

2.0 Chapter 2: Literature Review

2.1 Introduction

This chapter synthesizes contemporary literature to establish the technological, socio-economic, and theoretical landscape for the development of "Creatuno." The review critically examines the current state of Sierra Leone's digital and creative economies, evaluates existing models for digital portfolios and mentorship, and analyses appropriate technological frameworks for low-resource environments. By integrating findings from development reports, academic research, and regional case studies, this chapter identifies the specific gaps that Creatuno aims to address. The synthesis demonstrates that while the creative sector holds significant economic promise, its growth is stymied by a convergence of digital access barriers, a lack of integrated professional tools, and low digital literacy. This justifies the need for a context-specific, mobile-first platform that combines portfolio showcasing with structured mentorship.

2.2 Conceptual Review (Existing Systems, Technologies, and Models)

The Digital and Creative Economy Context of Sierra Leone

The creative economy, defined by the United Nations as the interface between creativity, culture, economics, and technology, has evolved into a major global economic force. It generates approximately \$2.25 trillion annually and supports nearly 50 million jobs worldwide, with growth rates often surpassing traditional industries. In Africa, this sector holds "outsized potential," driven by a young, digitally-engaged population. Sierra Leone's recent, evidence-based embrace of this sector marks a critical policy shift. The launch of the nation's first Creative Economy Diagnostic Report in September 2025 provides a foundational analysis, quantifying the sector's contribution at an estimated 4.5% of national GDP and more than 10% of formal employment. This positions the creative economy as the country's second-

largest employer after agriculture, with strongholds in audiovisual media, music, performing arts, and crafts.

This diagnostic, developed under the World Bank's CreatiFi initiative, transcends mere measurement; it is a strategic blueprint for national development. The report aligns with the government's 2024-2030 National Development Plan, which elevates creative and tourism sectors as critical enablers for economic diversification and job creation. As Minister of Tourism and Cultural Affairs Nabeela Tunis stated, "The creative industry is now part of Sierra Leone's development blueprint". The diagnostic identifies systemic barriers—limited finance, weak infrastructure, data gaps, and fragmented governance—that constrain growth despite this potential. Notably, 91% of creatives cite limited access to finance as their primary challenge, highlighting a critical market failure. Initial interventions, such as the Creative Accelerator Pilot Program that supported 25 women-led businesses and created 65 jobs, demonstrate the tangible impact of targeted support and the need for scalable solutions.

Mentorship Platforms and Models

Modern digital mentorship platforms provide a blueprint for structured, scalable professional guidance. Leading platforms such as MentorcliQ, Chronus, and Together offer key features that are relevant to adapt for the creative sector:

- **Intelligent Matching:** Using algorithms to pair mentors and mentees based on skills, goals, and interests.
- **Goal Setting and Tracking:** Providing tools to define objectives and monitor progress within the mentoring relationship.
- **Integrated Communication:** Facilitating communication within the platform to maintain structure and record insights.
- **Administration and Analytics:** Reducing manual overhead for program managers and providing data on participation and outcomes.

However, these platforms are primarily designed for formal, corporate environments within organizations. Their models often assume high connectivity, digital fluency,

and a context where professional development is institutionalized. The challenge and opportunity for Creatuno lie in adapting these proven features for an informal, entrepreneurial sector in a low-resource setting, where mentorship may be peer-driven and focused on practical business survival as much as creative growth.

Progressive Web App (PWA) Technology

For the Sierra Leonean context, Progressive Web App technology presents a strategically optimal technical architecture. PWAs are web applications that use modern web capabilities to deliver an app-like user experience. Their core advantages align directly with identified constraints:

- **Offline Functionality and Low Data Usage:** Through service workers and caching, PWAs can work reliably on poor or non-existent networks, a critical feature given that more than half of the adult population lacks reliable mobile network access.
- **Cross-Platform and Installable:** They run on any device with a modern web browser (Android, iOS, basic smartphones) and can be installed on the home screen without app store distribution, bypassing data-heavy downloads and storage limitations.
- **Discoverability and Linkability:** As websites, they are easily shareable via URL and indexable by search engines, aiding in the discoverability of creative professionals.

This architecture directly addresses the "high data cost" barrier by allowing users to access core portfolio content offline and interact with the platform in a data-light manner.

2.3 Theoretical Framework

This research is grounded in two interconnected theoretical paradigms:

1. **Human-Computer Interaction for Development (HCI4D):** This framework prioritizes designing technology with and for underserved populations, emphasizing deep contextual understanding, participatory design, and evaluating socio-economic impact over mere usability. Creatuno is

an HCI4D intervention, as its design is driven by the specific infrastructural (low connectivity), economic (informality, high data cost), and literacy constraints of Sierra Leonean creatives.

2. **Financial and Digital Capability Theory:** Moving beyond simple access, this theory focuses on an individual's ability to effectively use financial and digital tools to improve their well-being. The platform aims to build digital capability by simplifying complex online tasks (portfolio creation, professional networking) and financial capability by facilitating secure transactions and connecting users to financial tools, thereby addressing the low digital and financial literacy scores documented nationally.

2.4 Empirical Review (Related Studies and Findings)

Empirical evidence from related technological deployments in Sierra Leone and similar regions strongly informs the proposed technical architecture and implementation strategy.

- **Evidence for PWA Efficacy in Low-Bandwidth Settings:** Industry case studies are compelling. Twitter Lite, a PWA, demonstrated a 70% reduction in data consumption and significant increases in user engagement in emerging markets by employing aggressive caching and data-savvy loading strategies. This directly validates the technical premise that a well-optimized PWA can overcome connectivity barriers.
- **Lessons from Tech-Supported Professional Development in Sierra Leone:** A critical parallel exists in the education sector. The EdTech Hub's sandbox project for Teacher Continuous Professional Development (TCPD) in Sierra Leone tested a model using Android tablets with digital resources to facilitate teacher learning circles. Key, transferable findings include:
 - **Peer-Driven Adoption:** Teachers spontaneously used devices to record and critique each other's work, stating, "The video is like a mirror... you learn from each other". This mirrors the desired peer-review function within Creatuno.

- **The Vital Role of Mediators:** Success depended on supported peer facilitators and district officers, highlighting that technology alone is insufficient. This underscores the need for community management and onboarding support within Creatuno.
- **Content Format Preferences:** Teachers strongly preferred audio and video for learning but valued mixed formats, noting print's reliability without electricity or internet. This informs Creatuno's content strategy, emphasizing media optimization while considering fallback options.

2.5 Comparative Analysis of Existing Systems

This section provides a critical evaluation of the digital tools currently available to Sierra Leonean creative professionals, contrasting them with the proposed Creatuno platform. The analysis focuses on four key dimensions critical for success in the local context: technical efficiency and accessibility, comprehensiveness of professional features, cultural and contextual relevance, and overall barriers to adoption.

Technical Efficiency and Accessibility

The most immediate barrier for Sierra Leonean users is technical. Global portfolio platforms like Behance and Dribbble are engineered for high-bandwidth environments, featuring high-resolution image galleries and complex interfaces that consume significant data and perform poorly on unreliable connections. Similarly, while more accessible, social media platforms like Instagram and Facebook utilize data-heavy auto-playing videos and continuous feed refreshes. In contrast, Creatuno is conceived as a Progressive Web App (PWA), an architecture specifically chosen to overcome these constraints. By employing service workers for offline functionality, lazy loading for images, and aggressive data compression, it prioritizes minimal data consumption and core usability on basic smartphones and 2G/3G networks, directly addressing the infrastructural realities highlighted in national reports.

Comprehensiveness of Professional Features

Existing systems offer fragmented solutions that address only part of a creative professional's needs. Global portfolio platforms excel at visual presentation to a

worldwide audience but lack integrated tools for finding local work, securing mentorship, or managing client relationships specific to the Sierra Leonean market. Conversely, social media and messaging apps like WhatsApp are used ubiquitously for networking and client communication but are not designed for professional showcasing, lack structured job markets, and expose users to financial and intellectual property risks due to their informal nature. Creatuno aims to synthesize these functions into a holistic professional ecosystem. It integrates a dedicated portfolio builder with a structured, algorithm-assisted mentorship matching system, a verified local job and gig board, and community collaboration tools, creating a single destination for end-to-end professional development and economic opportunity.

Cultural and Contextual Relevance

A significant gap exists in the cultural localization of available tools. Mainstream international platforms operate on a one-size-fits-all model, with interfaces and community norms centered on Western creative markets. They offer no support for local languages like Krio, Mende, or Temne, and their content algorithms are not tuned to promote Sierra Leonean talent or connect users to regional opportunities. Creatuno is designed with local contextualization as a core principle. This includes a bilingual English-Krio interface, design sensibilities that reflect local aesthetics, features that accommodate prevalent business practices (such as integration pathways for mobile money), and a community framework built around the specific disciplines and hubs active within Sierra Leone's creative economy.

Barriers to Entry and Sustained Use

The barriers to effective use of existing platforms are multifaceted. Professional portfolio sites often have a steep learning curve and may hide advanced features behind paywalls, while the "free" access to social media masks high cumulative data costs and demands constant content creation to beat algorithmic feeds. Creatuno seeks to implement a low-barrier, high-value model. Its PWA nature eliminates app store downloads, its user experience is designed for varying levels of digital literacy, and its core functionality is intended to be freely accessible. By reducing the friction

and cost of creating a professional online presence and accessing growth tools, it aims to enable broader participation in the formal digital creative economy.

In summary, while global platforms and social media provide partial solutions, they are misaligned with the technical, economic, and cultural realities of Sierra Leonean creatives. This comparative analysis demonstrates that Creatuno is not merely another platform, but a targeted intervention designed to synthesize professional tools into an accessible, context-sensitive ecosystem that directly addresses the systemic gaps inhibiting the sector's growth. This positions the project to fill a unique and vital niche in the market.

Summary Table: Comparative Analysis of Existing Systems vs. Creatuno

Evaluation Dimension	Global Portfolio Platforms (e.g., Behance, Dribbble)	Social Media & Messaging Apps (e.g., Instagram, WhatsApp)	Proposed Creatuno Platform
1. Technical Efficiency & Accessibility	Poor. High-bandwidth, data-heavy design; no offline functionality; poor performance on 2G/3G networks.	Moderate to Poor. Data-intensive auto-play videos/feeds; limited offline utility; performance tied to connection quality.	Excellent. PWA architecture built for low-bandwidth: offline access via service workers, lazy loading, and data compression for use on basic devices and slow networks.
2. Professionalism	Strong display, weak ecosystem. Excellent	Very weak. Designed for social, not	Holistic & Integrated. Unifies portfolio builder, structured

Evaluation Dimension	Global Portfolio Platforms (e.g., Behance, Dribbble)	Social Media & Messaging Apps (e.g., Instagram, WhatsApp)	Proposed Creatuno Platform
I Feature Set	for global visual showcase but lacks integrated local job markets, structured mentorship, or business tools for freelancers.	professional, interaction. Job posts are ad-hoc and unverified ; no portfolio curation, secure transactions, or professional networking tools.	mentorship matching, verified local job board, and community collaboration tools in one professional ecosystem.
3. Cultural & Contextual Relevance	Global/Standardized. No support for local languages (Krio, Mende, Temne); algorithms and content not tailored to Sierra Leonean market or creative practices.	Algorithm-Driven & Global. Not designed for the Sierra Leonean creative economy; does not promote local talent or facilitate local business norms.	Locally Contextualized. Bilingual interface (English/Krio) ; design reflects local aesthetics; supports local practices (e.g., mobile money); focuses on domestic/regional opportunities.

Evaluation Dimension	Global Portfolio Platforms (e.g., Behance, Dribbble)	Social Media & Messaging Apps (e.g., Instagram, WhatsApp)	Proposed Creatuno Platform
4. Barrier to Entry & Sustainability	High. Steep learning curve for professional presentation; core features often behind paywalls; assumes high digital literacy.	Low barrier, high hidden cost. Easy to join but professional use is inefficient and risky ; high data costs; success depends on algorithmic visibility, not merit.	Designed for Low Barriers. Mobile-first for basic smartphones; intuitive interface for varying digital literacy; freemium model ensures core access; reduces data cost as a primary constraint.

2.6 Identified Research Gaps

This review reveals a significant and actionable research gap. While substantial, parallel bodies of work exist on Sierra Leone's creative economy potential, its digital infrastructure challenges, and the models of digital mentorship —there is a lack of applied research that converges these domains.

No existing study or platform provides a cohesive, evidence-based framework for a digital tool that:

1. Is **technologically architected from the ground up** (using PWA principles) for Sierra Leone's specific connectivity and device landscape.

2. **Translates formal mentorship and portfolio models** into a system relevant for an informal, entrepreneurial creative sector.
3. **Explicitly targets and measures** the enhancement of digital and financial capabilities as a pathway to professional and economic growth for creatives.

Therefore, this dissertation will address this gap. The development and pilot evaluation of Creatuno is not merely a software project; it is an integrated socio-technical intervention. It aims to generate new knowledge on effectively bridging the disconnect between high-potential economic sectors and the digital tools needed to unlock that potential in resource-constrained environments. The following chapter will detail the mixed-methods research design chosen to guide this development and measure its impact.

To help visualize how Creatuno's features are designed to address the specific challenges identified in this review, the following table maps core platform components to the key barriers faced by Sierra Leonean creatives:

Identified Barrier (from Literature)	Relevant Creatuno Feature	Intended Outcome
Low Digital Literacy (26/100 score)	Simplified, icon-driven UI; Bilingual (Krio/English) guides; In-app tutorials for portfolio creation.	Lower the learning curve, enabling non-tech-savvy creatives to build an online professional presence.
High Data Costs & Poor Connectivity	PWA Core: Offline portfolio viewing; Optimized image compression; Background sync for messages.	Make the platform usable and affordable by drastically reducing reliance on continuous, expensive mobile data.

Identified Barrier (from Literature)	Relevant Creatuno Feature	Intended Outcome
Lack of Structured Mentorship & Professional Networks	Algorithm-assisted mentor matching; In-platform messaging and goal tracking; Community forums.	Move professional guidance from ad-hoc, informal exchanges to structured, goal-oriented relationships and peer support.
Limited Market Access & Financial Informality	Integrated local job/ gig board; Portfolio showcase with direct contact; Mobile money payment facilitation guides.	Connect creatives directly to opportunities and provide pathways to secure, digital transactions.