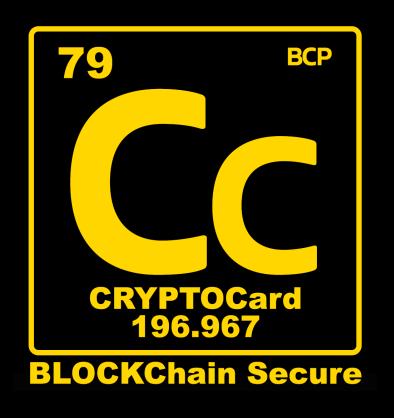
## PRESENTED BY YONGA TECH





The CRYPTOCard®

BLOCKChainPay™

**BLOCKChain Secure**<sup>™</sup>

Seamless Crypto Use\* at POS in 3 Seconds or Less

\*Available in USD and GBP. Other currency conversions available beginning 2026.

### Introducing The CRYPTOCard®

### Fulfilling Cryptocurrency's True Purpose

Yonga Tech's patent pending technology converts crypto to fiat currency in 3 seconds or less. Our **CRYPTOCard®** utilizes our patent pending **BLOCKChainPay™** technology, allowing cryptocurrency owners to use their crypto at point of sale with the exact same experience as a credit or debit card.

There is no merchant involvement required because they always receive fiat on their end. Simply download the app, create an account, load your desired cryptocurrency, then spend your crypto anywhere\* in the world with your **CRYPTOCard**®.

\*Currently converts to USD and GBP only. Other currency conversions available beginning 2026.

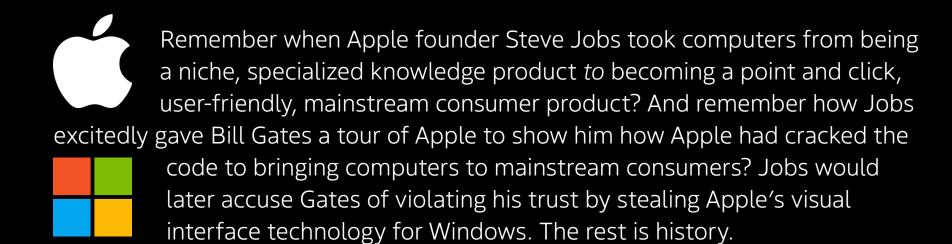




#### Installing a beta iOS or iPadOS app via email or public link invitation

- Open your email invitation and tap "Open or Install" or tap the public link on your device.
- 2. If a compatible build is available for your device, an Install button will appear, allowing you to accept the invitation and install it.
- 3. Create a new account, and enter your secret code you received on your postcard.

### A Revolution Has Begun



What Steve Jobs did for the computing world, Yonga Tech founder Andrew May is doing for the crypto world. But he's not giving any tours.

The same elite team of programmers that was contracted by the National Nuclear Security Administration to create architecture allowing secure remote access to sensitive data, and by H&R Block to build their entire secure mobile architecture and platform, has figured out how to create the cryptocurrency space where crypto can finally be used as real currency at POS.

We cracked the code. A revolution has begun. Crypto can finally become currency.

### **About Our Founder**

ANDREW MAY - An accomplished software engineer, Andrew May specializes in object-orientated design and analysis with expertise in the full lifecycle of the software design process, including: requirements definition, prototyping, proof of concept, architecture, interface implementation, testing, security and maintenance. In mobile since 2002, Andrew planted his roots by creating enterprise-centric mobile applications, starting with WindowsCE. He expanded his expertise into Android and iOS platforms. Andrew served as Co-Chair and Board Member of CodeStock, a non-profit 501c3 dedicated to technical education. Andrew and his programming team have been contracted by the likes of:



#### **The National Nuclear Security Administration**

(created and implemented a secure architecture for web applications allowing secure access to sensitive data for remote high profile individuals)



**H&R Block** (created a brand new mobile architecture and platform to solve security concerns and holes created by previous teams)



**PerfectServe** (created a secure platform following HIPAA rules and regulations to allow secure and instant communications between physicians).

## **Market Opportunity**

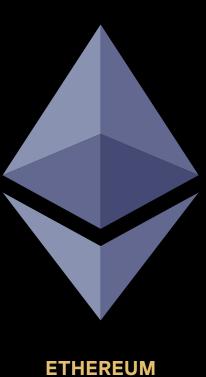
# Capitalizing on the Global Growth of Cryptocurrency as Currency

There are over **46 million** crypto owners in the United States alone. We are offering the most intuitive, cost effective, and convenient solution to use crypto at point of sale.





The crypto market (\$3.3 Trillion) has gained mainstream adoption in recent years.



## Compliance and Legal

### Fulfilling Cryptocurrency's True Purpose

Yonga Tech operates with full regulatory compliance by leveraging sponsor banks and partners to manage all required licenses, including Money Service Business (MSB) licenses.

Our innovative platform processes cryptocurrency on-ramps from one exchange and off-ramps from another, eliminating the need for reporting individual capital gains or losses.

We limit individual account loads to \$5,000, maintaining compliance with KYC requirements while avoiding IRS reporting for larger deposits. This strategic approach minimizes regulatory complexity and enhances scalability.



### **Unique Selling Proposition**

### Simplifying Crypto for Everyone

Our platform is unique in three key ways:



#### FREE POS TRANSACTIONS

Ve are the only platform that allows for free POS crypto transactions anywhere\* in the United States. We offset the transaction costs by implementing a low monthly fee, absolutely no purchase or transaction/network fees whatsoever, simplifying the user experience for all.

\*Currently converts to USD and GBP only. Other currency conversions available beginning 2026.



#### **EASE OF USE**

Our platform lets users buy and spend cryptocurrency seamlessly, eliminating the need for wallet transfers or direct crypto exchange accounts. This lowers barriers to entry, making crypto accessible to everyone. Because of how our technology is designed, we also are not required to report to the IRS but do provide a year-end transaction summary for user convenience. By reducing friction and simplifying adoption, we appeal to both crypto enthusiasts and newcomers.



#### **ADVANCED SECURITY PROTOCOLS**

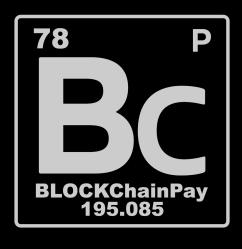
On device storage greatly mitigates exchange exposure. Rotating wallets as well as our patent pending PROXIMITYCard™ 3F

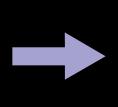
Authentication technology drastically reduces risk of theft or fraud, and our BLOCKChain Secure™ SMARTVault™ further amplifies these advantages.

### **PaaS Business Division**

The **CRYPTOCard®** utilizes our patent pending **BLOCKChainPay™** technology. It will transform every debit card and banking app into a powerful crypto-enabled tool. Just as Zelle revolutionized digital payments through seamless integration with current systems, CRYPTOCard's **BLOCKChainPay™** technology will empower major U.S. banks to offer instant crypto-to-fiat conversion at point of sale with their own card, redefining the future of crypto finance.

In what is nothing less than a revolutionary move, Yonga Tech is simultaneously creating the crypto payment space and becoming the uncontested leader of that space.









Click Here for PaaS Vendor Overview Collateral

## Yonga Tech's PROXIMITYCard™

#### **Next Level Fraud Protection**

With the era of digital currencies, Yonga Tech brings your bank a revolutionary proximity-based solution for fraud protection for your seamless crypto transactions. Designed for speed and convenience, your tokenized cards will not only allow for instant conversion of cryptocurrencies to fiat but will do so in a manner requiring a cell phone within 5 feet of the card. Our BLOCKChain Secure<sup>TM</sup> SMARTVault<sup>TM</sup> further amplifies these protections.



#### **KEY FEATURES**

- **SECURITY -** With state-of-the-art encryption and security protocols such as our patent pending proximity technology (you need your phone and card together to make a purchase), your transactions are more secure than traditional banking methods.
- **INSTANT CONVERSION** No more waiting for transactions to process. Our technology converts crypto to fiat instantly, directly at point of sale.
- UNIVERSAL COMPATIBILITY Yonga Tech's CRYPTOCard® technology works with any POS system making it universally applicable across various merchants and payment systems.
- **USER-FRIENDLY** Simply swipe, insert or tap your card at checkout. Our proprietary fifty-one step conversion process is done automatically in less than 3 seconds providing a seamless experience for both the user and the merchant.
- **COST EFFICIENCY** A low monthly fee and absolutely zero transaction or network fees make our license-based PaaS economical for your bank, consumers and merchants alike to adopt cryptocurrency payments without the usual high cost associated with crypto transactions.

### YONGA TECH Revenue Model

# Multiple Revenue Streams for Sustainable Growth

## AFFORDABLE ANNUAL MEMBERSHIP

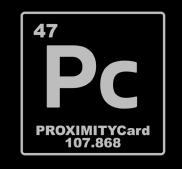
Costco model of monthly revenue that allows for predictable, scalable growth.

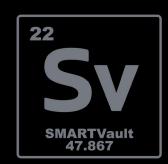
#### **PaaS REVENUE**

We will partner with major US banks for seamless integration of our **BLOCKChainPay™** software, transforming any bank's debit card into its very own **CRYPTOCard®**.







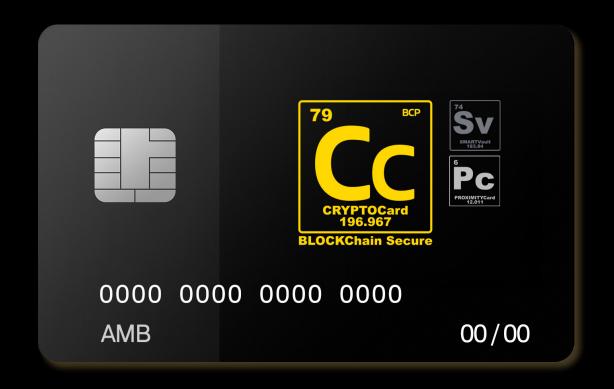


The Elements of YONGA TECH

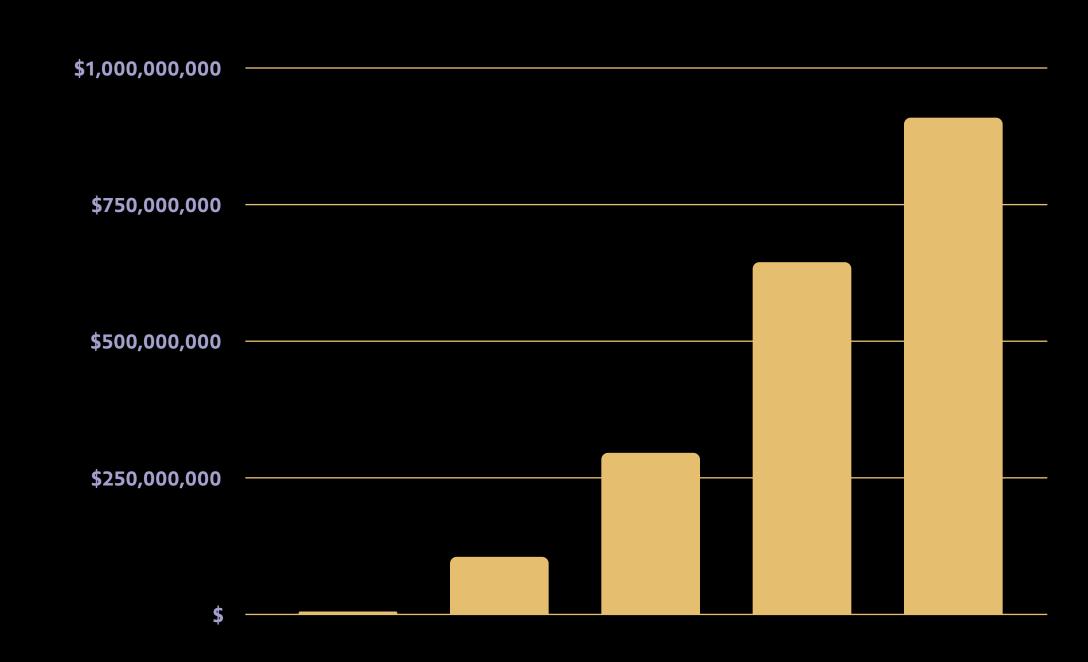
# The CRYPTOCard® Financial Projections

# Projected Revenue and Growth over the Next 5 Years

We forecast substantial growth with annual revenue targets.



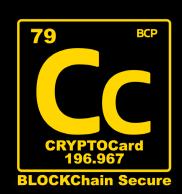
#### **Total Revenue**



Click Here for CRYPTOCard® Consumer Collateral

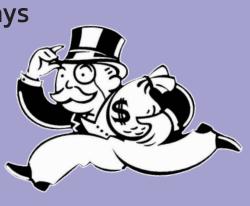
Click Here for Deep Dive: Crypto User Spending Patterns, 2019-2024

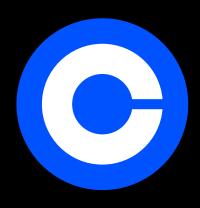
## Comparison of Initial Consumer Application Experiences



#### Our Initial Application Ease

- Create Account
- Scan Drivers License
- Approval in 7 Minutes or Less
- Card Issued in 3-5 Business Days





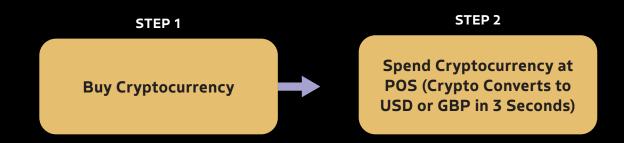
#### **Coinbase's Initial Application Friction**

- Create Account
- Scan Drivers License
- Enter Tax Information
- Take Video Selfie
- Approval in 45-90 Minutes
- Apply for Visa Debit Card
- Card Issued in 14-21 Business Days

\*Note: For immediate use, the app can be used without the PROXIMITYCard™ for the first ten days only, after which it will connect to the PROXIMITYCard™ permanently.

# Comparison of Consumer Use Step Experiences



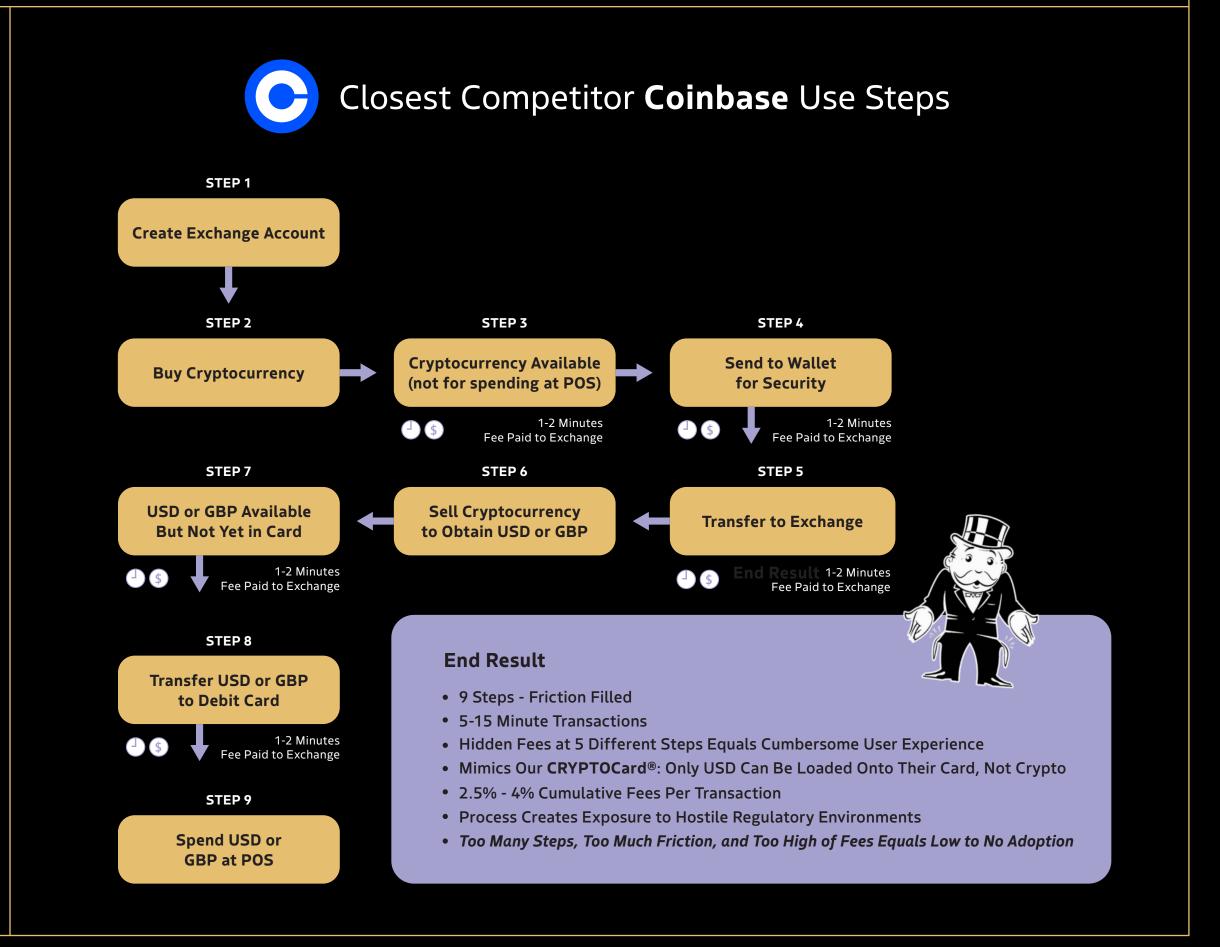




#### **End Result**

- Only 2 Steps Friction Free
- At POS, Crypto Converts to USD or GBP\* in 3 Seconds
- Low Monthly Fee, zero transaction fees
- Only Our Patent Pending CRYPTOCard®
   Allows You To Hold Crypto as Crypto and Spend as USD or GBP
- Regulation Proof: Our Patents Pending Process Transcends Hostile-Regulation vs Low-Regulation Environments
- 2 Step Ease of Use Equals Exponential Adoption Curve

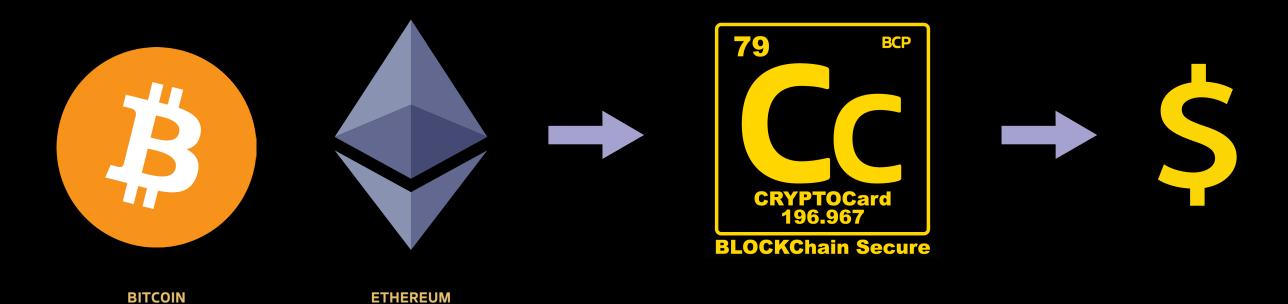
\*Currently converts to USD and GBP only. Other currency conversions available beginning 2026.



# User Growth & Market Penetration Strategy

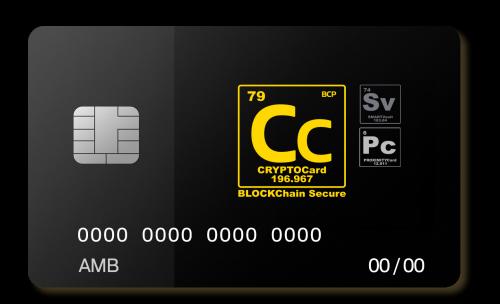
# Growing Our Community and Expanding Reach

Our growth strategy includes a multi-channel approach to attract users in order to use the **CRYPTOCard®** app.









**CRYPTOCard®** Available Nationwide at Thousands of Retailers



Partnerships with Influencers in the Crypto / Fintech Space



Strategic Ad Campaigns Targeting Early Adopters to Heavy Users

#### **JON FLATT**

#### **Chief Executive Officer**

Jon Flatt was the founder and CEO of Red McCombs Media for over ten years. He started the company from dollar one and generated over 900 hundred million in revenue, winning two Inc. 500 awards. The company was sold to Nexstar digital and is now a billion-dollar enterprise. Jon repeated his success with KERV Interactive as Kerv was named among the "Top 50 Brands in Silicon Valley," won an Inc. 500 award and received two Lumiere awards at Warner Brothers lot in Los Angeles for excellence in AI technology and business growth.

#### MARK MASTERS

#### **Co-Founder | Chief Strategist | Chief of Staff**

Mark Masters is a distinguished media executive and entrepreneur with a remarkable career spanning over three decades. He served as an award-winning Publisher and Editor-in-Chief of a news magazine (1987–1991) and later founded and led the largest independent spoken-word radio syndication group in the United States (1998–2014).

As CEO of the second-largest U.S. talk radio network by audience market share (2008–2014), Mark was instrumental in building Fox News Channel's talk radio divisions (2002–2004) and served as personal media adviser to FNC/FBN CEO Roger Ailes (2004–2016). He syndicated seven of America's ten largest breakout network radio talk shows (1998–2017) and created three national all-news radio brands (2009–2016).

In addition to his accomplishments in radio, Mark founded one of the country's most effective direct-response advertising agencies (2005–2016) and co-led an international TV production company with five scripted series in over 100 global markets (2013–2018). Since 2017, he has served as a full-time consulting media CEO, leveraging his unparalleled expertise in media and syndication.

#### **SHERRI HOLLAND**

#### **Chief Financial Officer**

Sherri has over 20 years' experience in CFO roles leading private equity, fintech, real estate, media and agriculture ventures. Sherri is a 2-time Inc. 500 CFO and has led multiple companies from start up through rapid growth stages and ultimately to exits. Her experience includes Group CFO of a multinational company valued at over \$300m in AUM spread across eight countries.



### **Our Team**

#### **ANDREW MAY**

#### **FOUNDER**

#### **Chief Technology Officer**

An accomplished software engineer, Andrew May specializes in object-orientated design and analysis with expertise in the full lifecycle of the software design process, including: requirements definition, prototyping, proof of concept, architecture, interface implementation, testing, security and maintenance. In mobile since 2002, Andrew planted his roots by creating enterprise-centric mobile applications, starting with WindowsCE. He expanded his expertise into Android and iOS platforms.

Andrew and his programming team have been contracted by the likes of the National Nuclear Security Administration (created and implemented a secure architecture for web applications allowing secure access to sensitive data for remote high profile individuals), H&R Block (created a brand new mobile architecture and platform to solve security concerns and holes created by previous teams) and PerfectServe (created a secure platform following HIPAA rules and regulations to allow secure and instant communications between physicians).

Andrew is the President and Lead Architect at CodeTank Labs, a software development agency based in Knoxville, TN. Andrew served as Co-Chair and Board Member of CodeStock, a non-profit 501c3 dedicated to technical education.

#### CHRISTOPER MASTERS

#### President

Christopher brings a unique blend of expertise as a medical professional, entrepreneur, and cryptocurrency enthusiast to his role as Co-CEO of Yonga Tech. With over 8 years of deep engagement in the cryptocurrency space, Christopher has combined his passion for innovation with a commitment to simplifying digital finance for everyday users. His entrepreneurial spirit and strategic leadership drive Yonga Tech's mission to revolutionize the way people interact with cryptocurrencies, making blockchain technology accessible and practical for all.

#### **BRANIGAN SHERMAN**

#### **Chief Operating Officer**

National media entrepreneur in the non-profit space with 30 years of experience starting, growing, managing and saving non-profit organizations. He co-founded and grew what became one of the largest Catholic radio networks in the United States and led a national media company to modify its strategy and ultimately become the largest Catholic network of AM and FM affiliate stations in the country. In 2017, Branigan was tapped by Mark Masters to become part of his media consulting team and has been a key member in various national media projects.

#### **LES ADKINS**

#### Co-Founder | Information Officer | Blockchain Innovation

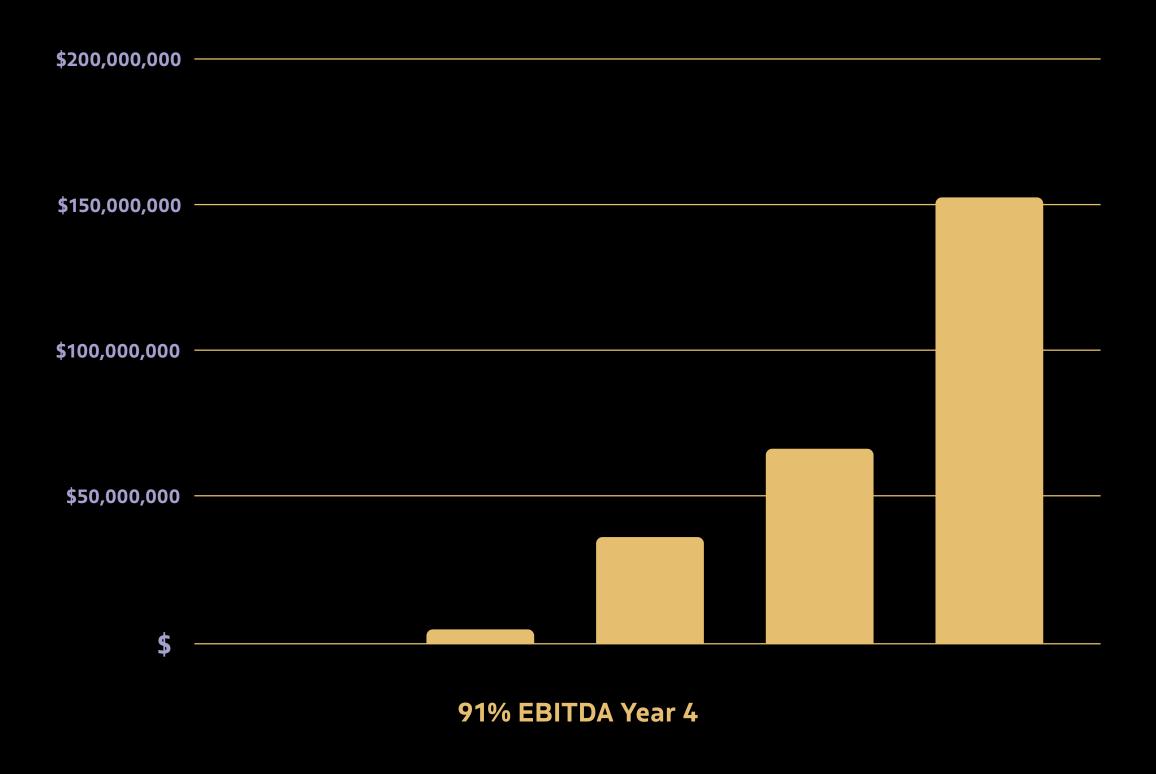
Les Adkins has been at the forefront of technological evolution since the early days of computing, beginning his career in college coding punch cards. His deep expertise in technology and business strategy has positioned him as a leader in blockchain innovation, crypto regulation, and emerging financial technologies.

His career trajectory includes key roles at Gateway Computers, where he transitioned from consumer sales to writing technology requirements for state and local governments across Texas. He later expanded his impact as the technology representative for the State of Texas and subsequently led K-12 technology sales and infrastructure development across Georgia, South Carolina, and North Carolina.



## PaaS Financial Projections

#### **Total Revenue**



#### **SEED ROUND**

# Investment Opportunity for CRYPTOCard®

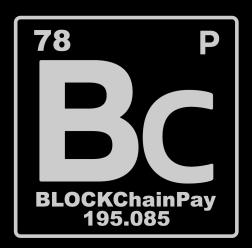


# Join Us in Transforming the Future of Digital Finance

#### We're seeking a \$5.1 million dollar investment to:

- Refine and complete our platform
- Hire quality employees
- Harden and further our patents
- Aggressively market to crypto and non-crypto users

# Series A Opportunity: PaaS Division



# Join Us in Assisting Banks to Include Crypto as an Option in their Card Services

We will be seeking Series A round 18 months from the completion of Seed round:

- Further scale our PaaS platform for banks
- Create large scale bank support infrastructure
- Super serve our bank customers
- Innovate far beyond our current first mover advantage

# **Shaping the Future of Turning Crypto into Currency**

Thank you for considering us as a part of your investment journey. We're excited about the possibilities ahead and look forward to collaborating with you to make digital finance accessible and secure for all.

Reach out with any questions or to schedule a deeper dive into our projections and roadmap.

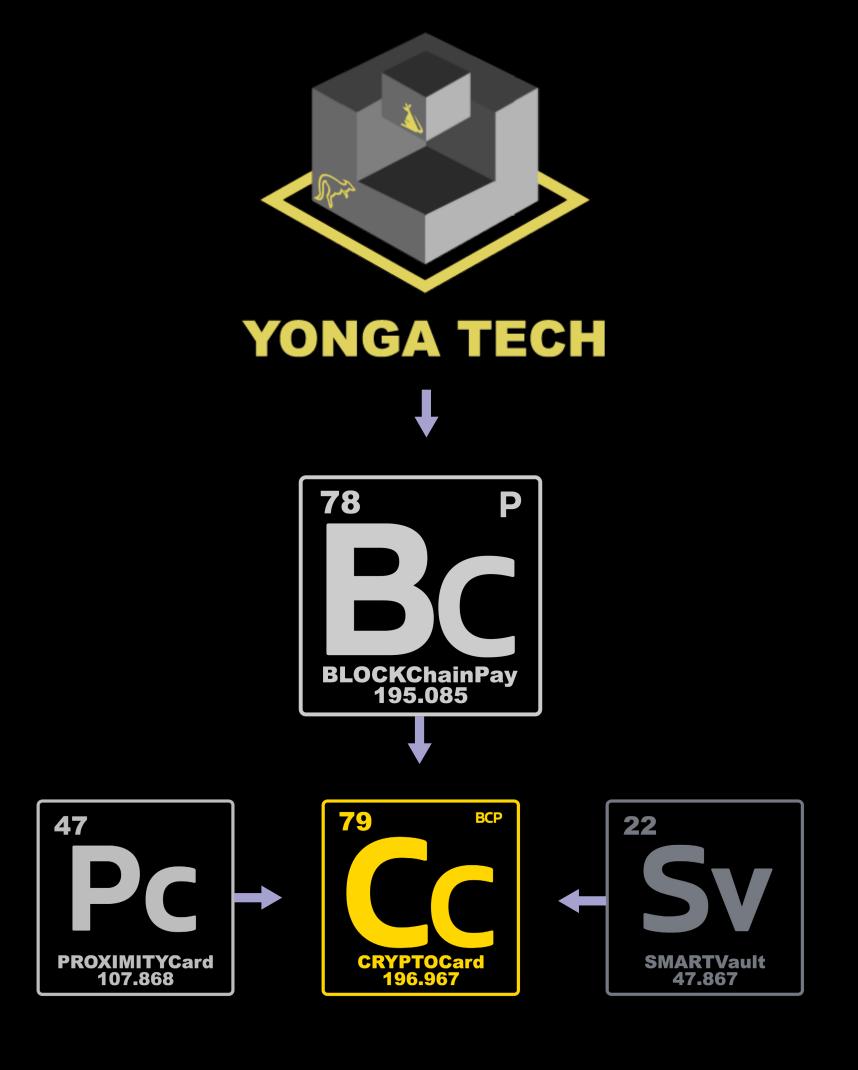
Andrew.May@yongatech.com

Jon.Flatt@yongatech.com

Christopher.Masters@yongatech.com

Branigan.Sherman@yongatech.com

www.yongatech.com



# APPENDIX: Crypto User Data Analytics

#### INTRODUCTION

The increasing adoption of cryptocurrency in consumer transactions has been a topic of growing interest. While historically dominated by investment activities, crypto usage for consumption is expected to rise due to changes in spending behaviors, wealth effects, and evolving payment infrastructures.

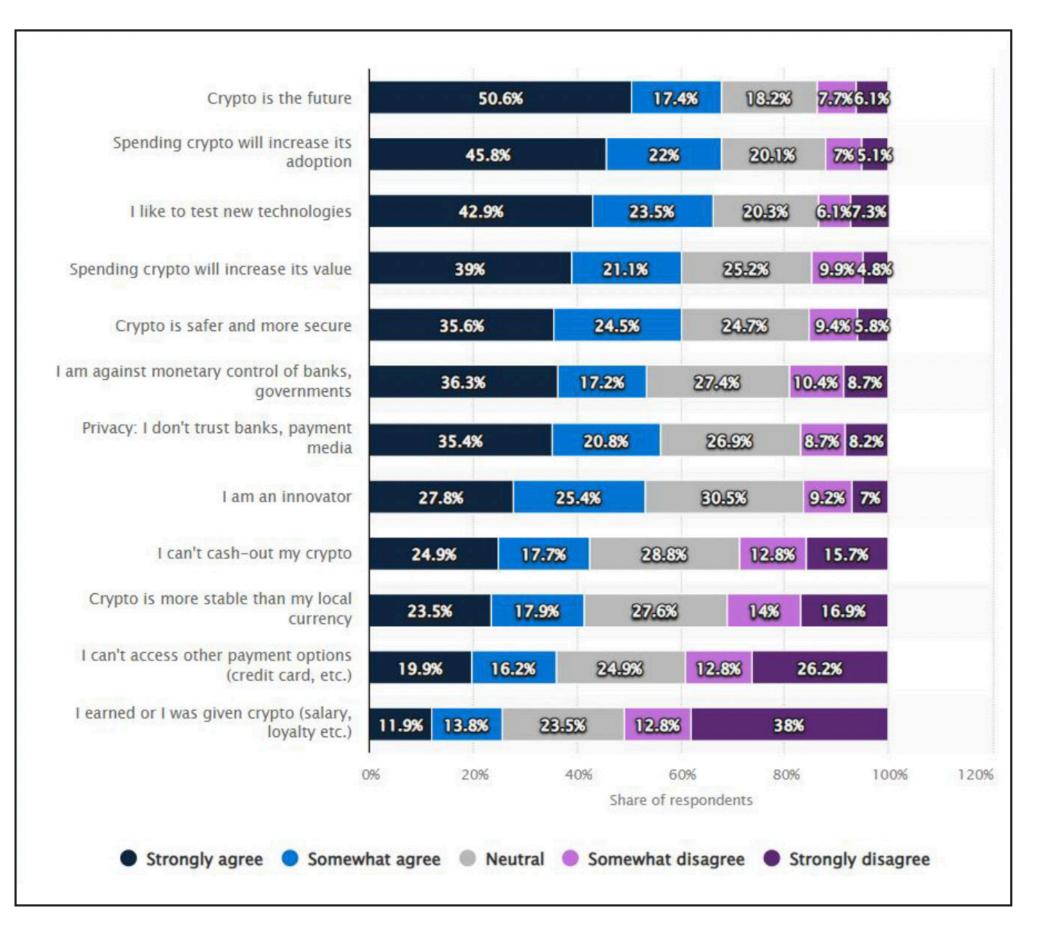
This report analyses the available data to project how crypto spend distribution and usage patterns will develop over time.

# Consumer Perception and Adoption Trends

Survey data provides further insights into the psychological and behavioral drivers behind cryptocurrency transactions:

- Over 50% of respondents believe that cryptocurrency is the future of payments.
- 45.8% of respondents believe that spending crypto will increase its adoption, suggesting a positive feedback loop in usage growth.
- Privacy and financial independence remain significant motivators, with 35% expressing distrust in traditional banking and payment systems.
- Despite these attitudes, long-term investment still dominates usage patterns, with 58% of crypto holders prioritizing accumulation over spending.

## Most Common Drivers for Consumers Worldwide to Choose Cryptocurrencies in Online Retail Shopping in 2022



Source: Statista

# Marginal Propensity to Consume (MPC) and Crypto Wealth Effects

one of the key insights from economic research on crypto spending behavior is the Marginal Propensity to Consume (MPC) out of crypto wealth, which is estimated at \$0.09 per dollar gained. This suggests that for every \$1 increase in crypto wealth, household spending rises by 9 cents. This is higher than the MPC out of equity wealth but lower than that of one-time income shocks or lottery winnings. Further insights indicate that:

- Households with lower savings demonstrate a higher MPC, implying that crypto wealth gains could disproportionately impact spending among liquidity-constrained individuals.
- Post-COVID effects on crypto wealth showed increased spending sensitivity, reinforcing the role of economic conditions in determining consumer behavior.
- The estimated MPC from crypto gains is only modestly higher than traditional investment wealth effects, meaning that while crypto gains translate into spending, they do so at a rate comparable to stock market investments.

#### **OLS Estimates of the MPC out of Crypto Wealth are Large**

	Total Quarterly Spending	
	OLS	
	(1)	
Avg. Quarterly Crypto Gains	0.114***	MDC aut af \$1 af
	(5.97)	<ul> <li>MPC out of \$1 of</li> </ul>
Avg. Quarterly Crypto Gains × Covid Indicator		crypto gains is \$0.1
Avg. Quarterly Crypto Gains × Post-Covid Indicator		<ul> <li>Identified? Spendin might drive crypto</li> </ul>
Lagged Income Control	X	
Household FE	X	investments
State × Quarter FE	X	
Sample	All Households	Solution? An
Observations	3,274,658	instrument!
Adjusted R <sup>2</sup>	0.676	

## 2SLS Estimates of the MPC out of Crypto Wealth are Smaller but Still Large

		Total	Quarterly Spe	ending		
	OLS	2SLS	2SLS	2SLS	2SLS	
	(1)	(2)	(3)	(4)	(5)	
Avg. Quarterly Crypto Gains	0.114***	0.0879***	0.0729***			
	(5.97)	(4.43)	(3.08)			<ul> <li>MPC out of \$1 of</li> </ul>
Avg. Quarterly Crypto Gains			0.0325			crypto gains is \$0.09
× Post-Covid Indicator			(0.79)			71 8
Avg. Quarterly Investment Gains				0.0678***	0.0487***	- Poughly 2Y MPC
				(2.95)	(4.45)	<ul> <li>Roughly 2X MPC</li> </ul>
Lagged Income Control	X	X	X	X	X	out of equity wealth
Household FE	X	X	X	X	X	
State × Quarter FE	X	X	X	X	X	• But $< \frac{1}{3}$ MPC out of
Sample	All	All	All	Crypto	Non-Crypto	stimulus/lotteries
	Households	Households	Households	Investors	Investors	stimulus/ lotteries
Observations	3,274,658	3,274,658	3,274,658	569,102	2,705,537	
Adjusted R <sup>2</sup>	0.692	0.082	0.082	0.081	0.081	
Weak ID KP F Stat		11,526	3,383	2,847	9,543	

Source: FDIC. https://www.fdic.gov/analysis/consumer-research/conferences/2024/presentations/johnson-slides.pdf?

## Consumer Spending Distribution Among Crypto Users

A comparison of spending habits between crypto users and non-crypto users reveals notable trends:

- Entertainment/Travel and Restaurants see increased spending among crypto users compared to non-crypto users.
- Spending on general merchandise and groceries remains similar between groups, suggesting that crypto adoption for basic consumer needs is growing but not yet dominant.
- Cash/Check transactions are lower among crypto users, which aligns with the digital-first nature of cryptocurrency payments.
- These spending patterns indicate that crypto holders are more inclined to spend on discretionary goods and services rather than necessities.

#### **Full Monthly Spending for Crypto vs Non-Crypto Users**

Variable	Crypto Users	Non-Crypto Users	Difference	
Percent of Spending:	·			
AutoFuel	5.2	4.7	0.5***	
Cable/Telecom	6.0	6.2	-0.2***	
Cash/Check	17.8	21.1	-3.2***	
Charity	0.5	0.5	0.1	
Education	0.4	0.3	0.1	
Entertainment/Travel	7.4	6.3	1.1***	
General Merchandise	21.6	21.4	0.2	
Groceries	8.8	9.0	-0.2**	
Insurance	4.9	5.1	-0.2***	
Medical	1.8	2.1	-0.2***	
Mortgage	9.9	9.2	0.7***	
Rent	2.1	1.7	0.4***	
Restaurants	9.7	8.5	1.1***	
Utilities	3.8	3.9	-0.1***	

Source: FDIC. <a href="https://www.fdic.gov/analysis/consumer-research/conferences/2024/presentations/johnson-slides.pdf">https://www.fdic.gov/analysis/consumer-research/conferences/2024/presentations/johnson-slides.pdf</a>?

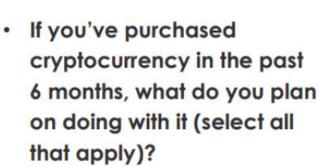
# Crypto Spending Behavior Insights

Recent survey data sheds further light on how crypto holders plan to use their assets:

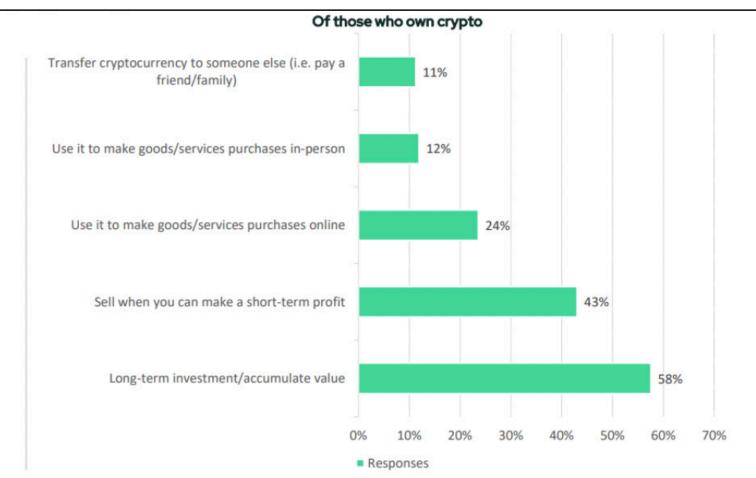
- 58% of respondents indicated that they intend to use their crypto for long-term investment and accumulation of value.
- 43% reported they would sell their holdings when they can make a short-term profit.
- 24% of users plan to make purchases online and 12% specifically targeting in-person transactions.
- Only 11% of crypto users transfer their cryptocurrency to someone else, such as friends or family.

The data suggests that while investment remains the dominant use case, a significant proportion of users are gradually transitioning towards using cryptocurrency for real-world transactions.

#### **Overall Results**



- 58% of those who own crypto selected longterm investment
- 24% said they plan to make purchases online and 12% plan to make in person purchases

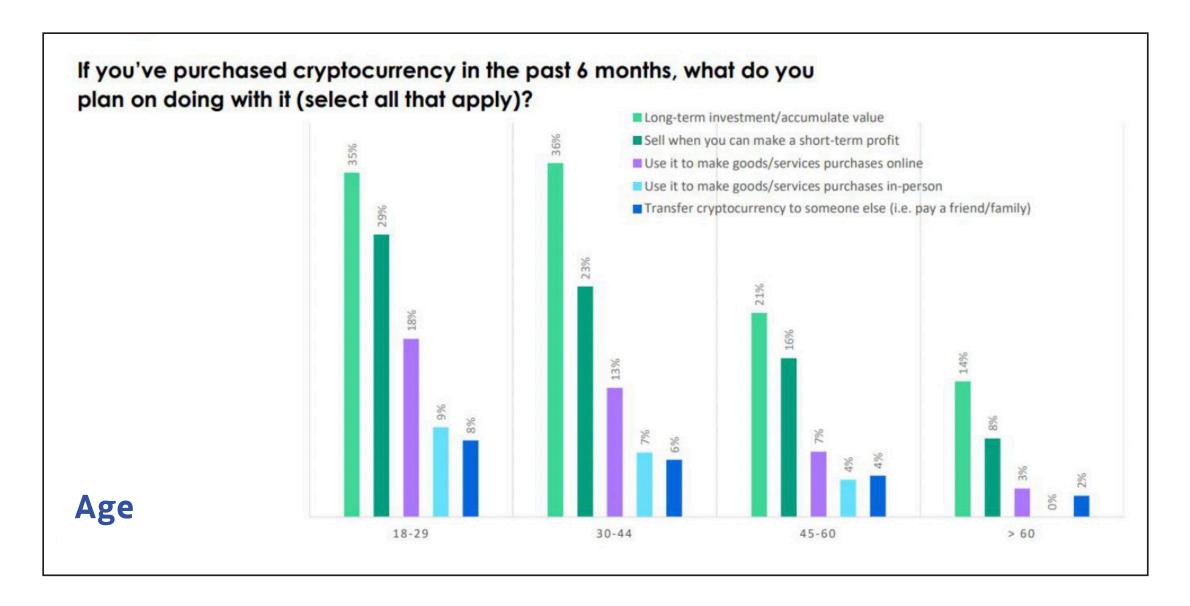


Source: https://publicdocs.bakkt.com/hubfs/collateral/Survey Crypto Exec Summary 090121.pdf

# The Effect of Age on Crypto Spending for Consumption

Age plays a significant role in shaping consumer behavior regarding cryptocurrency usage, particularly in consumption spending:

- Younger demographics (18-29 and 30-44) are the most likely to use crypto for purchases, with 18% of those aged 18-29 making online purchases and 13% of those aged 30-44 doing the same.
- The likelihood of using crypto for in-person purchases decreases with age, with 9% of those aged 18-29 making inperson purchases compared to only 4% for those above 60.
- Older users (45-60 and above 60) show significantly lower engagement in crypto consumption, with only 7% of those aged 45-60 and 3% of those above 60 making any type of crypto purchase.
- Short-term profit-taking is also higher among younger users, with 29% of those 18-29 and 23% of those aged 30-44 selling crypto for gains rather than spending it.



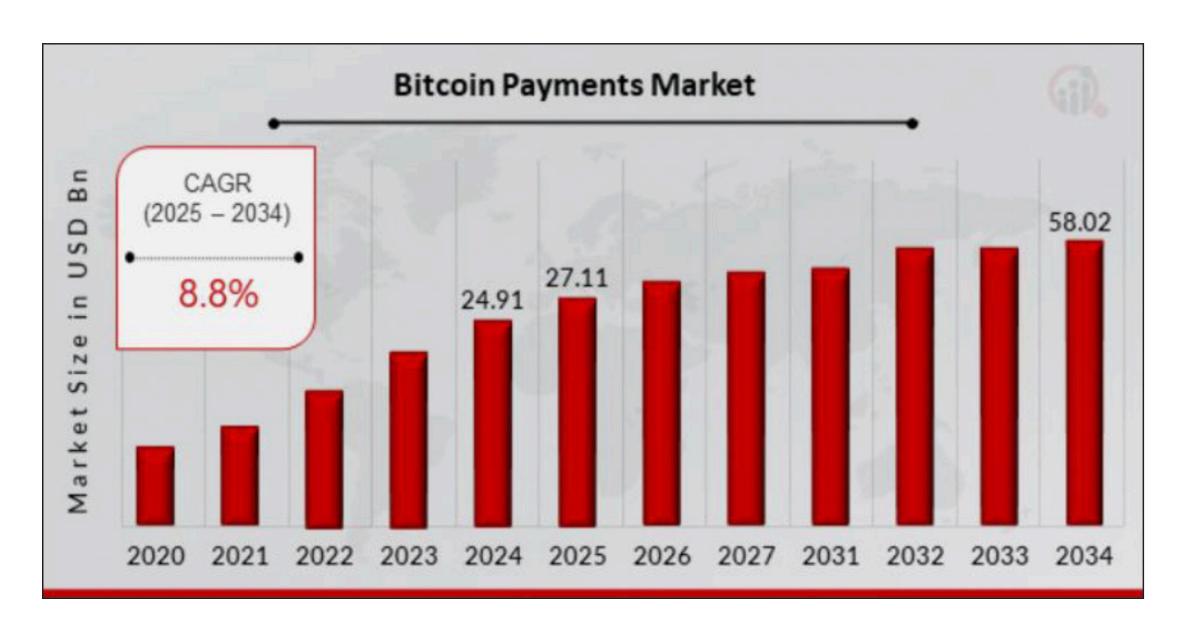
Source: https://publicdocs.bakkt.com/hubfs/collateral/Survey Crypto Exec Summary 090121.pdf

- Transferring crypto to others, such as friends and family, remains a minor use case across all age groups, with numbers below 10%.
- This analysis highlights that younger consumers are more likely to use cryptocurrency as a spending tool rather than just an investment vehicle. As this demographic matures and crypto adoption increases, the overall percentage of cryptocurrency used for consumption is expected to rise.

# Projected Growth in Crypto Payments and Transactions

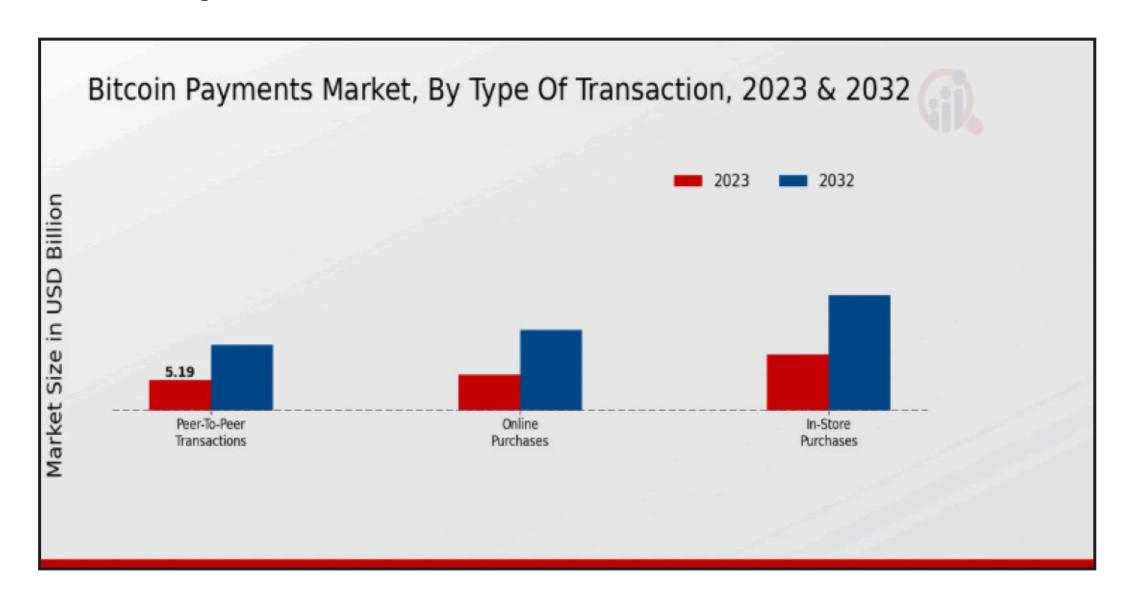
arket analysis suggests a significant growth trajectory for cryptocurrency transactions, particularly in retail and online purchases:

- Bitcoin Payments Market Growth: Projections indicate a compound annual growth rate (CAGR) of 8.8% from 2025 to 2034, suggesting increased adoption of Bitcoin for transactions beyond investments.
- Transaction Distribution: By 2032, peer-to-peer transactions, online purchases, and in-store purchases are all expected to rise significantly compared to 2023.
- Regional Variations: North America, Asia Pacific, and Europe are expected to lead in crypto payments adoption, while other regions will experience slower but steady growth



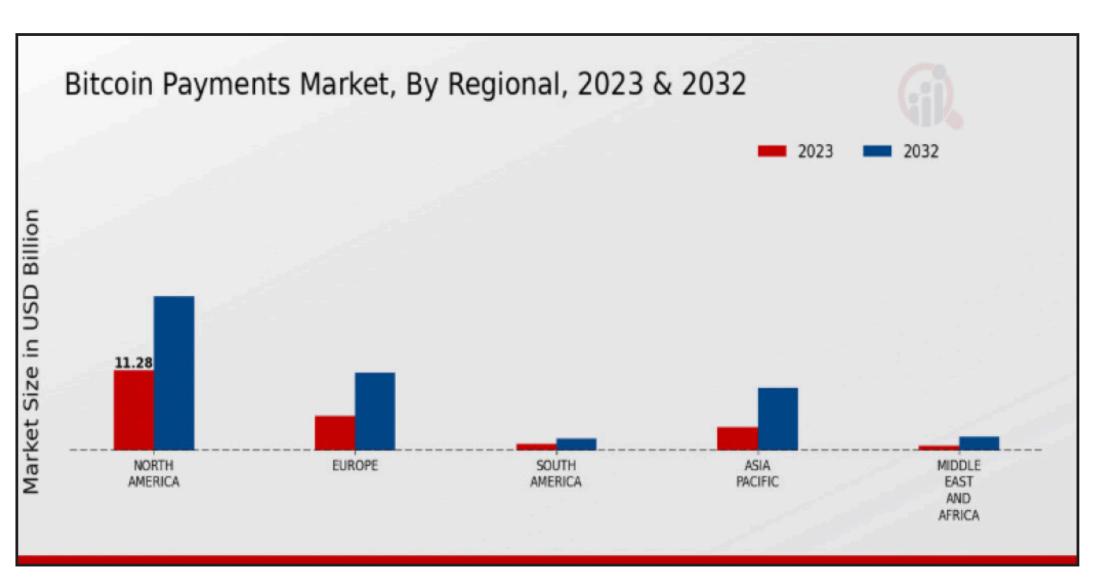
Source: Primary Research, Secondary Research, MRFR Database and Analyst Review

#### **Bitcoin Payments Market Drivers**



Source: Market Research Future. <a href="https://www.marketresearchfuture.com/reports/bitcoin-payments-market-24724">https://www.marketresearchfuture.com/reports/bitcoin-payments-market-24724</a>

#### **Bitcoin Payments Market Platform Insights**



### Market Study Conclusions

The analysis of historical data, consumer surveys, and market trends strongly suggests that cryptocurrency will continue to grow as a transactional medium, albeit at a measured pace.

- Short-term growth will be driven by increased integration of crypto payments in e-commerce and retail settings.
- Long-term growth will depend on financial infrastructure improvements, regulatory clarity, and technological advancements that reduce volatility and enhance ease of use.
- Consumer spending patterns indicate that crypto wealth impacts discretionary spending more than essential expenses, meaning its adoption in everyday transactions may lag behind its role as a digital asset.
- Higher-value crypto transactions are expected to grow, particularly for real estate and luxury goods, as confidence in crypto wealth stabilization increases.

In conclusion, while crypto payments are still in their early stages, evidence points to an expanding role in consumer transactions, particularly among younger demographics and emerging markets. Continued research and technological innovations will be key in shaping how cryptocurrency transitions from an investment tool to a mainstream spending method.

# Next Steps: Mathematical Approaches for Estimating Crypto Consumer Spending

n order to build a more robust analysis of customer spend and develop a strong revenue model, we can leverage several mathematical and machine learning techniques. These methods help model the effect of a fixed subscription fee and eventually determine the optimal price model for a crypto credit card, considering variable spending patterns and transaction fees:

#### 1. Time-Series Forecasting

- Utilize historical transaction data from blockchain networks and crypto payment processors.
- Apply ARIMA models or LSTM-based neural networks to predict future spending patterns.
- Adjust for economic factors like inflation and crypto market volatility.

#### 2. Regression-Based Estimation

• Use regression methods (e.g., XGR, random forest, etc.) to estimate spending based on income, crypto wealth, and market sentiment:

 $Spending = \beta_0 + \beta_1(CryptoWealth) + \beta_2(Income) + \beta_3(MarketVolatility) + \epsilon$ 

• This model helps in understanding the key drivers of crypto spending and optimizing revenue models.

#### 3. Monte Carlo Simulation

- Simulate consumer spending behaviors over time under different market conditions.
- Factor in gas fees, transaction fees, and different levels of crypto adoption.
- Use stochastic modeling to determine expected revenue from crypto credit card users.

#### 4. Market Basket Analysis (MBA)

- Apply association rule mining to blockchain transaction data to identify spending patterns.
- Determine which categories of goods and services are most frequently purchased with crypto.
- Use this data to optimize merchant partnerships and pricing structures.

#### 5. Optimization Modeling for Pricing Strategy

Define the problem mathematically:

- Let x be the average monthly spend using the crypto card.
- Let f be the fixed subscription fee.
- Let c be the card's operating cost, including transaction fees and gas fees.
- Revenue model:  $Profit = f + x \times r c$ , where is the transaction fee rate.
- Use reinforcement learning algorithms to dynamically adjust subscription pricing for maximum profitability.

### Conclusion

By applying these mathematical and machine learning techniques, we can create a more accurate and predictive model for estimating consumer spending behavior. This will help optimize the pricing strategy for a crypto-based credit card and enhance revenue projections. Understanding user behavior through data-driven methodologies will ensure that crypto transactions become an integral part of the evolving financial ecosystem.



Click Here for Deep Dive: Crypto User Spending Patterns, 2019-2024