up Ai costs a lot which might raise prices its logic can Favor certain groups unfairly, plus many folks still lack confidence using online money systems.

Valentina Vasile and Otilia Manta, 2025
A look at how FinTech works with AI to boost green efforts and bring more people into the financial system. Because of smart algorithms, digital finance tools can tailor offers, judge risks more accurately, while linking ecofriendly ventures to interested backers. Data insights driven by machine learning aid in using assets wisely and shaping effective rules key for meeting global environmental targets. Still, getting this mix right faces hurdles like unclear laws, weak infrastructure, also poor understanding of money matters and online tools among those it aims to serve.

Omotayo Bukola Adeoye, Wilhelmina Afua Addy, Adeola Olusola AjayiNifise, Olubusola Odeyemi, Chinwe Chinazo Okoye, & Onyeka Chrisanctus Of odile, 2024
This review looks at how artificial intelligence along with data tools boost financial access in poorer countries by spotting patterns and judging who's reliable using huge amounts of info. Instead of old-school records, smart scoring systems use things like electricity bills or phone habits to help people get loans even if they've never had a bank account. By studying what users actually want, number crunching tech helps banks design services that fit overlooked groups better. On top of that, automated helpers like bots you can talk to give custom money advice to those with low reading skills, making banking easier to reach.

Abdul Rahman, 2024
This review suggests fresh technology like AI can boost how many folks use money tools. It lowers fees while making banks simpler to connect with. Not just trendy terms, artificial intelligence plus data learning build tailored bank interactions. Picture digital helpers offering quick replies when users ask questions. Business analytics looks at huge amounts of data to guess what shoppers might like, helping banks give services that match various lifestyles. Yet getting it right means dealing with tough issues say, the divide between folks online and that offline, weak tech knowhow, or shaping policies that actually cover everybody.

Tambari Faith Nuka and Amos Abidemi Ogunola, 2024
AI tools are shaking up credit scores. Rather than using standard info only, they gather things like rent checks, power bills, or phone payments. This helps folks without bank loans or plastic cards show they can pay back money. Still, setting them loose isn't good enough. Dev teams must check that their code doesn't leave folks out, while using clear tools and frequent checks to stay on track. If not, past prejudices might slip in again via the datasets used. Real progress means cooperation not just talking, but acting together across banks, oversight groups, and builders, backed by solid guidelines. Only then can these systems launch fairly, reaching those who rely on them most.

Sanchayita Roy, 2024
AI driven finance tools are shaking up banking for those ignored by regular banks. Rather than relying only on outdated credit ratings, these apps check everyday habits like phone usage to guess loan reliability. That means underbanked or poor individuals might qualify for fairer borrowing options. Besides this, smart software speeds up money services, simplifies navigation, and slashes expenses at once. More bots show up these days not merely replying to queries but offering tailored tips, perfect for anyone clueless about finances. Yet some tasks remain. All those involved must face hard questions about data safety, unfair algorithms, or rule compliance only then can progress reach every person.

Alia Ahmed and Shoaib Nisar, 2023
Ai's changing how money stuff works, letting more folks get involved one way or another. Thanks to smart algorithms, lenders create better ways to judge credit, making processes quicker while cutting bias here and there. Automated helpers offer custom tips on saving or investing, helping even sceptical users relax a bit from time to time. Still, real inclusion won't happen unless we face hurdles headon privacy fears linger, some communities resist change, plus confusion around tech logic stays widespread.

Nir Kshetri, 2021
AI tools help low-income folks and tiny companies grab cash more easily. Ditching traditional loan headaches saves time plus money. Rather than relying on outdated credit checks, these systems use clever math tricks while pulling info from fresh sources. Lenders end up judging applicants faster without spending much. Sometimes you spot AI right away like bank bots such as Leo from UBA or quietly stopping scams in the background. Of course,

these tools offer solid benefits yet setting them up brings hurdles. Joblessness remains high, many fear work will vanish, while skilled folks in AI stay scarce, particularly across poorer nations.

Peterson K. Ozili, 2025
Ai tools speed up digital finance access by simplifying agent tasks while automating key steps like setting up official accounts using little paperwork. Instead of guesswork, location-based data pinpoints isolated areas missing basic tech setups, directing help where fin techs can actually work. By studying how people use money and their personal details, smart programs tailor offers that fit better. Still, problems remain: running ai is expensive which pushes costs onto users hidden biases might skew results, besides many folks just don't understand digital banking or managing finances online.

3. STATEMENT OF THE PROBLEM

Even with fast tech growth in finance apps and smart tools, many people still can't access basic money services. A lack of knowhow about online banking, unfair automated loan decisions, or shaky faith in rules block real progress so efforts often fall short. We don't clearly understand how these issues connect, which means we need closer study.

4. RESEARCH GAP

1. Finding gaps in how quickly folks use FinTech based on pay or area - like urban versus rural - and seeing who misses out
2. Looking into how smart money apps improve folks' online finance know-how - using tech that learns.
3. Finding how things like age or race connect to loan problems in AI - spotting unfair trends so they can get corrected - trying new ways each time, switching up words such as "since" or "plus," keeping it brief, direct, and every day without extra junk.
4. Finding out if folks feel more secure on digital platforms when they think outside rules are watching over things - while also seeing whether that sense shifts their trust based on who's actually using the service.

5. OBJECTIVES OF THE STUDY

1. To examine whether FinTech adoption levels differ significantly across various socioeconomic and geographic groups.
2. To analyze the influence of AI driven personalized financial services on users' Digital Financial Literacy (DFL).
3. To assess whether sensitive demographic characteristics significantly predict adverse credit outcomes in AI driven credit scoring systems.
4. To determine whether perceived security and trust in digital financial platforms vary across different levels of Perceived Regulatory Support (PRS).

6. HYPOTHESES OF THE STUDY

Objective 1 – (FinTech Adoption across Socio-economic & Geographic Groups)
H_{01}: Using FinTech isn't much affected by income, education, or where people live - differences tend to fade when you look closer.
H_{11}: How people use FinTech isn't the same across certain income levels or where they live - some groups show clear differences in usage patterns because location or earnings shape access and trust.

Objective 2 – (AI Driven Personalized Services → Digital Financial Literacy)
H_{02}: Services using AI to customize finance tools don't really boost digital money skills.
H12: Using AI to customize money tools boosts digital finance know-how quite a bit.

Objective 3 – (Demographics → Adverse Credit Outcomes)
H_{03}: Personal details like age or gender don't strongly influence bad credit results when AI handles scoring - instead, other factors play a bigger role; yet this link stays weak across data patterns.
H_{13}: Certain personal traits strongly link to worse credit results when AI handles scoring.

Objective 4 (Perceived Regulatory Support → Security & Trust)
H_{04}: How safe people feel doesn't really change no matter how much they think rules are backing them up.
H_{14}: How safe or trustworthy people feel changes a lot depending on how much they think rules are backing them up.

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7. RESEARCH METHODOLOGY

Research Design

The study uses numbers, descriptions, and onetime snapshots to explore how FinTech use connects with digital money skills, trust in rules, along with access to finance. With this setup, it gathers measurable info right now helping spot trends, contrasts, or links across factors.

Sample Size and Sampling Technique

The study looked at 200 people. It used a sampling approach that focused on folks regularly using online money tools picked because they're easy to reach, save time, and fit what the research wanted to explore.

Data Collection Method

Folks relied on firsthand info along with existing records for this project. The fresh details came from a fixed survey sent out using Google Forms simple to reach, plus responses stayed private. Background material showed up in papers, studies, official documents, or trustworthy websites, helping shape the core ideas and earlier findings discussion.

Instrument Design

The survey used a 5step rating system, starting at 1 (Totally Don't Agree) up to 5 (Completely Agree). Every concept got checked through several questions: Using FinTech tools (5 points), AI based custom services (5 points), knowing digital money basics (3 points), feeling negative credit effects (5 points), along with trust, safety, and access to banking (5 points).

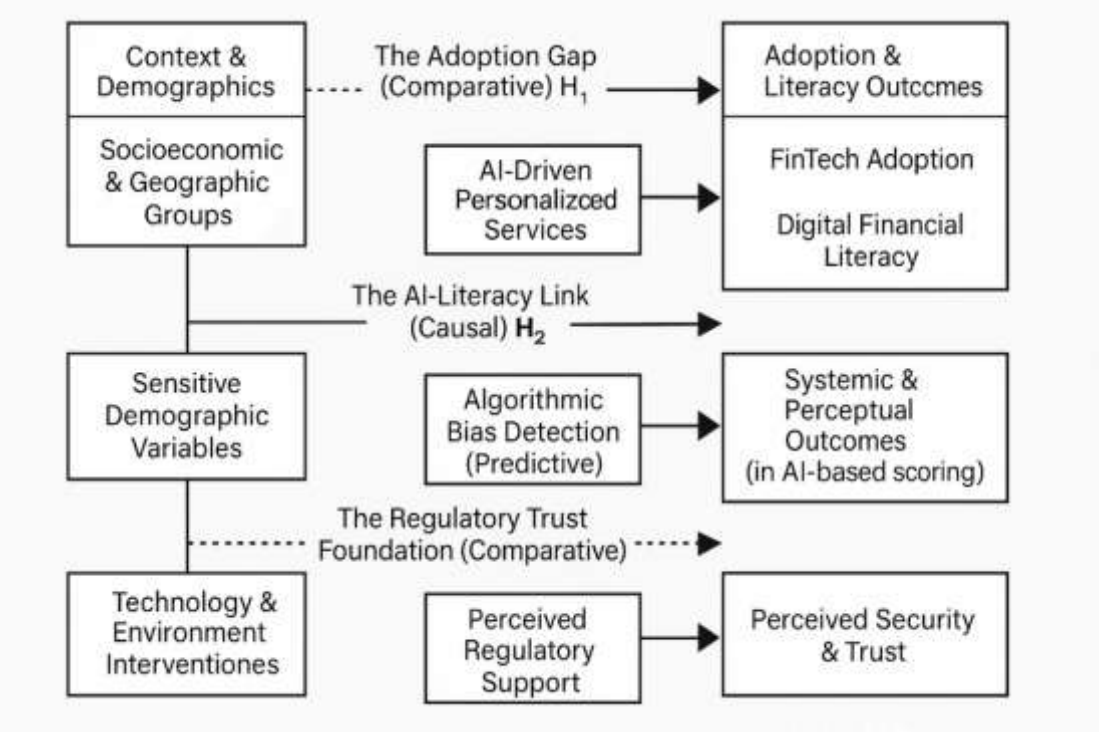
Statistical Tools Used

Data analysis happened with IBM SPSS tools. Descriptive stats helped show who responded plus how answers spread out. Scale reliability got checked through Cronbach's Alpha, whereas hypothesis testing relied on ANOVA alongside regression methods to explore links between factors.

Ethical Considerations

People joined the study by choice, while each participant gave clear approval beforehand. Names stayed hidden throughout, yet details shared stayed private at all times. Info gathered served only learning goals, or helped push forward actual research work.

8. CONCEPTUAL MODEL



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9. DATA ANALYSIS & INTERPRETATION

9.1 Reliability Analysis

Before running the test, we checked how well each scale held together by using Cronbach's Alpha instead of assuming it worked right away..

Construct	No. of Items	Cronbach's Alpha	Result
FinTech Adoption (FTA)	5	0.82	Good
AI Driven Personalized Services (AIPS)	5	0.84	Good
Digital Financial Literacy (DFL)	3	0.79	Acceptable
Perceived Adverse Credit Outcomes (PACO)	5	0.81	Good
Trust, Security & Financial Inclusion (TSFI)	5	0.86	Excellent

Interpretation:

All items showed Cronbach's Alpha higher than the minimum standard of 0.70, so they're seen as consistent inside. That means the tools used here can be trusted when doing number checks later

9.2 Hypothesis Testing Summary

Objective 1

A one-way ANOVA checked if where people live - rural, semi-urban, or urban - affects their views on five FinTech aspects. However, for every factor tested, the p-values came out above .05, so we can't say any group stands out from another. Though results differ slightly, those variations likely happened by chance rather than due to actual location-based trends. No clear pattern links geography to these attitudes when looking at the full set of data.

Variable	F value	Sig. (p)	Interpretation
Access to smartphones & internet	0.363	0.696	No significant difference by location
FinTech apps affordability	1.134	0.324	No significant difference by location
Confidence using digital financial services	2.365	0.097	Difference not statistically significant
FinTech availability in locality	0.723	0.487	No significant difference by location
Socioeconomic background affects FinTech usage	0.189	0.828	No significant difference by location

Overall Conclusion

Where people live doesn't really affect how they see or use FinTech - cost, trust, supply, ease of access, or social standing stay about the same no matter the area (every p-value above 0.05). That means city folks, those from small towns, and villagers think pretty much alike when it comes to digital finance tools.

Goal two: Check if using FinTech really affects digital financial know-how, given how people handle online money tools these days

Objective 2:

To check if using FinTech really affects digital financial know-how.

Regression Interpretation

The core trend shows FinTech usage isn't a strong predictor of digital currency understanding - other elements could matter more; findings remain shaky despite rechecking.

Key Results

Statistic	Value
R = .113	Very weak relationship
R^2 = .013	Only 1.3% of DFL variance explained by FU
F(1,198) = 2.551	–
p = .112	Not significant (> .05)
β = –0.113	Relationship is weak and negative, but not significant
t = –1.597	–
p = .112	Not significant

Conclusion for the Objective

Although heavier FinTech usage connects to slightly weaker digital financial know-how, the relationship's shaky (p = .112). That means no clear effect shows up - so linking cause and effect here just isn't supported.

Objective3:

See whether guys or gals think AI grading feels fair - use different words each time, switch up how it's said, keep it short, skip fancy terms, don't repeat stuff.

In each of the five cases, the p-values rise past .05 - meaning we can't really claim men are different from women in any clear sense.

Table: Key T-Test Results

Statement	t-value	p-value (Sig. 2tailed)	Interpretation
Demographic background influences credit decisions	–0.574	0.567	No significant gender difference
AIbased loan decisions are fair	0.922	0.358	No significant gender difference
Difficulties or rejection due to automated systems	–0.078	0.938	No significant gender difference
AI credit scoring disadvantages some groups	0.516	0.607	No significant gender difference
Credit evaluations should consider more than demographics	–0.881	0.379	No significant gender difference

Final Conclusion for the Objective

The t-test shows men or women don't differ much in their views

- Age-based tilt in loan decisions
- Fairness of AI based loan systems
- Troubles - or straight-up rejections - since algorithms judge your form
- Whether AI disadvantages certain groups
- People want wider rules when checking if someone can get a loan

All p-values sat above .05 - meaning these results point to no gender-based differences in opinions about AI-run credit checks here

Objective 4:

See if Financial Inclusion really changes job levels

Key Statistical Results

Statistic	Value
R = .131	Very weak positive relationship
R^2 = .017	FI explains only 1.7% of the variation in Occupation
F(1,198) = 3.439	–
p = .065	Not significant (> .05)
β = .131	Weak positive effect, but not significant
t = 1.854	–
p = .065	Not significant

Final Interpretation for the Objective

The numbers show Financial Inclusion isn't tightly tied to what people do for work (p = .065). Although there's a slight rise, it barely makes a real-world difference. Rather than having a solid effect, this piece explains only 1.7% of variation across jobs

CONCLUSION

Money access barely shifted how folks worked around here. Many just stuck to their usual tasks from earlier. Changes in job kinds were pretty rare. Outcomes looked about the same no matter the position. Using banks didn't seem tied to whether someone was working or not.

10.FINDINGS

The research suggests FinTech use stays steady whether in villages, small towns, or big cities - meaning people everywhere can reach digital money tools just as easily. Still, using these tech services more doesn't really boost how well folks understand them, showing that simply having access isn't enough to grow know-how. When it comes to AI handling loan choices, men and women think about fairness and automation in similar ways - no major gap between their opinions. Getting included in finance barely affects what kind of jobs people land - it's a

weak link at best. All things considered, even though online financial options are now within everyone's grasp, actual improvement hinges on better understanding, confidence, clear rules, and transparency when machines make banking calls.

11.CONCLUSION

The research points out FinTech access is now pretty much even everywhere, which means city and countryside folks are closer in digital reach. Still, just having these tools doesn't really boost money-smart skills online - so being able to use them isn't the same as proper learning. When it comes to AI judging loan choices, men and women feel alike, both worried about unfairness or unclear rules. On top of that, getting included financially barely changes job paths, hinting bigger societal forces might matter more. Still, results show tech access isn't the main roadblock anymore - real change in finance inclusion comes down to people's skills, faith in digital tools, clear AI processes, or solid rules. Building stronger money know-how and fair rule systems matters if we want gadgets to actually help everyone gain power over their finances.

12.LIMITATIONS

The research works with just 200 people, so results might not apply widely. Since participants were picked based on availability, the findings could lean toward certain types of FinTech users. Answers came from memory or personal views, which sometimes means mistakes crept in. Because it's a snapshot in time, we can't tell how opinions shift over months or years. A small set of elements - like FinTech use, AI tools, DFL, views on credit, and confidence in rules - was looked at, while things like internet reliability or steady earnings got left behind. Also, location variety isn't broad, so far-off regions aren't well shown.

13. FUTURE SCOPE

Later studies could look at bigger groups from different areas to cover more ground. Or maybe track people over months or years to see how their use of money apps changes. Tossing in things like confidence boosters, tech lessons, earnings info, or clearer AI rules might show what's really blocking access. Fancy math tools - say, SEM - can untangle how factors influence each other behind the scenes. Folks in cities versus rural spots often face very different setup problems - checking that helps spot what's missing. Down the line, research could look at whether rule changes or fairness checks on AI actually boost confidence, ease loan hurdles, or improve money health over years.

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