



Data Gaps Report

An analysis of the existing and required data in the gaming,
animation and illustration industries in South Africa

2020



On behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), the GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) and the Goethe-Institut promote the emerging market of cultural and creative industries in Africa and in the Middle East.

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1.

INTRODUCTION

The cultural and creative industries (CCIs) in South Africa are fragmented and suffer from low visibility. Additionally, there is a lack of clarity around potential solutions and interventions that may be implemented to strengthen the industry as a whole. This is partially due to the lack of functional cross-sector organisations and networks. Thus, the CCIs struggle to adequately represent their interests to state entities and key decision-makers.

Information is a valued currency in the creative economy. It provides business leads and trends as well as the shape and nature of the creative ecosystem. Thus data, whether in its raw form or analysed, is one of the major contributors to the development of an industry in the information age.

This report, formulated through the responses of practitioners in the CCIs, is based on discussions and research conducted in the creative industries. The research is part of the work of the Cav' Platform – a project of the Goethe-Institut to support the creative industries. The project contributes to existing efforts to improve the experience of practitioners in the CCIs by providing a space for dialogue, networking, information and resource sharing.

The Data Gaps Research aims to identify existing research and knowledge gaps in order to determine what additional research – and possible action – are required. This insight will guide the Cav' Platform regarding future research intervention. Contributors from the illustration, gaming and animation industries were invited to contribute to the desktop research on these industries.

The content of this document represents research contributions by individuals and organisations which are embedded in the creative sectors in focus. This is accompanied by a showcase of Credipple to highlight a business that blends industry association with business principles and a new way of organising, that goes beyond the traditional associations that are currently prevalent within the CCI.

2.

OVERVIEW OF DIGITAL WORK

One of the pathways for South Africa to create income-generating work in the digital age is through digital platforms. Currently, there are more than 90 digital platforms operating in South Africa that provide access to global business services (GBS) such as media, coding, finance, accounting and call centres. However, accessing work through digital platforms is still in its infancy with 53% of the South African population online yet only 250 000 GBS jobs can be found on these platforms. South Africa in a Digital Age (SADA), a joint venture by the Gordon Institute of Business Science, Genesis Analytics and the Pathways for Prosperity Commission, estimate this number could increase by 100 000 GBS export jobs by 2023.

The global business-to-business (B2B) market for online freelance work is worth 7.2 billion dollars, led by Upwork and is growing (World Economic Forum, 2019). With global exchange rates favourable for export, this is a huge opportunity for South Africa to develop professionals, not only to serve the local market but the global market as well, and by doing so, increasing the number of job opportunities available to professionals in South Africa.

The opportunity for the future of digital work in South Africa can only be realised by bringing the remaining 47% of the population online. Mobile devices with internet access feature amongst 93% of informal and small businesses yet less than 20% of them are using their mobile devices for business processes and management. Only 10% of internet users in South Africa choose to find work through online platforms (RIA, 2019).

In 2020, South Africa has a population of 57.7 million people with a working-age population of 37.8 million who are aged between 15-64 years. Of the total population, 20.4 million are young South Africans aged between 15-34 years and 8 million of them (40,1%) are not employed, not in education and not in training (NEET). The World Economic Forum (WEF) states that the present job deficit in South Africa in 2020 is 6.2 million jobs and will be 6.5 million jobs by 2021.

Better collection and sharing of data regarding freelance and self-employed professionals and their respective career development will better inform what urgent skills investments need to be made to improve the unemployment figures.

South African employers deduct a flat 25% of tax from freelancers for each job. SARS adds this tax up at the end of the year and adjusts it to reflect the freelancer's actual tax based on their total income that year earned from the various jobs. Although freelance professionals pay this tax to the South African government, they have received little or no benefit and protection in these times of crisis (Covid-19) mainly because the government has no way to monitor the interactions between professionals and clients in the freelance market.

3.

SHOWCASE: KNOWLEDGE DATA GAPS IDENTIFIED USING THE CREDIPPLE BUSINESS MODEL

Credipple is an online platform connecting creative freelancers and independent contractors with clients in the creative industries.

The professionals who access the freelance market through Credipple present an opportunity to better implement education and labour policies that are inclusive of freelance professionals in collaboration with the South African government.

Credipple is aligned with the Media, Information and Communication Technologies Sector Education and Training Authority (MICT SETA) as that is where the key industry sectors of advertising; film and electronic media; and information technology are located.

HUMAN CAPITAL

Professionally curated portfolios are an essential indicator of proficiency

Inexperienced professionals cannot package trustworthy portfolios and need additional means to verify skills

Professionals with disabilities are protected from possible discrimination in face-to-face meetings with clients

Credipple is able to curate appropriate briefs for clients

Credipple is able to intercept opportunity barriers on behalf of clients and professionals



FINANCIAL CAPITAL

Many professional artists do not have bank accounts and resort to third-party interventions to receive their payments

Some professionals do not know how to quote and invoice correctly

Freelance professionals need access to financial wellness products



INFRASTRUCTURE

Professionals have the ability to deliver the work but lack the required infrastructure to deliver timeously

Professionals struggle to meet deadlines as a result of limited internet access

Professionals have limited access to the equipment required to perform commissioned tasks

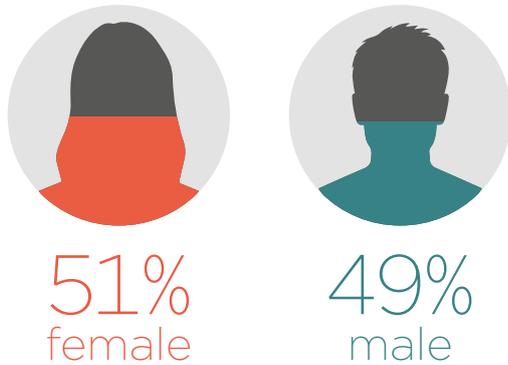
Restricted access to resources (as was evident during the Covid-19 lockdown) results in workflow breakdown



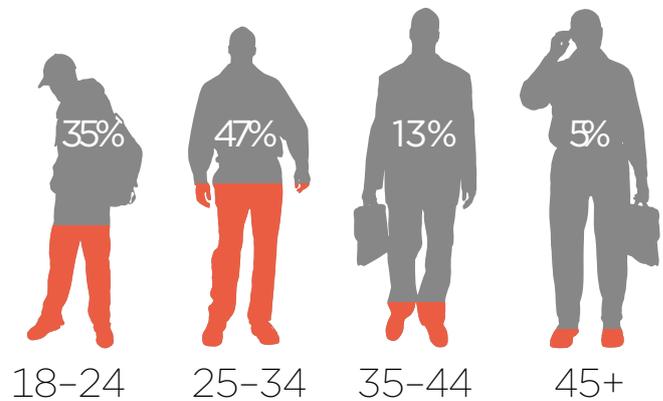
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SHOWCASE continued

CREDIPPLE NETWORK: GENDER BREAKDOWN



CREDIPPLE NETWORK: AGE BREAKDOWN



Geographic distribution

95% of the Credipple network is located in two provinces - Western Cape and Gauteng.

Services offered

The top-ranking and in-demand services at Credipple are:

- » Design and illustration
- » Digital marketing and search engine optimisation
- » Web development
- » Writing services
- » Content development.

Clients

Credipple's clients are divided into informal businesses; small businesses and NPOs; and media and advertising corporates.

Scope

Credipple started connecting professionals to clients in March 2019 and by the end of March 2020, they had fulfilled 50 bookings totaling R215 000 with an average booking of R4 300.

4.

GAMING: OVERVIEW OF THE SUB-SECTOR IN SOUTH AFRICA

Gaming in South Africa is still in its budding stages with researchers like Hall (2019) arguing that the industry makes up only 1.2% of the global industry. The 2019 South African Cultural Observatory (SACO) industry report titled *Unlocking the growth potential of the online gaming industry in South Africa: challenges and opportunities* also supports this argument stating that gaming is 'still small and new, but growing quickly, with an estimated turnover of R200 million for 2017/18.' Indications from available research, such as a report from the American company, Big Fish, argue that the industry is now probably worth over \$163 million (almost R3 billion) due to year-on-year exponential growth.

Breakdown of the global gaming sector



The 2019 SACO report also argues that there is 'considerable overlap between gaming and animation' scenarios, which makes it difficult to fully understand the total value of each as well as the revenue share. This presents a very large knowledge gap that needs to be investigated further.

The Fak'ugesi *African Digital Innovation Festival Games Research Roundtable Report* (2019) together with the Fak'ugesi *Futures and Networking Report* (2019) are two documents that offer additional analysis on gaming in South Africa and other parts of the African continent such as Kenya and Nigeria.

It has emerged that game developers are mostly under-financed and exist as small start-ups. These factors hinder the ability to access adequate funding from banks and other lenders to scale-up their businesses. Gaming requires a huge capital base and tech-heavy productivity so that new games are continuously being churned out. The disadvantage that local and African gamers face is that the biggest share of gaming revenues is rapidly taken up by international players which means they are always ahead of the curve.



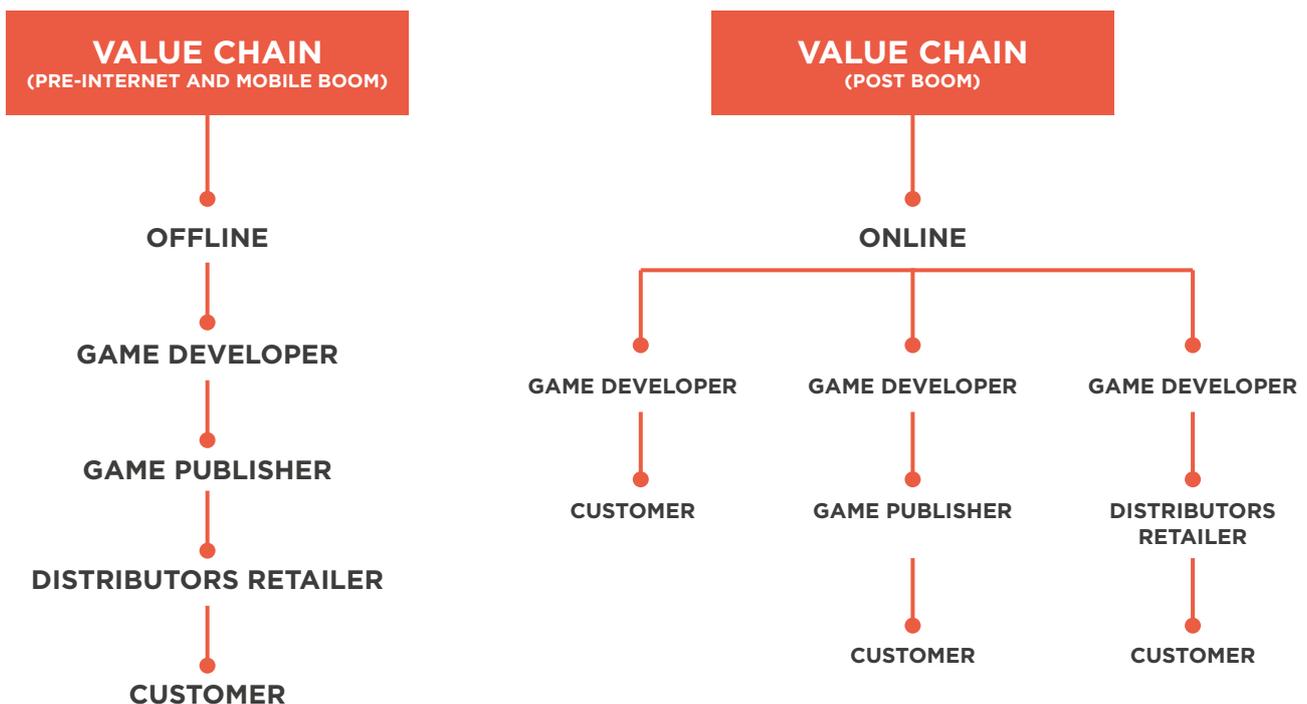
GAMING continued

In 2018 it was reported that South African game developers earned around R150 million as stated in the game research roundtable report produced by Fak’ugesi African Digital Innovation Festival 2019.

What is not clear is how those revenues were divided within the gaming ecosystem so it was difficult to get a sense of the areas which are capital and/or labour intensive, among other factors. The fragmented nature of the industry makes it difficult to get an accurate picture of how other sub-sectors contribute to the final product. The unavailability of such key information poses a challenge for potential investors who, as a result, struggle to understand where to invest and what kind of returns to expect on their investment.

The internet and mobile device boom had a substantial effect on the gaming value chain as can be seen in the graphic.

GAMING VALUE CHAIN





GAMING continued

Because many components make up the value chain it is important to understand the differences and similarities between the South African gaming market and traditional gaming value chains. Furthermore, as the local gaming industry is still developing, the available information is not extensive enough and one has to make a number of assumptions. This then invalidates the research conclusions since they are not based on empirical evidence.

Other key information such as consumption of gaming services (i.e. whether offline or online) and the contribution of e-sports to the gaming industry are all areas requiring further investigation. The Fak'ugesi and SACO reports do provide some data but, given the complexity of the gaming industry from a technological perspective, much of this data seems more anecdotal than a result of robust research. Additionally, given that the South African gaming industry is player-focused there is insufficient information on how this scenario can be changed because in other parts of the world, gaming revenues are mostly from the sale of games and the sale of game merchandise such as cars, character outfits, and weapons. Gaming merchandise is what has made events like Comic Con Africa (which started in 2018) grow and sell-out tickets within hours of them being issued because gamers from across the continent all make arrangements to attend.

An example of this is the roaring success of the film *Black Panther* which ideally should have resulted in game designers, distributors and publishers all cashing in due to it being an African story, with African themes and attire but this was not the case. Instead, the main beneficiary is Disney.

4.1 Knowledge gaps in the gaming sub-sector in South Africa

There are a number of knowledge gaps due to the lack of sufficient up-to-date research on the value of the gaming industry and its contribution to the gross domestic product (GDP). There is also a lack of information around the facets of the gaming industry ecosystem and the various relationships that make the sector a functioning one. The knowledge gaps include:

1. The state and value of the gaming ecosystem in South Africa.
2. Since gaming operates between the nexus of content, streaming, digital entertainment, with e-sports being an example, what strategies are in place to lobby sporting bodies (e.g. SASCO) as key partners towards recognition? This will ensure the further growth and development of gaming.



GAMING continued

3. The omission of gaming from the 2017 Revised White Paper on Arts, Culture and Heritage vis-a-vis the wider CCIs begs the question: What possibilities are present for such inclusion in the future?
4. The key role intellectual property (IP) plays when films and games based on African characters like Black Panther are produced also requires clarification and an answer to the question: What are the processes available from existing or ideal policies so that there is benefit to the local industry?
5. How much are the revenues from game merchandising and licensing and how could they benefit South African/African companies through secondary licensing and local manufacturing of merchandise?

4.2 Central research questions about gaming in South Africa

Several key questions are important so as to get a better understanding of gaming as an industry. Some of these questions have already been covered above as knowledge gaps:

1. Given that gaming falls within the CCIs' framework, the key questions are around policy, i.e. Should gaming be considered as part of the wider CCIs from a policy perspective? Is gaming's current location within the Department of Sports, Arts and Culture (DSAC) adequate?
2. What strategies are required to ensure that gaming becomes accessible to a wider demographic than in the existing scenarios in South Africa?
3. What interventions are needed to grow South Africa's current market share, which is currently estimated to be around 1.2% of the global industry?
4. What lessons can be drawn from other African countries where gaming and e-sports are growing, such as Kenya and Nigeria?
5. What strategies are required to change public and key stakeholder perceptions of gaming as a viable career path?
6. Gaming hardware and software are mostly imported. What strategies can be developed for the local manufacturing of these components?
7. What opportunities and barriers exist in the 2017 Revised White Paper on Arts, Culture and Heritage for the promotion of the gaming industry in South Africa?
8. Gaming IP and software are held by multinationals. Is there space for the development of South African and, by extension, African software and IP through secondary licensing rights of well-known games?

5.

ANIMATION: OVERVIEW OF THE SUB-SECTOR IN SOUTH AFRICA

The animation industry in South Africa is still relatively underdeveloped with about 30 animation studios around the country, predominately in Cape Town. There is no doubt that there are great opportunities to further grow the sector to become a sizable industry comparable to that in other parts of the world. Whilst being a fledgling sector, South African animation productions are drawing international attention and gaining broad recognition. A few animation companies have created works that have received international recognition and have been showcased on Netflix, Amazon and Nickelodeon. Triggerfish, an animation studio based in Cape Town, animated the short film, *Revolting Rhymes* which received an Oscar nomination in the Best Animation Short Film category.

The economic impact study done by the National Film and Video Foundation (2017) emphasises that financing of film projects is crucial, as the industry is viewed to be high in costs as well as high-risk in returns. This means that animation films not linked to well-known individuals or companies experience greater difficulties getting financial support and need government assistance in the form of incentives or initiatives.

Other methods that filmmakers can use to generate finance include:

- » Co-production agreements (both official and unofficial) – where producers collaborate and receive benefits in the form of tax incentives in the partner country.
- » Product placement – where films promote companies' products by including them in the final product and receive payment for marketing.

The NFVF research indicates that the total investment or expenditure that occurred in the South African film industry as a whole in the 2016/17 financial year resulted in the following economic benefits:

- » A direct impact of R4.4 billion on economic production, leading to a rise in total production in the economy to approximately R12.2 billion.
- » The net operational expenditure produced in the four financial years analysed in the study amounted to R17.5 billion.
- » During the 2016/17 financial year, the net operational expenditure of the film and video industry was R4.4 billion.
- » The employment multiplier increased by a multiple of 4.9 for every R1 invested. Therefore, the South African film industry created an increase in employment, which essentially meant that

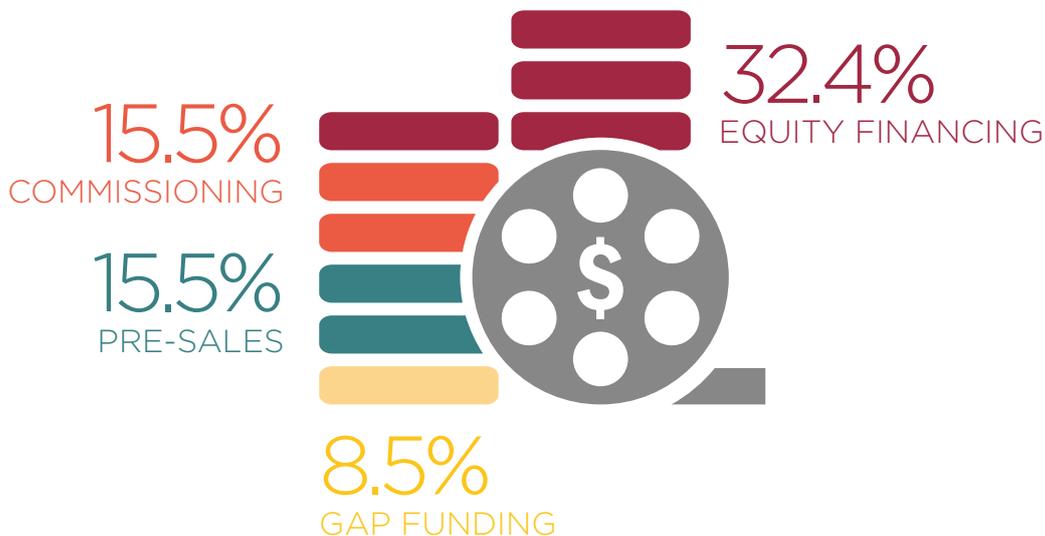


ANIMATION continued

an additional two people benefitted from the new income derived from the direct, indirect and induced jobs created in the 2016/17 financial year.

Apart from the already mentioned financing models, there are other ways in which films are funded according to the NFVF economic impact research. The figure below illustrates the percentages and funding avenues.

FUNDING AVENUES FOR THE FILM INDUSTRY



Most of the fiscal support that takes place in the industry comes from the government sector and individual investors. Each sector contributes 32.8% and 40.3% respectively. Government funders include the Department of Trade and Industry (DTI), NFVF and the Industrial Development Corporation (IDC).

At least 1 0% of the total budget of creating films comes from government investment in the form of equity financing (32.4%). Gap funding (8.5%) on the other hand is the least form of funding offered due to the high risk involved in issuing these loans. There are usually significant challenges for upcoming film producers to secure loans from banks as they are viewed as a risky investment that might not generate revenue.



ANIMATION continued

Whilst there is information and data that tracks and records the impact of the film industry in South Africa as whole, there is very little data that isolates and measures specifically the economic impact of animation. There is no doubt that this sector is under researched.

The graphic below demonstrates the percentage of produced films in South Africa and provides some specific information on the animation sub-sector.

SOUTH AFRICAN FILM INDUSTRY SURVEY



Animation films are the least produced (3%) films in South Africa. This could be due to the fact that animation is relatively under-developed in comparison to the other sub-sectors. A lack of professional and reputable companies working in this sub-sector could also be a contributing factor to the low production rate.

5.1 Knowledge gaps in the animation sub-sector in South Africa

The animation industry remains under-researched. This knowledge gap research of the sub-sector made it very clear that there are certain aspects of the animation industry ecosystem that require further research. Below are some of the knowledge gaps:

1. The total direct investment in the animation industry.
2. The economic impact of the animation industry.



ANIMATION continued

3. Understanding the value chain systems, opportunities and challenges.
4. The extent of South Africa's international penetration and market share.
5. Ways to stimulate demand for South African animation.
6. Ecosystems mapping - who is doing what and where.
7. Intergovernmental strategy in the development of animation in South Africa.
8. Understanding the skills, technology and software shortages.

5.2 Central research questions about animation in South Africa

Several key questions are important for understanding the animation industry:

1. To what extent do public and private institutions invest in animation?
2. What could be done to stimulate greater demand for South African animated films?
3. What policy frameworks need to be considered in developing the animation sub-sector?
4. Who are South Africa's primary trade partners when it comes to animation?
5. What is South Africa's main contribution to the global animation industry?
6. What is South Africa's market share of the animation industry on the continent and globally?
7. What are the challenges accessing markets? What are the barriers? What could be done to mitigate these?
8. How can we mitigate the seasonality of demand for the workforce in the animation sector?
9. Is there adequate training? How do we ensure the accessibility of animation training to young people?

6.

ILLUSTRATION: OVERVIEW OF THE SUB-SECTOR IN SOUTH AFRICA

The definition of illustration suggests manual illustration is hand-drawn and digital illustration uses computer technology. Digital illustration or computer illustration is the use of digital tools to produce images under the direct manipulation of the artist. With the rapid advancement in technology, digital illustration tends to overshadow traditional hand-drawn illustration and for that reason, illustration is typically classified under the digital creative economy as opposed to being classified under the visual arts. Advancement in digital technology has disrupted the value chain – conceptualisation, production, exhibition, distribution and consumption – of the illustration and other creative sectors in a way that demands reflexive and flexible business approaches.

According to the Revised White Paper on Arts, Culture and Heritage (2017), illustration fall under the language, literature, books and publishing sector. Digital illustrations have, however, become expansive, finding expression and a strong presence in the visual arts, crafts and design, and audiovisual media industries.

6.1 Knowledge gaps in the illustration sub-sector in South Africa

Certain aspects of the illustration industry require further research and the knowledge gaps include:

1. Public funding for the illustrations sub-sector.
2. Definition, identification and classification of illustration as an independent sub-sector.
3. The roles of editors, art directors, book designers, publishers in relation to illustrators.
4. Relationships with government departments and institutions.
5. How to strengthen existing networks.
6. The 'silence' of national cultural policy about illustration as a sub-sector.
7. Publishing costs and viability of the education market.
8. No direct state-driven institutions for illustration.



ILLUSTRATION continued

6.2 Central research questions about illustration in South Africa

To get a better understanding of the illustration industry, some key questions need to be asked:

1. What financing opportunities (public or private) can illustrators in South Africa access to advance their work and how can they access them?
2. Is it necessary to identify and define illustration as a stand-alone sub-sector given its expansiveness and embeddedness in other sub-sectors?
3. What are the roles of editors, art directors, book designers and publishers in advancing the role and status of illustrators in the CCIs?
4. Beyond online, subscription and transactional relationships, what other relationships exist between illustrators and other role players? How are these relationships managed?
5. Is it necessary to advocate for the full expression of illustration in national, provincial and local cultural policies given its embeddedness in other creative sub-sectors?
6. What are the costs of both online and physical publications and how viable is the education market for illustrators?
7. What is the contribution of the illustration sub-sector to the cultural and creative economy of South Africa?

7.

RECOMMENDATIONS

Regular, structured up-to-date research into gaming, animation and illustration is needed to assist role players in making key decisions on matters of policy and to determine the kind of support needed for the growth and development of the industry. Issues of access and transformation need to be addressed at various levels because the industry remains closed with complex barriers of entry. This does not augur well for the development of the industry.

Gaming remains a hugely untapped industry with great growth potential. To achieve this, key stakeholders from the government and the private sector need to come together to ensure that adequate strategies are put in place to grow the industry.

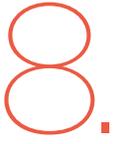
Animation remains a sector with massive growth potential in South Africa. Because the animation industry is so under-researched, the government is missing an opportunity to play a bigger role in creating policies that will allow the industry to compete globally and gain a share of the global market.

Illustration can be regarded as a sub-sub-sector and cuts across all CCIs and beyond. Lefèvre and Di Salvia (2011) concluded from their research on the socio-economic situation of comics authors and illustrators in Belgium that it is difficult to earn a living in this creative sub-sector. In our view, the reason for this is that the illustration sub-sector is subordinate to other sectors of the CCIs and does not receive independent recognition.

As in many countries across the world, the significant contribution of CCIs to the GDP of South Africa is not refutable. It is also not refutable that despite the significant contribution, there is limited research and therefore knowledge of the CCIs, meaning that the full potential of CCIs in South Africa has not yet been quantified and possibly not yet realised. The ramifications of limited knowledge about CCIs are particularly hard-hitting on the less visible sub-sectors of the CCIs, such as gaming, animation and illustration, which are the focus of this study.

Gaming, animation and illustration are not clearly delimited because they tend to blend, not only into each other but also across other sub-sectors of the CCIs. The expansive nature of these sub-sectors makes it hard to account for resources, role players, relationships, rules and results in the value chain and within the CCIs ecosystem.

There is a need for continuous, innovative and sub-sector-specific quantitative and qualitative research. The proposed research will help in the development of strategies to support the establishment and/or support of existing industry bodies to represent the interests of all those who make up these three sub-sectors.



CONCLUSION

While the data presented in this report was valid at the time of compilation, the information is to be revisited and updated as the Cav' Platform and the Data Gaps Research participants engage and design their intervention.

9.

CONTRIBUTORS

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Cultural and Creative Industries (CCI) research, strategic advisory and content engagement company.

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Animation South Africa (ASA)

A non-profit organisation mandated by industry to develop, promote and represent South African animation and VFX.

<https://animationsa.org/>

Credipple

A platform which connect clients to trusted professionals and small businesses in media and ICT industries.

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