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Research on the Impact of AI Tool Use on Operating Cost Control of Small and Micro Enterprises

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Abstract

Small and micro enterprises often face pressure from labor cost, time cost, communication cost, management cost, and marketing cost. Because their staff and financial resources are limited, operating cost control has a direct influence on their daily operation and long-term survival. This paper discusses the impact of AI tool use on operating cost control of small and micro enterprises through a theoretical analysis. Based on the technology acceptance model, transaction cost theory, and cost control theory, the paper argues that AI tools can improve cost control by raising work efficiency, shortening information processing time, reducing repeated communication, supporting process standardization, and lowering the initial cost of marketing content production. The paper also points out that AI tools may create new costs and risks, such as tool subscription fees, weak employee skills, output errors, data security concerns, and excessive reliance. Small and micro enterprises should use AI tools according to clear business scenarios and should combine tool use with human review, employee training, and data protection rules.

Keywords

artificial intelligence tools, small and micro enterprises, operating cost, cost control, digital management

1. Introduction

Small and micro enterprises are an important part of daily market activity. They are close to customers, respond quickly to demand changes, and often operate with flexible business models. At the same time, these enterprises usually have limited capital, small teams, and simple internal management systems. A manager in a small enterprise may need to deal with sales, customer service, inventory, finance, and marketing at the same time. This situation makes operating cost control a practical issue rather than an abstract management topic.

Operating cost does not only mean wages, rent, office expenses, or marketing fees that can be seen on accounting statements. In daily operation, enterprises also face many hidden costs. Employees may spend a long time writing similar documents. Customer needs may be repeated several times because the first communication is not clear. Managers may need to check the same task again and again because there is no stable process. Marketing content may depend on outsourcing because the enterprise has no full-time marketing staff. These costs may not always appear as separate items in financial reports, but they still affect efficiency, customer response, and business results.

The wide use of AI tools has brought a new option to small and micro enterprises. Compared with traditional digital systems, many AI tools have a lower use threshold. Employees can use natural language to create text, summarize information, organize tables, produce meeting notes, draft customer replies, and prepare marketing materials. Small and micro enterprises do not need to build a large information system before they start using these tools. This feature is important because most small and micro enterprises cannot afford complex digital transformation projects.

Existing studies on information technology provide a useful basis for this topic. Davis (1989) proposed the technology acceptance model and explained that perceived usefulness and perceived ease of use influence user acceptance of information technology. Oliveira and Martins (2011) reviewed information technology adoption models at the firm level and showed that technology, organizational conditions, and external environment affect the adoption of information technology. These studies suggest that the value of AI tools depends not only on technical functions, but also on whether enterprises can use them in real work.

Transaction cost theory also helps explain the relationship between AI tools and operating cost control. Williamson (1985) argued that enterprises and markets have different costs related to information search, coordination, monitoring, and contract execution. Small and micro enterprises are smaller than large firms, but they still need to search information, coordinate tasks, supervise work, and communicate with customers. If AI tools can reduce repeated information processing and unclear communication, they may improve cost control capability.

This paper focuses on three questions. How does AI tool use influence operating cost control of small and micro enterprises? Through what paths can AI tools affect cost control? What problems should small and micro enterprises notice when they use AI tools? This paper does not use questionnaire data or fabricated statistical results. It adopts a theoretical analysis approach and discusses AI tool use from the perspective of daily business scenarios, cost control mechanisms, practical risks, and management suggestions.

2. Related Concepts and Theoretical Basis

2.1 Definition of AI Tools

The AI tools discussed in this paper refer to intelligent tools that small and micro enterprises can directly use in daily office work and operating management. These tools include intelligent writing

tools, customer service assistants, table processing tools, meeting note tools, data sorting tools, image generation tools, and marketing copy tools. Their common feature is that employees can use them for specific tasks without a large technical team.

This paper does not discuss large industrial artificial intelligence systems or complex algorithm platforms. Those systems usually require large investment, technical maintenance, and data infrastructure. They are not the main tools that most small and micro enterprises can use in the short term. The focus of this paper is on light, low-threshold, and task-oriented AI tools that can be embedded in daily workflows.

This definition makes the scope of the study clearer. Small and micro enterprises do not use AI tools only because the technology is new. They use these tools because they want to save time, reduce repeated work, improve customer response, and lower part of the cost of content production. These goals are closely related to operating cost control.

2.2 Operating Cost Structure of Small and Micro Enterprises

Operating cost in small and micro enterprises can be understood from both visible and hidden dimensions. Direct costs can be recorded in accounts, but hidden costs are often formed in work processes. To make the analysis clearer, this paper divides operating cost into five types Table 1.

Table 1. Main Components of Operating Cost in Small and Micro Enterprises

Cost component	Main meaning	AI-related control point
Labor cost	Human input used for office work, customer service, marketing, and data sorting	Reduce repeated manual work and improve output per employee
Time cost	Time spent on task completion, customer response, and information processing	Shorten drafting, summarizing, searching, and reporting time
Communication cost	Coordination cost in internal communication and customer communication	Create clearer messages, meeting notes, and standard reply templates
Management cost	Cost of task assignment, process tracking, supervision, and internal control	Support workflow templates and reduce repeated managerial checking
Marketing cost	Cost of content creation, customer reach, and customer relationship maintenance	Lower the initial cost of copywriting, product descriptions, and promotion content

These cost components are connected with each other. Unclear communication can increase time cost. Weak process management can increase management cost. Low marketing content efficiency can increase both labor cost and external service cost. For small and micro enterprises, cost control must include these process costs. AI tools are meaningful because they may affect these hidden costs in daily work.

2.3 Cost Control Theory

Cost control is not the same as simply cutting expenses. If an enterprise only reduces spending, it may damage service quality, employee motivation, and customer satisfaction. A more reasonable view is that cost control means reducing ineffective consumption and improving the output of limited resources. For small and micro enterprises, the key question is how to use limited people, money, and time to produce more useful work.

Small and micro enterprises usually do not have a complete cost management system. They may also lack professional financial analysis staff. Because of this, their cost control needs simple and practical tools. If AI tools can help reduce repeated work, shorten processing time, and improve coordination, they may support cost control in a practical way.

2.4 Transaction Cost Theory

Williamson (1985) explained through transaction cost theory that economic activities involve information search, negotiation, coordination, monitoring, and execution costs. These costs are not always direct payments, but they still affect the efficiency of enterprises. In a small enterprise, a manager may spend time checking customer orders, confirming tasks with employees, and correcting repeated mistakes. These activities all consume managerial energy.

AI tools may influence transaction costs through information processing. They can summarize customer needs, organize meeting content, produce work checklists, and build standard reply templates. These functions can reduce repeated communication and make information easier to understand. In this sense, AI tools can help small and micro enterprises lower part of their internal coordination cost.

2.5 Technology Acceptance Theory

The technology acceptance model is useful for understanding why small and micro enterprises use or refuse AI tools. According to Davis (1989), perceived usefulness and perceived ease of use are important factors in user acceptance of information technology. In a small enterprise, a tool will be accepted only when employees believe that it can solve real problems and is not too hard to use.

Firm-level technology adoption is also affected by organizational conditions. Oliveira and Martins (2011) showed that information technology adoption at the firm level is related to technology, organization, and environment. Small and micro enterprises face the same issue. AI tool use depends on the tool itself, employee ability, managerial support, workflow fit, and cost pressure. If these conditions do not match, the tool may not produce real value.

3. Main Application Scenarios of AI Tools in Small and Micro Enterprises

3.1 Office Document Processing

Small and micro enterprises often need to prepare notices, emails, product descriptions, internal rules, and customer explanation documents. In the traditional way, these tasks depend heavily on the writing experience of employees. If employees have weak writing skills, the quality of documents may be unstable. If employees need to revise the same document many times, the time cost becomes high.

AI tools can help employees create a first draft and improve the structure of a document. For example, an enterprise can use an AI tool to draft a product description and then ask employees to add real product information. In this process, employees no longer need to write from the beginning. The tool reduces the first-draft cost and improves document processing efficiency.

Human review remains necessary. AI-generated text may contain inaccurate information or wording that does not match the enterprise style. Employees must check facts, tone, and format before using the text. The value of AI tools in this scenario is to reduce the cost of initial writing, not to replace final judgment.

3.2 Customer Service

Customer service is a high-frequency task in many small and micro enterprises. Customers often ask repeated questions about prices, delivery time, after-sales service, product size, and usage methods. If employees answer every similar question by hand, repeated work will take a large amount of time.

AI tools can help enterprises prepare common question replies and support employees in understanding customer needs. An enterprise can build a basic question-and-answer list and use AI tools to generate clear response drafts. Employees can then adjust the reply based on the specific customer. This process can shorten waiting time and reduce repetitive answering.

Customer service still requires human attention. Customers may have different emotions and special needs. AI tools may misunderstand the context or generate a reply that sounds too mechanical. Small and micro enterprises should use AI tools as a support system, while employees remain responsible for customer relationship quality.

3.3 Data and Table Processing

Small and micro enterprises often handle orders, inventory records, customer lists, expense details, and sales records. These data items seem simple, but they affect operating decisions. If inventory information is not clear, the enterprise may make wrong replenishment decisions. If expense data are disordered, managers may not know where money is being spent. If customer records are incomplete, customer maintenance will become difficult.

AI tools can help employees sort information, extract key points, and produce simple summaries. This function is useful for small and micro enterprises because they may not have professional data analysts. Even a basic summary can help managers see problems earlier.

Accuracy is a risk in this scenario. AI tools may make mistakes when processing numbers or extracting data. Enterprises must check outputs related to money, contracts, and customer records. AI tools can

assist data organization, but they should not become the only source of business judgment.

3.4 Marketing Content Production

Many small and micro enterprises do not have a full marketing department. Product introductions, posters, short video scripts, community messages, and promotional copy are often written by the owner or a few employees. This work takes time. If the enterprise uses external service providers, marketing cost may rise.

AI tools can lower the initial cost of marketing content production. They can provide draft copy, topic ideas, activity plans, and customer communication text. Employees can then revise the output according to product features and customer preferences. This helps the enterprise keep basic content output with lower input.

AI tools cannot guarantee marketing results. Effective marketing still depends on product quality, customer needs, and brand expression. If an enterprise directly uses generic AI content, the content may lack personality and may not attract customers. AI tools lower the entry cost of content production, but they do not replace marketing judgment.

3.5 Internal Process Management

The management process of many small and micro enterprises depends on personal experience. Customer follow-up, after-sales handling, expense reimbursement, and order confirmation may not have clear standards. When employees leave or change positions, work handover becomes difficult. This increases management cost.

AI tools can help enterprises organize work processes and create task lists, operating templates, and process descriptions. These documents do not need to be complex. Their main value is to make repeated work clearer and easier to copy. New employees can understand work requirements faster, and managers can check progress more easily.

In this scenario, AI tools do not build a complete management system by themselves. They help enterprises turn scattered experience into reusable documents. This process can improve management stability and reduce repeated explanation.

This function should be used with care. AI tools cannot replace financial verification, and they should not make final payment decisions. Their role is to improve the first stage of sorting and explanation. The final checking of amounts, contracts, invoices, and payment approval must still be completed by responsible employees.

AI tools can support this work by helping employees sort quotations, summarize expense descriptions, and prepare simple comparison notes. For example, an employee can ask an AI tool to classify purchase items or to turn scattered expense notes into a clearer format. This can help managers review operating spending more quickly.

Small and micro enterprises also use a large amount of time in routine purchasing and simple financial recording. They need to compare supplier quotations, record expense items, check invoice information, and summarize small payments. These tasks are not always difficult, but they are frequent and

detail-oriented. If employees handle them slowly, managers may not see cost changes in time.

4. Mechanisms of AI Tools Affecting Operating Cost Control

4.1 Improving Work Efficiency and Labor Cost Use

Employees in small and micro enterprises often take multiple roles. One employee may answer customer questions, prepare documents, assist sales, and handle after-sales work. When the work is fragmented and repetitive, labor cost use becomes less efficient.

AI tools can take over part of the basic and repetitive work. They can draft text, summarize meetings, classify customer needs, and support simple data processing. Employees can then spend more time on customer maintenance, sales conversion, and managerial judgment. This change does not mean that AI tools directly reduce the number of employees. A more careful expression is that AI tools can improve output per unit of labor input.

Earlier studies on information technology and enterprise efficiency support this analysis. Brynjolfsson and Hitt (1996) found evidence that information systems spending was related to firm-level output. Bharadwaj (2000) also argued from a resource-based perspective that information technology capability can support firm performance. Tarute and Gatautis (2014) examined the effect of information and communication technology on SME performance. Czarnitzki, Fernandez, and Rammer (2023) studied artificial intelligence and firm-level productivity. These studies remind us that digital tools do not create value alone. Their value appears when enterprises combine tools with work processes and organizational capability.

For small and micro enterprises, this point is practical. An AI tool may help one employee complete document drafting, customer reply preparation, and simple data summary in less time. The enterprise does not need to claim that labor cost has immediately fallen. It only needs to show that the same labor input can support more useful tasks.

4.2 Shortening Task Processing Time and Reducing Time Cost

Time cost is easily ignored in small and micro enterprises. A late customer reply may lead to order loss. A slow summary of sales data may delay a purchasing decision. A long drafting process may reduce the speed of marketing activity. These situations show that time cost is closely connected with business opportunities.

AI tools can shorten the processing time of some tasks. They can create a first draft, summarize customer feedback, prepare meeting notes, and extract key information from long text. These functions reduce the time spent on low-value routine work. Employees can use the saved time for tasks that require human judgment.

Recent research on generative AI in real work settings provides useful evidence. Brynjolfsson, Li, and Raymond (2025) studied generative AI in customer support work and found that AI assistance improved worker productivity in that setting. This finding cannot prove that every small and micro

enterprise will reduce costs. It does, however, show that AI tools can improve task efficiency in specific work scenarios.

For small and micro enterprises, reduced time cost may create a chain effect. Faster customer responses can reduce missed opportunities. Faster document production can support quicker sales activity. Faster data sorting can help managers find problems earlier. AI tools affect cost control through these specific work links.

4.3 Reducing Repeated Communication and Coordination Cost

Many enterprises lose efficiency because information is not communicated clearly. Task requirements may be incomplete. Customer needs may not be recorded in a structured way. Meeting conclusions may not become clear action points. These issues create repeated communication and increase coordination cost.

AI tools can help enterprises turn scattered information into structured content. A meeting transcript can become a meeting note and task list. A long customer message can become a short needs summary. Several common questions can become a standard reply template. These outputs can reduce repeated explanation and make the next step clearer.

This mechanism can also be understood through Williamson (1985). Enterprises need to coordinate people and information. The more unclear the coordination process is, the higher the internal transaction cost becomes. If AI tools reduce unclear information and repeated communication, they may lower part of the coordination cost of small and micro enterprises.

This mechanism does not mean that communication can be removed. Human communication remains important, especially in customer service and team management. AI tools only make communication more structured. They help employees see the key points faster and reduce unnecessary repetition.

4.4 Supporting Process Standardization and Reducing Management Cost

Management cost in small and micro enterprises often comes from unclear processes. When employees do not know the standard, managers must repeat instructions. When work has no template, employees start from the beginning each time. When experience stays only in one person's mind, the enterprise becomes weak during staff change.

AI tools can support process standardization. Enterprises can use AI tools to draft customer follow-up templates, after-sales service templates, activity planning templates, expense record templates, and order processing descriptions. These templates can make repeated work more stable.

After processes become clearer, managers can reduce repeated supervision. Employees can check templates before asking questions. New employees can learn work requirements faster. These changes may reduce management cost, even if no direct accounting item changes immediately.

Process standardization also improves the ability to copy good practices. A small enterprise that wants to grow must turn personal experience into common rules. AI tools can support this step by creating draft process documents. But the enterprise still needs to revise these drafts according to real business details.

4.5 Assisting Content Production and Reducing Marketing Cost

Marketing cost is a common pressure for small and micro enterprises. They need to describe products, prepare promotional content, maintain customer groups, and publish short marketing messages. If employees lack writing experience, content production becomes slow. If the enterprise uses outside service providers, direct cost rises.

AI tools can lower the initial cost of content production. They can provide product copy, title suggestions, activity messages, and short video script drafts. Employees can revise these drafts and add real product features. This process makes marketing content production less dependent on external services.

The cost reduction here should be understood carefully. AI tools do not guarantee better sales. They only reduce part of the input needed to create content. Marketing results still depend on product value, customer needs, channel choice, and human revision.

Small and micro enterprises should avoid overusing generic AI text. If many enterprises use similar wording, customers may feel that the content lacks trust and real experience. AI tools should help enterprises start writing, but the final expression should come from the enterprise's own products and customers.

The effect of resource reallocation depends on management action. If saved time is not used for important tasks, the benefit may disappear. Managers need to observe which tasks are reduced after AI tool use and decide where employee time should be moved. In this way, AI tools can support cost control through better use of limited resources.

This path is important for small and micro enterprises because they often cannot add staff quickly. A large enterprise may solve work pressure by creating a new department, but a small enterprise usually cannot do so. AI tools may provide a more flexible way to improve resource allocation under limited staffing conditions.

When AI tools reduce repeated drafting, sorting, and summarizing, managers can reallocate employee time. Employees can spend more time on tasks that are closer to revenue creation, such as customer follow-up, order conversion, service improvement, and supplier comparison. This does not mean that AI tools create revenue by themselves. It means that AI tools may free up time for more valuable work.

AI tools may also improve operating cost control by helping enterprises move resources away from low-value work. In a small enterprise, the same person may need to prepare documents, answer customers, update records, and support sales. If too much time is spent on routine tasks, the enterprise may not have enough time for customer development or product improvement.

5. Positive Effects of AI Tool Use on Operating Cost Control

5.1 Improving Resource Use Efficiency

Resource use efficiency is important for small and micro enterprises because their resources are limited. AI tools can help employees handle more basic work with the same amount of time. Employees can

spend less time on repeated text, simple sorting, and common replies. They can spend more time on sales, customer maintenance, and business follow-up.

This change may not appear as an immediate decline in total cost. But it can improve the use efficiency of existing resources. When the same staff can support more useful work, the enterprise's cost control capability becomes stronger.

5.2 Increasing Process Clarity

Many small and micro enterprises operate through experience. Experience is valuable, but it can be difficult to transfer. AI tools can help turn repeated work into checklists, templates, and process descriptions. This makes work standards clearer.

Clearer processes reduce learning costs for employees and reduce supervision pressure for managers. When tasks are written down in a stable form, employees can handle similar work more consistently. This helps the enterprise reduce hidden costs caused by confusion and repeated correction.

5.3 Improving Customer Response Speed

Customer response speed affects customer experience. A small enterprise may lose customers if replies are slow or unclear. AI tools can help employees understand customer questions and prepare draft replies faster. They can also help enterprises build common reply templates.

Faster response can reduce opportunity loss. This loss may not be recorded as a visible cost, but it affects revenue and customer relationship. For this reason, customer response speed is part of operating cost control in a broader sense.

5.4 Strengthening Cost Control Awareness

AI tool use can also push enterprises to re-examine their work processes. When a small enterprise starts to use AI tools, it may notice which tasks are repeated, which steps are slow, and which content can be made into templates. This process strengthens cost control awareness.

Cost control awareness matters because some enterprises do not clearly know where time and effort are wasted. AI tools can become an entry point for reviewing workflows. The tool itself is not the whole solution, but it can help managers see hidden inefficiency.

6. Problems and Risks in AI tool Use

6.1 Tool Fees May Create New Cost Pressure

Some AI tools require subscription fees or usage-based payments. If a small enterprise buys tools without a clear use plan, tool fees may become a new burden. The enterprise may spend money on functions that employees rarely use.

Before buying a tool, small and micro enterprises should ask a simple question: what specific problem will this tool solve? A tool with many functions is not always a suitable tool. A simple tool that solves a frequent problem may create more value than an expensive tool with unused functions.

6.2 Weak Employee Skills May Limit Actual Value

The value of AI tools depends on users. If employees cannot describe tasks clearly, they may receive

poor outputs. If employees cannot judge whether an output is correct, they may use wrong content. AI tools do not automatically create value. They require human participation and judgment.

Small and micro enterprises should not only buy tools. They should also help employees learn basic ways of using tools. Employees need to know how to ask clear questions, how to revise AI outputs, and how to connect outputs with real business scenarios.

6.3 Output Errors May Create Business Risk

AI tools may produce incorrect information, incomplete explanations, or unsuitable expressions. If an enterprise directly uses AI outputs in customer communication, marketing materials, contracts, or financial notes, it may face business risk.

Small and micro enterprises often do not have special review staff. Because of this, they need simple review rules. Content related to customers, prices, product parameters, after-sales promises, contracts, and finance should not be used without human checking.

6.4 Data Security Should not Be Ignored

AI tool use may involve customer names, phone numbers, order information, internal prices, contract text, and financial records. If employees input sensitive data into public AI tools, the enterprise may face data leakage risk.

Data security affects customer trust and operating safety. Small and micro enterprises should avoid entering sensitive information directly into public tools. When they need to process text, they can remove names, phone numbers, exact prices, and other sensitive details before using the tool.

6.5 Excessive Reliance May Weaken Managerial Judgment

AI tools can provide suggestions, but they do not fully understand the real business environment of an enterprise. Customer relationships, product features, local market habits, and business timing still require human judgment. If a manager depends too much on AI tools, decision making may become passive.

Small and micro enterprises should treat AI tools as assistants rather than final decision makers. Tools can help organize information and prepare drafts. Managers remain responsible for business decisions and customer relationships.

The solution is not to refuse AI tools. The better approach is to use AI tools for structure and draft preparation, while keeping final expression close to the enterprise itself. Employees should add real product details, customer cases, service promises, and local market information. This can reduce drafting cost without weakening business identity.

This risk is especially clear in marketing, customer service, and brand communication. Small and micro enterprises often rely on trust and personal connection with customers. If communication becomes too standardized, the enterprise may lose part of its closeness to customers.

AI tools often generate content based on common patterns. This is useful for starting a draft, but it may also lead to similar language across different enterprises. If a small enterprise uses AI-generated content without revision, customers may feel that the message is general and not based on real experience.

7. Suggestions for Optimizing AI Tool Use in Small and Micro Enterprises

7.1 Start with High-frequency and Low-risk Scenarios

Small and micro enterprises can start using AI tools in scenarios such as document drafting, table sorting, meeting notes, and common customer replies. These tasks are frequent, simple, and relatively low risk. Enterprises can observe whether tools save time before expanding use.

Enterprises should not begin with complex decisions. Complex decisions require real business experience, customer feedback, and managerial responsibility. AI tools can support decision preparation, but they should not replace the decision process.

7.2 Control Tool Purchase and Use Cost

Small and micro enterprises should choose AI tools based on real needs. They can start with free versions, trial versions, or low-cost versions. After employees form stable habits and the tool shows clear value, the enterprise can consider a paid version.

Enterprises should also review tool use regularly. If a tool is rarely used, the enterprise should stop paying for it. This simple check can prevent AI tool fees from becoming a new form of waste.

7.3 Build a Human Review Mechanism

AI-generated content should be reviewed before it enters business processes. Customer replies can be checked by business staff. Marketing content can be confirmed by the person in charge. Financial content should be checked by finance or management staff. Contract-related content requires special care.

A review mechanism does not need to be complex. For small and micro enterprises, the most useful rules are simple, clear, and easy to execute. The goal is to prevent serious errors while keeping work efficient.

7.4 Improve Employee Digital Skills

Employee skills influence AI tool results. Small and micro enterprises can provide short and practical training. The training can cover task description, prompt writing, output checking, content revision, and data protection.

Training does not need to be difficult. Employees only need to learn how to connect AI tools with daily work. When employees understand this connection, AI tools are more likely to become part of normal workflows.

7.5 Use Data Masking and Permission Rules

When employees use public AI tools, they should avoid inputting full customer information, contract information, and financial information. They can remove names, phone numbers, amounts, and internal prices before asking the tool to improve structure or wording.

If several employees use AI tools, the enterprise should explain what information can be entered and

what information cannot be entered. These rules can reduce data security risks.

7.6 Embed AI Tools into Specific Workflows

AI tools cannot create stable value if they are used only occasionally. Enterprises should place them into specific work links. For customer service, AI can generate a draft reply and employees can revise it. For meetings, AI can produce notes and the person in charge can add action items. For marketing, AI can offer ideas and employees can adjust the content to fit product features.

When AI tools are connected with workflows, their effect becomes more stable. Enterprises can also observe more clearly whether the tools save time and reduce repeated work.

For this reason, enterprises should connect AI tool use with customer value. A faster reply should still be accurate and polite. A marketing draft should still match the real product. A process template should make service more stable rather than more rigid. When cost control and customer value move together, AI tools are more likely to support long-term operation.

Cost control should not damage customer value. Small and micro enterprises should avoid reducing cost in a way that lowers service quality. AI tools should help enterprises reply faster, explain more clearly, and provide more stable service. If tool use makes customers feel ignored or misunderstood, the cost saving may not be worthwhile.

7.7 Keep AI Tool Use Connected with Customer Value

These indicators do not need to be complex. A small enterprise can compare the same task before and after tool use. If a task takes less time and the quality remains acceptable, the tool may have practical value. If employees rarely use the tool or the output requires too much correction, the enterprise should reconsider its use.

Small and micro enterprises should not judge AI tools only by feeling. They can use simple indicators to evaluate whether the tools are useful. These indicators may include document drafting time, customer reply time, number of repeated questions, time spent on table sorting, external content production cost, and employee satisfaction with the tool.

8. Conclusion

AI tool use has a positive meaning for operating cost control in small and micro enterprises. Its value does not lie in directly replacing employees or removing all expenses. Its main value lies in improving work efficiency, shortening task processing time, reducing repeated communication, supporting process standardization, and lowering the initial cost of content production.

From the actual situation of small and micro enterprises, AI tools are more suitable as low-threshold operating assistants. Enterprises can use them for repetitive, standardized, and information-based tasks. In this way, limited human resources can be used more for customer maintenance, sales conversion, and business judgment.

AI tools also have clear limitations. Tool fees, weak employee skills, inaccurate outputs, data security risks, and excessive reliance may reduce their value or create new problems. If small and micro enterprises use AI tools blindly, their costs may not fall and their management risk may even rise.

Small and micro enterprises should choose AI tools according to real business scenarios. They should also build review rules, training methods, and data protection measures. Only when AI tools are connected with enterprise workflows, employee ability, and cost control goals can they help small and micro enterprises improve operating efficiency and strengthen operating cost control capability.

Compared with studies that mainly discuss general information technology adoption or firm-level productivity, this paper places AI tool use in the daily operating context of small and micro enterprises. The paper develops a practical mechanism framework, but it does not test the framework with survey or financial data. Future research can collect data from small and micro enterprises and further examine the strength of each mechanism in different industries.

References

Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly*, *24*(1), 169-196.

Brynjolfsson, E., & Hitt, L. (1996). Paradox lost? Firm-level evidence on the returns to information systems spending. *Management Science*, *42*(4), 541-558.

Brynjolfsson, E., Li, D., & Raymond, L. R. (2025). Generative AI at work. *The Quarterly Journal of Economics*, *140*(2), 889-942.

Czarnitzki, D., Fernandez, G. P., & Rammer, C. (2023). Artificial intelligence and firm-level productivity. *Journal of Economic Behavior and Organization*, *211*, 188-205.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319-340.

Oliveira, T., & Martins, M. F. (2011). Literature review of information technology adoption models at firm level. *The Electronic Journal of Information Systems Evaluation*, *14*(1), 110-121.

Tarute, A., & Gatautis, R. (2014). ICT impact on SMEs performance. *Procedia - Social and Behavioral Sciences*, *110*, 1218-1225.

Williamson, O. E. (1985). *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*. New York: Free Press.