-code/no-code platforms cultivates precisely the design judgement that automation education requires. These platforms allow students to construct functioning automations without extensive programming, thereby keeping the focus on process logic and design decisions. Project-based learning is particularly suited to automation design: students might be tasked with automating a routine administrative process end-to-end, documenting their design rationale, and presenting their solution to peers for critique. The assessment should evaluate not only whether the automation works but whether the design choices are justified in terms of efficiency, reliability, maintainability, and human factors. This dimension directly addresses the curriculum gap identified in OTM programmes, where instruction often remains confined to basic software operations rather than the design of automated systems (Adamu et al., 2025).

Intelligent Augmentation

Intelligent augmentation concerns the integration of AI capabilities into automated workflows and the corresponding reconfiguration of human–machine collaboration. It moves beyond automation as the replacement of human action toward automation as the amplification of human capability. Students should understand how machine learning models can be embedded in workflows to classify documents, predict outcomes, or prioritise tasks; how natural language processing enables conversational interfaces and text analytics; and how these capabilities alter the division of labour between human and machine (Bhardwaj & Kumar, 2025; IEEE, 2026). Crucially, they should also

understand the limits of augmentation: the conditions under which AI outputs are unreliable, the forms of bias that can be introduced, and the necessity of human review at critical junctures (Walsh, 2024).

Pedagogically, intelligent augmentation can be taught through simulation and scenario analysis. Students might work with a workflow that incorporates an AI-based document classifier and be asked to evaluate its performance on a sample of documents, identify misclassifications, and propose a human-in-the-loop review protocol. Or they might design a chatbot-assisted enquiry-handling process and analyse the conversational failures that occur when the chatbot encounters ambiguous requests. The aim is to cultivate a realistic, non-utopian understanding of AI in office work: AI is neither a panacea nor a threat, but a set of capabilities whose value depends on thoughtful integration into processes and careful governance of their use (Springer, 2026). This dimension also connects to broader debates about the future of administrative work, in which the office professional is positioned as an orchestrator of intelligent agents rather than a competitor to them (Akpan et al., 2025; SAP, 2026). Emerce (2025) provides a cautionary counterpoint, showing through an exploratory analysis of ChatGPT's performance in the public sector workplace that AI tools can underperform expectations when embedded without adequate process design and oversight.

Ethical Governance

Ethical governance is the dimension that distinguishes a professional education from mere technical training. Intelligent automation raises a range of ethical and governance questions: Who is accountable when an automated process produces a harmful outcome? How should personal data be handled within automated workflows? What transparency is owed to clients or citizens whose cases are processed by algorithms? How can automation be designed to be inclusive rather than exclusionary? These questions cannot be addressed as an afterthought; they must be woven throughout the curriculum. A student who can build an automation but cannot reason about its ethical implications is incompletely educated (Walsh, 2024).

The ADRI-CEL framework provides a useful model for integrating ethical reflection with technical learning: it positions AI-supported administrative reasoning within a structure that includes critical management skills, ethical use of AI, and community-engaged problem-solving (Springer, 2026). In practice, ethical governance can be taught through case-based discussion, stakeholder analysis, and the development of governance protocols for student-designed automations. Students should be required to articulate the risks of their automation designs, specify the oversight mechanisms that would mitigate those risks, and consider the distributional consequences of automating particular tasks. This dimension also prepares students for the organisational realities of automation, where change management, resistance, and concerns about job displacement must be navigated with sensitivity and evidence (Bhardwaj & Kumar, 2025; OECD, 2026). The gendered dimension of displacement deserves particular attention: FT Chinese (2026) reports that women are at the sharp end as AI takes over administrative roles, a finding that underscores the need for ethical governance to address equity as well as accountability. Zenodo (2025a) further demonstrates that OTM professionals require specific AI skills for effective records management, including the ethical handling of sensitive organisational data, thereby connecting governance directly to professional practice.

Impressive Journal of Management and Social Sciences
ISSN: 3043-6311 (Print); 2006-7976 (Online)
Volume 3, Issue 2
September 2026

Pedagogical Strategies and Curriculum Integration

The four-dimensional framework implies a pedagogical orientation that is constructivist, project-based, and reflective. Rather than delivering content about intelligent automation in lecture format and testing recall, the curriculum should engage students in authentic process-analysis and automation-design activities that require them to integrate technical, organisational, and ethical considerations. Several strategies are particularly well suited to this orientation.

Process-mining simulations offer a bridge between process literacy and automation design. Students are presented with event logs from an administrative process and use process-mining techniques to discover the actual flow of work, identify deviations from the prescribed process, and locate bottlenecks (Celonis, 2026; University of Hamburg, 2025). They then propose automation interventions and evaluate their likely impact. This strategy develops both analytical skills and an appreciation for the gap between formal process models and lived organisational reality.

Low-code automation projects provide hands-on experience with the construction of intelligent workflows. Working in teams, students identify a process suitable for automation, design the workflow, implement it using a low-code platform, test it against realistic data, and present the result to a panel of peers and instructors (Jurczuk, 2025; Hof University, 2025; University of Bocconi, n.d.). The project should require students to document their design decisions, including the rationale for automating certain steps and retaining human control over others. This strategy directly cultivates automation design competence while also surfacing ethical and governance questions that students must address in their documentation.

Critical incident analysis is a reflective strategy that develops ethical governance and intelligent augmentation. Students are presented with documented cases of automation failures, AI bias, or unintended consequences in administrative settings and are asked to analyse the incident, identify the governance failures that contributed to it, and propose preventive measures (Walsh, 2024; Emerce, 2025). The case method is well established in professional education and is particularly effective for cultivating judgement in situations where technical and ethical considerations are entangled.

Industry-embedded projects connect all four dimensions to authentic workplace practice. Partnering with local organisations, students undertake a workflow analysis and automation feasibility study, presenting their findings to organisational stakeholders (Adamu et al., 2025). This strategy addresses the persistent concern that office education is disconnected from workplace realities and provides students with evidence of their competence for future employers. It also exposes students to the organisational politics of automation, including resistance from staff who fear displacement, thereby deepening their understanding of change management and ethical governance. Evidence on outcomes is encouraging: Wiley (2026) reports that robots can improve work–life balance in shared services centres, suggesting that well-designed automation can enhance rather than degrade the quality of administrative work. Platform vendors have begun to support such partnerships directly, as Zoho (2026) documents in its regional newsletter describing academic collaborations. Institutional exemplars are also emerging: SUSS (n.d.) offers a dedicated course in hyperautomation, Chalmers University of Technology (2026) provides a syllabus for intelligent automation, and TU Dublin (2026) delivers instruction in business process automation, together

demonstrating that the curricular infrastructure for this shift is already being built.

Curriculum integration should be progressive rather than episodic. Process literacy can be introduced early, through foundational courses in office systems and procedures, while automation design and intelligent augmentation are developed in intermediate courses, and ethical governance is woven throughout, culminating in a capstone project that requires students to design, implement, and defend an intelligent automation solution. This progression ensures that students develop technical skills in tandem with conceptual understanding and ethical awareness, rather than acquiring tools first and reflecting on their implications later.

Conditions, Challenges and Limitations

The framework proposed here is ambitious, and its implementation faces significant conditions and constraints. The first is infrastructural. Intelligent automation education requires access to automation platforms, cloud computing resources, and realistic organisational data. In many institutions, particularly in developing contexts, these resources are scarce (Ndidi, 2026). The use of free or low-cost low-code platforms can mitigate this constraint, but it cannot eliminate it entirely. Partnerships with industry can provide access to platforms and data, but such partnerships require institutional commitment and are unevenly distributed. The second condition is faculty capacity. Many office education instructors were trained in an earlier technological paradigm and may lack familiarity with process modelling, automation design, and AI concepts. Professional development is therefore essential, but it is often under-resourced. Zenodo (2025b) documents the development of a faculty training package designed to address precisely this gap, while the ITU (n.d.) identifies teachers and school administrators as priority populations for AI competency development. The framework does not require every instructor to become an automation engineer, but it does require a shift in pedagogical orientation from tool instruction to process thinking, and this shift cannot be mandated without sustained support (Adamu et al., 2025). The third condition is curricular space. Office education programmes are already crowded with required content, and adding intelligent automation may appear to necessitate the removal of other material. The framework's response is that intelligent automation should not be treated as an additional topic but as a reorganizing principle. Word processing need not disappear from the curriculum, but it should be taught as one element within a workflow rather than as a self-contained competency. This requires curriculum designers to think interactively rather than additively, which is easier said than done.

A fourth challenge is the rapid pace of technological change. Any framework anchored to specific tools will date quickly. The four-dimensional framework is deliberately tool-agnostic, focusing on process literacy, design judgement, augmentation awareness, and ethical governance rather than on particular platforms. Nevertheless, instructors must continually update their examples and projects to reflect current practice, which imposes an ongoing workload (Kedziora et al., 2026).

Finally, the framework is not a panacea for the broader challenges facing office education. Issues of funding, institutional policy, and labour market recognition lie beyond the scope of pedagogical design. The framework can make a contribution to curriculum coherence and relevance, but it cannot by itself resolve the structural inequalities that shape educational provision (ILO, 2026; OECD/UNESCO, 2024). It should therefore be understood as a contribution to a larger project of curricular renewal, not as a complete solution.

Conclusion

The shift from word processing to workflow processing is not a matter of replacing one software category with another. It is a shift in the object of office education: from the artefact to the process, from the application to the architecture, from operation to design. Intelligent automation is both a symptom of this shift and a resource for responding to it. By treating automation not as a set of tools to be added to the curriculum but as a lens through which office work is understood, office education can prepare graduates who are not merely proficient users of technology but capable designers and governors of technology-mediated work. The four-dimensional framework proposed in this paper—process literacy, automation design, intelligent augmentation, and ethical governance—offers a structure for curriculum reconstruction that is conceptually coherent, pedagogically actionable, and ethically grounded. It aligns with recent scholarship on AI integration in OTM education, which emphasises the need for critical digital competencies rather than mere tool proficiency (Ndidi, 2026; UNIJERPS, 2026; Springer, 2026), and with research on intelligent automation that underscores the importance of process thinking and human oversight (Bhardwaj & Kumar, 2025; Kedziora et al., 2026; IEEE, 2026). Its implementation is conditioned by infrastructural, faculty, and curricular constraints, but these constraints are not insurmountable. The future relevance of office education will depend on its willingness to move beyond application training toward workflow thinking, and on its capacity to educate professionals who can not only use office technologies but also shape the automated processes that increasingly constitute office work.

References

Adamu, S., Mshelia, A. M., Ibrahim, A., Akpena, J. E., & Umar, N. A. (2025). Assessment of curriculum improvement needs of Office Technology and Management programme in public polytechnics in Northern Nigeria. *Kano Journal of Education,* 7(1), 1–15.

Adecco. (2025, October 24). *Office jobs in transition.*

Akpan, I. J., et al. (2025). Teaching undergraduate accounting students to manage AI agents when they have no work experience: A framework, curriculum, and oversight rubric. *Journal of Emerging Technologies in Accounting*. Advance online publication.

Bhardwaj, V., & Kumar, M. (2025). Transforming higher education with robotic process automation: Enhancing efficiency, innovation, and student-centered learning. *Discover Sustainability,* 6(1), 1–21. https://doi.org/10.1007/s43621-025-01198-6

Businessday NG. (2026, February 10). AI set to displace clerical, customer service, junior professional roles.

Celonis. (2026, March 18). *Why process intelligence belongs in high schools.* https://main--commercial--celonis.aem.page

Chalmers University of Technology. (2026). *Course syllabus for intelligent automation.* https://www.chalmers.se

Emerce. (2025, June 16). ChatGPT on ChatGPT: An exploratory analysis of its performance in the public sector workplace. *Digital Government: Research and Practice.*

FT Chinese. (2026, May 9). Women at the sharp end as AI takes over administrative roles.

Gov.uk. (2025, June 2). Landmark government trial shows AI could save civil servants nearly 2 weeks a year.

Hof University. (2025, March 12). How Make helps Hof University students stand out in the job market. Make. https://www.make.com/en/success-stories/make-helps-hof-university-students-stand-out-in-the-job-market

IEEE. (2026). Hybrid workforce: Competences for effective collaboration between employees and software robots. *IEEE Xplore.* https://ieeexplore.ieee.org/document/11420831

International Labour Organization. (2026, March 2). Workers' exposure to AI: What indicators tell us – and what they don't.

International Telecommunication Union. (n.d.). Education: Teachers and school administrators.

Jurczuk, A. (2025). Strengthening digital skills for Industry 4.0 and Society 5.0 among students by learning low-code tools for intelligent automation. In Digital transformation in education (pp. 155–170). *Routledge*.

Kedziora, D., et al. (2026). Robotic process automation in public sector: Enhancing efficiency and transparency in government workflows. *IEEE.*

Kucińska-Landwójtowicz, A., et al. (2025). Learning through development of a digital manufacturing system in a learning factory using low-code/no-code platforms. *Procedia Computer Science*.

Ndidi, C. A. (2026). Artificial intelligence integration in Office Technology and Management education: Preparing graduates for digital workplace transformation. *Unizik Journal of Educational Research and Policy Studies*, 21(2), 1–15.

OECD. (2026). Building an AI-ready public workforce. *OECD Publishing.*

OECD/UNESCO. (2024). AI and the future of work in the public sector. *OECD Publishing.*

Robert Half. (2026a, August 4). As AI reshapes administrative roles, human touch becomes critical.

Robert Half. (2026b, February 18). Technology upgrades and AI in the workplace: Strategies for administrative leaders in 2026.

SAP. (2026, June 2). *From campus to career: SAP empowers academia to prepare students for the age of agentic AI. *SAP News*. https://news.sap.com/2026/06/sap-academia-prepare-students-agentic-ai/

Springer. (2026). A pedagogical framework for integrating AI-driven administrative management in community engaged learning. *Discover Education*, 5, Article 648. https://doi.org/10.1007/s44217-026-01669-6

SUSS. (n.d.). *ANL505 Hyperautomation*. https://sims1.suss.edu.sg

TU Dublin. (2026, May 8). *Business process automation.*

UNIJERPS. (2026). Artificial intelligence integration in Office Technology and Management education. *Unizik Journal of Educational Research and Policy Studies*, 21(2).

University of Bocconi. (n.d.). Foundations of intelligent process automation and applications of low-code tools. https://www.unibocconi.it

University of Hamburg. (2025, November 10). *Business process management.* https://www.bwl.uni-hamburg.de

UPT. (n.d.). *Hiperautomação*. https://www.upt.pt

Walsh, M. (2024). Discussions on how to best prepare students on the ethics of human-machine interactions at work. In Handbook of research on AI and organizational behaviour (Chapter 15). *IGI Global*.

Wiley. (2026, March 10). Do robots improve the work–life balance? Evidence from a shared services center. *Journal of Organizational Behavior.*

Zenodo. (2025a). Artificial intelligence skills possessed by Office Technology and Management professionals for effective records management in Kano State public offices.

Zenodo. (2025b). Faculty members' training package.

Zoho. (2026, August). *Zoho APAC newsletter*.

Impressive Journal of Management and Social Sciences
ISSN: 3043-6311 (Print); 2006-7976 (Online)
Volume 3, Issue 2
September 2026