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## THE IMPACT OF BLOCKCHAIN ON DIGITAL IDENTITY AND SECURITY

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### Анотація

*Комп'ютеризована особистість у сучасному світі стала основним компонентом онлайн-інтелекту. Як би там не було, звичайні системи адміністрування символів мають критичні недоліки — централізовані бази даних є цілями відвідування для кібератак, що призводить до великомасштабних витоків інформації. Блокчейн пропонує різноманітний підхід: замість того, щоб зберігати дані клієнта в єдиній базі даних, він дає людям можливість автономно контролювати свій характер. У цьому документі досліджуються цікаві моменти персональних механізмів на основі блокчейну, проблеми в їх реалізації та можливі майбутні вдосконалення в цій галузі.*

**Ключові слова:** цифрова ідентичність, блокчейн, безпека, децентралізація, криптографія, аутентифікація.

### Abstract

*Computerized personality has ended up a basic component of online intelligent in today's world. Be that as it may, conventional character administration frameworks come with critical drawbacks — centralized databases are visit targets for cyberattacks, driving to large-scale information breaches. Blockchain offers a diverse approach: rather than putting away client data in a single database, it empowers people to oversee their character autonomously. This paper investigates the points of interest of blockchain-based personality arrangements, challenges in their execution, and potential future improvements within the field.*

**Keywords:** advanced personality, blockchain, security, decentralization, cryptography, confirmation.

### Introduction

Most individuals do not think twice approximately entering individual data online. Whether logging into social media, making online buys, or getting to keeping money administrations, we continually depend on conventional character confirmation frameworks. But these frameworks have a major flaw — our delicate information is put away on centralized servers, making them an appealing target for cybercriminals.

Blockchain offers a profoundly distinctive approach to overseeing advanced character. Rather than giving over individual information to third parties, clients can store scrambled qualifications on a decentralized organize. This not as it were decreasing the chance of large-scale information breaches but too gives people more prominent control over their private data.

This paper looks at how blockchain can change computerized character administration, its benefits, the deterrents to widespread adoption, and what long term might hold.

### Research results

One of the most focal points of blockchain in personality administration is that it kills the require for middle people. Customarily, when verifying identity — whether for opening a bank account or getting to government services — users rely on organizations that store their information and confirm them when required. Blockchain-based character frameworks work in an unexpected way. They permit people to form self-sovereign characters (SSI), meaning they control their claim information without depending on a central specialist.

One of the major focal points of blockchain in advanced character is unchanging nature. Once recorded, information cannot be changed or erased, guaranteeing keenness and anticipating extortion. This is often especially valuable in zones such as managing an account, healthcare, and government administrations, where secure and irrefutable character verification is fundamental. For illustration, Estonia's advanced ID framework utilizes blockchain standards to empower citizens to get to government administrations securely.

In any case, executing blockchain-based personality arrangements isn't without challenges. Versatility remains a critical concern, as open blockchains frequently involvement moderate exchange speeds due to the agreement components they utilize. Also, administrative obstacles and changing universal information protection laws complicate the broad selection of blockchain character frameworks. There's moreover the issue of client selection, as people and organizations must adjust to unused verification strategies that vary from conventional login qualifications.

In spite of these deterrents, blockchain innovation proceeds to pick up footing as a solid arrangement for advanced character security. With continuous headways, it has the potential to rethink how character confirmation is dealt with all inclusive, making online intuitive more secure, productive, and user-centric.

### Conclusion

Blockchain presents a transformative move in advanced character administration, advertising upgraded security, decentralization, and client control over individual information. Whereas challenges such as versatility and direction must be tended to, the long-term benefits exceed these challenges. As blockchain appropriation increments, it has the potential to essentially make strides personality verification processes, reduce extortion, and upgrade information protection within the computerized world.

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