

The application status and improvement path of element-based complaints under the case complexity diversion system: a case study of courts in Ningxia

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Abstract. Against the backdrop of the pronounced tension between a growing caseload and limited judicial personnel, the element-based complaint has been regarded as an efficiency-enhancing instrument in the reform of case complexity diversion and has played a pivotal role in the development of smart courts. Taking courts in Ningxia as the research sample, this study investigates the application status and practical challenges of element-based complaints through questionnaire surveys, judicial interviews, and comparative data analysis. In response to the difficulties encountered during implementation—including challenges faced by litigants in completing the forms, obstacles in lawyers' application, and operational issues within the courts—this paper tentatively proposes a localized improvement scheme integrating "element-based complaints + artificial intelligence." The study seeks to explore a replicable path for optimizing the element-based complaint system in the central and western regions of China.

Keywords: element-based complaint, artificial intelligence, judicial reform, smart courts, courts in Ningxia

1. The raising of the question

At present, adjudicatory work in the People's Courts of China is confronted with several structural challenges, including rapid social transformation, limited judicial resources at the grassroots level, and persistent difficulties in reconciling fairness with efficiency. In particular, following the reform of the case registration system, the tension between a surging caseload and a shortage of judicial personnel has become increasingly acute. To address this problem, the Supreme People's Court introduced the case complexity diversion system, aiming to meet the public's expectations for both higher adjudicatory quality and greater procedural efficiency. However, in judicial practice, when parties register a case, they typically submit only a written complaint and proof of identity. The court conducts merely a formal review of the submitted materials and is therefore unable to accurately assess the substantive complexity of the dispute. As a result, cases may be diverted into summary procedures that later prove unsuitable due to their complexity. If such cases are subsequently transferred to ordinary procedures, judicial resources are wasted; if not, the parties may perceive the process as procedurally unfair.

In March 2024, the Supreme People's Court, the Ministry of Justice of the People's Republic of China, and the All China Lawyers Association jointly issued the Notice on the Issuance of Model Texts of Civil Complaints and Answers for Certain Types of Cases (Trial Implementation). The Notice provides that, "in order to adapt to the high-quality development of China's economy and society and to meet the people's growing demands for litigation convenience and enhanced judicial efficiency and effectiveness," model element-based complaints may be applied to eleven categories of frequently occurring civil cases, including financial loan disputes, private lending disputes, and labor disputes. An element-based complaint refers to a simplified form of litigation document designed for typified cases in which factual elements are relatively fixed. It departs from the traditional four-part structure of judicial documents and instead centers on the core elements of the case, providing summary confirmation of uncontested elements while concentrating reasoning on disputed ones. By extracting the essential elements of recurring case types and streamlining document structure and expression, the element-based complaint offers practical support for the efficient adjudication of summary cases. Compared with courts in eastern China or in economically developed provincial capitals, research on the application of element-based complaints in central and western regions remains limited. As a representative sample of the central and western regions, courts in Ningxia face common challenges shared by courts in Gansu, Qinghai, and Xinjiang, including insufficient technological resources and significant disparities in litigants' legal literacy. Moreover, relevant data and practical experience from courts in Ningxia have not yet been systematically examined. A study of the difficulties encountered in the application of element-based complaints in Ningxia can therefore provide broadly applicable insights for addressing the implementation challenges of the case complexity diversion reform in central and western China. For these reasons, this paper takes the promotion and application of element-based complaints in courts in Ningxia as its research object. Focusing on three principal actors—litigants, lawyers, and judicial personnel—it seeks to explore pathways for optimizing the element-based complaint system.

2. The development background of element-based complaints

2.1. Policy background: national policy and the demand-driven reform of case registration

In response to the overarching objectives of China's judicial reform and to optimize judicial resource allocation through case complexity diversion, element-based complaints have emerged as an innovative tool. In December 2014, the Supreme People's Court issued the Several Opinions on Further Strengthening the Work of People's Courts under the New Circumstances, which for the first time proposed "exploring the use of simplified documents, such as tabular, writ-style, or element-based forms, in small claims and other suitable summary cases." In July 2016, the Civil Litigation Document Templates were introduced, further specifying "the exploration of element-based judicial documents for summary, small-claims, and uncontested cases." As an important document type in the case registration stage, element-based complaints gradually became incorporated into reform initiatives. Subsequently, in 2019, the Supreme People's Court's Several Opinions on Further Advancing Case Complexity Diversion and Optimizing Judicial Resource Allocation emphasized the need to "promote the diversion of judicial documents by complexity and develop element-based complaint templates according to the characteristics of different case types."

Ningxia has adapted these national reforms to local judicial practice by establishing its own regulatory framework for element-based complaints. In December 2019, the Ningxia Hui Autonomous Region Higher People's Court issued the Implementation Measures for the Trial of Civil Expedited Cases (Trial) and the Implementation Measures for Element-Based Adjudication in Expedited Cases (Trial), which clarified that expedited cases could adopt element-based adjudication methods. Litigants are required to complete element

tables, and the measures provide specific adjudication elements and document formats for case types such as sales contracts and private lending disputes, laying a formal foundation for the application of element-based complaints. In the same year, the Yinchuan Intermediate People's Court, as the only pilot court in Ningxia, formulated the Implementation Plan and Detailed Rules for the Pilot Reform of Civil Procedure Case Complexity Diversion, incorporating element-based documents into small claims and summary procedures as part of document simplification measures. Subsequently, the Yinchuan Intermediate Court and its subordinate grassroots courts have continuously refined the practical operational standards of element-based complaints by strengthening pilot initiatives and optimizing electronic litigation applications. These efforts have promoted the complaint as an important vehicle for enhancing case registration efficiency and reducing the procedural burden on litigants.

2.2. Technical background: deep integration of artificial intelligence and judicial reform

The rapid advancement of Artificial Intelligence (AI) has provided a solid technological foundation for the development of element-based complaints. In April 2017, the Supreme People's Court issued the Opinions on Accelerating the Construction of Smart Courts [1], which proposed "utilizing artificial intelligence technology to ensure that all trial and enforcement elements are lawfully disclosed, allowing informatization to truly serve judicial adjudication and enforcement." In July of the same year, the State Council of the People's Republic of China published the New Generation Artificial Intelligence Development Plan, calling for the establishment of a first-mover advantage in AI development and strengthening AI's precision in judicial services. In January, Zhou Qiang, President of the Supreme People's Court, emphasized in his report at the 30th Meeting of the 12th National People's Congress Standing Committee, Report on the Comprehensive Deepening of Judicial Reform by the People's Courts, the need to vigorously promote smart court construction. Leveraging the internet, big data, AI, and other modern technologies to drive judicial reform was identified as a major reform direction for courts in the coming years. These initiatives collectively indicate that harnessing modern technology to consolidate the achievements of judicial reform, foster innovation in the field, and build intelligent case-handling platforms to provide AI-assisted support for judges will be a central focus of future court reforms [2].

The emergence of Artificial Intelligence (AI) not only provides a new perspective for addressing the prominent "person-versus-case" tension in the judicial field, but its organic integration with element-based adjudication also represents a feasible pathway to resolve this tension. As a crucial starting point and foundational carrier of element-based adjudication, the development and expansion of element-based complaints are directly supported by the maturity and application of AI technologies. With the continuous deepening of AI applications in the judicial field, the exploration and implementation of "AI judges" in courts may become an unavoidable development trend. These intelligent entities, which combine legal logical reasoning with superior data-processing capabilities, focus on extracting and analyzing rules from legislation, judicial interpretations, and other sources using knowledge graphs, thereby constructing a normative rather than experiential adjudication model [3]. This approach aligns closely with the defining feature of element-based complaints: the clear and standardized presentation of core case information. For an AI judge to perform initial case screening, fact organization, and even assist in judgment, it first requires structured and complete input information—precisely what element-based complaints provide—serving as a critical bridge between litigants' claims and AI-assisted judicial processing.

Although legal AI research has flourished unprecedentedly, the arrival of a strong AI era remains distant [4]. The "natural semantic recognition" capabilities of current AI have limitations in accurately interpreting legal language, necessitating the construction of legal knowledge graphs based on AI's learning pathways [5]. Element-based adjudication and element-based complaints, by clearly delineating the factual elements of a

case, provide a crucial source of information for building these legal knowledge graphs. By using judicial documents as core learning objects and incorporating clearly specified claims, factual elements, and other content from element-based complaints, AI's deep learning and model optimization can be efficiently advanced. Furthermore, the explicit assertions and defenses regarding factual elements provided by both parties in the complaint significantly reduce the workload of AI judges in extracting case facts and enhance the accuracy of information processing, laying a solid foundation for subsequent tasks such as case similarity identification and legal application analysis. It can therefore be argued that the development of AI not only enables the potential introduction of AI judges in future courts but also directly drives the development and refinement of element-based complaints due to AI's reliance on standardized, structured information. In turn, the maturity of element-based complaints further empowers the deep application of AI in the judicial field, forming a virtuous cycle in which technology and institutional design mutually reinforce one another, injecting strong momentum into judicial reform and the enhancement of adjudicatory quality and efficiency.

2.3. Practical background: judicial pressure and the need for document simplification

In the modernization process, with a continuous increase in case volumes, relying solely on simplified procedural diversion without supporting simplified documents makes it difficult to achieve truly expedited handling of simple cases. The application and promotion of element-based complaints has thus become an inevitable choice to break through efficiency bottlenecks. Taking Hebei courts as an example, from 2012 to 2017, the number of civil case filings in the province increased from 598,600 to 997,800, and the number of concluded cases rose from 592,400 to 1,025,400. Although the average application rate of simplified procedures for first-instance civil cases remained at 72.64%, the problem of "simple cases undergoing complex trials" caused by traditional complaints remained unresolved—among some grassroots courts, unclear factual descriptions in complaints led to a second hearing rate of over 30% [6].

3. The current application of element-based complaints in Ningxia

3.1. Basic situation of the empirical survey

To ensure the comprehensiveness, accuracy, and relevance of the collected data, the author conducted field research in local courts and collected a total of 254 questionnaires. After review, screening, and removal of invalid responses, 240 effective questionnaires remained, including 50 from lawyers, 127 from litigants, and 63 from judicial personnel.

3.1.1. Litigant group

Respondents ranged across age groups of 18–30, 31–50, and 51 and above, with educational levels spanning from primary school and below to undergraduate and above. Among them, 60.63% of litigants reported being "not very familiar" or "completely unfamiliar" with element-based documents, while only 9.45% could clearly describe their definition and characteristics, with overall awareness concentrated in the "not very familiar" to "somewhat familiar" range. Regarding perceived utility, 73.23% believed element-based complaints help safeguard litigation rights, and 67.71% recognized their potential to improve litigation efficiency. However, 49.61% felt that "they require too much legal knowledge," and 44.09% worried that "the content is too simplified to fully express claims." Moreover, 74.80% had received no effective guidance or instruction, directly contributing to a low willingness to use the documents, with only 27.56% fully accepting them.

3.1.2. Lawyer group

Respondents' years of practice ranged from 1–3, 3–5, and over 5 years, covering a variety of practice areas including civil-commercial, tort, and family law. Among them, 58% of lawyers had never used element-based complaints, and only 16% were frequent users. Half of the respondents (50%) acknowledged the advantages of element-based complaints, such as clear structure and ease of extracting core information. However, 66% believed the element design was inappropriate for more complex cases, and 34% reported inconsistent acceptance across courts and a lack of uniform templates. Regarding promotion, 50% supported flexible adjustment before wider adoption, while only 8% agreed to full-scale promotion.

3.1.3. Judicial personnel group

Respondents were primarily from case registration departments of various courts. Among them, 82.54% reported that promotion of element-based complaints had been implemented in their departments, yet 49.21% noted "a lack of systematic planning." The proportion of cases using element-based complaints varied: 50.79% indicated an application rate of 20–50%, while only 9.52% reported 80–100%, showing that full coverage has not yet been achieved. More than 60% recognized advantages such as "enhancing efficiency" and "helping litigants understand procedures," and 68.25% believed they could safeguard litigants' rights. Nevertheless, 41.27% expressed concern that "simplifying complex cases may lead to unfairness," and 36.51% worried that it "reduces the ability of parties to express their individual claims."

3.1.4. Application rate and growth data

In Shizuishan, the application rate of element-based complaints surged from 16.83% in January 2025 to 82.23% in June 2025, nearly a fivefold increase within six months. A total of 2,908 cases were filed using this method, and the average case registration time decreased from 30 minutes to 15 minutes, achieving a 50% efficiency improvement. In the Zhenbeibao Court of Yinchuan, the use rate exceeded 90% in 2025, with the average time for litigants to complete forms in the registration stage reduced by over 50% compared with previous periods. Xingqing District Court implemented an intelligent element-based complaint generation system, allowing cases involving private lending and property disputes to be filed and processed immediately.

However, some remote grassroots courts in Guyuan and Zhongwei faced limited coverage of electronic litigation platforms, preventing the online functionality of element-based complaints. Their application rate remained below 30%, far lower than the 80%+ levels in Shizuishan and Yinchuan. In rural areas of Ningxia, litigants' difficulty in understanding "element terminology" led to an error rate of over 50% in element tables. For example, in land dispute cases, elements such as "ownership certificate" and "transfer procedure" were often misunderstood, resulting in an overall completion accuracy of less than 40%.

3.2. Current difficulties in the application of complaints

3.2.1. From the litigants' perspective

Element-based complaints objectively exhibit issues in content design, resulting in excessive time required for litigants to complete them. First, the content design fails to account for the actual circumstances of litigants. When courts address element-related questions, they focus solely on the nature of the case, without considering the legal literacy or educational level of the parties. This raises the legal threshold of many questions, leading to misunderstandings and significantly increasing the difficulty of completion.

Second, the selection of key elements is often misplaced. For instance, a template used by a court in Yinchuan for property disputes includes redundant elements such as "occupancy start date" and "detailed property fee payment history," which provide little practical value. This not only heightens litigants' resistance to using element-based documents but also increases guidance tasks for court staff, multiplying workload and reducing service quality.

Third, litigants' subjective expression is restricted. Beyond the objective difficulties in filling out the forms, the fixed nature of element-based questions limits the expression of personal feelings, severely affecting parties' sense of identification with judicial outcomes. A survey in a grassroots court revealed that element tables for family disputes focus only on legal factors such as property division and custody, disregarding the litigants' personal circumstances and family background. Although efficiency gains are realized, the limitation on emotional expression conflicts with the principle of integrating law, reason, and humanity and undermines the "people-centered" judicial goal. Litigants often perceive the element table as "cold and rigid, unable to reflect real difficulties," which diminishes their recognition of court decisions.

Fourth, element-based complaints have become an "invisible barrier." The survey also found that some grassroots courts treat element-based complaints as a precondition for filing, returning cases deemed incomplete if litigants do not use the template. This practice contradicts the Supreme Court's requirement that the template is not mandatory, creating a perception among litigants that the system intentionally sets barriers. In Yinchuan, one litigant described the experience of filling the element table as "harder than the lawsuit itself."

3.2.2. From the lawyers' perspective

Lawyers accustomed to traditional complaints often exhibit resistance toward element-based complaints. On one hand, the overall design of elements is unreasonable. Many lawyers reported that the fixed template framework cannot accommodate personalized case details. Some elements are rarely applicable in typical disputes, and in certain instances, lawyers spend considerable time completing an element-based complaint only to have judges request a traditional complaint afterward.

On the other hand, document standards differ across jurisdictions. Currently, only some courts in Ningxia provide element guidelines for specific case types, while unified templates across regions and case types are lacking. For example, when a lawyer handles similar financial cases in Yinchuan and Wuzhong, they must adapt to different element requirements in each court. Even interest calculation elements have three distinct submission standards, significantly increasing practice costs.

3.2.3. From the courts' perspective

First, there is a shortage of technical personnel at the grassroots level. Surveys show that few staff members are responsible for both the maintenance and operation of element-based form machines, in addition to their other duties. Other judicial personnel are unfamiliar with the machines and cannot promptly resolve simple technical issues for litigants. In one court, an attempt to introduce intelligent mediation technology resulted in a high error rate in automatically generated element tables due to a lack of professional staff for system integration and debugging. Consequently, manual correction was still necessary, and the technological investment did not translate into actual efficiency, instead increasing staff workload. This mismatch between technical equipment and personnel capability hinders the digital promotion of element-based complaints.

Second, institutional effectiveness falls short of expectations. Element-based complaints must be closely integrated with adjudication procedures and multi-channel dispute resolution mechanisms to be effective. However, surveys revealed significant institutional gaps in judicial practice. In some courts, element-based complaints are promoted without corresponding element-based trial procedures. Judges with long-standing traditional practice often find element tables cumbersome and continue to investigate all case facts using conventional methods, rendering element-based complaints largely formalistic and, in effect, a "wasted document."

4. Analysis of the causes behind the application difficulties of element-based complaints

4.1. Institutional design level: litigants' difficulties

As a nascent institutional innovation, element-based documents require continuous adjustment based on practical feedback to achieve their intended effect of promoting case complexity diversion. On one hand, the lack of sufficient legal data is a prominent issue. Current judicial transparency initiatives primarily focus on making trial proceedings and rulings public, while decision-making discussions and judges' subjective reasoning remain largely undisclosed. Moreover, much legal information is either inadequately recorded or not recorded at all [7].

On the other hand, the content of element-based complaints urgently needs optimization. Grassroots courts generally lack routine mechanisms for research, evaluation, and template revision. The design process is dominated by a single authority and does not incorporate feedback from litigants, lawyers, or grassroots judges, resulting in persistent unreasonable template designs. Although the core advantage of element-based documents lies in standardization and elementization, poorly designed or misallocated elements—redundant elements remaining alongside missing essential ones—lead to fragmented outcomes, increasing the burden on both litigants and lawyers, contrary to the original purpose of the system.

4.2. Conceptual cognition level: lawyers' work difficulties

A cognitive mismatch exists between the emphasis of template designers and the practical concerns of frontline judges, lawyers, and litigants. Designers primarily focus on the efficiency value of element-based documents, while users care more about their practicality and adaptability. The main objective of element-based documents is to simplify litigation processes, reduce litigants' costs, and enhance adjudicatory efficiency, consistent with the "judiciary for the people" value orientation. However, in grassroots practice, some courts narrowly view them as a tool to speed up case registration and reduce judges' workload, neglecting the interests of lawyers and failing to provide guidance through professional associations. Consequently, lawyers accustomed to traditional complaints face higher time costs when completing element-based complaints, increasing their practice burden. This reflects a conceptual gap in which management considers users only as subordinate implementers of court policies rather than as participants in institutional co-construction, ignoring both lawyers' professional habits and litigants' personalized needs.

4.3. Practical implementation level: courts' operational difficulties

First, some courts lack corresponding element-based trial procedures, and senior judges continue using traditional methods. Courts have not provided sufficient training, leaving some experienced judges unfamiliar with element-based trial procedures and the correct use of element tables. Additionally, the absence of assessment and incentive mechanisms reduces judges' motivation to adapt to new systems.

Second, human resource allocation at grassroots courts is not synchronized with institutional reforms. Although courts are generally equipped with machines for completing element-based documents, judges' assistants are still responsible for multiple tasks, including mediation guidance and element table review. The introduction of element-based documents increases workload without additional staffing or adjustment of responsibilities. Emphasis on technological equipment over talent development and operational training has prevented technological investments from translating into actual efficiency gains.

Third, regional development disparities also have a significant impact. Economic development levels and dispute type distributions vary across cities such as Yinchuan and Wuzhong, but no differentiated element-based document system has been established. Uniform templates fail to accommodate local needs, exacerbating conflicts in practical application.

5. Recommendations for further improving the application of element-based complaints

5.1. Standardize the content of element-based complaints to reduce litigants' filing difficulty

5.1.1. Provide "second-level" translation of legal terminology

For element-based complaints to be effectively implemented in Ningxia, legal phrasing must be converted into plain language, embedding legal principles within understandable reasoning. For example, the *type of guarantee* in a financial loan form is directly derived from Article 681 of the *Civil Code of the People's Republic of China* and appears in the element-based complaint as:

"A. *General Guarantee*

B. *Joint and Several Liability Guarantee*"

However, surveys show that 71% of litigants cannot accurately understand these legal terms. A solution is to append plain-language explanations:

"A. *General Guarantee* (I will only repay if the borrower is truly unable to pay)

B. *Joint and Several Liability Guarantee* (The bank can demand repayment from me directly, without first seeking the borrower)"

5.1.2. Reserve narrative space at the end of complaints

For cases with local characteristics—such as rural land disputes or family disputes—templates should follow a "fit-for-purpose" reform approach and avoid detachment from local realities [8]. Element templates can include a "Facts and Emotional Statement Section". For family disputes, beyond core legal elements such as property division and custody, litigants should be able to describe family background and causes of conflict. Following the principle of "technically moralized design", the template can embed user-friendly guidance during drafting [9], facilitating the smooth translation of lived facts into legal facts. This aligns with the judicial philosophy of integrating legal, rational, and human considerations, enhancing litigants' recognition of judgments and preventing the "people-centered" principle from being undermined by restricted emotional expression.

5.2. Optimize institutional coordination to improve lawyers' efficiency

5.2.1. Establish a unified template framework for element-based complaints

Provincial-level courts should coordinate the development of cross-region, cross-case-type templates, clearly distinguishing "mandatory elements" from "optional elements". Local courts can adjust and refine templates according to case characteristics. By incorporating feedback from lawyers, litigants, and grassroots judges, the problem of a single-template design can be mitigated, addressing lawyers' complaints that handling cases across regions requires adapting to multiple element requirements [10].

5.2.2. Provide specialized training on element-based complaints

Training should balance the professional needs and interests of lawyers. Lawyers' associations can organize sessions explaining the logic of element selection and filing standards for different case types. Drawing on the practice of the Guangdong High People's Court, which "optimizes templates based on lawyers' feedback,"

such training can transform institutional resistance into promotion support, reducing increased practice costs caused by inappropriate templates. Lawyers' procedural choice rights should be safeguarded to avoid mandatory use that might trigger resistance [11].

5.2.3. Standardize and streamline trial procedures

Standardize the recording of disputed elements and reasoning criteria for first-instance element-based documents. For cases submitted with element tables, implement a pre-confirmation of undisputed elements during trial, providing clear adjudicatory reference for appeals or retrials. At the filing stage, judges' assistants can prepare a checklist of undisputed elements, while trials focus solely on disputed elements. Establish a mechanism for pre-trial mediation element confirmation with automatic reuse during litigation. For example, details confirmed by mediators—such as property fee payment history or loan amounts—can be automatically recorded in the court system. If mediation fails, lawyers need not fill the same information again. This approach reduces duplication, improves trial efficiency, and ensures that element-based complaints serve as both a procedural simplification and a foundation for accurate adjudication.

5.3. Develop technical talent to ensure adequate court staffing

5.3.1. Conduct judicial competency training

Internal training should focus on judges, emphasizing skills such as summarizing disputed elements and simplifying reasoning in documents. Simulated scenarios—e.g., litigants not understanding "burden of proof" elements—can enhance judges' ability to guide proceedings. Judges' assistants and clerks should receive targeted training on guiding litigants in completing element tables and correcting common errors, ensuring frontline staff can efficiently assist litigants. Performance metrics should incorporate the usage rate of element-based documents and litigant satisfaction, with dedicated rewards and additional funding for courts demonstrating strong promotion results. A "fast-track case" performance conversion system can ensure judges handling simplified cases receive fair evaluation and recognition [12].

5.3.2. Enhance litigation assistance services for litigants

External measures include creating visual guidance manuals and simplified filling instructions to reduce errors. Multi-language explanation services and online consultation platforms should be established. Drawing on the auxiliary functions of "evidence-guided" element tables, litigants can view required evidence checklists directly, reducing omissions [13]. The educational and adaptive component is critical: "Public acceptance often determines whether a new technology is promoted or prohibited." Therefore, guidance on using element-based documents should be incorporated into public legal education programs to increase societal acceptance.

5.4. Optimize promotion methods to improve the application rate of element-based complaints

5.4.1. Fully leverage artificial intelligence

First, it is necessary to objectively recognize that the AI industry has paid insufficient attention to the legal sector. Many programmers, having never been exposed to the legal industry, are unable to understand the requirements proposed by legal professionals. This has resulted in many legal AI products failing to meet the expectations of legal practitioners, producing only limited practical effects [7].

Second, it is necessary to cultivate legal technology enterprises to participate in AI development and construction for courts. "Law + Technology" compound talents are an urgent need for courts facing intelligent transformation, but the internal court system cannot independently support long-term development. Therefore, at the national level, special funds should be provided to cultivate and guide a group of legal technology enterprises to actively participate in legal product technology development, thereby achieving scale [14].

Finally, it is essential to establish a correct understanding of AI and use it to create promotion mechanisms adapted to the hierarchical characteristics of Ningxia courts. For example, launching the "Ningxia Element-Filling Simplified Mini Program" could: support voice input in local dialects such as Yinchuan and Wuzhong; include an "offline fill-in—online upload" feature to address weak rural network signals; automatically highlight supplementary materials when generating complaint drafts and provide guidance to the nearest court filing window. Optical Character Recognition (OCR) technology can extract claims from complaints, and combined with Natural Language Processing (NLP), automatically backfill element values, reducing manual entry errors [2].

5.4.2. Align promotion with court functional roles

Assigning professionals to their areas of expertise reduces the burden on judges and benefits the public. First, as the front-end window of litigation, the filing division should incorporate the promotion of element-based complaints as a mandatory step in filing guidelines. For simple cases, such as civil loans under 100,000 RMB or traffic disputes with clear facts, filing staff should actively guide litigants to use the element-based forms. Second, civil trial divisions and family trial divisions should formulate application checklists for element-based documents according to their respective case types. For example, civil trial divisions should focus on promoting forms for financial and property disputes, while family trial divisions should focus on divorce and custody dispute forms, thereby avoiding resource waste caused by "one-size-fits-all" promotion. At the same time, the application rate of element-based documents and litigant satisfaction should be incorporated into the performance evaluations of judges and judicial assistants. A special award for element-based trials should be established, and courts in pilot areas, such as Helan County and Xingqing District, should receive additional funding for divisions with outstanding promotion results, thereby stimulating grassroots enthusiasm for adoption.

5.4.3. Promote regional collaboration

Special funds should be allocated from the autonomous region (provincial) judicial budget to upgrade electronic litigation platforms in remote grassroots courts such as Guyuan and Zhongwei, achieving full coverage for online element-based document submission and addressing low application rates in some courts. An urban–rural court pairing support mechanism should be established, where technologically advanced courts, such as Yinchuan Intermediate People's Court and Xingqing District Court, share element-based document templates and promotion manuals with grassroots courts in Wuzhong, Guyuan, etc., combining online remote guidance with on-site support to promote balanced regional development.

6. Conclusion

The deep integration of artificial intelligence and the judiciary provides a new pathway for optimizing element-based complaints, and the standardized and structured characteristics of these complaints lay the foundation for the construction of smart courts. In the future, Ningxia courts should continue to deepen the localization of element-based complaints by standardizing document content, optimizing institutional coordination, enhancing technical empowerment, and promoting regional collaboration to address the prominent contradictions in current applications. At the same time, this exploration can serve as an opportunity to accumulate replicable experience for promoting element-based documents in central and western China, extending element-based trials from simplified procedures to a broader range of applications. This approach ensures that institutional reforms are both "grounded in reality" and "able to keep pace," truly achieving a simultaneous improvement in judicial efficiency and fairness, and contributing a Ningxia-specific solution

with both local characteristics and general significance to the reform of the civil litigation system in the new era.

Fund project

National College Student Innovation and Entrepreneurship Training Program of Ningxia University, "A Study on the Digital Path for Safeguarding Litigants' Procedural Rights under the Background of Element-Based Application" (Project No. G202510749010)

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