

Media Arts, Creative Economy Transformation, and Collaborative Urban Governance in Emerging Creative Cities: Evidence from Malang, Indonesia

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Abstract

The growing importance of creative economies has positioned Media Arts as a strategic driver of urban transformation, digital innovation, and sustainable competitiveness. However, existing creative city scholarship remains heavily concentrated on metropolitan cities in developed countries, while medium-sized cities in emerging economies, particularly in Southeast Asia, remain underexplored. This study examines the transformation of Malang City, Indonesia, into the first UNESCO Creative City of Media Arts in Southeast Asia by analyzing the integration of creative economy strategies, collaborative governance mechanisms, and Media Arts-based urban development. Using a qualitative descriptive case study approach, this research draws upon UNESCO dossiers, regional planning documents, policy reports, creative economy statistics, and relevant academic literature. The findings reveal that Malang's transformation was supported by the synergistic interaction between cultural heritage, educational ecosystems, digital innovation, and collaborative governance institutionalized through the Culture-Talent-Technology (CTT) framework and the Hexahelix governance model. The study further demonstrates that Media Arts ecosystems contributed not only to economic growth and employment generation but also to cultural revitalization, urban branding, tourism development, and social inclusion. The findings contribute theoretically by extending creative city and collaborative governance literature through the proposed Media Arts-Based Urban Transformation Model for medium-sized cities in emerging economies. Practically, the study provides strategic insights for cities seeking to develop sustainable and globally competitive creative ecosystems through culturally grounded, innovation-oriented, and collaborative urban development strategies.

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1. Introduction

The transformation of urban development in the twenty-first century demonstrates that creativity, innovation, and digital technology have increasingly become central components of urban competitiveness and sustainable economic growth. Contemporary cities are progressively shifting from industrial-based development toward knowledge- and creativity-driven economies, where culture and innovation function not only as social assets but also as strategic economic resources. Within this context, the creative city paradigm has emerged as an influential framework emphasizing the integration of culture, technology, and collaborative governance into urban development planning to strengthen economic resilience, social inclusion, and city branding (Segovia et al., 2022). Recent studies further indicate that creative cities contribute significantly to innovation ecosystems, creative talent attraction, and urban adaptability within digitally mediated economies (Hollands, 2023; Pratt et al., 2013).

Globally, the growing importance of the creative economy is reflected in the rapid expansion of the UNESCO Creative Cities Network (UCCN), which by 2025–2026 included 408 cities across more than 100 countries. UNESCO further reports that approximately 13% of urban employment worldwide is associated with cultural and creative sectors, indicating that creative industries have evolved into strategic drivers of urban economies and employment generation (UNESCO, 2021). Alongside this transformation, Media Arts has emerged as one of the most dynamic sectors within contemporary creative economies. Media Arts encompasses digitally mediated creative activities such as animation, game development, multimedia storytelling, digital design, virtual reality, and interactive visual production systems (Flew, 2011). Previous studies suggest that Media Arts contributes not only to economic productivity but also to urban regeneration, public participation, city branding, and sustainable urban transformation (Evans, 2009).



Figure 1. Global Expansion of Creative Cities and Media Arts Ecosystems

However, despite the increasing global popularity of the creative city paradigm, contemporary literature also highlights important criticisms and unresolved challenges regarding creative-city development. Empirical studies across 190 European cities demonstrate that cultural vibrancy does not automatically correlate with strong creative economic performance, indicating that creative-city transformation is influenced by more complex institutional and governance dynamics (Montalto et al., 2023). Other scholars argue that creative-city agendas frequently shift toward symbolic city branding, entrepreneurial urbanism, and top-down governance approaches that may marginalize local communities and cultural practitioners (Rius-Ulldemolins et al., 2023). In several cases, creative-city policies have generated social tensions related to spatial inequality, cultural commodification, and uneven urban development (Park et al., 2025). At the same time, Media Arts initiatives are increasingly recognized as strategic instruments for urban resilience,

participatory governance, and smart-city development through the integration of digital infrastructures, cultural innovation hubs, and collaborative public spaces (Cooke et al., 2008; McQuire, 2017). Furthermore, cities integrating Media Arts into urban policy frameworks tend to achieve stronger city branding, international visibility, and innovation-oriented urban identities capable of attracting investment, tourism, and creative talent (Ciurea et al., 2019).

Nevertheless, existing scholarship remains heavily concentrated on metropolitan cities in developed regions such as Europe, North America, and East Asia, while discussions concerning Media Arts-based urban transformation in medium-sized cities within emerging economies remain relatively limited, particularly in Southeast Asia. Most previous studies focus on globally established innovation hubs, advanced digital economies, or large-scale creative clusters, leaving the experiences of secondary cities in developing countries underexplored. This imbalance creates an important theoretical and empirical gap regarding how medium-sized cities can mobilize cultural heritage, educational ecosystems, digital infrastructure, and collaborative governance as strategic instruments for sustainable urban transformation. Recent studies increasingly acknowledge that secondary cities possess unique potentials for innovation-driven development due to their cultural distinctiveness, institutional flexibility, and community-based innovation ecosystems (Rodríguez-Pose et al., 2020). Similarly, Gu, (2014) emphasizes that creative economy policies in emerging economies operate under different socio-economic and governance conditions compared to advanced industrial cities, requiring more context-sensitive analytical approaches. In Southeast Asia, uneven digital infrastructure, fragmented governance, and limited investment capacity frequently complicate creative-city implementation despite the presence of strong local cultural assets and emerging creative communities (Zhirou, 2020). Nevertheless, universities, collaborative creative networks, and community-led digital initiatives are increasingly recognized as important drivers of innovation ecosystems and urban resilience within non-metropolitan regions (Kyaw et al., 2024).

Within this broader context, Malang City presents an increasingly significant empirical case. On 30 October 2025, UNESCO officially designated Malang as a member of the UNESCO Creative Cities Network in the category of Media Arts, making it the first UNESCO Media Arts city in Southeast Asia. This recognition positioned Malang not only as a symbolic cultural city but also as an emerging example of medium-sized urban transformation driven by creativity, digital ecosystems, and collaborative governance.

Structurally, Malang demonstrates several indicators supporting its relevance as a Media Arts ecosystem. The city recorded a population of 891,859 inhabitants in 2025, with economic growth reaching 5.92% and Gross Regional Domestic Product (GRDP) amounting to IDR 108.15 trillion. The creative economy sector itself grew by approximately 5.93% in 2024, while the unemployment rate declined consistently from 6.80% in 2023 to 5.69% in 2025. Moreover, the Information and Communication sector contributed approximately 4.26% to Malang's GRDP, indicating the existence of a substantial digital-economic foundation supporting Media Arts development. The density of educational and creative infrastructure further strengthens Malang's strategic position. Official city data show that Malang hosts 74 universities, 123 vocational institutions, 125 training institutions, 1,315 Media Arts practitioners, 142 creative communities, 137 digital startups, and 47 co-working spaces. Since the activation of the Malang Creative Center (MCC) in 2023, the city has recorded 24,826 creative activities, 223 collaborators, 23 startup incubation programs, 4,180 active actors, and more than 1,059,482 beneficiaries. These indicators demonstrate that the Media Arts ecosystem in Malang is supported by measurable institutional, educational, technological, and collaborative infrastructures rather than symbolic branding alone.



Figure 2. Strategic Indicators Supporting Malang as a UNESCO Media Arts City

In addition to its digital ecosystem, Malang also possesses strong historical and cultural foundations rooted in the heritage of the Kanjuruhan Kingdom, Singhasari civilization, colonial urban architecture, and traditional visual storytelling traditions such as Wayang Beber. The interaction between these historical-cultural assets and contemporary digital creative industries creates a distinctive urban context in which local identity, digital technology, and creative entrepreneurship intersect within broader urban transformation processes.

Based on these considerations, this study contributes to the creative city and urban development literature in three ways. First, it provides one of the earliest empirical analyses of a UNESCO Media Arts city in Southeast Asia from the perspective of urban development planning rather than city branding alone. Second, the study operationalizes the Culture–Talent–Technology (CTT) framework as an integrative analytical lens connecting cultural heritage, digital ecosystems, and creative human capital within urban transformation processes. Third, the study extends collaborative governance discussions by examining how medium-sized cities in emerging economies institutionalize Media Arts agendas through multi-stakeholder urban ecosystems.

2. Methods

This study employed a qualitative descriptive case study approach to examine the transformation of Malang City as a UNESCO Creative City of Media Arts within the context of creative economy development and collaborative urban governance. A qualitative case study was considered appropriate because the research aimed to explore the interaction between cultural heritage, Media Arts ecosystems, digital innovation, and governance mechanisms within a complex urban context. The research focused on Malang City, East Java, Indonesia, which was officially designated as a UNESCO Creative City of Media Arts on 30 October 2025 and became the first UNESCO City of Media Arts in Southeast Asia. Malang was selected as the research setting because it represents an emerging medium-sized city integrating cultural heritage, educational ecosystems, digital creative industries, and collaborative governance into urban development strategies.

This study primarily utilized secondary qualitative data derived from multiple documentary and institutional sources, including: (1) UNESCO Creative Cities Network (UCCN) Dossier 5.0 Update of Malang City; (2) regional development planning documents such as the Regional Development Plan (RPD) and Long-Term Regional Development Plan (RPJPD); (3) policy documents related to creative economy governance and urban cultural development; (4) statistical reports from the Central Bureau of Statistics (BPS) and local government institutions; (5) reports from the Creative Economy Committee (KEK) and Malang Creative Center (MCC); and (6) relevant academic literature concerning creative cities, Media Arts, collaborative governance, and urban transformation.

Data collection was conducted through document analysis and literature review. Policy documents, statistical publications, institutional reports, and academic studies were systematically reviewed to identify patterns related to Media Arts development, creative economy transformation, and collaborative governance mechanisms. The data were analyzed

using qualitative thematic analysis combined with policy content analysis. Thematic analysis was employed to identify recurring themes concerning cultural heritage, digital innovation, governance collaboration, and creative ecosystem development, while policy content analysis examined how Media Arts agendas were institutionalized within urban development frameworks. The study was guided by three analytical perspectives: creative city theory (matovic, 2020; Florida, 2019), collaborative governance theory (Ansell & Torfing, 2023), and the Culture–Talent–Technology (CTT) framework. To ensure analytical trustworthiness, source triangulation and cross-document verification were applied by comparing information from UNESCO documents, government reports, institutional publications, and academic literature.

3. Results and Discussion

The Transformation of Malang City toward UNESCO Creative City of Media Arts

The transformation of Malang City toward a UNESCO Creative City of Media Arts reflects a broader shift in urban development paradigms in which creativity, digital innovation, and cultural identity increasingly function as strategic instruments for economic transformation and urban competitiveness. Historically recognized as an educational and cultural city in East Java, Malang gradually repositioned itself from a conventional service-oriented urban economy toward a creativity-based urban ecosystem driven by Media Arts industries, digital entrepreneurship, and collaborative innovation.

The findings indicate that this transformation emerged not solely through spontaneous creative industry growth, but through the interaction between historical-cultural assets, educational ecosystems, digital economic expansion, and collaborative governance. In this context, Media Arts increasingly functioned not only as a cultural sector but also as an urban development strategy capable of strengthening economic resilience, innovation ecosystems, and city branding within knowledge-based economies (Pratt et al., 2013).

Historically, Malang possessed strong cultural foundations rooted in the legacy of the Kanjuruhan Kingdom, the Singhasari civilization, colonial-era urban architecture, and local cultural traditions such as Walikan and Wayang Beber. These historical-cultural assets later evolved into symbolic and creative capital supporting digital storytelling, animation, multimedia production, festivals, and urban cultural branding. Rather than positioning modernization as separate from tradition, Malang increasingly integrated local narratives and heritage identity into contemporary Media Arts production. This condition supports previous studies emphasizing that authentic cultural identity strengthens urban differentiation and sustainable creative city development within increasingly competitive global urban environments (Hollands, 2023).

The transformation of Malang toward a Media Arts city was also strongly influenced by the rapid growth of digital creative industries. The city currently hosts approximately 192 digital startups, 30 game studios, and more than 30 design and advertising studios operating within animation, multimedia production, game development, digital marketing, and content creation sectors. This expansion indicates that Media Arts evolved beyond artistic production into a strategic economic sector closely connected with innovation-oriented entrepreneurship and digitally mediated economies. The economic contribution of the creative sector further demonstrates the strategic importance of Media Arts within Malang’s urban transformation process. The city’s creative economy Gross Regional Domestic Product (GRDP) increased consistently from USD 471.2 million in 2020 to USD 529.2 million in 2023, while the application and game subsector contributed approximately 1.067% of current-price GRDP in 2023.

Table 1. Development of Malang City Creative Economy GRDP (2020–2023)

Year	Creative Economy GRDP (USD)	Growth Rate	Application & Game Contribution
2020	471,265,219	Baseline	–
2021	485,643,567	+3.05%	–

2022	505,894,387	+4.17%	0.993% of GRDP
2023	529,215,674	+4.61%	1.067% of GRDP

Source: Adapted from *Malang: UNESCO Creative City of Media Arts*.

The data demonstrate that Malang's creative economy maintained relatively stable growth during the post-pandemic recovery period, indicating the adaptive capacity of digital creative industries within rapidly changing urban economies. This condition aligns with previous studies suggesting that digital creative sectors tend to demonstrate higher resilience because they rely on technological flexibility, knowledge-based production, and networked innovation systems (Flew, 2011).

The expansion of creative industries also contributed positively to employment generation and entrepreneurial transformation. Malang's unemployment rate decreased from 9.65% in 2021 to 6.80% in 2023, while the growth of startups, creative studios, and digital enterprises created employment opportunities for youth, freelancers, programmers, animators, multimedia designers, and content creators. These findings indicate that Media Arts industries contributed not only to economic growth but also to more inclusive urban employment structures. Another important factor supporting Malang's transformation was the city's strong educational ecosystem. Malang hosts more than 70 universities and possesses a productive-age population accounting for approximately 68.45% of total residents. This demographic and educational advantage significantly strengthened the availability of creative human capital, digital literacy, and entrepreneurial capacity supporting Media Arts development. Universities and vocational institutions contributed through animation programs, multimedia education, entrepreneurship training, incubation initiatives, and collaborative technological experimentation.

The findings suggest that higher education institutions increasingly functioned not only as centers of knowledge production but also as strategic actors supporting urban innovation ecosystems and creative entrepreneurship. This condition reflects broader global trends where universities play increasingly important roles in strengthening regional innovation capacity, knowledge transfer, and digital skill development (Cheraghi, 2026). Media Arts in Malang also evolved into a multidimensional urban development strategy connecting economic transformation, cultural revitalization, tourism enhancement, urban branding, and social participation. Festivals, heritage revitalization initiatives, thematic villages, and digital creative programs became integrated into broader urban transformation agendas. The establishment of Malang Creative Center (MCC) further strengthened this ecosystem by functioning as a collaborative hub for incubation, innovation exchange, exhibitions, festivals, and entrepreneurial networking. Within only 21 months of operation, MCC organized 12,215 events, collaborated with 216 organizations, involved 3,842 creative practitioners, and reached more than 655,075 participants.

The findings further indicate that Malang's transformation was strongly influenced by the implementation of the Culture–Talent–Technology (CTT) framework integrating cultural heritage preservation, talent development, and technological innovation into a comprehensive urban development strategy. Unlike conventional development models emphasizing industrial expansion or physical infrastructure alone, the CTT framework positioned creativity and local identity as central components of urban competitiveness. Simultaneously, collaborative governance through the Hexahelix model strengthened coordination among government institutions, universities, creative communities, business sectors, and media organizations within the city's creative ecosystem. The recognition of Malang as a UNESCO Creative City of Media Arts on 30 October 2025 represents a significant milestone within Southeast Asian urban development. Malang became the first city in East Java and the first city in the ASEAN region to receive UNESCO recognition in the Media Arts category. More importantly, the case of Malang demonstrates that medium-sized cities in emerging economies possess substantial potential to achieve globally recognized urban transformation through the integration of cultural heritage, educational ecosystems, digital innovation, and collaborative governance.

The findings suggest that Malang City represents an important example of Media Arts-based urban transformation within medium-sized cities in developing countries. The successful integration of creativity, technology, local identity, and collaborative governance demonstrates that sustainable urban transformation increasingly depends on ecosystem-oriented development strategies capable of combining innovation, cultural sustainability, and participatory urban development simultaneously.

Integration of Culture, Talent, and Technology (CTT) in Urban Creative Development

The findings demonstrate that the transformation of Malang City toward a Media Arts-based creative city was strongly supported by the integration of cultural heritage, educational ecosystems, and technological innovation institutionalized through the Culture–Talent–Technology (CTT) framework. The framework represents a multidimensional urban development approach emphasizing the interaction between local cultural identity, human capital development, and digital innovation in strengthening urban competitiveness and sustainable creative economy transformation. Within the context of Malang City, culture functioned as one of the foundational dimensions supporting the development of Media Arts ecosystems. Historically, Malang possesses strong cultural assets rooted in the legacy of the Kanjuruhan Kingdom, Singhasari civilization, colonial urban heritage, local linguistic traditions such as Walikan, and visual storytelling practices including Wayang Beber. These historical-cultural assets increasingly became integrated into digital storytelling, animation, multimedia production, cultural festivals, and urban branding strategies.

Rather than positioning modernization as separate from tradition, the findings indicate that Malang increasingly utilized local identity and cultural narratives as symbolic and creative capital supporting contemporary Media Arts development. This integration demonstrates that cultural preservation and technological innovation can operate synergistically within urban transformation processes. Previous studies similarly argue that cities possessing strong cultural authenticity tend to develop more sustainable and differentiated creative economies because local identity strengthens urban branding and cultural competitiveness within global creative industries (hollands, 2023). Talent development also emerged as another important component within Malang’s creative transformation process. The city hosts more than 70 universities and possesses a productive-age population accounting for approximately 68.45% of total residents. These demographic and educational advantages significantly contributed to the development of creative human capital, digital literacy, and entrepreneurial ecosystems supporting Media Arts industries.

Table 2. Creative Industry Ecosystem in Malang City

Sector	Number/Contribution
Digital Startups	192 startups
Game Studios	30 studios
Design & Advertising Studios	>30 studios
Universities	>70 universities
Productive-age Population	68.45%
Information & Communication Sector Contribution (2023)	USD 254.54 million

Source: Adapted from *Dossier 5.0 Update – Kota Malang*.

The findings suggest that universities and vocational institutions increasingly functioned not only as centers of formal education but also as strategic actors supporting urban innovation ecosystems. Educational institutions contributed through animation programs, multimedia education, entrepreneurship training, incubation initiatives, and collaborative technological experimentation. The emergence of startups, digital studios, and creative enterprises initiated by students and university graduates further strengthened the city’s

innovation-oriented entrepreneurial ecosystem. In addition to formal educational institutions, creative communities and collaborative innovation networks also played important roles in strengthening talent ecosystems within Malang. Communities such as Game Dev Malang, Forum Animasi Malang (FAM), ADGI Malang, and Malang Creative Fusion facilitated collaborative learning, digital skill development, creative experimentation, and entrepreneurial networking. These ecosystems enabled participatory learning processes beyond formal institutional structures and strengthened the adaptive capacity of the city's creative industries.

Technology constituted the third important dimension within the CTT framework. The findings reveal that digital creative industries increasingly contributed to Malang's economic transformation through the expansion of startups, game studios, multimedia production, digital marketing, and content creation industries. The Information and Communication sector contributed approximately USD 254.54 million to the city's Gross Regional Domestic Product (GRDP) in 2023, indicating the growing strategic importance of digitally mediated industries within the local economy. The expansion of technological infrastructure and digital innovation ecosystems also strengthened the city's Media Arts development. Coworking spaces, innovation hubs, startup incubation programs, and collaborative digital platforms enabled creators, entrepreneurs, and communities to strengthen production capacity and market access. The establishment of Malang Creative Center (MCC) further accelerated interdisciplinary collaboration and digital entrepreneurship within the city's creative ecosystem. The findings additionally indicate that technological adaptation enabled more flexible and globally connected creative production systems. Animation creators, multimedia designers, programmers, and digital entrepreneurs increasingly utilized social media platforms, online collaboration systems, cloud-based production technologies, and digital marketplaces to distribute products and expand international visibility. This transformation demonstrates that Media Arts development in Malang increasingly relied on digitally networked production systems characteristic of contemporary knowledge-based economies.

The interaction between culture, talent, and technology collectively became the central mechanism supporting Malang's urban creative transformation. Cultural heritage strengthened symbolic differentiation and urban identity; educational ecosystems supplied human capital and innovation capacity; while technology facilitated digital production, entrepreneurship, and global connectivity. Rather than functioning independently, these dimensions operated synergistically in shaping sustainable urban competitiveness.

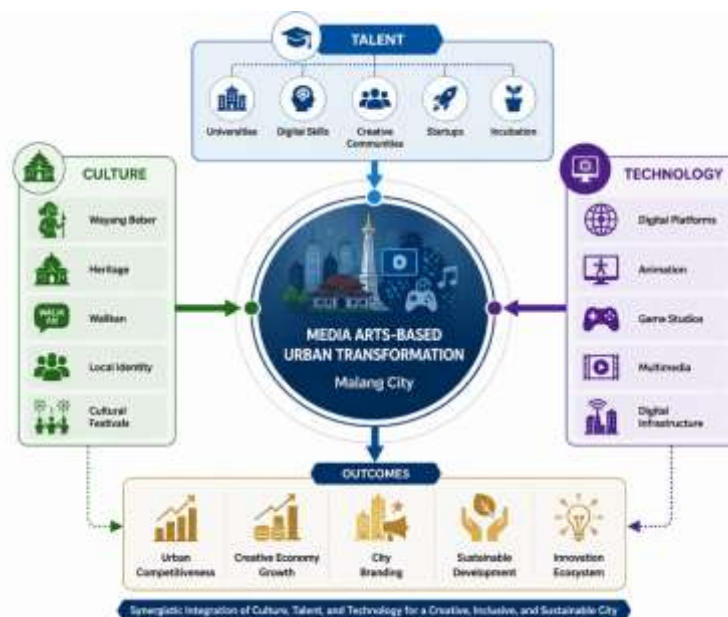


Figure 3. The integrated interaction between cultural heritage, talent ecosystems, and technological innovation within Malang City's Media Arts-based urban transformation process.

The framework demonstrates that sustainable Media Arts-based urban transformation increasingly depends on the balanced integration of local identity, educational ecosystems, technological innovation, and collaborative governance. Unlike conventional urban development approaches emphasizing industrial expansion or physical infrastructure alone, the CTT framework positions creativity, cultural sustainability, and digital innovation as interconnected components supporting long-term urban competitiveness. The findings therefore extend existing creative city discussions by suggesting that medium-sized cities in emerging economies can strengthen global competitiveness not solely through technological modernization, but also through the integration of cultural authenticity, collaborative learning ecosystems, and innovation-oriented governance structures. In the context of Malang, local heritage and digital creativity did not operate as contradictory forces; instead, their interaction contributed to the emergence of a distinctive Media Arts ecosystem capable of supporting sustainable urban transformation within the digit.

Collaborative Governance and the Hexahelix Ecosystem

The findings demonstrate that collaborative governance became one of the most important institutional foundations supporting the transformation of Malang City toward a UNESCO Creative City of Media Arts. The city implemented a Hexahelix governance model involving government institutions, universities, business sectors, communities, media organizations, and supporting institutions within an integrated urban creative ecosystem. This governance structure enabled coordination among multiple stakeholders in developing Media Arts industries, strengthening digital entrepreneurship, and supporting sustainable urban transformation.

The transformation of Malang's creative ecosystem was not driven solely by government initiatives or market expansion, but emerged through continuous interaction among urban actors operating collaboratively within the city's creative economy ecosystem. This condition reflects broader transformations in urban governance where creativity and innovation increasingly depend on participatory governance systems and network-based collaboration rather than hierarchical institutional structures alone. Government institutions played strategic roles in facilitating policy alignment, institutional coordination, and ecosystem development within the city's Media Arts transformation process. The establishment of the Creative Economy Committee (Komite Ekonomi Kreatif/KEK) in 2017 represented an important milestone in institutionalizing collaborative governance for creative economy development. KEK functioned as a coordinating platform integrating government agencies, universities, creative communities, business actors, and supporting institutions into a shared urban development agenda. The findings indicate that local governments increasingly positioned Media Arts and creative industries as strategic sectors contributing to economic transformation, city branding, employment generation, and sustainable urban competitiveness. This orientation was reflected in the integration of creative economy programs into regional development planning frameworks, public innovation initiatives, creative infrastructure development, and cultural revitalization policies.

In addition to policy coordination, government institutions also functioned as facilitators supporting innovation ecosystems through festivals, incubation programs, public creative spaces, and collaborative infrastructures. The establishment of Malang Creative Center (MCC), thematic village programs, and cultural revitalization initiatives demonstrated the active role of public institutions in creating enabling environments for participatory innovation and creative entrepreneurship. These findings align with collaborative governance theories emphasizing that contemporary urban innovation increasingly requires governments to shift from hierarchical control toward facilitative and participatory governance approaches (Ansell & Torfing, 2023). Within creative city development, government institutions increasingly operate as ecosystem coordinators and innovation facilitators rather than solely regulatory authorities.

Academia also emerged as one of the most influential actors within Malang's Hexahelix ecosystem. The city's strong educational infrastructure enabled universities and vocational institutions to contribute significantly to knowledge production, digital skill development, entrepreneurship training, and technological experimentation. Educational institutions increasingly collaborated with startups, creative communities, local government institutions,

and digital industries to support Media Arts development and innovation-oriented entrepreneurship. The findings suggest that universities in Malang increasingly functioned as entrepreneurial institutions supporting regional innovation ecosystems. Their roles extended beyond formal education into incubation activities, collaborative projects, digital talent development, and interdisciplinary experimentation. This condition reflects broader global trends where higher education institutions increasingly contribute to urban competitiveness through knowledge transfer, digital innovation, and entrepreneurial ecosystem development.

Community participation also became one of the central elements supporting the sustainability of Malang's Media Arts ecosystem. Creative communities such as Game Dev Malang, Forum Animasi Malang (FAM), ADGI Malang, and Malang Creative Fusion functioned as collaborative platforms connecting creators, designers, students, programmers, entrepreneurs, and cultural practitioners. These communities facilitated collaborative learning, networking, creative experimentation, and grassroots innovation. The existence of these collaborative networks strengthened participatory urban innovation by enabling horizontal interaction among ecosystem actors. Workshops, festivals, exhibitions, hackathons, and public creative events increasingly functioned as spaces for knowledge exchange and collective creativity. The findings therefore indicate that creative city transformation in Malang increasingly depended on socially embedded innovation ecosystems and participatory collaboration.

The business sector also played important roles within the Hexahelix ecosystem by strengthening creative entrepreneurship and innovation-oriented economic activities. Startups, animation studios, digital agencies, multimedia enterprises, and coworking spaces increasingly contributed to interdisciplinary collaboration and entrepreneurial ecosystem expansion. Rather than operating within isolated industrial structures, many creative enterprises collaborated closely with universities, communities, digital platforms, and public innovation programs. This condition demonstrates that innovation within contemporary Media Arts ecosystems increasingly emerges through collaborative production systems and network-based entrepreneurship. The findings therefore reinforce recent urban innovation studies suggesting that creative economies increasingly rely on flexible collaboration, interdisciplinary interaction, and ecosystem-oriented business models.

Media organizations and digital platforms also became increasingly important within Malang's urban transformation process. Digital communication networks, social media platforms, online marketplaces, and multimedia promotion channels contributed significantly to urban branding, ecosystem visibility, and public participation. Creative festivals, cultural revitalization programs, and startup activities were increasingly disseminated through digital media platforms, strengthening both local engagement and international exposure. The findings further indicate that digital platforms enabled creators and creative enterprises to expand audiences, strengthen market access, and increase global connectivity. This transformation reflects broader shifts toward digitally mediated creative economies where media technologies increasingly function as strategic instruments for cultural dissemination, entrepreneurship, and urban branding.

The interaction among government institutions, academia, communities, business sectors, and media organizations collectively formed an integrated Hexahelix ecosystem supporting Malang's Media Arts transformation. Rather than functioning independently, each stakeholder contributed complementary resources, institutional capacities, knowledge, and collaborative networks supporting ecosystem sustainability.



Figure 4. The collaborative interaction among stakeholders within Malang's Hexahelix governance ecosystem.

The findings therefore suggest that sustainable creative city development increasingly depends on ecosystem-oriented governance structures characterized by institutional flexibility, participatory interaction, and collaborative innovation. Within the context of Malang, collaborative governance enabled the integration of cultural preservation, digital entrepreneurship, educational ecosystems, and technological innovation into a shared urban transformation agenda. The findings demonstrate that the Hexahelix governance model became a central mechanism supporting the transformation of Malang City toward a UNESCO Creative City of Media Arts. The interaction among government institutions, universities, communities, business sectors, and media organizations strengthened ecosystem resilience, participatory innovation, and sustainable urban competitiveness within the context of emerging creative cities.

Media Arts Ecosystem and Urban Creative Infrastructure

The findings demonstrate that the development of Media Arts ecosystems and creative infrastructure became one of the most important foundations supporting the transformation of Malang City toward a UNESCO Creative City of Media Arts. The city increasingly strengthened its creative ecosystem through the establishment of collaborative innovation spaces, public cultural programs, digital creative industries, and community-based creative initiatives. This transformation indicates that urban creative development in Malang extended beyond symbolic city branding into the construction of institutional and spatial infrastructures capable of supporting sustainable innovation ecosystems.

One of the most significant developments within Malang's creative transformation process was the establishment of Malang Creative Center (MCC). MCC functions as an integrated creative hub supporting collaboration, incubation, innovation exchange, festivals, exhibitions, entrepreneurial networking, and digital creative production. Unlike conventional public facilities emphasizing administrative functions, MCC was designed as an ecosystem-oriented infrastructure enabling interaction among creators, startups, universities, communities, business sectors, and public institutions.

The findings indicate that MCC rapidly evolved into one of the most active creative hubs in East Java. Within only 21 months of operation, MCC organized 12,215 events, collaborated with 216 organizations, involved 3,842 creative practitioners, and reached more than

655,075 participants and beneficiaries. The data demonstrate that MCC functioned not merely as a physical building, but as a collaborative innovation ecosystem facilitating networking, interdisciplinary interaction, and entrepreneurial development. Through exhibitions, workshops, startup incubation programs, festivals, and public innovation events, MCC strengthened ecosystem connectivity and accelerated the growth of Media Arts industries within the city. Previous studies similarly emphasize that creative hubs and innovation centers play strategic roles in strengthening urban innovation capacity and entrepreneurial ecosystems through collaborative interaction and knowledge exchange (Lazzaro, 2018).

The findings further indicate that the expansion of animation, game development, multimedia production, and digital creative industries became another important driver of Malang's urban transformation. Digital startups, game studios, design agencies, and multimedia enterprises increasingly contributed to innovation-oriented economic activities and digitally mediated creative production systems. The growth of these industries demonstrates that Media Arts in Malang evolved beyond artistic production into a broader creative economy ecosystem closely connected with entrepreneurship, digital platforms, and global creative networks. Animation creators, multimedia designers, programmers, and digital entrepreneurs increasingly utilized online collaboration systems, social media promotion, and digital marketplaces to strengthen production capacity and market access.

The findings also suggest that public creative spaces increasingly became important components supporting participatory urban transformation. Festivals, thematic villages, public art activities, and community-based innovation programs transformed urban spaces into collaborative environments for cultural production and creative experimentation. Programs such as Festival Mbois, ASEAN Panji Festival, Malang Flower Carnival, and Malang Game Festival strengthened public participation while simultaneously reinforcing the city's Media Arts identity. The findings reveal that these programs functioned not merely as entertainment activities, but as mechanisms supporting social interaction, cultural revitalization, tourism development, and community-based innovation. Public festivals increasingly connected artists, students, entrepreneurs, communities, tourists, and local residents within collaborative cultural experiences. This condition indicates that Media Arts-based urban transformation in Malang relied heavily on participatory ecosystems and socially embedded innovation processes. Thematic village initiatives further demonstrate how creative city development was integrated into broader urban revitalization strategies. Villages transformed through mural arts, local crafts, public performances, culinary innovation, and digital promotion increasingly became part of Malang's creative tourism ecosystem. These initiatives contributed to strengthening local economic participation while simultaneously enhancing urban aesthetics and cultural identity.

Another important finding concerns the role of Media Arts ecosystems in supporting urban regeneration processes. Heritage revitalization initiatives such as Kayutangan Heritage increasingly integrated cultural preservation with creative tourism, digital storytelling, public art, and entrepreneurial activities. Historical districts were transformed into interactive public spaces supporting cultural performance, visual creativity, and creative entrepreneurship. This transformation demonstrates that urban regeneration within creative cities increasingly involves the reinterpretation of historical assets through contemporary creative practices. Rather than replacing historical identity with modern infrastructure alone, Malang increasingly utilized Media Arts and creative programs to reactivate urban heritage and strengthen cultural continuity. Previous studies similarly suggest that cultural industries and creative economies contribute significantly to urban regeneration by revitalizing public spaces, strengthening cultural identity, and increasing tourism attractiveness (Evans, 2009). The findings therefore indicate that Media Arts ecosystems in Malang increasingly operated as interconnected urban innovation systems integrating creative infrastructure, public participation, digital entrepreneurship, and cultural revitalization simultaneously. The interaction among creative hubs, festivals, public spaces, and community-based innovation strengthened the city's urban competitiveness while contributing to broader sustainable urban transformation processes. The findings demonstrate that the development of Media Arts ecosystems and urban creative infrastructure became central components supporting the transformation of Malang City

toward a UNESCO Creative City of Media Arts. The establishment of collaborative creative infrastructures, the activation of public cultural spaces, and the integration of Media Arts into urban regeneration initiatives enabled Malang to strengthen innovation-oriented urban development while reinforcing cultural identity and participatory urban resilience within the context of emerging creative cities.

Implications of Media Arts-Based Urban Development

The findings demonstrate that the transformation of Malang City toward a UNESCO Creative City of Media Arts generated multidimensional implications extending beyond economic growth into broader social, cultural, and urban sustainability dimensions. The development of Media Arts ecosystems increasingly influenced creative entrepreneurship, employment structures, public participation, tourism development, and urban competitiveness within the city's broader transformation process. One of the most visible implications concerns the expansion of the creative economy and digital entrepreneurship ecosystem. The growth of digital startups, animation studios, multimedia enterprises, and game development sectors contributed significantly to the restructuring of Malang's urban economy toward knowledge- and innovation-based activities. The city's creative economy Gross Regional Domestic Product (GRDP) increased from USD 471.2 million in 2020 to USD 529.2 million in 2023, while the application and game subsector contributed approximately 1.067% of current-price GRDP in 2023. Simultaneously, the expansion of creative industries generated employment opportunities for youth, freelancers, programmers, designers, multimedia creators, and digital entrepreneurs. These developments indicate that Media Arts increasingly functioned as a strategic economic sector supporting urban competitiveness and post-pandemic economic resilience. Employment patterns also shifted from conventional industrial labor toward more flexible and digitally mediated creative work systems. This transformation reflects the growing importance of innovation-oriented entrepreneurship and digital production ecosystems within contemporary urban economies (Flew, 2011; Pratt et al., 2013).

Beyond economic transformation, Media Arts-based development also generated important socio-cultural implications within urban communities. The integration of local culture, historical narratives, digital storytelling, festivals, and public creative activities strengthened urban identity and collective cultural awareness. Cultural heritage increasingly evolved from passive historical preservation into active components of contemporary creative production and public participation. The findings indicate that festivals, public creative spaces, and community-based innovation initiatives strengthened social interaction and participatory urban identity formation. Creative communities, collaborative networks, and grassroots innovation activities increasingly enabled broader public engagement within the city's creative ecosystem. As a result, urban residents participated not only as consumers of creative products but also as active contributors within collaborative cultural production processes. Media Arts development also contributed significantly to tourism enhancement and urban branding. The recognition of Malang as a UNESCO Creative City of Media Arts strengthened the city's international visibility and positioned Malang within global creative city networks. This recognition became an important strategic instrument supporting tourism attractiveness, investment opportunities, and the city's identity as an innovation-oriented urban center. The revitalization of heritage districts, thematic villages, cultural festivals, and creative public spaces further strengthened Malang's tourism ecosystem and urban image. Simultaneously, digital media platforms and online communication networks enabled broader dissemination of creative activities, multimedia content, and public cultural programs, increasing both regional and international exposure.

However, despite these positive implications, the findings also reveal several sustainability challenges affecting the long-term development of Malang's Media Arts ecosystem. One of the major challenges concerns maintaining ecosystem resilience within rapidly changing digital economies. Creative industries remain highly dependent on technological adaptation, digital literacy, innovation capacity, and market accessibility, requiring continuous investment in education, infrastructure, and entrepreneurial development. The findings further indicate that unequal access to digital infrastructure and creative resources may create disparities among urban communities. While some groups

successfully benefit from digital creative opportunities, smaller communities and marginalized populations may experience limited access to technological facilities, digital training, and innovation networks. In addition, the increasing commercialization of local culture may create risks of symbolic commodification and reduced cultural authenticity if economic objectives are not balanced with cultural sustainability principles. Another important challenge concerns governance continuity and long-term institutional coordination. The success of Malang's transformation heavily depended on collaboration among government institutions, universities, communities, business sectors, and media organizations. Maintaining this ecosystem over time therefore requires adaptive governance mechanisms, stable policy commitments, and continuous stakeholder participation capable of responding to rapidly evolving technological and socio-economic conditions (Evans, 2009). The findings demonstrate that Media Arts-based urban transformation generated broad economic, social, cultural, and urban implications within Malang City. The expansion of creative industries strengthened entrepreneurial development and economic diversification; cultural revitalization and participatory innovation reinforced social cohesion and urban identity; while UNESCO recognition enhanced tourism attractiveness and international competitiveness. Nevertheless, sustaining creative city transformation requires continuous efforts to strengthen inclusive governance, technological adaptability, cultural sustainability, and collaborative ecosystem resilience within emerging urban contexts.

Discussion

The findings of this study contribute to the growing literature on creative cities, collaborative governance, and Media Arts-based urban transformation by demonstrating how medium-sized cities in emerging economies can develop globally recognized creative ecosystems through localized cultural resources, educational infrastructures, digital innovation, and participatory governance (Cerisola et al., 2021). Unlike dominant creative city discussions that primarily focus on large metropolitan centers in developed countries, the case of Malang demonstrates that urban competitiveness and creative transformation may also emerge through community-based ecosystems, collaborative entrepreneurship, and culturally grounded innovation strategies. Existing creative city literature has historically emphasized metropolitan innovation hubs such as London, New York, Tokyo, and Seoul, where urban transformation is closely associated with large-scale capital concentration, advanced technological infrastructure, and global creative industries (Florida, 2019; Kavle et al., 2018). However, the findings of this study suggest that medium-sized cities possess alternative pathways toward creative transformation that rely more heavily on educational ecosystems, local identity, collaborative governance, and digital entrepreneurship. The transformation of Malang demonstrates that cultural heritage increasingly functions not merely as historical preservation but as symbolic and creative capital supporting Media Arts ecosystems and urban competitiveness (Bayliss, 2007). The integration of local narratives, Wayang Beber traditions, heritage revitalization, and digital storytelling illustrates that local identity can strengthen creative differentiation within increasingly homogenized global creative industries. This finding supports recent urban cultural scholarship arguing that cities possessing strong cultural authenticity tend to develop more sustainable and resilient creative economies because local identity strengthens both community participation and urban branding (Hollands, 2023).

The findings also extend collaborative governance discussions by demonstrating the strategic role of the Hexahelix ecosystem within Media Arts-based urban transformation (Dellyana et al., 2023). The interaction among government institutions, universities, business sectors, communities, and media organizations enabled the development of participatory innovation ecosystems supporting creative entrepreneurship and urban resilience. In this context, governance increasingly operated through ecosystem facilitation and network-based coordination rather than hierarchical institutional control. This condition reinforces collaborative governance theory suggesting that contemporary urban innovation increasingly depends on institutional flexibility, participatory interaction, and multi-stakeholder collaboration (Ansell et al., 2021). The case of Malang further indicates that sustainable creative city development requires not only public policy intervention but also collaborative ecosystem-building involving educational institutions, creative communities,

digital entrepreneurs, and cultural actors simultaneously (Panda et al., 2025). Another important contribution concerns the extension of the Culture–Talent–Technology (CTT) framework within urban creative development discussions. Existing creative city theories are frequently influenced by Florida’s “3T” framework emphasizing talent, technology, and tolerance as the primary determinants of urban competitiveness. However, the findings from Malang suggest that culture and local identity may function as equally important dimensions within emerging creative cities.

Within the context of Malang, culture operated not merely as a symbolic element but as an active component integrated into digital creativity, festivals, animation, tourism, and urban branding. Simultaneously, educational ecosystems strengthened talent development and entrepreneurial capacity, while digital technologies enabled innovation-oriented production systems and global connectivity. The interaction among these dimensions collectively shaped a Media Arts ecosystem capable of supporting sustainable urban transformation. The findings therefore suggest that sustainable urban competitiveness increasingly depends on the balanced integration of cultural authenticity, human capital development, technological innovation, and collaborative governance. This perspective differs from conventional urban development models emphasizing industrial expansion or physical infrastructure alone. Instead, the case of Malang demonstrates that medium-sized cities in emerging economies may strengthen global competitiveness through ecosystem-oriented development strategies integrating creativity, local identity, and participatory innovation. The study also contributes to broader discussions concerning Media Arts as a strategic instrument for sustainable urban development. The findings reveal that Media Arts ecosystems contributed not only to economic growth and employment generation but also to cultural revitalization, tourism enhancement, public participation, and social inclusion. Festivals, thematic villages, heritage revitalization initiatives, and public creative spaces increasingly functioned as mechanisms strengthening social cohesion and participatory urban identity formation.

This condition aligns with UNESCO perspectives emphasizing that creative cities should function not solely as centers of economic productivity but also as inclusive and culturally grounded urban communities. The findings therefore reinforce the argument that Media Arts increasingly represents a multidimensional urban development instrument connecting economic transformation, cultural sustainability, digital innovation, and collaborative governance within contemporary knowledge-based economies. The transformation of Malang City toward a UNESCO Creative City of Media Arts extends existing discussions on creative cities and collaborative governance by highlighting the strategic importance of localized ecosystems within medium-sized cities in emerging economies. The case of Malang suggests that sustainable urban transformation increasingly depends not only on technological modernization and economic expansion, but also on the integration of cultural authenticity, educational ecosystems, collaborative governance, and participatory innovation within holistic urban development strategies.

Proposed Conceptual Framework: Media Arts-Based Urban Transformation Model

The findings of this study indicate that the transformation of Malang City toward a UNESCO Creative City of Media Arts cannot be understood solely through isolated economic, technological, or cultural perspectives. Instead, the transformation process emerged through the interaction between cultural heritage, educational ecosystems, digital innovation, collaborative governance, and participatory creative networks. Based on these findings, this study proposes the Media Arts-Based Urban Transformation Model as an integrated conceptual framework for understanding creative city transformation within medium-sized cities in emerging economies. The proposed model emphasizes that sustainable urban transformation increasingly depends on the synergistic interaction between four central dimensions: culture, talent, technology, and governance. Rather than functioning independently, these dimensions collectively shape urban creative ecosystems capable of supporting innovation-oriented entrepreneurship, cultural revitalization, social inclusion, urban branding, and sustainable economic transformation. Within the proposed framework, culture functions as the source of symbolic identity and creative differentiation; talent ecosystems strengthen innovation capacity and entrepreneurial adaptability; technology

enables digital production, connectivity, and market expansion; while governance facilitates institutional coordination and collaborative ecosystem development. The interaction among these dimensions collectively supports the emergence of adaptive Media Arts ecosystems within contemporary knowledge-based urban economies.

The findings further suggest that Media Arts ecosystems increasingly operate as multidimensional urban systems integrating cultural sustainability, digital entrepreneurship, collaborative innovation, and participatory urban development simultaneously. Creative hubs, festivals, educational institutions, public creative spaces, startups, and community-based innovation initiatives collectively contribute to strengthening ecosystem resilience and urban competitiveness.



Figure 5. Media Arts-Based Urban Transformation Model

The model illustrates the interaction between four core dimensions culture, talent, technology, and governance within the development of Media Arts ecosystems in Malang City. These dimensions interact through collaborative creative infrastructures, educational ecosystems, digital innovation networks, public participation, and entrepreneurial activities, generating broader urban transformation outcomes including creative economy growth, cultural revitalization, social inclusion, urban competitiveness, city branding, and sustainable urban development.

The proposed framework contributes theoretically by extending creative city discussions beyond metropolitan-centered perspectives and emphasizing the importance of localized ecosystems within medium-sized cities in emerging economies. Unlike many conventional creative city models focusing primarily on technological modernization or global investment attraction, the proposed model highlights the strategic integration between cultural authenticity, educational ecosystems, collaborative governance, and digital innovation. The framework also reinforces collaborative governance discussions by demonstrating that sustainable urban innovation increasingly depends on ecosystem-oriented governance structures characterized by participatory interaction, institutional flexibility, and multi-stakeholder collaboration. In the context of Malang, collaborative governance enabled the integration of cultural preservation, entrepreneurial development, technological innovation, and public participation into a shared urban transformation agenda.

From a practical perspective, the proposed framework provides strategic insights for emerging creative cities seeking to strengthen sustainable urban competitiveness through Media Arts-based development. The findings suggest that successful creative city transformation requires more than infrastructure provision or symbolic branding initiatives alone. Instead, cities must strengthen educational ecosystems, preserve local identity, support collaborative innovation networks, and develop adaptive governance mechanisms

capable of responding to rapidly evolving digital economies. The findings also imply that medium-sized cities possess substantial opportunities to develop globally competitive creative ecosystems without replicating metropolitan urban development models. The case of Malang demonstrates that localized cultural resources, educational strengths, participatory innovation, and collaborative governance can collectively support sustainable urban transformation within emerging urban contexts. The Media Arts-Based Urban Transformation Model provides an integrated framework for understanding how medium-sized cities can strategically utilize Media Arts, cultural heritage, digital innovation, and collaborative governance as instruments for sustainable urban transformation. The framework therefore contributes both theoretically and practically to broader discussions concerning creative cities, Media Arts ecosystems, collaborative governance, and sustainable urban development within emerging economies.

4. Conclusion

This study demonstrates that the transformation of Malang City toward a UNESCO Creative City of Media Arts represents an important example of Media Arts-based urban transformation within medium-sized cities in emerging economies. The findings indicate that the city's transformation emerged through the integration of cultural heritage, educational ecosystems, digital innovation, and collaborative governance, enabling Malang to strengthen its creative economy ecosystem while simultaneously reinforcing urban competitiveness, cultural identity, and sustainable development.

The study further reveals that Media Arts development in Malang extended beyond economic expansion into broader processes of cultural revitalization, participatory innovation, entrepreneurial transformation, and collaborative urban governance. The interaction among government institutions, universities, creative communities, business sectors, and digital platforms through the Hexahelix ecosystem strengthened ecosystem resilience and facilitated the development of innovation-oriented urban creative infrastructures.

Theoretically, this study contributes to creative city and collaborative governance literature by extending existing discussions beyond metropolitan-centered perspectives. The proposed Media Arts-Based Urban Transformation Model highlights the strategic interaction between culture, talent, technology, and governance within sustainable urban transformation processes in medium-sized cities. The findings suggest that localized cultural resources, educational ecosystems, and participatory innovation networks may become equally important as technological infrastructure and economic capital in strengthening urban competitiveness within emerging creative economies.

From a practical perspective, the findings imply that cities seeking to develop sustainable creative economies should adopt integrated urban development strategies combining cultural preservation, talent development, digital innovation, and participatory governance. Creative city development should therefore be understood not merely as urban branding or economic diversification, but as a holistic ecosystem-building process capable of strengthening long-term urban resilience and social inclusion.

Despite these contributions, this study has several limitations. The research relied primarily on secondary qualitative data and focused on a single-city case study, limiting broader comparative generalization. Future research is therefore encouraged to conduct comparative studies across creative cities in Southeast Asia, examine longitudinal transformations of Media Arts ecosystems, and integrate quantitative approaches to measure the long-term impacts of creative city development on urban sustainability and economic resilience.

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Conflict Of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper. All authors have approved the final version of the manuscript and agreed to its submission for publication.

Data Availability

The data supporting the findings of this study are derived from publicly available documents, including UNESCO reports, regional planning documents, institutional publications, statistical reports, and academic literature. Additional supporting data are available from the corresponding author upon reasonable request.

Author Contributions

All authors contributed significantly to this research. Conceptualization and research design were conducted collaboratively by all authors. Data collection, document analysis, and literature review were performed jointly. Data interpretation and thematic analysis were completed collaboratively among the research team. Manuscript drafting, revision, and final approval were carried out collectively by all authors.

References

- Ansell, C., & Torfing, J. (2021). Co-creation: the new kid on the block in public governance. *Policy & Politics*, 49(2), 211–230. <https://doi.org/10.56687/9781447369042-005>
- Bayliss, D. (2007). The rise of the creative city: Culture and creativity in Copenhagen. *European Planning Studies*, 15(7), 889–903. <https://doi.org/10.1080/09654310701356183>
- Cerisola, S., & Panzera, E. (2021). Cultural and creative cities and regional economic efficiency: Context conditions as catalyzers of cultural vibrancy and creative economy. *Sustainability*, 13(13), 7150. <https://doi.org/10.3390/su13137150>
- Cheraghi, E. (2026). Weaving the creative thread into the fabric of sustainable urban development: The case of the unesco creative cities network. *Geojournal of Tourism and Geosites*, 64(1), 250–264. <https://doi.org/10.30892/gtg.64122-1673>
- Ciurea, C., & Filip, F. G. (2019). The globalization impact on creative industries and cultural heritage: A case study. *Creativity Studies*, 12(2), 211–223. <https://doi.org/10.3846/cs.2019.7753>
- Cooke, P. N., & Lazzeretti, L. (2008). *Creative cities, cultural clusters and local economic development*. Edward Elgar Publishing.
- Dellyana, D., Arina, N., & Fauzan, T. R. (2023). Digital innovative governance of the Indonesian creative economy: A governmental perspective. *Sustainability*, 15(23), 16234. <https://doi.org/10.3390/su152316234>
- Evans, G. (2009). Creative cities, creative spaces and urban policy. *Urban Studies*, 46(5–6), 1003–1040. <https://doi.org/10.1177/0042098009103853>
- Flew, T. (2011). *The creative industries: Culture and policy*.
- Florida, R. (2019). *The rise of the creative class*. Basic books.
- Gu, X. (2014). Creative industries, creative clusters and cultural policy in Shanghai. In *Cultural Policies in East Asia: Dynamics between the State, Arts and Creative Industries* (pp. 174–192). Springer. <https://doi.org/10.1057/9781137327772.0017>
- Hollands, R. G. (2023). Neoliberalism, Creativity and Cities. In *Beyond the Neoliberal Creative City* (pp. 1–23). Bristol University Press. <https://doi.org/10.1332/policypress/9781529233124.003.0001>
- Kavle, J. A., & Landry, M. (2018). Addressing barriers to maternal nutrition in low-and middle-income countries: A review of the evidence and programme implications. *Maternal & Child Nutrition*, 14(1), e12508. <https://doi.org/10.1111/mcn.12508>

- Kyaw, M. H., Spinardi, J. R., Jagun, O., Franco Villalobos, C., Kapetanakis, V., Sharf-Williams, R., & Yarnoff, B. (2024). Descriptive analysis to assess seasonal patterns of COVID-19 and influenza in low-income and middle-income countries in Asia, the Middle East and Latin America. *BMJ Open*, 14(1), e081019. <https://doi.org/10.1136/bmjopen-2023-081019>
- Lazzaro, E. (2018). Studies on Culture and Creative economics in Belgium (Brussels, Flanders and Wallonia). *4th Bandung Creative Movement International Conference on Creative Industries 2017 (4th BCM 2017)*, 1–4. <https://doi.org/10.2991/bcm-17.2018.1>
- McQuire, S. (2017). *Geomedia: Networked cities and the future of public space*. John Wiley & Sons.
- Montalto, V., Alberti, V., Panella, F., & Sacco, P. L. (2023). Are cultural cities always creative? An empirical analysis of culture-led development in 190 European cities. *Habitat International*, 132, 102739. <https://doi.org/10.1016/j.habitatint.2022.102739>
- Panda, M., Hossain, M. M., Puri, R., & Ahmad, A. (2025). Artificial intelligence in action: shaping the future of public sector. *Digital Policy, Regulation and Governance*, 27(6), 668–686. <https://doi.org/10.1108/dprg-10-2024-0272>
- Park, S. H., & Shin, H. (2025). The entrepreneurial creative city and its discontents: The politics of art-led urban regeneration in Incheon, South Korea. *Urban Studies*, 62(7), 1358–1374. <https://doi.org/10.1177/00420980241285856>
- Pratt, A. C., & Hutton, T. A. (2013). Reconceptualising the relationship between the creative economy and the city: Learning from the financial crisis. *Cities*, 33, 86–95. <https://doi.org/10.1016/j.cities.2012.05.008>
- Rius-Ulledemolins, J., & Díaz-Solano, P. (2023). Local political change, the neo-creative city paradigm and the mutations of Valencian cultural branding. *City, Culture and Society*, 34, 100535. <https://doi.org/10.1016/j.ccs.2023.100535>
- Rodríguez-Pose, A., & Ketterer, T. (2020). Institutional change and the development of lagging regions in Europe. *Regional Studies*, 54(7), 974–986. <https://doi.org/10.1080/00343404.2019.1608356>
- Segovia, C., & Hervé, J. (2022). The creative city approach: origins, construction and prospects in a scenario of transition. *City, Territory and Architecture*, 9(1), 29. <https://doi.org/10.1186/s40410-022-00178-x>
- UNESCO. (2021). *Cities, culture, creativity: Leveraging culture and creativity for sustainable urban development and inclusive growth*. World Bank. <https://doi.org/10.1596/978-92-3-100452-0>
- Zhirou, L. (2020). *Empirical Studies in Social Stratification Research on Educational Inequalities—A Case Study of Two High Schools in Detroit*. <https://doi.org/10.2991/ASSEHR.K.200826.084>