

## REVIEW

**of the official reviewer on the dissertation of Martin Elihaki Kanyika  
on the topic: “Students’ Perception of Digital Library Services: on the Case of Al-Farabi KazNU”  
submitted for the degree of Doctor of Philosophy (PhD) in the specialty “8D03206 - Library Information Systems”**

**Degree defense is based on the series of three articles:**

1. Kanyika M, Sadykova R, Kalima T, et al. (2024) User perspectives on library digitization and its impact on research capabilities. Information Development: 1– 16. <https://doi.org/10.1177/026666669241294053>
2. Kanyika M, Sadykova R and Kosmyrza Z (2024) Digital literacy competencies among students in higher learning institutions in Kazakhstan. Global Knowledge, Memory and Communication. <https://doi.org/10.1108/GKMC04-2024-0224>
3. Kanyika M, Sadykova R, Kalima T, et al. (2025) Adapting to new technologies: A systematic literature review of blockchain implementation in academic libraries. Information Development. <https://doi.org/10.1177/026666669241312153>

№	Criteria	Compliance with criteria ( <u>underline one option</u> )	Justification of the reviewer’s position ( <b>comments should be italicized</b> )
1.	<b>Dissertation Topic (as of its date of approval) corresponds to the directions of scientific development and/or state programs</b>	1.1 Compliance with priority areas of scientific development or state programs:	The dissertation corresponds to a priority scientific development area “Intellectual potential” approved by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan in September 2024.
		1) The dissertation was conducted within a project or targeted program funded by the state budget (indicate the title and number of the project or program);	
		2) The dissertation was conducted within another government program (indicate the title of the program);	
		<b>3) The dissertation corresponds to a priority scientific development area approved by the Higher Scientific and Technical Commission under the Government of the Republic of Kazakhstan (indicate the area).</b>	
2.	<b>Scientific Significance</b>	The work makes/does not make a significant contribution to science, and its importance is well articulated/not articulated.	The PhD candidate is defending his degree based on a series of three articles published in peer-reviewed high-quality journals. All three articles have strong fundamentals to contribute to science, and this is well-articulated in the articles.

			<p>The research field is one of the understudied spheres in the system of education and, particularly, academic libraries.</p> <p>The articles include rigorous and valid research results on library digitization, blockchain implementation possibilities in academic libraries and the level of digital skills of students in Kazakhstani context and students' perception of the digital library services.</p> <p>This makes the study original and for the first time a compiled approach to the up-to-date topic of academic library digitization as well as its perception by the students is presented.</p> <p>The author tackles the topic from both theoretical and practical sides, making it important and relevant for further research in this field.</p>
3.	<b>Principle of Independence</b>	Level of independence:	<p>Through the three articles a high level of research independence could be observed. The researcher has made thorough and systemic literature reviews using SALSA framework adhered to PRISMA criteria to conduct a meta-analysis of the articles. Based on the nature of the research questions and the specifics of the topic of the research, particular methodology has been selected. Both quantitative and qualitative research methods of data collection and data analysis were employed. The discussion and conclusion parts together with limitation parts show that the researcher has been involved in all parts of the research and writing up of its results.</p>
		1) <b>High;</b>	
		2) Medium;	
		3) Low;	
		4) No independence.	
4.	<b>Principle of Internal Consistency</b>	4.1 Justification of the dissertation's relevance:	<p>All three articles have well-elaborated and relevant justification together with the rationale for the research questions selection and the research purposes of the studies.</p>
		1) <b>Well justified;</b>	
		2) Partially justified;	
		3) Not justified.	
		4.2 The content of the dissertation reflects its topic:	<p>The content of all three articles reflects the topic of the dissertation fully/ the topics of three submitted</p>
		1) <b>Reflects;</b>	

		2) Partially reflects;	articles present a series of the main parts of the research – theory around academic library digitization and the perspectives of using blockchain as the technology to upgrade the services of the library, digital competencies of the students and user perspectives. The research questions, research methods and results of the study reflected in the articles are to the stated topics.
		3) Does not reflect.	
		4.3. The goals and objectives correspond to the dissertation topic:	The goals and objectives in the form of main research questions and research goals fully correspond to the topics of the articles and the topic of the dissertation.
		<b>1) Correspond;</b>	
		2) Partially correspond;	
		3) Do not correspond.	
		4.4 All sections and statements of the dissertation are logically interconnected:	The articles are well-structured with logically interconnected sections and statements
		<b>1) Fully interconnected;</b>	
		2) Partially interconnected;	
		3) Not interconnected.	
		4.5 The new solutions (principles, methods) proposed by the author are substantiated and evaluated in comparison with existing ones:	Well-structured discussion and conclusion parts of the articles include the new solutions which are substantiated and evaluated in comparison with existing ones.
		<b>1) A critical analysis is present;</b>	
		2) Partial analysis;	
		3) Analysis is presented in the form of quotations from other authors, not the author's own opinions;	
		4) Analysis is absent.	
<b>5.</b>	<b>Principle of Scientific Novelty</b>	5.1 Are the scientific results and findings new?	The articles include new results and findings along with the ones which were identified by other researchers. Thus, international studies like PIAAC indicate that adults have constraints in digital tools utilization. The uniqueness of the current study is that it is case-based and tackles particularly the skills needed for and perceptions of digital academic libraries utilization.
		1) Completely new;	
		<b>2) Partially new (25–75% are new);</b>	
		3) Not new (less than 25% are new).	

		5.2 Are the conclusions of the dissertation new?	The conclusions and recommendations are not completely new. Many researchers recommend additional learning time as the way to resolve the problem in skill acquisition. The uniqueness of this study is that it focuses on the students in particular case-study.
		1) Completely new;	
		<b>2) Partially new (25–75% are new);</b>	
		3) Not new (less than 25% are new).	They are new but not completely. The researchers recommend using additional equipment or training to resolve the identified problem. The uniqueness of this study is that it focuses on case-study of the certain university.
		5.3 Are the technical, technological, economic, or managerial solutions new and substantiated?	
		1) Completely new;	
		<b>2) Partially new (25–75% are new);</b>	
		3) Not new (less than 25% are new).	
<b>6.</b>	<b>Validity of Main Conclusions</b>	All main conclusions <b>are</b> /are not <b>based</b> on scientifically sound evidence or are sufficiently substantiated (for qualitative research and fields of arts and humanities).	All main conclusions are based on scientifically sound evidence and are sufficiently substantiated.
<b>7.</b>	<b>Key Provisions Submitted for Defense</b>	For each provision, the following must be assessed:	<p>The defense of the degree is based on the three published articles.</p> <p>The stated topic is systematically reflected in all three articles with clear theoretical and interdisciplinary provision of the rationale for the study.</p> <p>The statement on the need for the academic library digitization and perception and readiness of the students to utilize the services of the digital library are not trivial and have rigorous data to prove.</p> <p>The statements are proven by the survey data and are substantiated by the research already done by other researchers and could be broadly applied for further research and policy actions in this field.</p>
		7.1 Has the provision been proven?	
		<b>1) Proven;</b>	
		2) Likely proven;	
		3) Likely not proven;	
		4) Not proven;	
		5) Cannot determine based on the current wording.	
		7.2 Is the provision trivial?	
		1) Yes;	
		<b>2) No;</b>	
		3) Cannot determine based on the current wording.	
		7.3 Is the provision new?	
		<b>1) Yes;</b>	
		2) No;	
		3) Cannot determine based on the current wording.	
		7.4 Applicability level:	

		1) Narrow;	
		2) Medium;	
		<b>3) Broad;</b>	
		4) Cannot determine based on the current wording.	
		7.5 Proven in the article?	
		<b>1) Yes;</b>	
		2) No;	
		3) Cannot determine based on the current wording.	
<b>8.</b>	<b>Principle of Reliability.</b>	8.1 The choice of methodology is justified or sufficiently described:	Methodology is well-structured and justified. Both quantitative and qualitative methodology were employed. Such methods as SALSA framework for systemic literature review provided rigour to the research. Survey design and interviews along with the literature review provide triangulation of the data.
	<b>Reliability of sources and provided information</b>	<b>1) Yes;</b>	
		2) No.	
		8.2 The results were obtained using modern scientific methods and data analysis techniques, including computer technologies:	Different methods of data collection and data analysis were used including computer technologies.
		<b>1) Yes;</b>	
		2) No.	
		8.3 Theoretical conclusions, models, revealed patterns and interrelations are proven and confirmed through experimental research (in pedagogical sciences—via pedagogical experiment):	The methodology and the nature of the research were not aimed at conducting the experiment. This is acceptable. The articles include cases and trends that are proven by the collected data.
		1) Yes;	
		<b>2) No.</b>	
		8.4 Major claims are: <b>Confirmed</b> / Partially confirmed / Not confirmed by references to up-to-date and reliable scientific literature.	A wide list of references are used by the author to confirm the claims of the study.
		8.5 The literature sources used are: <b>Sufficient</b> / Not sufficient for the literature review.	The literature sources are sufficient for the current study.

9	Principle of Practical Value	9.1 The dissertation has theoretical significance:	The articles include theoretical conclusions which are relevant for the topic of the dissertation.
		1) Yes;	
		2) No.	
		9.2 The dissertation has practical significance and a high probability of application:	The recommendations compiled based on the results of the study can be applied in practice when modernizing academic libraries and when preparing students to work with digital tools in the library.
		1) Yes;	
		2) No.	
		9.3 Proposals for practice are:	Proposals for practice are in the form of recommendations. Some of them are already in place and they need upgrade.
		1) Completely new;	
		2) Partially new (25–75% are new);	
3) Not new (less than 25% are new).			
10.	Quality of Writing and Formatting	Quality of academic writing:	The articles are written comprehensively using professional language. They are well-structured and have logical parts with clear statements and recommendations.
		1) High;	
		2) Medium;	
		3) Below average;	
		4) Low.	
11.	Comments on the Dissertation	All three articles have both scientific and practical importance. They have relevant literature review and data that can be referenced for the future research and applied in practice.	
12.	Scientific Level of Doctoral Articles Related to the Dissertation Topic  (If the dissertation is defended as a series of publications, the official reviewers must comment on the scientific quality of each article related to the dissertation topic.)	All three articles have high scientific level as they have thorough literature review, justified methodology and well-structured results and elaborated discussions.	

<b>13.</b>	<b>Reviewer's Conclusion (in accordance with paragraph 28 of the current Standard Regulation)</b>	The series of articles can be recommended as the basis to award Martin Elihaki Kanyika the academic degree of the Doctor of Philosophy (PhD).
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The official reviewer must indicate one of the following decisions:

1. **To award the academic degree of Doctor of Philosophy (PhD) or Doctor of Science;**
2. To return the dissertation for revision (except when defended as a series of publications);
3. To deny awarding the degree of Doctor of Philosophy (PhD) or Doctor of Science in the given specialty.

Copies of official reviews must be provided to the doctoral candidate no later than five (5) working days before the defense.

**Official Reviewer:**

**Madina Tynybayeva**

**PhD in Education, Project Lead, JAS Ventures Middle East - FZE**

(Place of work, academic degree)



(Signature)

**Madina Tynybayeva**

(Full name)