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FRAMEWORK DOMESTICATION OF AI TOOLS IN THE EVERYDAY LIVES OF CROATIAN CITIZENS

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ABSTRACT

This article analyses how generative artificial intelligence (AI) can be domesticated within everyday life by revisiting and extending classic theories of technological integration. Drawing on Silverstone's domestication model, the analysis outlines how technologies acquire meaning through appropriation, objectification, incorporation, and conversion within the moral economy of the household. To address the limits of a framework originally developed for television, the article integrates insights from the Actor-Network Theory, and the Technology Acceptance Model.

Empirical results show that 54,5% of Croatian citizens use AI tools, while 45,5% do not. Usage varies significantly by age and region, with 27,8% using AI occasionally, 26,7% frequently, and 23,6% not at all. Non-use is primarily explained by insufficient knowledge, lack of interest, and distrust. Familiarity and perceived competence strongly shape attitudes and incorporation into daily routines, indicating that domestication often breaks down at the appropriation stage. Overall, the findings highlight AI's ambivalent role as both intermediary and mediator in everyday practices.

KEY WORDS

technological domestication, actor-network theory, technology acceptance model, AI tools domestication, attitudes about AI

CLASSIFICATION

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INTRODUCTION

Throughout history, humanity has continuously engaged in the process of domesticating beings, objects, and phenomena encountered for the first time. While we have long presumed to understand the phylogenesis and ontogenesis of taming wild animals, our primary interest lies in the metaphorical application of these concepts to the realm of technology. From the invention of the earliest tools to the adoption of paper, projectors, and presentation software, the integration of technology follows a specific trajectory. However, the emergence of artificial intelligence (AI) raises a critical question: to what extent are AI tools distinct from these relatively familiar forms of domestication? To address this, we turn to the domestication theory originally developed by Silverstone [1, 2]. Silverstone was primarily interested in how new technologies are appropriated and integrated into the fabric of everyday life. He proposed four distinct phases of technological domestication.

1. *Appropriation*: the process of selecting and purchasing a product from the market and bringing it into one's personal space.
2. *Objectification*: the positioning of the product within the spatial environment, determined by aesthetic and functional categories.
3. *Incorporation*: the temporal dimension involving the creation of routines and time structures around the product's usage.
4. *Conversion*: the process whereby the product is displayed to others, acting as a symbol of status or identity construction.

The four processes outlined are essential for the transformation of products that are publicly produced, impersonal, and situated within public spaces beyond the household into objects imbued with distinctive meanings within the private domestic sphere. Through these processes, such products become shaped by the household's own symbolism, practices of use, habitual routines, value orientations, and, ultimately, elements of identity. The phases described are intrinsically linked to the concept of the moral economy of the household [1]. It can be conceptualized as a unit characterized by several factors, specific social, cultural, and economic specificities that are continuously interacting with the meanings and artifacts present within the public sphere.

The moral economy of the household may be conceptualized through a constellation of interrelated dimensions that structure the dynamics and practices of everyday life. At its core lie the household's value orientations and identity orientations, formed through the biographical, cultural, and social trajectories of its members. These orientations shape economic practices and foster a sense of collective as well as individual stability. The constitution of the home involves the transformation of a physical setting into a socially and symbolically meaningful locus, maintained through patterned spatial and temporal routines. Household practices are thus grounded in particular moral logics of evaluation, exchange, and reciprocity that stand in contrast to those governing market-based interactions. Information and communication technologies play a central role in articulating these dynamics. As both material artefacts and media channels that extend the household's communicative orientation toward the outside world, information and communication technologies introduce additional tensions between domestic life and external influences. Their presence requires active boundary management, including the regulation of access, usage practices, and points of engagement with the wider socio-technical environment. The four phases of domestication serve as an analytical framework for exploring the ways in which households negotiate their relationships with commodities and media systems within the parameters of their moral economy.

It is crucial to note that Silverstone's theory emerged primarily through the analysis of television and media technologies. Domestication, however, does not occur in a vacuum; it

unfolds within the "everyday", a lifeworld composed of routines and rituals, but also of the potential to rupture them. This ambivalence was highlighted by de Certeau, who distinguished between strategies – the overarching discourses of power that organize everyday life and tactics, the maneuverings of individual actors who seize moments of freedom by subverting strategic discourses [3]. Similarly, Hall, in tradition of Cultural studies, addressed the decoding of discourse, proposing three potential positions for the receiver: the dominant-hegemonic (decoding within the reference code), the negotiated (mixing adaptive and oppositional elements), and the oppositional (decoding contrary to the encoder's intent) [4, 5]. Like Silverstone, Hall's framework was largely predicated on television as the dominant medium.

To extend these concepts to the domestication of AI, we employ Actor-Network Theory (ANT)[1]. Latour inverted Durkheim's sociological premise, arguing that rather than starting with the "social" (*sui generis*) to explain phenomena, we must study the diverse associations of actors that eventually constitute the social [6, 7]. This methodological shift allows for the symmetrical analysis of both human and non-human entities, termed actants. Furthermore, this study draws upon the Technology Acceptance Model (TAM), which posits two primary conditions for the successful adoption and integration of any technology into human life: perceived usefulness and perceived ease of use [8]. Perceived usefulness refers to the extent to which an individual believes that a particular technology will provide tangible benefits in their everyday professional and private life domains. Perceived ease of use denotes the degree to which an individual perceives the use of a given technology as effortless.

Research on innovation adoption demonstrates that perceived ease of use significantly influences the acceptance of new technologies. In that context, Tornatzky and Klein identify *compatibility*, *relative advantage*, and *complexity* as the factors most consistently associated with appropriation phase across various innovations [9]. *Complexity* refers to the degree to which an innovation is perceived as difficult to understand and use, which closely corresponds to perceived ease of use.

Within this framework, AI is often conceptualized as a "black box", a stabilized, opaque set of relationships where the internal complexity is invisible, and only the input and output are observed [10, 11]. Theoretically, a black box is typically associated with the concept of an intermediary – an entity that transports meaning or force without transformation (e.g., a standard algorithm where Output equals Input). However, in practice, AI functions as a mediator. Unlike intermediaries, mediators transform, translate, distort, and modify the meaning or elements they carry; they are unpredictable and seemingly "intelligent" because they adapt.

This article addresses the resulting theoretical tension: How do we reconcile the definition of AI as a "black box" (a closed system traditionally viewed as a reliable intermediary) with its performative role as a mediator (an agent of transformation and continuous adaptation)? How, in essence, do we domesticate such a fundamentally different "beast"?

METHODOLOGY

RESEARCH OBJECTIVES

The primary objective of this study was to determine the extent to which AI tools have been domesticated in the everyday lives of citizens of Croatia. In this research, the level of domestication refers to the frequency of AI tool use, attitudes toward AI tools, and behavioural patterns related to their everyday application. Accordingly, this variable was first examined through a general analysis of AI tool use frequency among Croatian citizens. The frequency levels were then analysed, using both descriptive and inferential statistical techniques, in relation to sociodemographic characteristics, AI usage practices, and attitudes toward AI tools.

This approach enabled the identification of patterns in AI tool use among the population and the classification of two distinct groups: individuals who use AI tools daily (AI users) and those who rarely or never use them (AI non-users). It is important to emphasize that non-users were defined solely by their non-use of the AI tools listed in the survey questionnaire. Everyday use of technologies such as smartphones or other tools that participants cannot meaningfully choose whether to use was not included in this categorisation.

The main research questions, corresponding to the three analytical dimensions of this study, concern:

1. general sociodemographic characteristics associated with the use of various AI tools,
2. the frequency of intentional use of different AI tools, and
3. differences in attitudes and behaviours between two groups of respondents shaped around the *conversion* idea in the context of Silverstone's theory: those who intentionally use AI tools in everyday life (AI users) and those who do not use AI tools in everyday life (AI non-users).

Perceived attitudes and behaviour are measured using the Technology Acceptance Model, which considers perceived usefulness and perceived ease of use as the most critical indicators of a person's intention to use a new technology [8, 12]. The theoretical model is often broadened in other research on two additional variables – familiarity and knowledge about technologies and trust [13, 14]. Therefore, this research also uses the model. Finally, this research specifically focuses on appropriation and incorporation within Silverstone's four-phase domestication model, while future research will examine all four phases through a qualitative approach.

DATA COLLECTION AND SAMPLE

To address the primary research objective, data were collected through an online survey using a random sample, a Likert-type measurement scale, and the Computer-Assisted Web Interview method.

The survey was conducted using the Hendal online respondent panel, with 500 participants. For the purposes of this research, data were collected through questions that examined: the frequency of AI tool use; the level of agreement with statements measuring attitudes; respondents' self-perceived familiarity with AI tools; and perceptions of the usefulness and domestication of AI tools in everyday life.

DATA ANALYSIS

Data were analyzed using descriptive and inferential statistical methods. Descriptive analyses included frequencies, measures of central tendency, and distribution analyses. Inferential analyses were used to test group differences between AI users and AI non-users using the t-test, and to examine relationships among key variables. Significance levels were set at conventional thresholds ($p < 0,05$).

RESULTS AND DISCUSSION

SOCIODEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Table 1 shows the sociodemographic characteristics of the respondents in the study sample. The total number of respondents was 500, with 52,6% women and 47,4% men. The largest group was aged 55 or older (43,8%), while 16% were in the 35-44 and 45-54 age groups. Respondents aged 15-24 made up 10,8%, and those aged 25-34 accounted for 13,4%.

Regarding the size of respondents' residences, the largest portion lived in small settlements of up to 2 000 inhabitants (38,8%), followed by cities with more than 100 000 residents (25,8%). A total of 19,2% lived in areas with 10 001-100 000 residents, and the smallest group (16,2%) resided in settlements with 2 001-10 000 inhabitants.

In terms of regional distribution, the highest share of respondents came from Zagreb (27,4%) and Dalmatia (20,4%). The smallest share was recorded in the region of Lika, Kordun, and Banovina (7,6%). Additionally, 15,3% of respondents were from Northern Croatia, 17,2% from Slavonia, and 12% from Istria, the Croatian Littoral, and Gorski Kotar.

Table 1. Main socio-demographic characteristics of the sample.

Variable	Modalities	Number of respondents, $N = 500$	Percentage
Gender	Female	263	52,6
	Male	237	47,4
Age	15-24	54	10,8
	25-34	67	13,4
	35-44	80	16,0
	45-54	80	16,0
	55+	219	43,8
Settlement size	up to 2 000 inhabitants	194	38,8
	2 001-10 000 inhabitants	81	16,2
	10 001-100 000 inhabitants	96	19,2
	More than 100 000 inhabitants	129	25,8
Region	Zagreb	137	27,4
	Northern Croatia	76	15,3
	Slavonia	86	17,2
	Lika, Kordun, and Banovina	38	7,6
	Istria, Croatian Littoral, and Gorski Kotar	60	12,0
	Dalmatia	102	20,4

FREQUENCY OF AI TOOL USE IN EVERYDAY LIFE

From Table 2, it is clear that the highest percentage of respondents sometimes (a few times per month) (27,8%) and often (every week or daily) (26,7%) intentionally use different AI tools. A total of 23,6% do not use them at all, while 21,9% of respondents use various AI tools rarely (several times per year). Similar findings – with the highest percentage of those using AI tools daily or occasionally – were reported by Gillespie et al. in a global study, who conclude that the high level of daily AI tool adoption reflects their ease of use and accessibility for a diverse range of people [15]. The researchers noted that this is a key difference between AI tools and other complex technologies, which are typically harder to access and adopt in daily life. AI tools are affordable and user-friendly, making them suitable for quick, straightforward integration into daily routines, supporting the concept of AI tool domestication. The ease of use is a significant predictor of AI tool adoption in daily life, as emphasized by numerous authors even among young, educated groups such as students [16, 17].

Table 2. Frequency of use of different AI tools.

Frequency of using AI tools	Number of respondents ($N = 500$)	Percentage
Do not use at all	118	23,6
Rarely (several times per year)	109	21,9
Sometimes (a few times per month)	139	27,8
Often (every week or day)	133	26,7

When considering the average weekly use of different AI tools in hours, Table 3, respondents report an average of 2,44 hours per week (SD = 3,47).

Table 3. Average weekly use of different AI tools in hours.

Mean	Standard deviation	Median	Minimum	Maximum	Number of respondents
2,44	3,47	1	0	30	382

Respondents who do not use AI tools, Table 4, cite insufficient knowledge of AI tools (57,1%) and a general lack of interest in AI tools (33,4%) as the most common reasons for non-use. 26,9% of respondents indicate distrust in AI tools as a reason, while 23,8% do not consider AI tools useful for their needs. Additionally, 17,4% of respondents report specific fears and concerns about AI tools that prevent them from using them. It can be concluded that the main factors preventing respondents from domesticating AI tools into their daily lives are insufficient knowledge, a lack of interest, and distrust. These results can be understood within the Technology Acceptance Model, which highlights trust and familiarity with new technologies as key factors in technology adoption. In other words, if people lack confidence and familiarity with AI tools, they are likely to resist using them regularly [18].

The results support the study by Johannessen et al., which concluded that respondents fall into two groups: one open to new technologies and the other sceptical and resistant due to a lack of trust, understanding, and familiarity [19]. The characteristics of the two groups are analyzed later in this article.

Table 4. Reasons for not using AI tools.

Reason for non-use	Number of respondents (N = 118)	Percentage
I am not sufficiently familiar with AI tools	67	57,1
I do not trust AI tools	32	26,9
I have specific fears and concerns related to AI tools	21	17,4
I do not consider AI tools useful for my needs	28	23,8
I have no interest in AI tools	39	33,4

THE DIFFERENCES BETWEEN AI USERS AND AI NON-USERS

For the further analysis presented in this subchapter, it was necessary to recode variables to divide respondents into users and non-users of AI tools. The recategorization was performed so that the non-user group consisted of respondents who reported never or rarely using AI tools. In contrast, the user group included respondents who use AI tools sometimes or daily. As shown in Table 5, a slightly higher percentage of citizens use various AI tools (54,5%), whereas non-users account for 45,5% of the sample.

Table 5. Descriptive indicators of AI users and AI non-users of different AI tools.

Group	Number of respondents (N = 500)	Percentage
AI non-users	228	45,5
AI users	272	54,5

There are more female users of different AI tools, in total 152, than male users, who number 121, Table 6. Similarly, more males (117) than females (111) do not use AI tools. The majority of users are in the mature age group (55+), while the fewest users are in the youngest age group (15-24 years).

When considering other similar studies, it can be concluded that younger respondents, typically aged 18-34, are more inclined to domesticate AI tools into their daily lives than respondents aged 55 and older [15]. This finding aligns with the data obtained in the present study, as the non-user group is predominantly composed of mature-aged citizens. Gillespie et al. explain this tendency by the greater flexibility of younger respondents in accepting innovations in their everyday life and their higher level of education regarding AI tools [15].

However, differences in the domestication of AI tools and in expressed attitudes toward them across age groups are complex. For example, the study by Kaya et al. found that age is not a significant predictor of AI tool use or of attitudes toward them [20]. This is further supported by other research, such as Park et al., which found that older individuals show higher acceptance of AI tools and new technologies, primarily to keep up with the times and avoid missing out on innovations in daily life [21]. These conflicting findings indicate no consensus on whether the youngest or slightly older age groups are more inclined to adopt AI tools.

Regarding regional distribution, the largest share of users comes from Zagreb, totaling 90, while only 18 are from Lika, Banovina, and Kordun. Among non-users, the largest share is from Split, totaling 52, whereas only 20 are from Lika, Banovina, and Kordun, Table 6.

Table 6. Descriptive indicators of sociodemographic data for users and non-users.

Variable	Modalities	Users (N = 272)	Non-users (N = 228)
Gender	Female	152	111
	Male	121	117
Age	15-24	41	13
	25-34	47	20
	35-44	48	32
	45-54	48	32
	55+	88	131
Region	Zagreb	90	47
	Northern Croatia	39	38
	Slavonia	42	44
	Lika, Kordun, and Banovina	18	20
	Istria, Croatian Littoral, and Gorski Kotar	34	26
	Dalmatia	50	52

Furthermore, out of a total of 272 respondents included in the group of users of different AI tools, 172 consider themselves only partially familiar with the capabilities of these tools Table 7. At the same time, 127 generally agree that they understand how AI tools work.

Regarding other attitudes, 150 users generally agree that AI tools can assist them with daily tasks, while 79 fully agree. 108 users agree that AI tools are already part of their everyday lives, and 123 believe they will be essential in a few years.

Interestingly, as seen from Table 7, a relatively large number of users express a neutral stance (neither agree nor disagree) toward each statement, which may indicate limited familiarity with the topic or uncertainty about their current perceptions of AI tools.

Table 7. Descriptive indicators of N = 272 users' attitudes toward AI tools.

Statement	Not at all familiar	Slightly familiar	Partially familiar	Very familiar	Cannot assess
Familiarity with the capabilities of AI tools	0	21	172	77	3
Statement	**Strongly disagree**	**Mostly disagree**	**Neither agree nor disagree**	**Mostly agree**	**Fully agree**
AI tools can help me with daily tasks	0	3	41	150	79
AI tools are already part of my everyday life	5	18	84	108	58
AI tools will be essential in my everyday life in a few years	4	21	64	123	60
I understand how AI tools function	4	22	91	127	28

Table 8 shows that non-users report limited familiarity with AI tool capabilities (93), and the largest group is unable to assess whether they understand how AI tools function (66). 104 non-users express a neutral stance toward the statement that AI tools can assist them with daily tasks, while 81 strongly disagree that AI tools are already part of their everyday lives. Additionally, 84 non-users express a neutral stance regarding the statement that AI tools will be essential in their everyday life in a few years.

Table 8. Descriptive indicators of $N = 228$ non-users' attitudes toward AI tools.

Statement	**Not at all familiar**	**Slightly familiar**	**Partially familiar**	**Very familiar**	**Cannot assess**
Familiarity with the capabilities of AI tools	47	93	70	13	4
Statement	**Strongly disagree**	**Mostly disagree**	**Neither agree nor disagree**	**Mostly agree**	**Fully agree**
AI tools can help me with daily tasks	30	25	104	64	5
AI tools are already part of my everyday life	81	60	61	24	2
AI tools will be essential in my everyday life in a few years	32	43	84	66	3
I understand how AI tools function	49	63	66	44	5

To determine whether there is a statistically significant difference between users and non-users regarding the previously analyzed variables of gender, age, and region, an independent samples t-test was conducted. The results of Levene's test for equality of variances indicate that the assumption of variance homogeneity is not violated ($F = 2{,}620$, $p < 0{,}05$; $F = 17{,}118$, $p < 0{,}05$; $F = 0{,}243$, $p > 0{,}05$).

Based on the results of the independent samples t-test, it can be concluded that users and non-users of AI tools do not differ statistically significantly in terms of gender ($t = -1{,}543$, $df = 498$, $p > 0{,}05$). The observed difference in mean values between users ($M = 1{,}56$, $SD = 0{,}498$) and non-users ($M = 1{,}49$, $SD = 0{,}501$) for gender is considered random and not statistically significant, Table 9. This result is consistent with the findings of Kaya et al., who reported no statistically significant differences in AI tool usage or attitudes toward AI tools by gender [21]. However, men tended to show slightly more positive attitudes. On the other hand, the t-test results indicate that users and non-users differ statistically significantly with respect to age ($t = 6{,}083$, $df = 497{,}617$, $p < 0{,}05$) and region of residence ($t = 2{,}140$, $df = 498$, $p < 0{,}05$).

Table 9. Group statistics for sociodemographic variables: gender, age, and region.

Variable	**Group**	**Number of respondents**	**Mean**	**Standard deviation**
Gender	Users	272	1,56	0,498
	Non-users	228	1,49	0,501
Age	Users	272	3,35	1,461
	Non-users	228	4,09	1,254
Region	Users	272	3,06	1,919
	Non-users	228	3,43	1,855

To determine whether there is a statistically significant difference in attitudes toward AI tools between users and non-users, an independent-samples t-test was also conducted, Table 10. The results of Levene's test for equality of variances indicate that the assumption of variance homogeneity is violated ($F = 47{,}566$, $p < 0{,}05$; $F = 16{,}659$, $p < 0{,}05$; $F = 6{,}551$, $p < 0{,}05$; $F = 4{,}329$, $p < 0{,}05$; $F = 30{,}341$, $p < 0{,}05$). Therefore, due to corrections after Levene's test, calculations for unequal variances with adjusted degrees of freedom (df) were considered.

Table 10. Independent samples test for variables gender, age, and region.

Variable	Assumption	Levene's test for equality of variances		t-test for equality of means				95% confidence interval of the difference	
		F	Sig.	t	df	Sig. 2-tailed	M. difference	Std. error difference	lower	upper
Gender	Equal Variances Assumed	2,620	0,106	–1,543	498	0,124	–0,069	0,045	–0,157	0,019
	Equal Variances not assumed			–1,542	481,114	0,124	–0,069	0,045	–0,157	0,019
Age	Equal Variances Assumed	17,118	0,000	6,001	498	0,000	0,739	0,123	0,497	0,981
	Equal Variances not assumed			6,083	497,617	0,000	0,739	0,121	0,500	0,978
Region	Equal Variances Assumed	0,243	0,622	2,140	498	0,033	0,363	0,170	0,030	0,697
	Equal Variances not assumed			2,147	487,507	0,032	0,363	0,169	0,031	0,696

Based on the results of the independent samples t-test, Tables 11 and 12, it can be concluded that users and non-users of AI tools differ statistically significantly in all observed attitudes toward AI tools. The two groups vary considerably in their perceived familiarity with the capabilities of AI tools ($t = –13{,}553$, $df = 373{,}514$, $p < 0{,}05$) as well as in their agreement with the statement that AI tools can help them in daily tasks ($t = –14{,}797$, $df = 387{,}758$, $p < 0{,}05$).

Furthermore, users and non-users differ statistically significantly regarding the statements that AI tools are already part of their everyday lives ($t = –17{,}442$, $df = 458{,}289$, $p < 0{,}05$) and that AI tools will be essential in their everyday life in a few years ($t = –10{,}537$, $df = 457{,}707$, $p < 0{,}05$). Finally, the two groups differ statistically significantly in their personal perception of understanding how AI tools function ($t = –11{,}700$, $df = 419{,}757$, $p < 0{,}05$).

Table 11. Group statistics for attitudes about AI tools.

Attitude	Group	Number of respondents	Mean	Standard deviation
Familiarity with the capabilities of AI tools	Users	272	1,56	0,498
	Non-users	228	2,27	0,917
AI tools can help me with daily tasks	Users	272	4,12	0,685
	Non-users	228	2,95	1,005
AI tools are already part of my everyday life	Users	272	3,72	0,936
	Non users	228	2,15	1,051
AI tools will be essential in my everyday life in a few years	Users	272	3,79	0,923
	Non users	228	2,85	1,038
I understand how AI tools function	Users	272	3,56	0,841
	Non users	228	2,53	1,094

Table 12. Independent samples test for attitudes about AI tools.

Variable	Assumption	Levene's test for equality of variances		t-test for equality of means					95% confidence interval of the difference	
		F	Sig.	t	df	Sig. 2-tailed	M. difference	Std. error difference	lower	upper
Familiarity with the capabilities of AI tools	Equal Variances Assumed	47,566	0,000	–14,067	498	0,000	–0,956	0,068	–1,090	–0,823
	Equal Variances not assumed			–13,553	373,514	0,000	–0,956	0,071	–1,095	–0,818
AI tools can help me with daily tasks	Equal Variances Assumed	16,659	0,000	–15,292	498	0,000	–1,162	0,076	–1,311	–1,013
	Equal Variances not assumed			–14,797	387,758	0,000	–1,162	0,079	–1,316	–1,007
AI tools are already part of my everyday life	Equal Variances Assumed	6,551	0,011	–17,624	498	0,000	–1,566	0,089	–1,741	–1,392
	Equal Variances not assumed			–17,442	458,289	0,000	–1,566	0,090	–1,743	–1,390
AI tools will be essential in my everyday life in a	Equal Variances Assumed	4,329	0,038	–10,650	498	0,000	–0,934	0,088	–1,107	–0,762
	Equal Variances not assumed			–10,537	457,707	0,000	–0,934	0,089	–1,109	–0,760
I understand how AI tools function	Equal Variances Assumed	30,341	0,000	–11,975	498	0,000	–1,037	0,087	–1,207	–0,867
	Equal Variances not assumed			–11,700	419,757	0,000	–1,037	0,089	–1,211	–0,863

Kaya et al. conclude that self-assessed familiarity with AI tools is a strong predictor of attitudes toward those tools [20]. Other research findings indicate that respondents who report greater personal familiarity with the functioning and capabilities of AI tools use them more frequently and are more likely to domesticate them into everyday life [22, 23].

Furthermore, the study by Kaya et al. supports the results of the present research conducted in Croatia, as it concludes that respondents who use AI tools more frequently tend to have more positive attitudes toward them and are more inclined to implement them in their daily routines, in contrast to respondents who use them less frequently and are skeptical about their integration [20]. In other words, Croatian citizens who are more exposed to various AI tools also show more positive attitudes toward AI.

LIMITATIONS AND IMPLICATIONS FOR FUTURE RESEARCH

This study has several limitations that should be acknowledged. Although the research provides valuable insights into the domestication of AI tools; a qualitative component would be

necessary to gain a deeper, more nuanced understanding of the underlying motivations, concerns, and contextual factors shaping participants' attitudes.

Second, the study relied on an online questionnaire as its primary data-collection method. While online surveys are efficient, accessible, and cost-effective, they come with limitations. These include potential sampling bias, as individuals with lower digital literacy may be underrepresented.

Taken together, these limitations indicate that future research would benefit from integrating qualitative approaches and more diverse sampling strategies to strengthen the results.

CONCLUSION

A critical synthesis of these theories (Domestication, the Everyday life, ANT, and TAM) establishes the necessity of understanding AI not merely as a passive tool, but as an active non-human actant (a Mediator) whose domestication must be measured through the structured phases of appropriation, objectification, incorporation, and conversion.

In the context of the degree of domestication (incorporation), results indicate that slightly more than half of citizens (54,5%) fall into the category of AI users (utilizing AI sometimes or often/weekly/daily), while 45,5% are AI non-users. The study revealed that AI tool users and non-users do not differ significantly by gender, but significant differences were found with respect to age, and region of residence. Specifically, a majority of respondents engage with AI tools regularly, with 27,8% using them occasionally and 26,7% using them often, while 23,6% do not use them at all. Non-use was primarily attributed to insufficient knowledge (57,1%), lack of interest (33,4%), and distrust (26,9%). These findings underscore the importance of familiarity and trust in technology adoption, consistent with the TAM [18].

These findings indicate that exposure and familiarity with AI tools are key determinants of adoption and positive attitudes, consistent with previous research [20, 22, 23]. Croatian respondents who frequently use AI tools show more positive attitudes and are more likely to integrate them into daily routines, whereas less frequent users remain skeptical. Overall, the domestication of AI tools into everyday life is strongly influenced by both experience and perceived competence.

These factors suggest that domestication often fails at the initial Appropriation stage. Ultimately, the empirical analysis examines how the ambivalent role of AI as a Mediator/Intermediary manifests in everyday practices; specifically, whether AI is truly "domesticated" through routinized and systematic usage (the Incorporation phase), or if perception remains heavily influenced by earlier phases (Appropriation/Objectification) and external social strategies and tactics.

REMARK

[1]The aforementioned model will be presented and elaborated in greater detail in a future qualitative research study.

REFERENCES

[1] Silverstone, R.; Hirsch, E. and Morley, D.: *Information and communication technologies and the moral economy of the household*.
In: Hirsch, E. and Silverstone, R., eds.: *Consuming Technologies: Media and Information in Domestic Spaces*. Taylor and Francis, London & New York, pp.9-17, 2003,

[2] Silverstone, R. and Haddon, L.: *Design and the Domestication of ICTs: Technical Change and Everyday Life*.
In: Silverstone, R. and Mansell, R., eds: *Communicating by Design: The Politics of Information and Communication Technologies*. Oxford University Press, Oxford, 1996,
http://dx.doi.org/10.4324/9780203401491,
[3] de Certeau, M.: *The practice of everyday life*.
University of California Press, 1984,
[4] Hall, S. *Encoding and decoding in the television discourse*.
Centre for Cultural Studies, University of Birmingham, 1973,
[5] Hall, S.; Hobson, D.; Lowe, A. and Willis, P.: *Culture, Media, Language: Working Papers in Cultural Studies 1972-79*.
Routledge, London, 1980,
[6] Latour, B.: *Reassembling the social: an introduction to Actor-Network-Theory*.
Oxford University Press, 2007,
[7] Durkheim, É.: *The rules of sociological method*.
The Free Press, London, 1982,
http://dx.doi.org/10.1007/978-1-349-16939-9,
[8] Davis, F.D.: *Perceived usefulness, perceived ease of use, and user acceptance of information technology*.
MIS Quarterly **13**(3), 319-340, 1989,
http://dx.doi.org/10.2307/249008,
[9] Tornatzky, L.G. and Klein, K.J.: *Innovation Characteristics and Innovation Adoption--Implementation: A Meta-Analysis of Findings*.
IEEE Transactions on Engineering Management **EM-29**(1), 28-45,1982,
http://dx.doi.org/10.1109/TEM.1982.6447463,
[10] Latour, B.: *Science in action: How to follow scientists and engineers through society*.
Harvard UniversityPress, Cambridge, 1987,
[11] Bucher, T.: *Neither Black Nor Box: Ways of Knowing Algorithms*.
In: Kubitschko, S. and Kaun, A., eds.: *Innovative Methods in Media and Communication Research.*
Springer, Bremen, pp.81-98, 2016,
http://dx.doi.org/10.1007/978-3-319-40700-5_5,
[12] Davis, F.D.: *A technology acceptance model for empirically testing new end-user information systems: Theory and results.*
Massachusetts Institute of Technology, 1985,
[13] Kashive, N. and Powale, L.: *Understanding user perception toward artificial intelligence (AI) enabled e-learning*.
International Journal of Information and Learning Technology **38**(1), 1-19, 2021,
http://dx.doi.org/10.1108/IJILT-05-2020-0090,
[14] Lin, C.-Y. and Xu, N.: *Extended TAM model to explore the factors that affect intention to use AI robotic architects for architectural design*.
Technology Analysis & Strategic Management **34**(3), 349-362, 2022,
http://dx.doi.org/10.1080/09537325.2021.1900808,
[15] Gillespie, N.; Lockey, S.; Ward, T.; Macdade, A. and Hassed, G.: *Trust, attitudes and use of artificial intelligence: A global study 2025.*
The University of Melbourne & KPMG, 2025,
http://dx.doi.org/10.26188/28822919,
[16] Sova, R.; Tudor, C.; Tartavulea, C.V. and Dieaconescu, R.I.: *Artificial Intelligence Tool Adoption in Higher Education: A Structural Equation Modeling Approach to Understanding Impact Factors among Economics Students*.
Electronics **13**(18), No. 3632, 2024,
http://dx.doi.org/10.3390/electronics13183632,

[17] Venkatesh, V. and Davis, F.D.: *A theoretical extension of the technology acceptance model: Four longitudinal field studies*.
Management Science **46**(2), 186-204, 2000,
http://dx.doi.org/10.1287/mnsc.46.2.186.11926,

[18] Kelly, S.; Kaye, S.-A. and Oviedo-Trespalacios, O.: *What factors contribute to the acceptance of artificial intelligence? A systematic review.*
Telematics and Informatics **77**, No. 101925, 2023,
http://dx.doi.org/10.1016/j.tele.2022.101925,

[19] Johannessen, L.E.F.; Nordtug, M. and Haldar, M.: *Multi-site domestication: taming technologies across multiple institutional settings.*
Information, Communication & Society **27**(11), 2077-2093, 2024,
http://dx.doi.org/10.1080/1369118X.2023.2255644,

[20] Kaya, F., et al.: *The roles of personality traits, AI anxiety, and demographic factors in attitudes toward artificial intelligence.*
International Journal of Human-Computer Interaction **40**(2), 497-514, 2024,
http://dx.doi.org/10.1080/10447318.2022.2151730,

[21] Park, J. and Woo, S.E.: *Who likes artificial intelligence? Personality predictors of attitudes toward artificial intelligence*.
The Journal of Psychology **156**(1), 68-94, 2022,
http://dx.doi.org/10.1080/00223980.2021.2012109,

[22] Belanche, D.; Casaló, L.V. and Flavián, C.: *Artificial intelligence in FinTech: Understanding robo-advisors adoption among customers.*
Industrial Management & Data Systems **119**(7), 1411-1430, 2019,
http://dx.doi.org/10.1108/IMDS-08-2018-0368,

[23] Mantello, P.; Ho, M.T.; Nguyen, M.H. and Vuong, Q.H.: *Bosses without a heart: Socio--demographic and cross-cultural determinants of attitude toward Emotional AI in the workplace*.
AI & SOCIETY **38**(1), 97-119, 2023,
http://dx.doi.org/10.1007/s00146-021-01290-1.