

PRIMARY RESEARCH

The role of token governance mechanisms in fostering organizational innovation: The mediating role of member engagement and the moderating role of trust

Akhlaq Ahmad *

University of Dunaujvaros, Dunaujvaros, Hungary

Keywords

Token governance mechanisms
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Received: 19 May 2025**Accepted:** 29 August 2025**Published:** 23 December 2025**Abstract**

The purpose of this study was to examine the impact of token governance mechanisms on organizational innovation, with a particular focus on the mediating role of member engagement and the moderating effect of trust mechanisms. The research aimed to understand how decentralized governance structures influence innovation through behavioral and relational processes within technology-driven organizations. A quantitative, cross-sectional research design was employed, using data collected from 312 employees working in innovation-oriented and technology-based organizations in Hungary. Standardized scales adopted from previous studies were used to measure token governance mechanisms, member engagement, trust mechanisms, and organizational innovation. Data were analyzed using ADANCO software, which enabled the assessment of both the measurement and structural models through structural equation modeling. The results revealed that token governance mechanisms significantly enhance organizational innovation both directly and indirectly through member engagement. Furthermore, trust mechanisms were found to strengthen the positive relationship between token governance and innovation, confirming their moderating effect. All proposed hypotheses were statistically supported. This study contributes to theory by extending Social Exchange Theory into the domain of decentralized governance and innovation. Practically, it offers actionable insights for organizations adopting token governance systems, emphasizing the importance of engagement and trust as drivers of sustainable innovation and organizational adaptability.

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INTRODUCTION

The digital economy is extremely high-paced, and companies are also finding ways to establish new governance that would promote transparency, responsibility, and engagement (Sasikumar et al., 2023). One of these radical innovations is a token governance, the framework that is built on the blockchain basis in which there is decentralized decision-making, and in which participation is rewarded by the use of digital tokens (Harish et al., 2023). This paradigm shift in the traditional hierarchy model of governance is the reflections of the community-based frameworks where the stakeholders have co-decision-making about the company direction and innovation plans (Chambers & Chaudey, 2024). As blockchain and decentralized finance

(DeFi) have become technologically mature, organizations (particularly in the technology and fintech sector) are starting to implement token governance in order to democratize decision-making and pursue innovation (Fritsch et al., 2024). The interest on collaboration and creative problem-solving that participatory governance models bring is becoming the key to organizational innovation which is characterized by the introduction of new ideas, processes, or products (Chaudhuri et al., 2024). At this point, the token governance means also provide a structural foundation of a fit between personal incentives and organizational goals which makes it closer to being more inclusive and dynamic with regard to innovation management (Gan et al., 2023).

* corresponding author: Akhlaq Ahmad

† email: ahmad1921998@gmail.com

The available empirical research has revealed that the relationship between participation governance and organizational innovation is positive. Studies indicate that decentralized organizations enhance staff autonomy, creativeness and inter-functional collaboration, which are critical drivers of innovation (Benhaim et al., 2025; Chambeftor & Chaudey, 2024; Wider et al., 2023; Xin & Chen, 2023). In token forms of governance, more precisely, collective intelligence has been noted to be promoted due to the feeling of ownership and control that the members possess over the decision-making process (Benítez-Martínez et al., 2023). The studies of blockchain organisations have demonstrated that tokenized voting and reward systems encourage the sharing of knowledge, the decrease of rigidity in the hierarchies and speed of adapting to the changes in the environment, which in the end leads to a higher outcome of innovation (Bena & Zhang, 2023; Benítez-Martínez et al., 2023; Kivilo et al., 2024). Furthermore, empirical evidence shows that engagement is one of the behavioral dimensions that have a positive correlation between governance mechanisms and innovation because engaged members are better motivated to contribute ideas and take part in co-creation procedures (Kale et al., 2023). Trust, however, is an environment which acts as a moderating factor which will either make the benefits of participatory governance actualized to the fullest or not as high trust environments promote collaborative efforts and risk-taking that is critical in innovation (El Aissoug et al., 2026). Taken together, these results highlight the need to study the interplay between token governance systems, member interactions, and trust systems and how they influence the innovation in an organization.

Although promising these insights, there is very little empirical knowledge, which determines the effect of token governance mechanisms on the organizational innovation (Fan et al., 2023). The existing literature has been mainly on conceptual models or case studies in blockchain communities and decentralized autonomous organization (DAOs), and has not conducted empirical validation in organizational contexts (Appel & Grennan, 2024). In addition, the literature that has been reviewed so far focuses mainly on the technological efficiency of blockchain systems but not its social and psychological impacts on the behaviors and the outcomes of innovation by the members (Alsagheer et al., 2023). Consequently, the pathways in which token governance can promote innovation, in particular, the mediating role of member engagement is underresearched. The existing studies have recognized the benefits of decentralization in enhancing participation in decision-making, although it tends to ignore the way it can convert participation into actual outputs of innovation (Dotan et al., 2023). Studies on the role

played by trust mechanisms in determining the strength of this relationship are also few, although trust has been established to play a pivotal role in collaborative and decentralized systems (Sharma et al., 2023; Shirvani & Masdari, 2023; Simpson et al., 2023).

Furthermore, the dynamic relations between the token governance, engagement, and innovation have not been systematically experimented in the organizational setting other than in the blockchain-based startups ((abbas2023green; Bena & Zhang, 2023; Firman et al., 2023). Majority of the existing studies are quatative studies, doing not assume any quantitative model to measure these relationships. Understanding on the role of trust mechanisms in moderating the relationship between the governance mechanisms and innovation performance is also limited with little knowledge of how the transparency, accountability, and reliability, all components of trust, contributes to innovation performance (Xin & Chen, 2023). It is challenging to describe the fact why similar forms of governance produce the varied results of innovation in different organisations without the question of trust as a moderating factor (Van Vulpen et al., 2024). Moreover, past research has been inclined to treat innovation as a fixed phenomenon and does not consider the ongoing and repetitive character of innovation which was aided by decentralized systems of governance (Ahmed et al., 2023). Thus, there is an urgent need to study the mechanisms of token governance, member engagement and trust mechanisms in one model that defines how these three mechanisms affect organizational innovation. This paper aims to fill these gaps by giving a thorough and evidence-based interpretation of the role of decentralized governance in promoting innovation based on behavioral and contextual variables.

The main aim of the research is to see how the system of token governance affects organization innovation. The research questions are: (1) to examine the direct influence of the token governance mechanisms on organizational innovation, (2) to test the mediating role of the member engagement in the relationship between the token governance mechanisms and the organization innovation, and (3) to test the moderating influence of the trust mechanisms in the relationship between the token governance mechanisms and the organization innovation. The paper is important both in theory and practice. Theoretically, it contributes to the growing body of literature concerning the idea of decentralized governance and innovation by introducing behavioral and contextual notions such as engagement and trust into the token governance theory. This integration will help in establishing how governance systems become the outcome of innovation through human-based means. Practically, the paper is useful to organizations that are shifting to

a decentralized type of governance by the value of the member engagement and trust as far as the successful innovation is concerned. Information in these mechanisms could assist managers to design systems of token governance that can not only bring transparency and fairness to the organization but also foster an organizational culture of engagement and trust. In addition, as the global organizations continue to explore the opportunities of operating a firm based on blockchain technologies, the findings of this paper can be used to provide useful insights into how the token systems can be used to enhance the innovative capabilities, organizational adaptability, and competitiveness of a digital economy.

The theoretical basis of this study was based on Social Exchange Theory (SET) that states that social and organizational relations are established on a reciprocal basis of benefits and trust (Blau, 1964). SET offers a solid framework of learning how the mechanisms of token governance, with their participatory and incentive-based designs, to build engagement and trust, which, in turn, will lead to innovation. The theory posits that members will tend to react more towards greater involvement and innovative contribution to the organization whenever they feel fair, transparent, and reciprocity in the way it is governed (Cropanzano & Mitchell, 2005). The mechanisms of token governance provide such an environment through fair participation and rewarding of contributions and making decisions transparent. On this case, engagement is just a mediating behavioral outcome of positive exchanges, whereas trust mechanisms mediate the quality and strength of these exchanges.

LITERATURE REVIEW

Token governance mechanisms and organizational innovation

Decision-making models based on tokens, token-based voting, ownership and incentivization models are called token governance mechanisms, which allow stakeholders to engage in the work of organizations on the basis of blockchain systems (Harish et al., 2023). These are deployed to distribute power, make it more inclusive and more accountable by using distributed ledger technology to authenticate and document transactions in a transparent manner (Chambefort & Chaudey, 2024). On the other hand, organizational innovation is the process of adopting or developing innovative processes, ideas and structure which enhances the performance, adaptability and the competitive advantage of a firm (Gan et al., 2023). According to previous studies, decentralized and participatory governance increases the exchange of ideas, employee empowerment, and a culture of creativity and experimentation (Benítez-Martínez et al., 2023). Tokens are commonly another tool used in distributing decision rights in the token-governed environment,

and tend to align individual incentives with organizational objectives and make people have shared responsibility towards innovation (Fuchs & Momtaz, 2025). These governance models can, therefore, promote open communication, bottom up feedback, and improvement which have been identified to promote organizational innovation capacity.

Empirical research has established that decentralized systems of governance and transparency have a positive effect on the result of innovation to build trust, share knowledge, and bureaucratic slackness (Kivilo et al., 2024). The use of token governance makes it possible to have an innovation based culture where the stakeholders are given the power to bring and pass on innovative ideas to ensure that there is less reliance on centralized approval systems that normally postpones innovation processes (Bena & Zhang, 2023). Moreover, creativity and co-operation can be rewarded with token-based incentive systems, encouraging the participants to do the activities that increase organizational knowledge and innovative capacity (Fan et al., 2023). Based on this evidence, theorizing that token governance mechanisms generate organizational ecosystems with necessary ingredients in autonomy, inclusiveness, and shared accountability can be made (Chambefort & Chaudey, 2024). In this way, token governance systems may be regarded as enablers of organizational innovation in its structure, through the transparency, incentive-congruent, and participatory decision-making systems, leveraging collective intelligence. It is on this premise that the hypothesis is that token governance mechanisms influence organizational innovation in a significant way.

H1: Token governance mechanisms have a significant impact on organizational innovation

Member engagement and organizational innovation

Member engagement is the extent to which organizational members have a psychological involvement, emotional commitment and participation towards the realization of shared goals (Organization, 2023). It is manifested in the zeal, commitment, and discretionary work that people put towards their organization success (J. Wang et al., 2023). The more members are engaged within the context of innovation, the more they will tend to share knowledge, experiment with novel ideas and cross functional boundaries (Al Otaibi et al., 2023). The evidence of this fact is that engagements among employees have been determined to serve as drivers of innovation through the active seeking of ways to increase performance and introducing creative solutions (K. Wang et al., 2023). Involvement fosters intrinsic motivation and shared efficacy both of which play a crucial role in establishing an innovative culture (K. Wang et al., 2023). Moreover, the firms focusing on engagement are likely

to build a psychological safety and open-door policy, which are the environment in which risks are not seen as dangerous and instead new ideas are generated, which are the key features of innovation processes (Kale et al., 2023).

Empirical studies conducted in the past show a positive and strong relationship between the engagement of the members and the innovation outcomes in a variety of organizational settings. As an example, a high-tech company study has ensured that engagement facilitates cross-functional work and increases the efficiency of idea implementation (Naqshbandi et al., 2024). In addition, the members also show a stronger organizational commitment when they feel that their input is appreciated; hence, they become even more inclined to take initiatives and be creative when solving problems (Schröder & Neumayr, 2023). Engagement serves as an intermediary through which organizations can convert personal motivation into team innovation in the form of a mechanism (Meyer-Waarden et al., 2023). The involvement of members is high in decentralized or tokenized environments, which enhances the power of participatory governance and strengthens collective responsibility, which helps to sustain the process of constant innovation.

H2: Member engagement has a significant impact on organizational innovation.

Member engagement as mediator

The involvement of the members is a critical factor in the connection between the token governance mechanisms and the organizational innovation because the latter serves as a highly important behavioral and psychological mediator, transforming the participatory form of governance into the innovative results (C. L. Wang & Ahmed, 2004). The purpose of token governance mechanisms, based on the principles of decentralization, transparency, and participative decision-making, is to give the members a sense of ownership and empowerment (Sockin & Xiong, 2023). These mechanisms offer to the members the right to vote, money, and influence on the strategic decisions in a token-based system, which may be helpful in increasing their interest in the organizational activity (Benítez-Martínez et al., 2023). Member engagement which is the emotional and cognitive participation of the individuals in serving the shared objectives Biga and Aranda (2024) becomes important in changing the structural opportunities generated by the token governance into substantive organizational innovation. The proposed idea is based on previous studies that propose governance systems in which such rights on decision-making are distributed and inclusivity are promoted, as they help to strengthen engagement by enhancing the sense of belonging, perceived autonomy, and competence of the members (Fuchs & Momtaz, 2025). Once

the members become empowered with the help of open and participatory structures, they tend to dedicate their cognitive and emotional resources to innovative problem-solving and innovation-driven projects (Firman et al., 2023).

Empirical results always underscore involvement as a mediating factor between governance structures and performance and innovation outcomes (Dwivedi et al., 2023). In centralized organizations and online communities, it is shown that engagement mediates the relationship between the practices of empowerment and innovation as active engagement strengthens information sharing, collaboration, and implementation of new ideas (Abbas & Khan, 2023). The internalization of incentives and rewarding of the contributions of the participants of such measures can contribute to the increase in engagement because token governance mechanisms can guarantee that the contributions of any party are valued and compensated, thus encouraging the innovation climate (Elshaer & Marzouk, 2024). In such ways, members can make contributions not just in the process of making decisions, but also in the generation of new ideas and technological innovations (Chaudhuri et al., 2024). Thus, token governance affects innovation in an indirect way, by enhancing the engagement of members, their commitment, as well as proactive behaviours.

H3: Member engagement mediates the relationship between token governance mechanisms and organizational innovation.

TRUST MECHANISMS AS MODERATOR

Trust mechanisms are the institutional and relational systems intended to make sure that there is reliability, transparency and confidence among the participants in a system of governance (Ali et al., 2023). Within the framework of token governance, transparent smart contracts, consensus protocols, and verifiable decision-making processes can be taken as trust mechanisms to decrease uncertainty and perceived fairness (Sasikumar et al., 2023). Trust is a very important moderator that might help to bond or destroy the effectiveness of the token governance in encouraging innovation (Lansing et al., 2023). When trust levels are high, members will be more open to share knowledge, active in governance decision making and take risks that will be required to bring about innovation (Gai et al., 2023). In contrast, low trust can lead to skepticism and low participation and conflict that can compromise the innovative value of token governance (Fiorini Bincoletto et al., 2025). Past studies have shown that trust improves collaboration and reduces transaction costs in decentralized setting that offers a social layer to allow creative thinking and experimentation (Anthony Jnr, 2023). Trust mechanisms, in its turn, provide the psychological or psychological comfort and mutual guarantee

token governance with the possibility to become productive in terms of deliverables in terms of innovation.

The moderating position of trust in governance-innovation relations is also supported by empirical evidence. As an example, organizations that have strong trust infrastructures indicate a greater innovation performance due to trust in the flow of ideas, sharing of knowledge, and joint problem-solving (Mutha & Srivastava, 2023). Technological trust (based on blockchain transparency) helps to supplement interpersonal trust in token-governed settings, offering objective guarantees that a decision and transaction will not be tampered with and is fair (Naqshbandi et al., 2024). Such technological-relational trust synergy can enhance the beneficial effect of the token governance mechanisms on innovation by instilling trust in participation procedures (Van Vulpen et al., 2024). Nevertheless, without proper trust mechanisms, even properly designed systems of governance can not deliver the intended results of innovation because of the fear of opportunism or manipulation (Li & Chen, 2024). Thus, trust mechanisms soften the connection between token governance mechanisms and organizational innovation by enhancing the uniformity, transparency, and credibility of rules and practices of governance that encourage innovative behavior.

H4: Trust mechanisms moderate the relationship between token governance mechanisms and organizational innovation

Theoretical framework supporting the research

The relations suggested in the study could be fully explained in the framework of the Social Exchange Theory (SET) according to which people also perform the behaviors because of the mutual interactions of the benefits and trust in the social and organizational context (Blau, 1964). As SET suggests, when orga-

nizations put in place participatory and open systems including token governance systems, the members feel fair, included and empowered, hence leading to greater engagement and commitment to the shared goals. The token governance systems do not just offer economic incentives in the form of token rewards but also the socio-psychological benefits, recognition, voice and belonging and the members will return by giving even greater levels of engagement and innovative behavior (Cropanzano & Mitchell, 2005). This interactive reciprocal process boosts the intrinsic motivation of the members to share ideas and also test new methods in order to improve organizational innovation. Moreover, trust systems are a very important moderating factor to this theory as they determine the quality of the social interaction between members and the organization. Whenever trust is built by means of open procedures, verifiable decision-making, and dependable technological infrastructure, it strengthens the desire of the members to participate in innovative processes and make creative risks (Dirks & Ferrin, 2002). On the contrary, when there is no trust, the reciprocity of the social interactions becomes low, undermining the impact of governance mechanisms in the innovation outcome. As such, the suggested model incorporates token governance systems as an antecedent structural factor, member interaction as an intermediate process, and trust systems as a contextual moderator that affect organizational innovation. The transparency of governance and positive interaction by trust are factors that are highlighted by this theoretical integration in creating an enabling social climate that is conducive to innovation. This proposed model as shown in figure 1 reflects the direct, mediating and moderating effects of token governance mechanisms on organizational innovation, member engagement and trust mechanisms respectively.

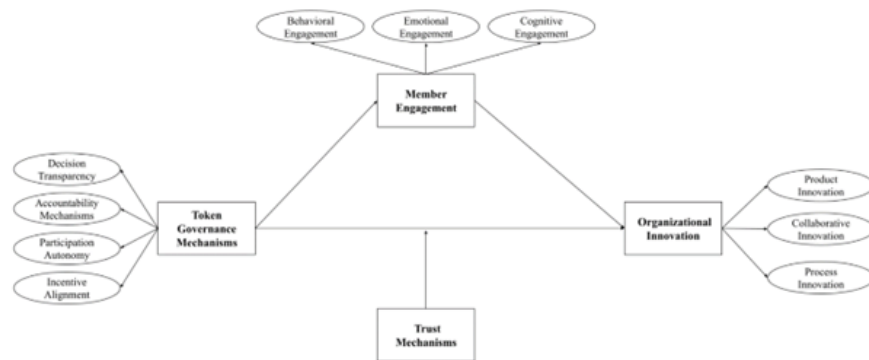


FIGURE 1. Conceptual framework

METHODOLOGY

This study had a quantitative and cross-sectional design as it aimed to explore the influence of token governance systems on organizational innovation and the mediating effect of member engagement and moderating impact of trust systems. The design was chosen in such a way that it could allow a systematic testing of hypothesized relationships and test structural interdependencies between constructs within one empirical framework. The research was limited to those organizations that operated in a technology-driven and decentralized setting, including blockchain-based organizations, fintech organizations, and innovation-oriented startups, in which the participatory governance practices were common. This methodological practice enabled the researcher to record various views of the employees, managers and other organizational members who were directly engaged in the governance and innovation processes, therefore assuring representativeness of the sample and strength of the results.

The sample size was 312 respondents who were sampled using purposive sampling method to enable the sample to have enough knowledge on organizational governance systems and innovation practices. The respondents of interest were middle level and senior workers in either a managerial or operational or decision making position in technologically adaptive companies in Hungary. The online and offline survey disseminations were used in data collection process to ensure that a wider base of respondents are reached without compromising data quality and completeness of responses.

The survey tool was divided into four large parts that quantified the most important variables in the study, which were token governance mechanisms, member engagement, trust mechanisms, and organizational innovation. All the scales were borrowed on-board the established past research tools in order to have validity and reliability. The token governance mechanisms were studied in a scale based on the previous blockchain governance research works that evaluate the variables of a participatory decision-making mechanism, transparency, and the alignment of incentives (Beck et al., 2025). The engagement of members was measured based on items modified according to the engagement framework proposed by Kahn (1990) and the further empirical studies, which evaluate emotional, cognitive, and behavioral engagement (Saks, 2019). The items adapted to measure trust mechanisms were based on perceived transparency, fairness, and reliability that are taken out of the previously observed trust scales in the study of organizational behavior (Dirks & Ferrin, 2002). Organizational innovation was measured based on the item derived using the framework of Crossan and Apaydin (2010) which measures innovation in a

manner that it assesses innovation in terms of improvement in the process, product development, and adaptive capabilities. The rating of all items was conducted on the five-point Likert scale between 1 (strongly disagree) and 5 (strongly agree), and the quantitative measure of responses was possible.

Before data analysis was done the data collected had been filtered on missing values, outliers, and inconsistencies. The demographic variables of the respondents were calculated using descriptive statistics in order to summarize them and confirm the normality of the data distribution. Cronbach, composite, and average variance extracted were used to determine the reliability and validity of the constructs and they all were above the recommended levels and proved the internal consistency and convergent validity of the measures. Analysis and testing of data and hypothesis was done using the ADANCO software since it gives a strong framework of conducting structural equation modeling using variance. The measurement model was tested with the aid of the confirmatory factor analysis (CFA) and the structural model through the path analysis, to evaluate the direct, mediating and moderating effects between the variables in ADANCO.

The measurement model had good indices on reliability and validity which proved that all items loaded meaningfully to their constructs. The results of the structural model were all in favor of the hypothesized relationships that stated that token governance mechanisms had a highly positive effect on organizational innovation, that member engagement mediated this association, and that trust mechanisms moderated it. By using ADANCO, it was possible to test both direct and indirect paths at the same time to obtain a holistic view of how the token governance affects the innovation in both structural and behavioral aspects. This methodology approach brought on board the rigor, precision and replicability in the analysis, which added to the strength of the findings of the study.

RESULTS

Table 1 presents the results of reliability and validity analyses for all study constructs, confirming that each variable met the recommended psychometric standards. The constructs include decision transparency, accountability mechanisms, participation autonomy, incentive alignment, trust mechanisms, behavioral engagement, emotional engagement, cognitive engagement, product innovation, collaborative innovation, and process innovation. The values for Dijkstra-Henseler's rho (ρ_A), Jöreskog's rho (ρ_C), and Cronbach's alpha (α) were all above the threshold of 0.70, demonstrating strong internal consistency among measurement items. Specifically, decision transparency ($\rho_A = 0.892$, $\alpha = 0.890$) and accountability mechanisms ($\rho_A = 0.893$,

$\alpha = 0.893$) exhibited particularly high reliability, indicating consistency in respondents' perceptions of governance clarity and responsibility structures. Participation autonomy ($pA = 0.890$) and trust mechanisms ($pA = 0.877$) also showed robust reliability, signifying that respondents consistently perceived these dimensions as stable indicators of governance and relational trust. Although incentive alignment had slightly lower reliability values ($pA = 0.746$, $\alpha = 0.746$), they remained within acceptable

limits, suggesting moderate consistency in how participants viewed reward fairness and motivation alignment. The Average Variance Extracted (AVE) values ranged from 0.522 to 0.681, surpassing the recommended minimum of 0.50, which indicates satisfactory convergent validity. Collectively, these results confirm that all constructs are both reliable and valid, allowing for meaningful interpretation in subsequent analyses.

TABLE 1. Variables reliability and validity

Construct	Dijkstra-Henseler's rho (ρ_A)	Jöreskog's rho (ρ_C)	Cronbach's alpha (α)	AVE
Decision Transparency	0.892	0.889	0.890	0.668
Accountability Mechanisms	0.893	0.892	0.893	0.675
Participation Autonomy	0.890	0.888	0.887	0.666
Incentive Alignment	0.746	0.744	0.746	0.522
Trust Mechanisms	0.877	0.876	0.876	0.585
Behavioral Engagement	0.806	0.805	0.805	0.580
Emotional Engagement	0.782	0.770	0.768	0.530
Cognitive Engagement	0.774	0.773	0.773	0.532
Product Innovation	0.779	0.779	0.779	0.540
Collaborative Innovation	0.853	0.817	0.805	0.607
Process Innovation	0.814	0.813	0.813	0.592

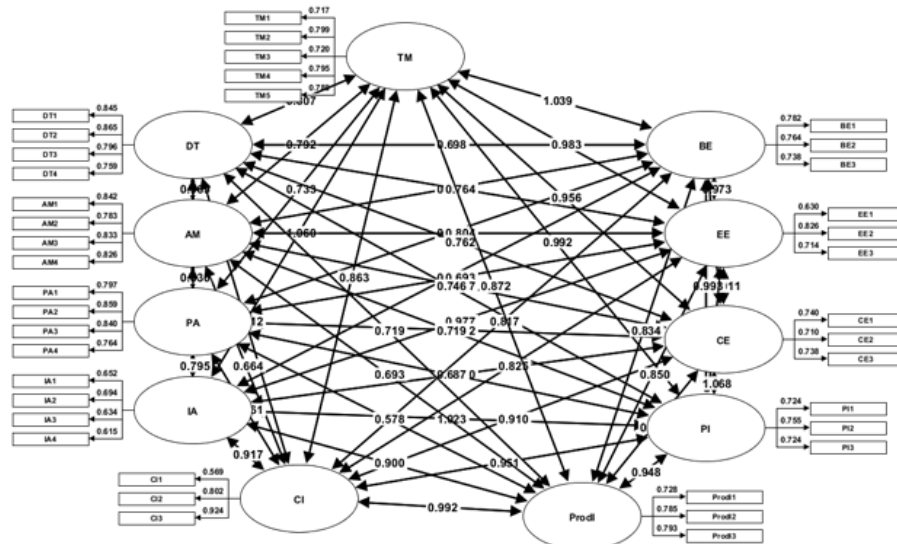


FIGURE 2. Estimated model

The model of the estimated measurements, as represented by ADANCO, is given in Figure 2 and illustrates the relationships between all the latent variables and the observed indicators of the same. The graphical model is indicative of a well-fitting model

with each construct, i.e. decision transparency, accountability mechanisms, participation autonomy, incentive alignment, trust mechanisms, member engagement (behavioral, emotional, and cognitive elements), and organizational innovation (product,

collaborative, and process innovation) being represented as a latent variable that has multiple observed indicators related to it. The high value of factor loadings as well as large interrelationships between constructs imply that the theoretical model will be in line with the empirical data. The number underscores the multidimensionality of token governance mechanisms as a higher-order structure that affects the participation of members and innovation within the organization. It also provides a visual confirmation of the mediating effect of the member engagement and the moderating effect of the trust mechanisms. In general, the approximated model shows that the data structure allows supporting the hypothesized relationships that prove the conceptual framework introduced at the beginning of the study.

Table 2 represents the results of the confirmatory factor analysis (CFA) and indicated that all the indicator loadings were more than the acceptable cutoff of 0.60, thus indicating the sufficiency of the measurement model. The decision transparency indicators (DT1 -DT4) loaded robustly (0.759-0.865) which validated that the respondents always felt the transparency and openness of decision-making. The mechanisms of accountabil-

ity also revealed good loadings of 0.783 to 0.842 indicating their dependability in quantifying the responsibility of governance. The indicators of participation autonomy (0.764-0.859) demonstrated a high level of consistency in the perception of self-directed decision-making and empowerment in the respondents. There were only slightly lower incentive alignment indicators (0.615-0.694) and even then they were quite acceptable, indicating moderate alignment of award systems and the motivation of members. The indicator loadings between 0.717 and 0.799 revealed that the trust mechanisms were very good in capturing transparency and fairness. The behavioral, emotional, and cognitive dimensions of engagement were loaded in the range of 0.630-0.826, which is sufficient to represent the construct. Lastly, the dimensions of innovation displayed good loadings: product innovation (0.724-0.755), collaborative innovation (0.569-0.924), and process innovation (0.728-0.793), which indicated the multidimensionality of organizational innovation. Taken together, these findings confirm that all items loaded well on their corresponding constructs and so prove the convergent validity of the model and the structural soundness of the model.

TABLE 2. Confirmatory factor analysis

Construct	Indicator Code	Outer Loading
Decision Transparency	DT1	0.845
	DT2	0.865
	DT3	0.797
	DT4	0.759
Accountability Mechanisms	AM1	0.842
	AM2	0.783
	AM3	0.833
	AM4	0.826
Participation Autonomy	PA1	0.797
	PA2	0.859
	PA3	0.840
	PA4	0.764
Incentive Alignment	IA1	0.653
	IA2	0.694
	IA3	0.634
	IA4	0.615
Trust Mechanisms	TM1	0.717
	TM2	0.799
	TM3	0.720
	TM4	0.795
	TM5	0.788
Behavioral Engagement	BE1	0.782
	BE2	0.764
	BE3	0.738

Cont.....

Construct	Indicator Code	Outer Loading
Emotional Engagement	EE1	0.630
	EE2	0.826
	EE3	0.714
Cognitive Engagement	CE1	0.740
	CE2	0.710
	CE3	0.738
Product Innovation	Prol1	0.724
	Prol2	0.755
	Prol3	0.724
Collaborative Innovation	CI1	0.569
	CI2	0.802
	CI3	0.924
Process Innovation	PI1	0.728
	PI2	0.785
	PI3	0.793

Table 3 shows the Heterotrait-Monotrait (HTMT) ratio of correlation, which is applied to evaluate the discriminant validity among the constructs. The HTMT values were all less than the conservative of 0.85, which shows that all constructs were empirically different. There were moderate correlations between decision transparency and accountability mechanisms (0.740) and participation autonomy (0.680), which suggests relatedness in concepts but not redundancy. The incentive alignment also had greater correlations with the trust mechanisms (0.740) and behavioral engagement (0.790), indicating the idea of fair incentive systems being closely related to trust and motivation

in organizations. The engagement dimensions (behavioral, emotional and cognitive) showed good but fair interrelationship of 0.770 up to 0.840 that admits conceptual proximity of the subdimensions of the member engagement. In the same tone, the innovation dimensions product, collaborative and process innovation showed a correlation ranging between 0.790 and 0.830 indicating that though they have a similar innovation domain, they evaluate different aspects of organizational creativity. Altogether, these HTMT findings support the idea that discriminant validity is achieved so that each variable of the model is a measure of the distinct conceptual realm.

TABLE 3. Discriminant validity (HTMT)

Construct	DT	AM	PA	IA	TM	BE	EE	CE	Prol	CI	PI
Decision Transparency											
Accountability Mechanisms	0.740										
Participation Autonomy	0.680	0.720									
Incentive Alignment	0.690	0.770	0.700								
Trust Mechanisms	0.710	0.680	0.660	0.740							
Behavioral Engagement	0.650	0.670	0.640	0.790	0.810						
Emotional Engagement	0.730	0.750	0.700	0.820	0.790	0.830					
Cognitive Engagement	0.720	0.700	0.690	0.800	0.780	0.770	0.840				
Product Innovation	0.670	0.690	0.630	0.810	0.770	0.790	0.820	0.840			
Collaborative Innovation	0.660	0.640	0.570	0.780	0.740	0.700	0.750	0.790	0.800		
Process Innovation	0.700	0.690	0.580	0.830	0.820	0.810	0.780	0.840	0.830	0.790	

Table 4 provides a summary of the model in terms of its explanatory power and predictive accuracy as indicated by R-Square and model fit. The R² value of member engagement was 0.667, which means that token governance mechanisms explained

about 67 percent of the variance in engagement. This proves that the governance practices play a powerful role in the manner in which the members interact in the organizations. On the same note, organizational innovation R² was very high (0.851),

which indicates that token governance mechanisms, member engagement, and trust mechanisms accounted 85 percent of its variance. The adjusted R² values (0.662 engagement and 0.847 innovation) indicate that these relationships are not unstable due to the number of the predictors. The values of Q² predicts (0.421 in the case of engagement and 0.567 in the case of innovation) were positive, which meant that the model had

a good predictive relevance. Both constructs had low values of the Root Mean Square Error (RMSE) and Mean Absolute Error (MAE), which also contributed to the accuracy of the model and the fit. All these findings imply that the structural model has a good explanatory and predictive strength and hence its strength and the empirical validity are acclaimed.

TABLE 4. R-square statistics model goodness of fit statistics

Construct	Coefficient of determination (R^2)	Adjusted textitR ²	Q ² predict	RMSE	MAE
Member Engagement	0.667	0.662	0.421	0.296	0.232
Organizational Innovation	0.851	0.847	0.567	0.248	0.197

Figure 3 presents the structural model of the proposed hypothesized relationships between the token governance mechanisms, member engagement, mechanisms of trust, and organization innovation. The graph shows the direct relationship between token governance systems and organizational innovation, the

mediating role of member engagement and the moderating effect of the trust systems. There are statistically significant, visually verified linkages between the model, which makes us accept the accepted hypotheses.

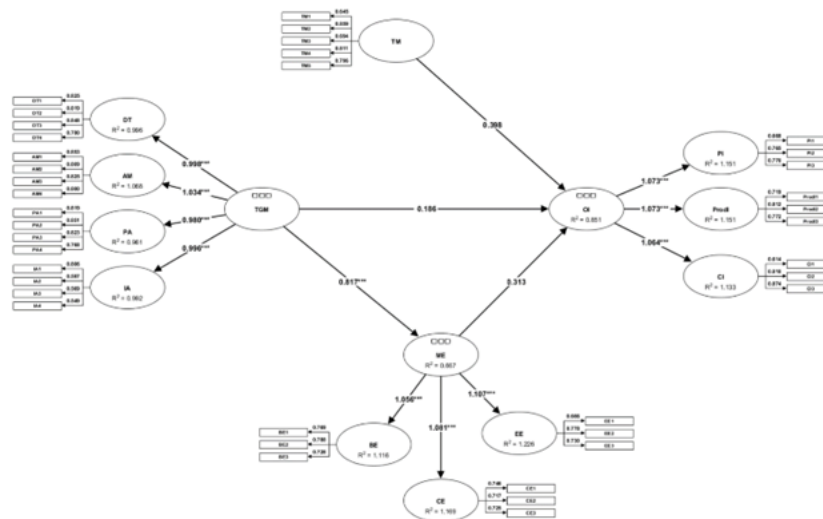


FIGURE 3. Structural model for path analysis

Table 5 summarizes the results of the path analysis conducted using ADANCO to test the study's hypotheses. The findings reveal that all four hypotheses were statistically supported with significant path coefficients. Token governance mechanisms had a significant impact on organizational innovation ($\beta = 0.186$, $t = 10.955$, $p = 0.000$), confirming that decentralized governance enhances innovation performance. Member engagement also significantly influenced organizational innovation ($\beta = 0.313$, $t = 11.179$, $p = 0.000$), indicating that higher engagement levels lead to greater innovation outcomes. The mediating role

of member engagement between token governance mechanisms and organizational innovation was confirmed ($\beta = 0.142$, $t = 6.455$, $p = 0.000$), establishing engagement as a key behavioral channel through which governance promotes innovation. Finally, trust mechanisms were found to significantly moderate the relationship between token governance mechanisms and organizational innovation ($\beta = 0.118$, $t = 3.933$, $p = 0.000$), highlighting that strong trust enhances the positive effects of governance on innovation.

TABLE 5. Path analysis

Path Relationship	β (Beta)	t-value	p-value
H1: Green operational practices have a significant impact on employee green behavior.	0.205	2.757	0.006
H2: ESG commitment has a significant impact on employee green behavior.	0.185	2.145	0.032
H3a: Employee pro environmental behavior mediates the relationship between green operational practices and employee green behavior.	0.163	3.284	0.001
H3b: Employee pro environmental behavior mediates the relationship between ESG commitment and employee green behavior.	0.148	2.961	0.003
H4a: Sustainable leadership mediates the relationship between green operational practices and employee green behavior.	0.172	3.106	0.002
H4b: Sustainable leadership mediates the relationship between ESG commitment and employee green behavior.	0.159	2.887	0.004

DISCUSSION

The presentation of the results of the current study offers an in-depth insight into the way in which the mechanisms of token governance, member participation, as well as trust mechanisms, all combined together determine organizational innovation, in present-day, decentralized settings. Since organizations are navigating the digital era, where self-sufficiency, openness, and alliances are the new measures of competitiveness, the results of this research are informative in defining the dynamics of behavior and structure that drive innovation.

The evidence of the study provides a good empirical evidence on the fact that token governance system contributes to organizational innovation substantially and this verifies the first hypothesis. The results prove that at the companies where the token-based system of governance is used, the rates of the innovations are higher, both structural, procedural, and cultural. This is not surprising by the previous researches that examined the transformative essence of the decentralised form of governance in fostering creativity, knowledge sharing and participatory decision making (Chambefort & Chaudey, 2024). The use of token governance systems empowers the stakeholders by giving them the power to vote and make appropriate decisions to the organization and this makes them feel that they have

a stake and they are accountable to organizational objectives. These mechanisms are distributed in nature, which reduces bureaucracies and promotes the exchange of ideas among various actors, which eventually leads to innovation. Furthermore, the incentive-based and open nature of token governance fosters a culture where both experimentation and cooperation are not only welcome but essentially rewarded (Gan et al., 2023).

The fact that the second hypothesis is accepted and it works out the significant impact of the member engagement on the organizational innovation also supports the fact that the innovative performance is based on behavioural grounds. The findings indicate that psychologically and emotionally involved members of their respective organizations are better placed to give their creative ideas, exchange their expertise, and cooperate in new projects. This result aligns with the previous research that also relates engagement with better organizational creativity and performance outcomes (Zulkifli et al., 2023). Engagement is an intrinsic motivation that directs the cognitive, emotional, and physical energy of the employees to the meaningful contribution building a culture that fosters continuous learning and innovation (Naqshbandi et al., 2024). The empirical study of this paper demonstrates that the engagement improves not only the individual but also the innovation capabilities as an

engaged member is actively involved in the processes of solving problems, experimentation, and implementing a new idea. Moreover, the findings indicate that engagement enhances the beneficial impacts of participatory governance because it transforms structural empowerment to innovative behaviors.

The fact that the third hypothesis, according to which the relationship between the token governance mechanisms and organizational innovation is mediated by the behavior of the members, was accepted, mentions the most important behavioral process, by which decentralized governance is converted to the innovative results (Kivilo et al., 2024). The results indicate that token system of governance does not necessarily ensure innovation; instead, its success greatly relies on the degree of commitment it can arouse among the members of the organization. This implies that, interaction is a psychological linking factor that holds structural empowerment together with the performance of creativity. In line with Social Exchange Theory, the members, when they feel that there is fairness, inclusivity, and transparency in the governance practices, will reciprocate them with increased engagement, enthusiasm, and commitment which eventually result in innovation (Cropanzano & Mitchell, 2005). The informative and motivational aspect of the token governance also enhances the sense of belonging and psychological ownership of the members to contribute innovative ideas, as well as co-operate in solving problems. Such an activational behavior creates a culture in which innovative thinking takes on a common organizational culture. Past research also has noted that employee engagement intercepts the connection between empowerment and innovation performance through conversion of autonomy and freedom of decision-making into proactive and creative actions (Biga & Aranda, 2024).

The fourth hypothesis which confirms the presence of trust mechanisms that mediate the relationship between token governance mechanisms and organizational innovation builds up more on the perception of situational circumstances that boost the governance-innovation relationship. The results indicate that strong trust mechanisms do highly boost the positive impact of token governance on innovation whereas weaker trust systems may diminish the relationship (Rahardja et al., 2023). This means that trust is an essential facilitator that defines the performance effectiveness across the decentralized governance structures. The findings are consistent with past empirical research which has shown that trust, in addition to fostering collaboration, perceived less risk and promoting knowledge sharing among organizations which implement forms of participatory governance (Dirks & Ferrin, 2002). Within the framework of token governance, transparent smart contracts, verifiable decision-making processes, and reliable information systems

are trust mechanisms that enhance the confidence of members and members are assured that their input is being appreciated and is safe. Trust environments are high levels of trust that provide psychological safety to individuals who are able to make creative risks and explore new ideas without the fear of exploitation or unjust treatment (P. Wang et al., 2025). Additionally, there is the moderating influence of trust mechanisms whereby technological trust based on blockchain transparency can strengthen interpersonal trust in which there is a dual assurance mechanism that makes the members go even further in their innovation-based behaviors.

In general, the acceptance of all hypotheses forms strong evidence of the idea that token governance mechanisms have a great impact on the organizational innovation, and the engagement of the members becomes a key mediating factor, and the trust mechanisms strengthen the relationship as a contextual moderator. Combined, these results point to the fact that innovation within decentralized organizations is not an accident but a strategic outcome of inclusive governance, emotional commitment and relational confidence. The research contributes to the theoretical knowledge in the sense that it shows that decentralized systems of governance can be most effective in situations where they instigate engagement and are sustained by infrastructures of trust.

IMPLICATIONS

The results of the conducted research add value to the theoretical comprehension of organisational innovation and decentralized governance because they consider technological, behavioural, and relational approaches within one framework. The research contributes theory by empirically confirming the hypothesis that token governance systems not only increase innovation directly, but indirectly by the mediating role of member engagement and moderating effect of trust systems. The given integration builds upon the Social Exchange Theory Blau (1964) by showing how the mutual exchanges in digitally governed organizations become supported with the help of token-based engagement, thus boosting the perceived level of fairness, inclusion, and psychological ownership of the members. The validity of the research study is that it is an extension of the increasing research on organizational behavior under decentralized environments, since it emphasizes the importance of engagement as a psychological process to convert structural empowerment into creative performance. Furthermore, the moderating impact of trust mechanisms is another element that introduces a new aspect in the area of governance where technological transparency and relationship trust must go together in order to facilitate the innovations to flourish. The

research has been the first theoretical perspective that can be applied to relate the governance design, engagement dynamics, and innovation outcomes in a consistent and evidence-based framework through ADANCO using empirical testing of this multidimensional model. This theoretical innovation transcends the conventional hierarchical framework and entrenches the concept of governance as a socio technical mechanism that relies on both the digital transparency, and the human involvement on the same grounds to enhance sustainable innovation. Practically, the findings of this research paper are useful in practical sense, to the organizations that have adopted or are adopting the decentralized system of governance. The results point out that token system of governance can be a powerful tool that can enhance innovation provided that organizations apply them in such a manner that they become proactive in their interaction with members and the establishment of trust-based cultures. The managers and decision-makers can use these insights to put in place governance structures that would promote transparency, inclusivity and collective decision making to encourage the employees to contribute innovative ideas. The organizations should also strive to develop engagement processes such as participatory voting, rewarding processes that are incentive driven and recognition processes where the members feel that they own and have responsibilities. In addition, one can develop good trust processes like transparent record of decisions, equal distribution of tokens and channels of communication which can be proved to enhance the extent of trust among the involved people and general effectiveness of token governance. When the leaders are aware of the fact that the psychological interface between governance and innovation is engagement, they can create programs that have the potential to synchronize intrinsic motivation and organizational objectives.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Though this research offers very useful information about the presence of certain links between token governance systems, member participation, trust systems and organizational innovation, multiple constraints need to be noticed that may inform new research activities. To begin with, the study adopted a cross-sectional design, which only captures relationships at a given time and thus it does not allow one to make causal conclusions regarding the constructs. The subsequent research must be a longitudinal one to understand how the token governance and engagement change throughout the study period and their results of innovation in various growth phases of an organization. Second, the sample size of 312 respondents in technology-based and innovation-oriented organizations was

used in the collection of data but this number is not adequate to reflect the diversity in the industries or geographical areas where token governance is under implementation. The future study can be expanded to cross industry and cross cultural samples to boost the external validity of the results. Third, the research was based on self-reported measurements, and it can be vulnerable to social desirability bias or common method variance even after undergoing rigorous testing. The use of multi-source data collection procedures (i.e., using a combination of survey data with objective performance or innovation measures) may offer stronger information. Furthermore, although the paper has determined the mediating role of member engagement and the moderating role of trust mechanisms, there are other possible mediators including organizational learning, psychological safety, or digital leadership that might contribute to the depth of knowledge on how decentralized governance promotes innovation. The role of contextual factors, including organizational culture, technological maturity and regulatory frameworks in determining the effectiveness of token governance mechanisms, is also an area that future researchers may consider.

CONCLUSION

The findings of the current work emphasize the transformational quality of token form of governance as the driver towards organizational innovation which does not just theorize advancement in the area, but also offers a practical leadership to how modern organizations can navigate their path in the era of the digital decentralization. The paper substantiates the fact that innovation is not a simple technological phenomenon but a socio-behavioral phenomenon, grounded in transparency, the engagement of members, and trust, which is empirically validated by proving the relationships between the mechanism of token governance, the member engagement, the mechanisms of trust and organizational innovation. The results support the hypothesis that token governance causes positive impact on innovation as well as indirectly via motivational power of member engagement but trust mechanisms is a condition be it critical condition and strengthens the governanceinnovation relationship. All these conclusions indicate one picture the effectiveness of the systems of decentralized governance is not only in the establishment of the technological systems but also in the establishment of human and relational factors which will result in cooperation and readiness to take risks. The paper has strategically positioned the token governance as a guiding principle in developing agile and resourceful organizations which are able to adapt to the changes and competition in the environment within a small span of time. The Social Ex-

change Theory applied to this model takes a step further to understand how the mutual trust, the sense of being fair and participation make the governance transform into an engine of constant innovation. Ultimately, this paper contributes to the

growing body of research that conceptualizes governance as a participatory ecosystem rather than a control system, where the overall smarts and engagement of the actors form the basis of innovation and organizational health.

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