

SOUTH AFRICAN CULTURAL OBSERVATORY

Economic Mapping Study Research Services to SACO

Technical Research Report 4 (of 5): Provincial Location and Clusters of
Cultural and Creative Industries

Submitted to the:

Department of Arts and Culture

Submitted by:

Nelson Mandela University

In Partnership with:

Rhodes University, University of Fort Hare and University of KwaZulu-Natal

NELSON MANDELA
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Economic Mapping Study Research Services

Technical Research Report 4 (of 5): Provincial Location and Clusters of Cultural and Creative Industries

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Submitted to the Department of Arts and Culture:



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ACRONYMS

AFS	:	Annual Financial Statistics
CCI	:	Cultural and Creative Industries
CID	:	Conningarth Infrastructure Database
CPC	:	Central Product Classification
CSA	:	Cultural Satellite Accounts
CSAM	:	Cultural SAM
CFCS	:	Canadian Framework for Culture Statistics
DET	:	Department of Education and Training
DAC	:	Department of Arts and Culture
DTI	:	Department of Trade and Industry
EBOPS	:	Extended Balance of payment Services Classification
FCS	:	2009 UNESCO Framework for Cultural Statistics
FDM	:	Freight Demand Model
GDP	:	Gross Domestic Product
GDP	:	Gross Value Added
HS	:	Harmonised Commodity Description and coding system
ICATUS	:	Intelligent Classification of Activities for Time Use Statistics
ICH	:	Intangible Cultural Heritage
ICT	:	Information and Communication Technology
ILO	:	International Labour Organisation
IO	:	Input Output Table
IP	:	Intellectual Property
ISCO	:	International Standard Classification of Occupations
ISIC	:	International Standard Industrial Classification
MEIA	:	Macroeconomic Impact Assessment Model
NMMU	:	Nelson Mandela Metropolitan University
OECD	:	Organisation for Economic Co-operation and Development



OFO	:	Organising Framework for Occupation
RSA	:	Republic of South Africa
SAM	:	Social Accounting Matrix
SACO	:	South African Cultural Observatory
SASCO	:	South African Standard Classification of Occupations
SIC	:	Standard Industrial Classification
SNA	:	System of National Accounts
SU	:	Supply and Use Tables
StatsSA	:	Statistics South Africa
TSA	:	Tourism Satellite Accounts
UIS	:	UNESCO Institute for Statistics
UN	:	United Nations
UNCTAG	:	United Nations Conference on Trade and Development
UNESCO	:	United Nations Educational, Scientific & Cultural Organisation
QLFS	:	Quarterly Labour Force Survey



1. Introduction and Background

This Research, Report 4, is the fourth in a series of five reports that forms deliverables of the 2020 economic mapping study. As it was the case with deliverables 2 and 3, this report is an update of a similar report that was produced in December 2017. It is important to note that the methodological approach undertaken for the 2020 study, was in line to the 2017 study except that the cluster analysis was extended and the mapping of the cluster analysis is also quantified for the various geographical location involved.

This current study is conducted under the auspices of the Nelson Mandela University in partnership with Rhodes University, University of Fort Hare, and the University of KwaZulu-Natal.

1.1 Scope of Work of the 2020 Study

Table 1.1 below reflects the scope of work undertaken in this 2020 study, as well as the titles of the reports produced as part of the overall study.

Table 1.1: Scope of Work and Research Reports

Scope of Work
1. Inception Report
2. Macroeconomic Impact Analysis: • The contribution of the CCIs towards GDP (economic output), as well as demonstrating the relative size of the CCIs sector in relation to other economic sectors across the UNESCO defined domains • An estimation of the forward and backward linkages (multipliers) in the CCIs sector itself, as well as linkages with other economic sectors
3. Provincial, Location and Cluster Analysis: • Provincial distribution of the CCIs (as per the macro-economic analysis stated above – this section should include maps detailing provincial distribution patterns) • Identification of possible clusters within the CCIs (this should include maps pertaining to the relevant findings), and • Employment from a provincial and geo spatial spread, i.e. mapping exercise & GIS Mapping
4. Shifting Transformation and Ownership Analysis: • Determine the transformation and ownership patterns within the South African CCIs across the UNESCO domains, noting that transformation and ownership levels must also be presented in the above-mentions section dealing with provincial distribution and clustering • Transformation and ownership levels from a provincial perspective

This specific report relates to item number three (Provincial, Location and Cluster Analysis) of the entire study.



1.2 Objective of this Report

The focus of this Technical Research Report 4 is on the Provincial Location and Clusters of Cultural and Creative Industries (CCIs). These and other industries, are not evenly distributed across geographical space or some special locational patterns but can be spatially concentrated. CCIs tend to concentrate in provinces, cities as well as in areas which are significant drivers of creative and cultural activity. Of course, in most cases, CCIs connect to more than one sector, especially in big metros. In this report the mapping of CCIs is undertaken in order to depict patterns of spatial clustering in terms of provinces, metros and selected cities. A comparative analysis between the clusters is also presented.

The objective of this study is to make use of this information, as well as of other secondary information, to calculate the size of CCI activities by province in terms of macroeconomic variables such as:

- GDP¹ which is the main indicator for economic activity;
- Employment which is a good indicator for income distribution; and
- Capital which is an indicator for the utilisation of scarce resources.

1.3 Data Sources

Within the above context, the study makes use of the following data sources:

- The 2009 UNESCO Framework for Cultural Statistics (FCS);
- Conningarth Infrastructure Database (CID);
- National Level audited trade and economic data from StatsSA or other relevant national entities; and
- Labour Market Dynamics Survey (StatsSA).

1.4 Organisation of this Report

This report will consist of the following sections:

Section 1: Introduction and Background

Section 2: Methodology

Section 3: Provincial Location of the Cultural and Creative Industries

Section 4: Identification of Possible Clusters within Cultural and Creative Industries, and

Section 5: Summary and Recommendations

¹ This report makes use of Gross Domestic Product (GDP) and not Gross Value Added (GVA) to quantify economic activity. In some cases, it can be argued that GVA is technically more correct, but GDP is more commonly used and understood by the general public. The difference between the two concepts is marginal – according to National Accounts, in calculating the magnitude of economic activity, GDP includes taxes and subsidies on products, whereas GVA excludes these two items.



2. Methodology

The methodology employed in this study is described below. The methodology entails apportioning the total production of the national CCI sectors on a geographic location basis.

The main step in mapping the geographic location of the various CCIs was to synchronise the CCI sectors to sectors based on the Standard Industrial Classification (SIC). From a technical perspective, two main datasets were used to achieve the required synchronisation. One dataset is the Conningarth Infrastructure Database (CID), which is based on the SIC, representing production at local municipality level, including the metros. The second dataset represents the CCIs. The CCI production and other related information were sourced from work done for reports 2 and 3 of this study.

The synchronisation of the two datasets was possible due to the fact that both were originally developed from Annual Financial Statistics of South Africa published by StatsSA.

The **Conningarth Infrastructure Database, (CID)**, is an extension of the Freight Demand Model (FDM) of Transnet where Conningarth conducts economic forecasts ahead on a detailed basis (local municipality level) and for various sectors (114 sectors) which are of strategic importance for Transnet. Conningarth Economists have undertaken this exercise for Transnet on a yearly basis over the past 20 years.

The level of detail regarding CID entails the following:

- Forecasts are on a sectoral basis for 114 products and services;
- The forecast of the South African economy is further broken down to provincial and local government levels. The specifications for this exercise cover 9 provinces, 8 metropolises, and 226 local municipalities;
- The RSA economy is projected on an annual basis for 31 years ahead;
- Its main emphasis is on the medium to long term, but due to the fact that it is on an annual basis, it can also be used for short term budgeting purposes; and
- The forecasts are updated on a rolling annual basis where one year falls away and another is added.

The mapping of the CCI sectors on a geographical location basis was done for the 2018 base year. It is important to note that due to the fact that the CCI sectors was apportioned on a detail municipality level, the information could be used for the provincial as well as the cluster analysis.

Another step was to convert the estimated production values of the CCI sectors into other macro-economic variables. The objective of this is to make use of this information, as well as of other secondary information to calculate the size of CCI activities by province in terms of macroeconomic variables such as:

- GDP (or Gross Value Added) is the main indicator for economic activity;
- Employment is a good indicator for income distribution; and
- Capital is an indicator for the utilisation of scarce resources.



3. Provincial Location of the Cultural and Creative Industries

3.1 Introduction and Methodology for Updating the Provinces and Clusters

The research team calculated and updated to 2018 values the CCI activities production on a provincial basis by making use of the following algorithm process. The CCI activities are depicted in appendix A in this report.

The data compiled for the cluster calculations were aggregated to a provincial level for this analysis and are expressed in percentage terms as was the case in the 2017 study. This data was then used to obtain production values per CCI activities per province.

The resultant data was multiplied by the percentage structure of CCI activities per province by the total of each CCI activity as presented by the CCI activity satellite account. To convert the estimated provincial production values, the CCI national multipliers of GDP, labour and capital estimated for report 3 were used.

There are differences across RSA and Provincial economies when analysing the CCI activities by specific economic variables. For instance, the film industry is mostly concentrated in the Western Cape; whilst museums, zoos and performing arts are mostly in big cities. Game Parks are situated in rural areas such as the Kruger National Park in Mpumalanga.

The objective of optimising the economy in this context is to foster economic growth and create employment through effective and efficient utilisation of scarce capital, by optimising the CCIs. The current provincial location of the CCIs will provide an indication of the viability of the extension of future CCI activities in specific provinces. An example of this is if there is not currently an opera house in the Northern Cape, red flags should be raised if there is a proposal to build one in this province.

3.2 Contribution of Cultural and Creative Industries Towards GDP

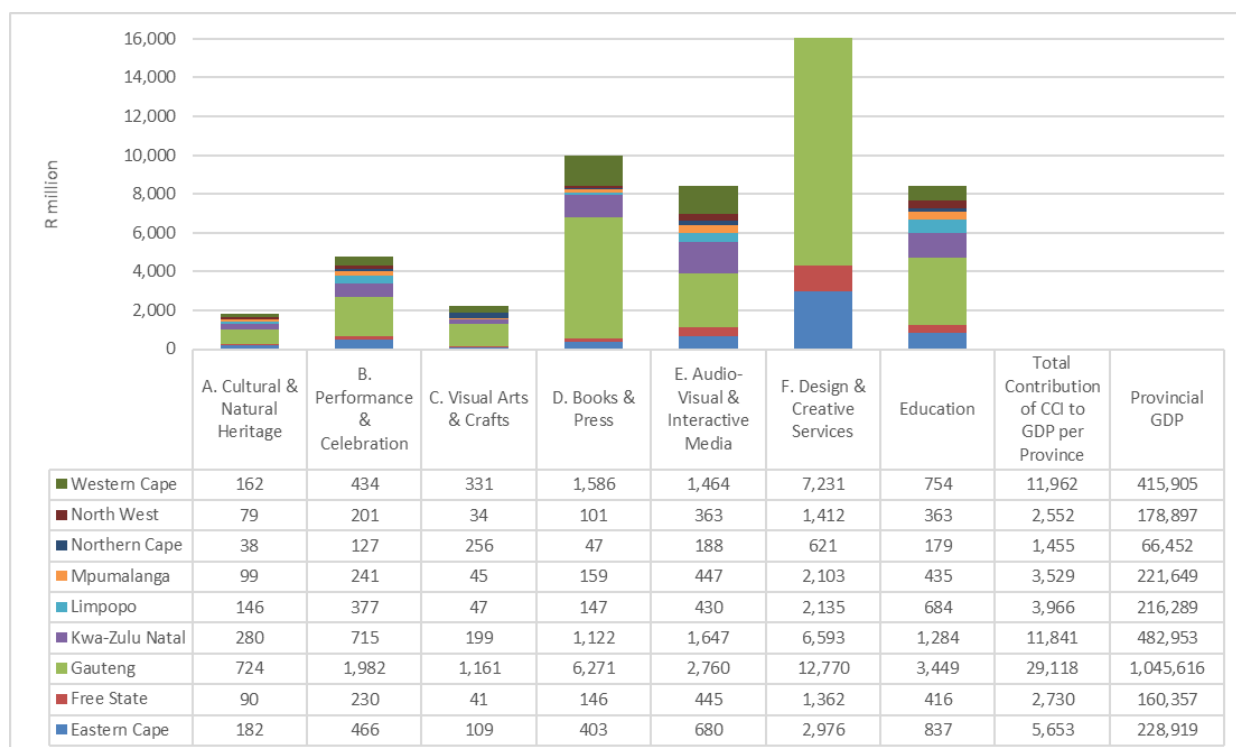
The contribution of CCIs to GDP was analysed from two perspectives. Firstly, the presentation of provincial GDP across CCI domains, and, secondly, the distribution of CCI domain GDP across provinces.

3.2.1 Presentation of CCI Domain GDP According to Provinces

Figure 3.1 depicts the provincial composition of CCI domain GDP.



Figure 3.1: CCI Domain GDP by Province (R million, 2018 prices)



Source: Conningarth own calculation

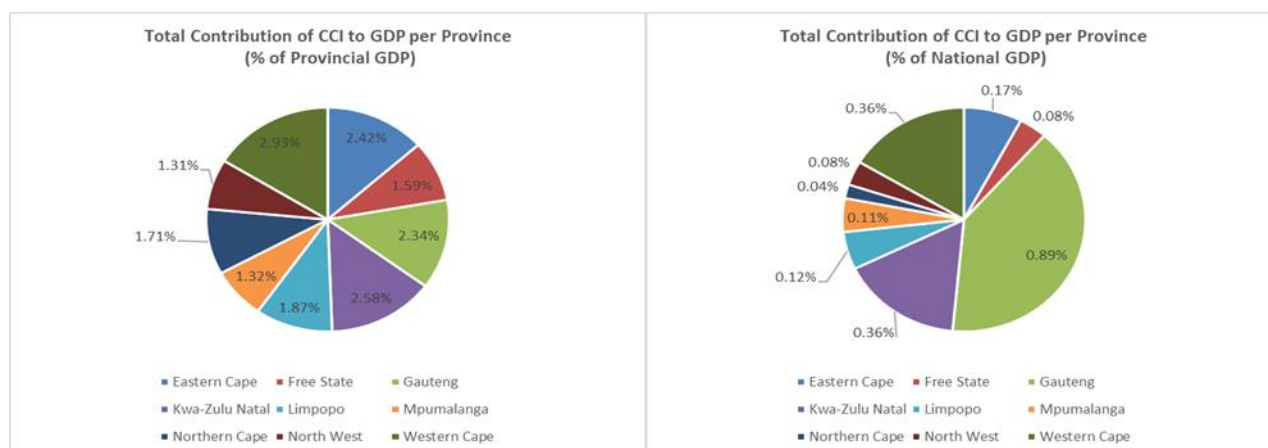
Important aspects pertaining to Figure 3.1 worth highlighting with regards to the respective domains is that the CCIs are concentrated in three provinces, namely Gauteng, Western Cape and Kwa-Zulu Natal in terms of Gross Domestic Product (GDP). Figure 3.2 below reflects the GDP contribution that the CCI sector makes to provincial economies and to the National economy, i.e. the GDP of the CCI sector in the Eastern Cape makes up 2.42% of the Eastern Cape economy.

The GDP contribution of the CCI to national GDP is 2.5%. This is lower than the contribution of CCIs in developed countries such as the USA and Europe where the contribution is well above 3%. It is also significantly lower than that of emerging European countries and many developing countries – for example in Indonesia the contribution is above 7% of GDP. The above may imply that there is room for CCIs to grow and play a more meaningful role in the economy.

In the next section the contribution of CCI domains to provincial GDP will be considered.



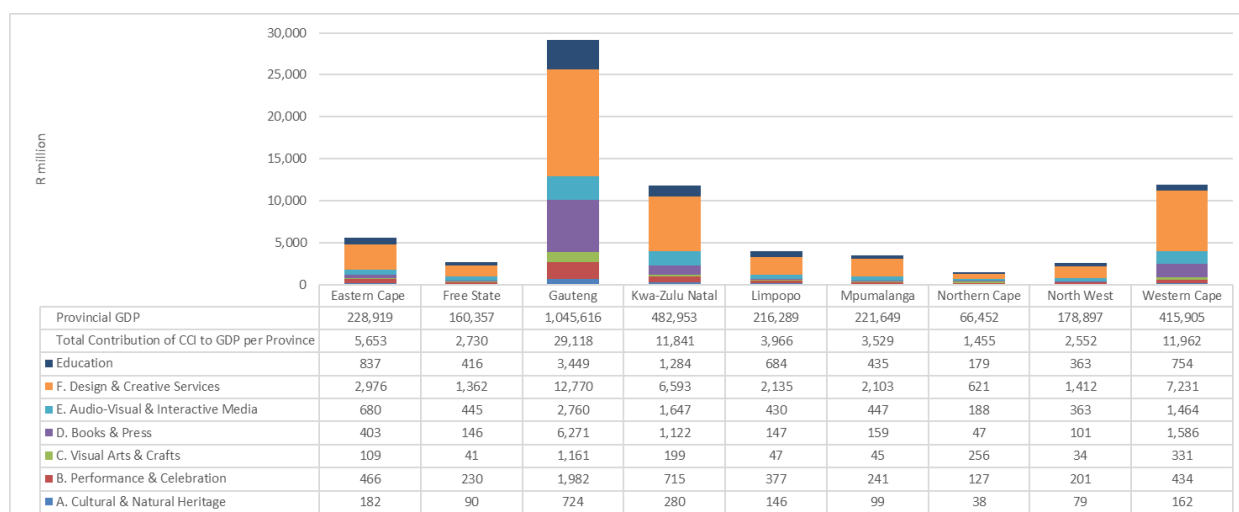
Figure 3.2: GDP Contribution of the CCI Sector to Provincial and National Economies (percentages)



3.2.2 Presentation of Provincial GDP by CCI Domain

The contribution of domains towards provincial GDP is illustrated in Figures 3.3. and 3.4, where Figure 3.3 reflects GDP values and Figure 3.4 reflects percentages.

Figure 3.3: Domain Contribution to Provincial GDP (R million, 2018 prices)

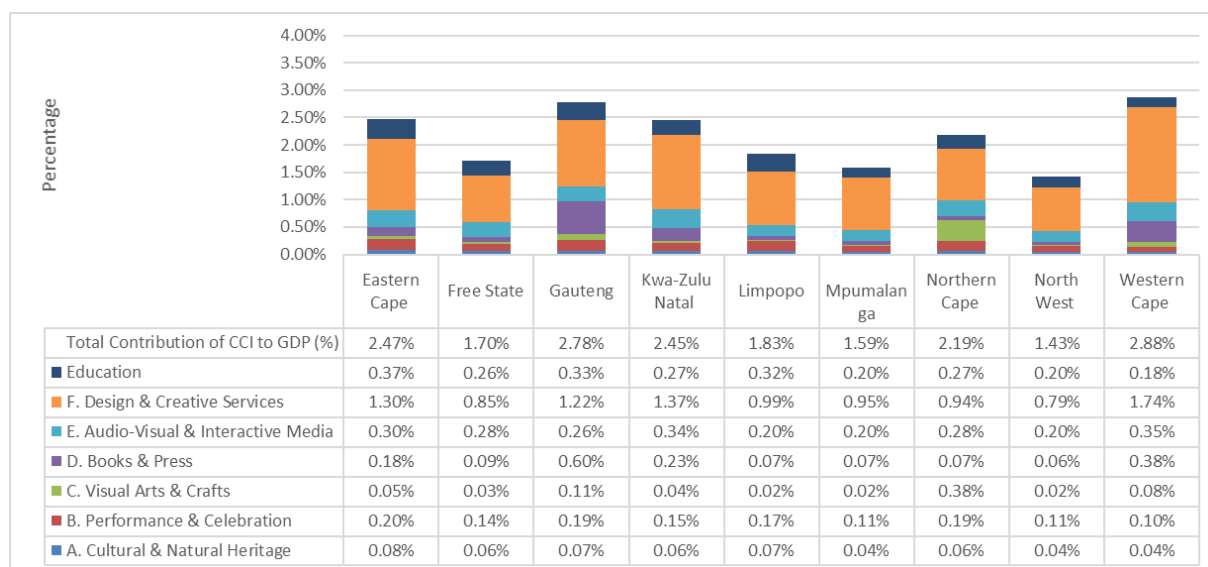


Source: Conningarth own calculation

Since values in percentages are more informative to facilitate comparisons, Figure 3.4 below shows the domain contribution to provincial GDP.



Figure 3.4: Domain Contribution to Provincial GDP (percentages)



Source: Conningarth own calculation

The CCI contribution towards GDP per domain when viewed from the perspective of provinces indicate the following:

As far as the contribution of CCI domains to provincial GDP is concerned, the Western Cape, Gauteng and KwaZulu-Natal show the three largest percentage contributions of 2.9%, 2.8% and 2.5% respectively. These provinces are followed by Gauteng, the province with the largest absolute contribution in monetary terms. It would appear that large provinces (the Western Cape, Gauteng and KwaZulu-Natal) show the largest contribution of CCI domains to provincial GDP expressed in percentage terms. However, the largest province (Gauteng) and the smallest province (Northern Cape) in terms of their GDP, show similar contributions to their provincial GDP 2.8%. So, it appears that no discernable pattern can be found in the data. However, the point can be made that coastal provinces seem to perform well in terms of the contribution of domains to their GDP. It can be speculated that the historical and political history of these provinces may contribute to the relative strength of their CCIs.

The Design and Creative Services domain is a major contributor to GDP across most provinces. This trend is also consistent with regard to the RSA situation. The Audio-Visual & Interactive Media domain is also a significant contributor to GDP in most of the provinces. Although Books and have the second highest contribution, it can be argued it is a domain that will be present in all geographical locations and is thus not highlighted in the rest of the analysis.



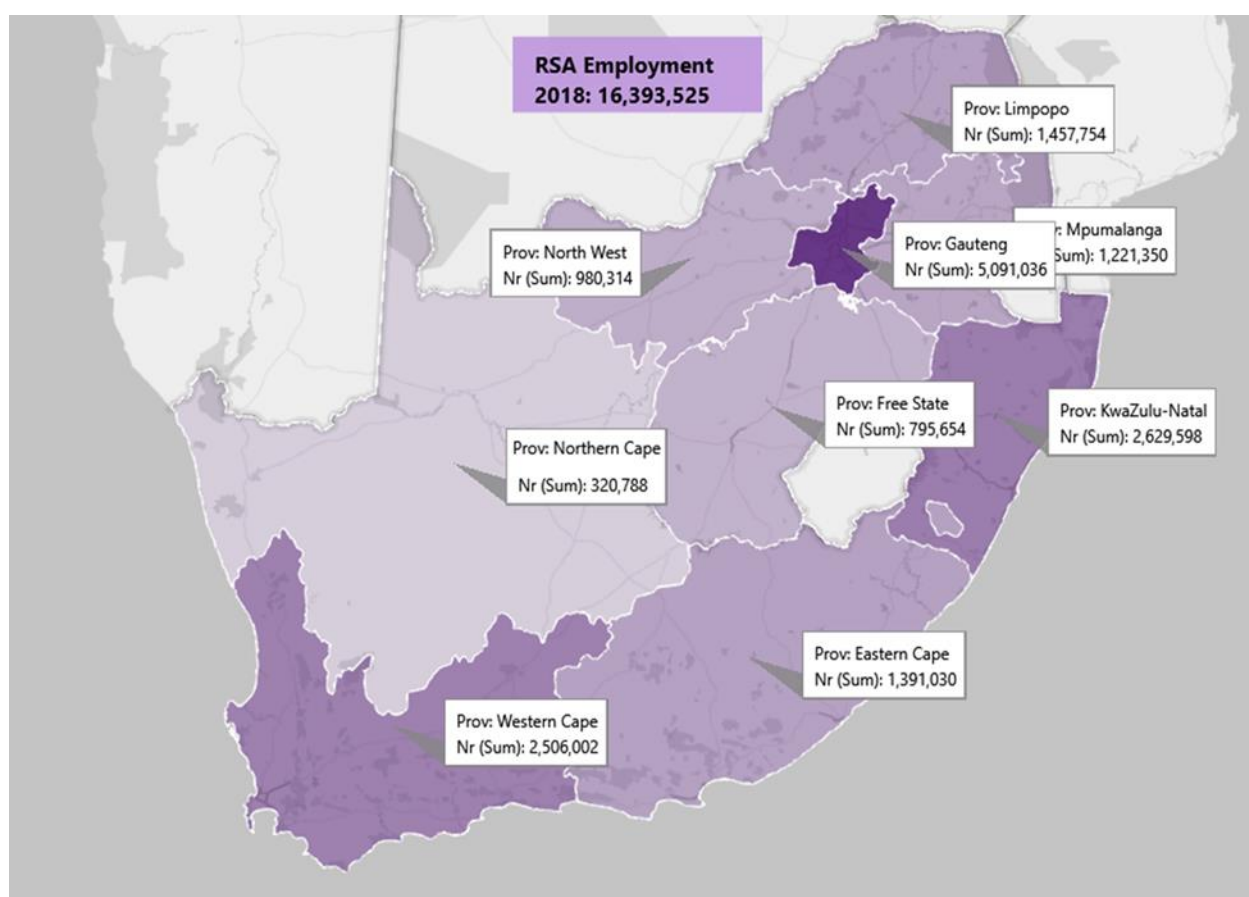
3.3 Contribution of Cultural and Creative Industries to Employment

The contribution of the CCIs to employment is presented from two perspectives. Firstly, employment within CCI domain is presented by province; and, secondly, CCI domain employment is presented by province. A more detailed analysis of CCI employment can be found in **Research Report 3: The Macroeconomic Impact Assessment Modelling System and Macroeconomic Impact Analysis of the Cultural and Creative Industries Sector**, where skilled, semi-skilled and unskilled employment numbers are provided for each CCI Domain; and in **Research Report 5: CCI Transformation and Ownership**, where employment figures will be provided for CCI domains by racial group.

3.3.1 Provincial Employment and CCI Domains

The maps below represent the total RSA employment as well as those of the CCI compared to the provincial employment in 2018. The darker colours in Figure 3.5 show a higher density of provincial employment distribution and the larger symbols in Figure 3.6 depict the highest CCI employment density in the subsequent map.

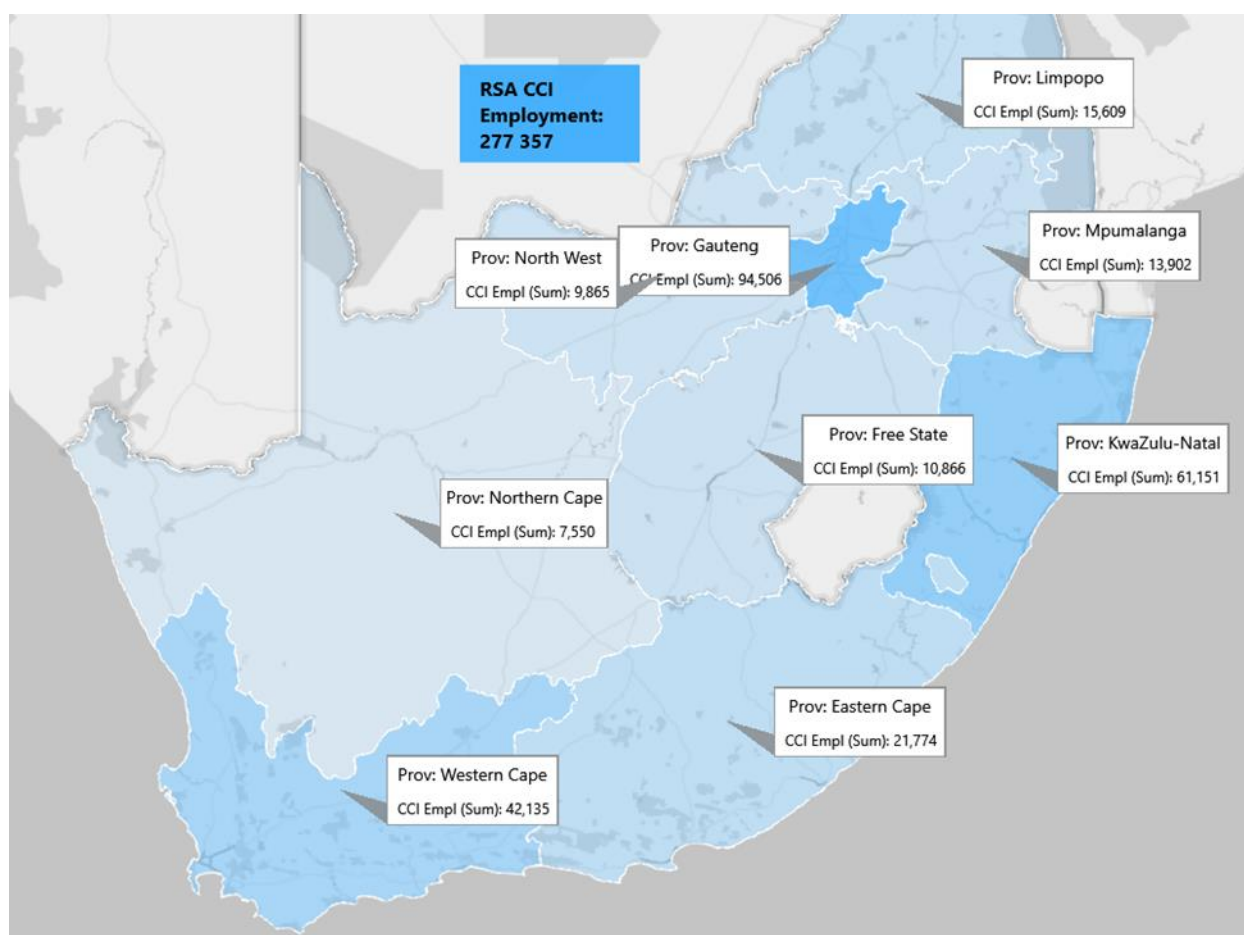
Figure 3.5: Provincial Employment Distribution in 2018 (numbers)



Source: Adapted from Labour Force Survey 2019, StatsSA



Figure 3.6: Provincial Employment Distribution with CCI employment magnitudes in 2018



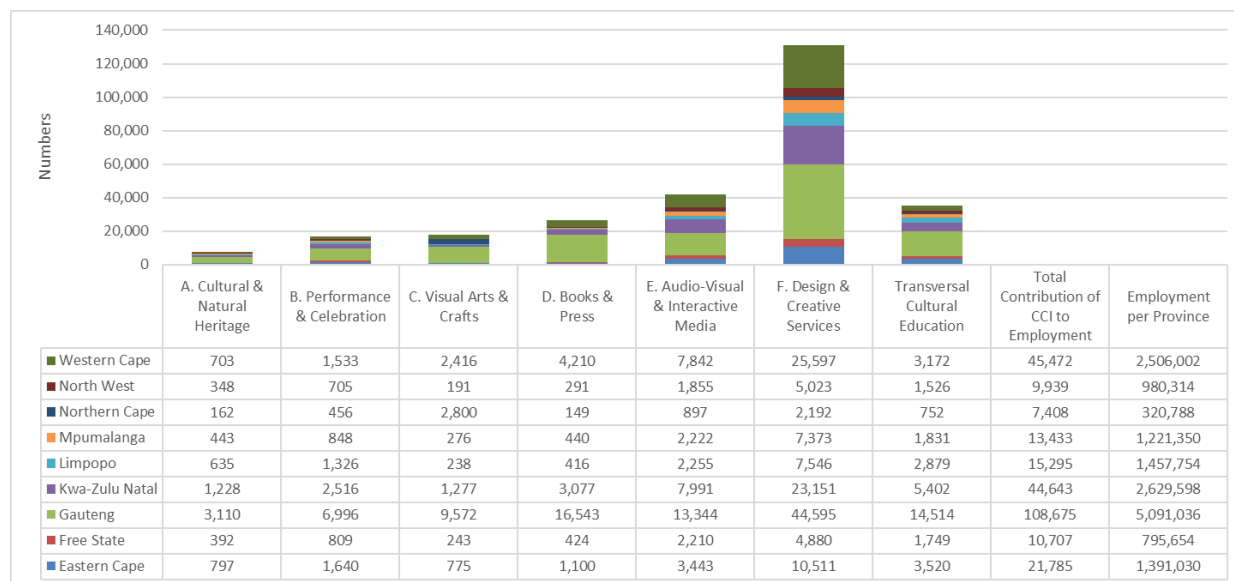
Source: Adapted from Labour Force Survey (StatsSA) and Conningarth own Calculations

In the maps above, it is clear that despite that Gauteng province having the geographically smallest area, it is a major employment centre in the country followed by KwaZulu-Natal and the Western Cape.



Figure 3.7 reflects employment by province within CCI domains.

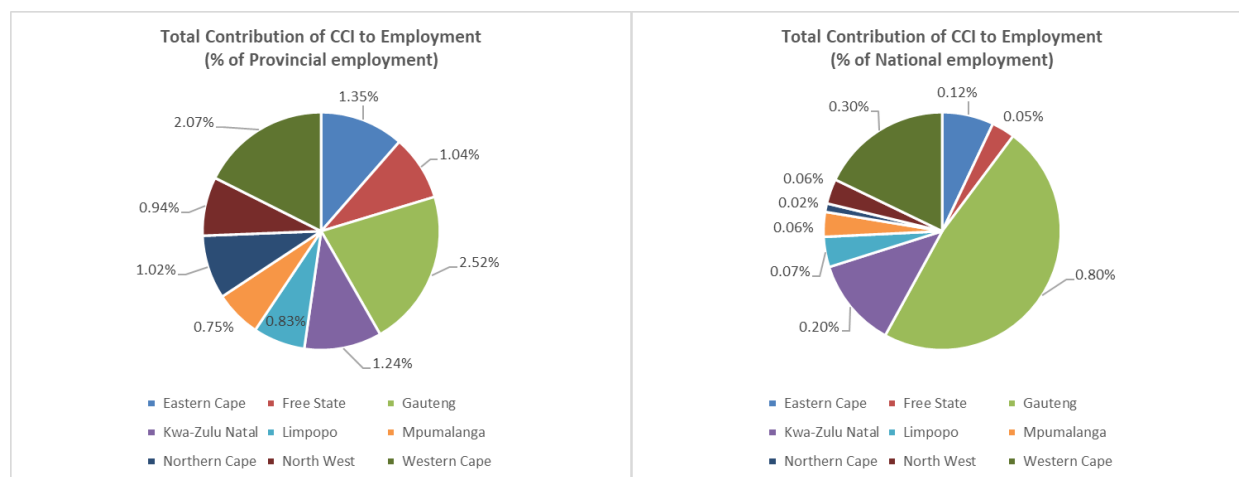
Figure 3.7: Provincial Composition of Domains in Terms of Employment (numbers)



Source: Conningarth own calculation

Important aspects pertaining to Figure 3.7 which are worth highlighting with regards to the main domains are that Creative and Cultural Industries have predominance in Gauteng, KwaZulu Natal and Western Cape in terms of employment. Figure 3.8 below reflects the Employment contribution that the CCI sector makes to Provincial economies and the to the National economy, i.e. employment in the CCI sector in the Eastern Cape makes up 1.35% of the Eastern Cape economy as measured by GDP, and 0.12% of the National economy.

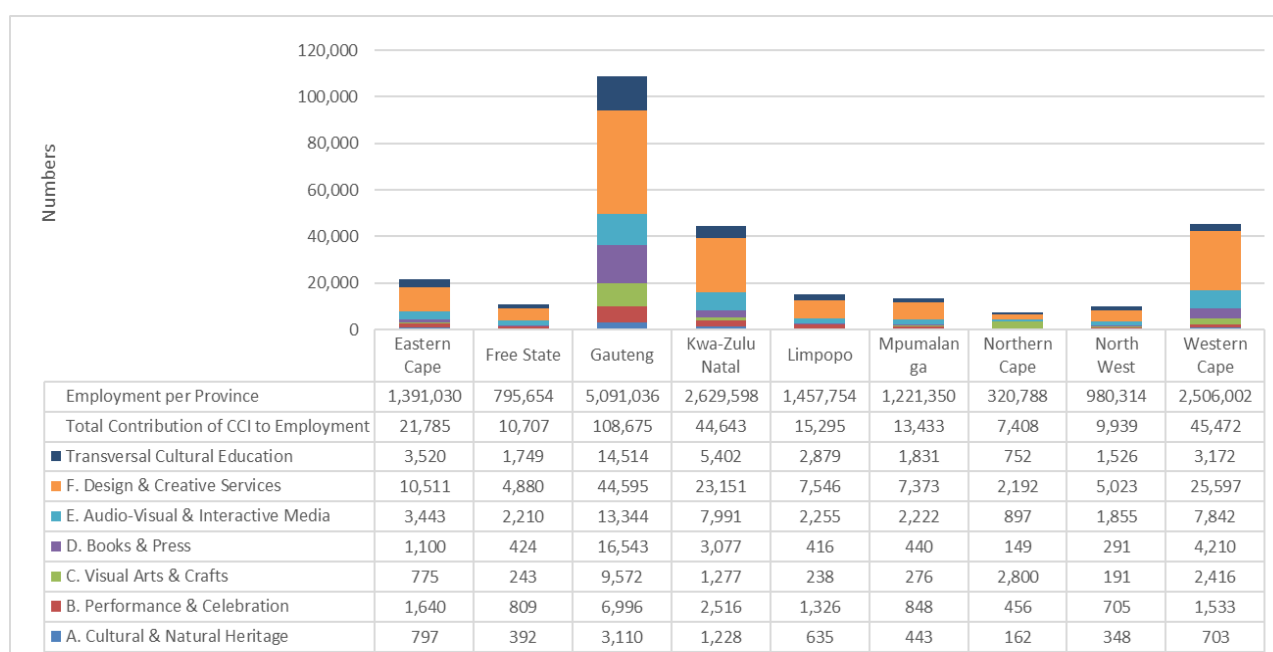
Figure 3.8: Contribution of CCI Sector Employment to Provincial and National Economies (percentages)



3.3.2 Provincial Employment by CCI Domain

In this section, employment per domain by province is illustrated by Figures 3.9 and 3.10 below – Figure 3. reflects CCI employment numbers, whilst figure 3.10 presents the numbers as CCI sector and domain percentages of employment within each province.

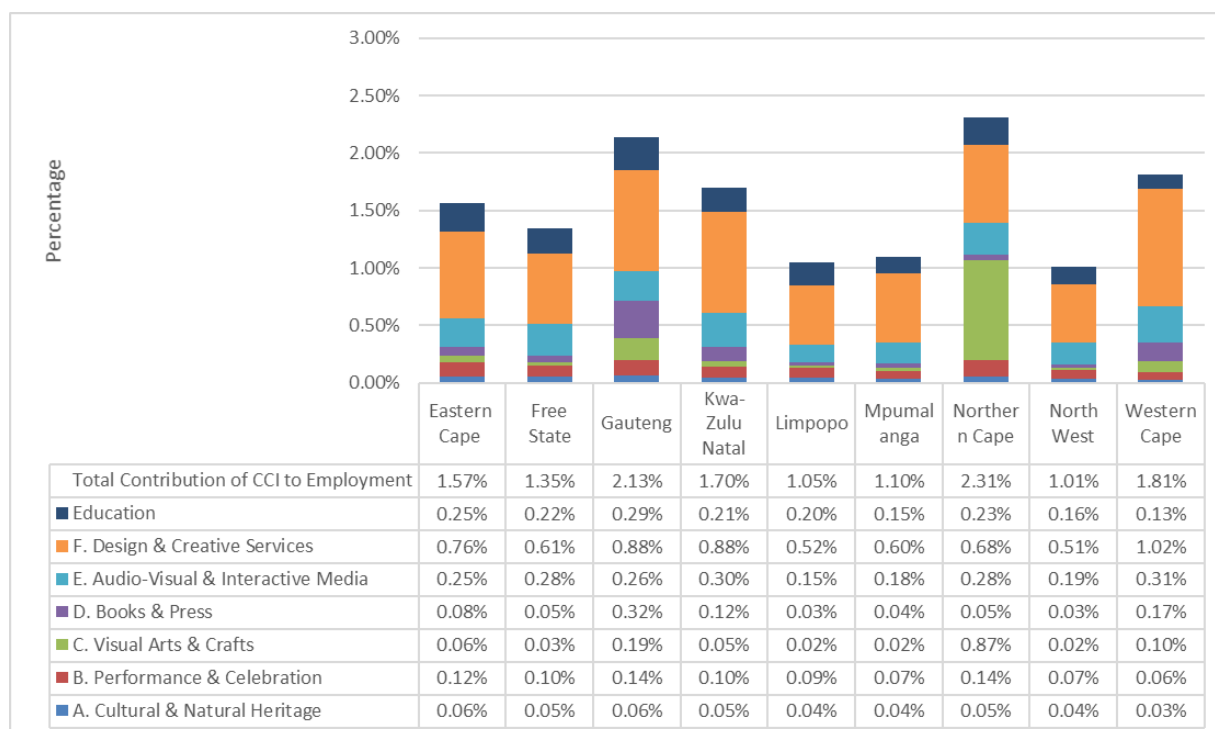
Figure 3.9: Provincial Employment by CCI Domain (numbers)



Source: Conningarth own calculation.



Figure 3.10: Provincial Employment by CCI Domain (percentage)



Source: Conningarth own calculation

The employment performance of CCI per domain when viewed from the perspective of provinces elucidates the following:

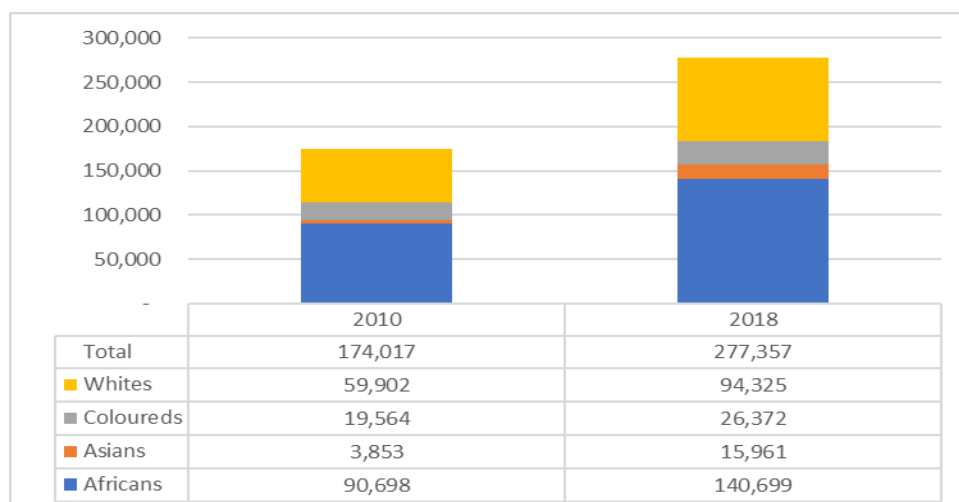
The Design and Creative Services is a major source of employment across most provinces. This phenomena is also consistence with regard to the RSA situation. Audio – Visual and Interactive Media is also a major source of employment in most of the provinces.

3.3.3 Historical CCI Employment by Province

Figure 3.11 illustrates CCI employment numbers by province and race group for 2010 and 2018 respectively in South Africa followed by each of the nine provinces historical movements.

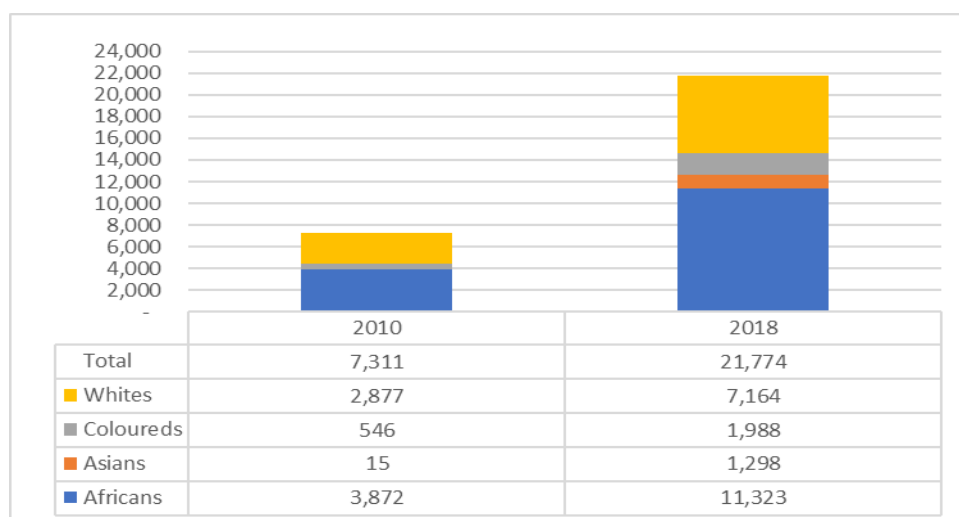


Figure 3.11: Historical Increase in CCI Employment in South Africa (numbers).



Source: Conningarth own calculation

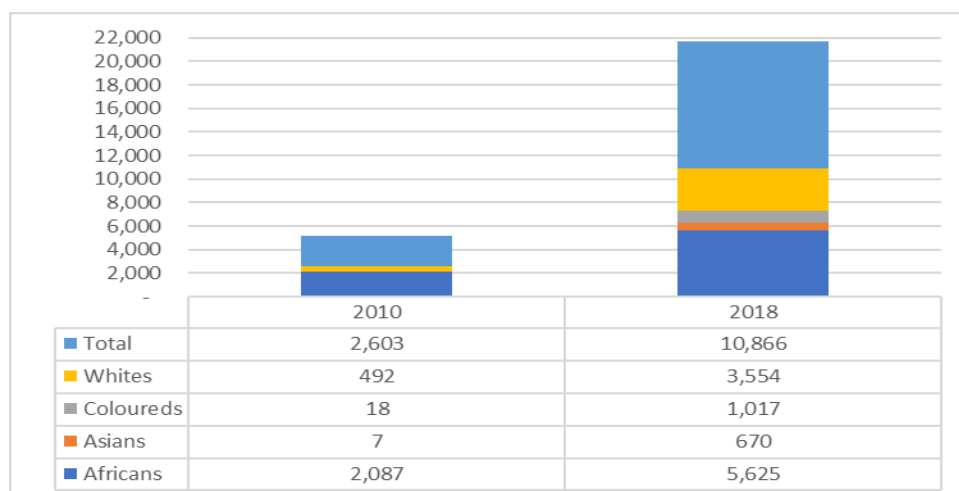
Figure 3.12: Historical Increase in CCI Employment in Eastern Cape (numbers).



Source: Conningarth own calculation

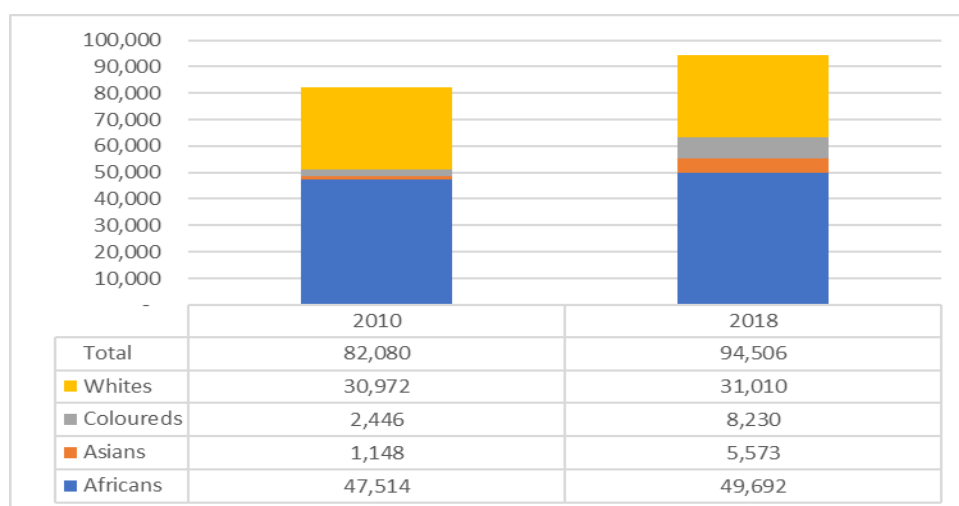


Figure 3.13: Historical Increase in CCI Employment in the Free State (numbers).



Source: Conningarth own calculation

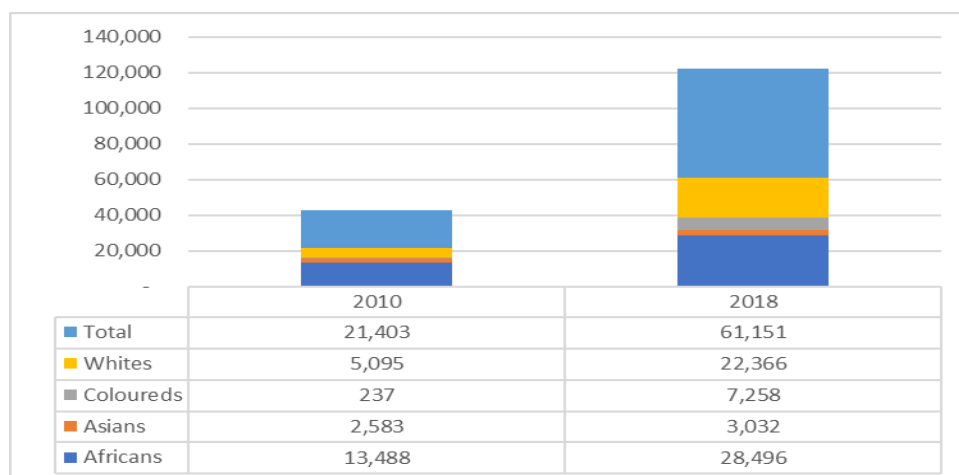
Figure 3.14: Historical Increase in CCI Employment in Gauteng (numbers).



Source: Conningarth own calculation

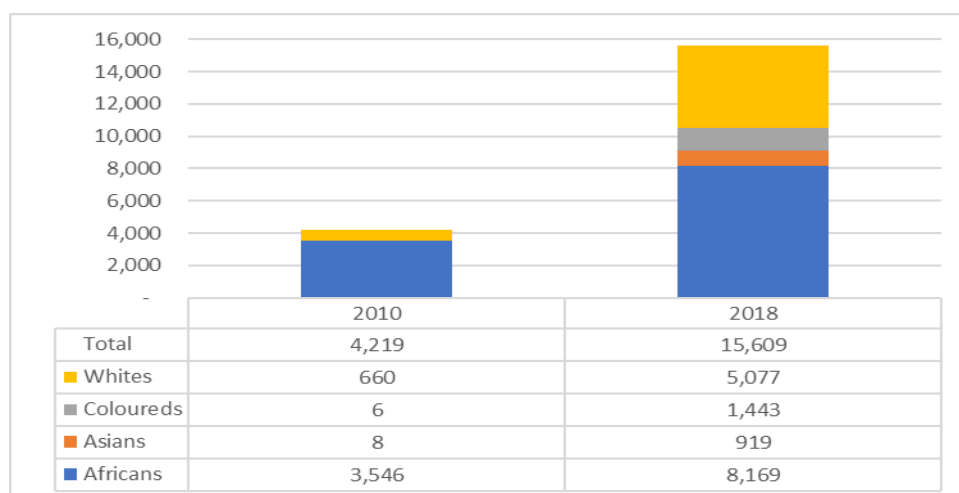


Figure 3.15: Historical Increase in CCI Employment in KwaZulu-Natal (numbers).



Source: Conningarth own calculation

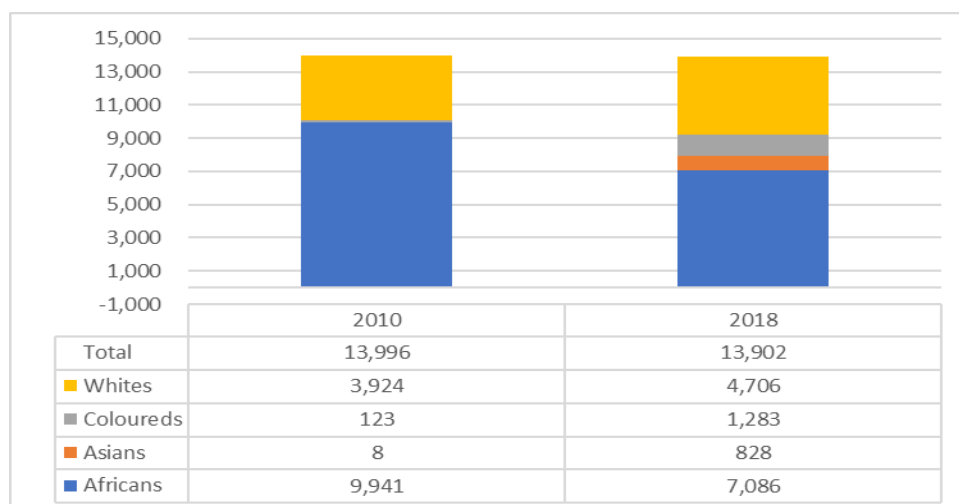
Figure 3.16: Historical Increase in CCI Employment in Limpopo (numbers).



Source: Conningarth own calculation

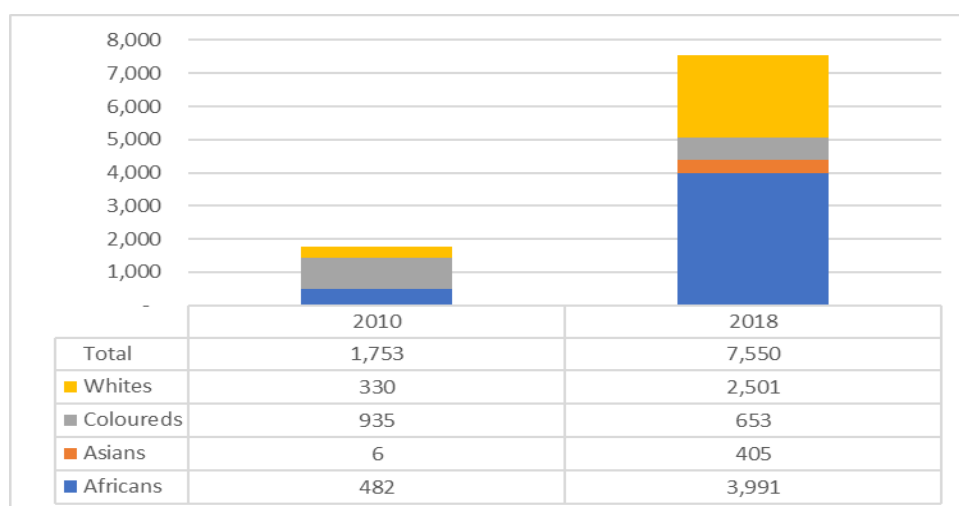


Figure 3.17: Historical Increase in CCI Employment in Mpumalanga (numbers).



Source: Conningarth own calculation

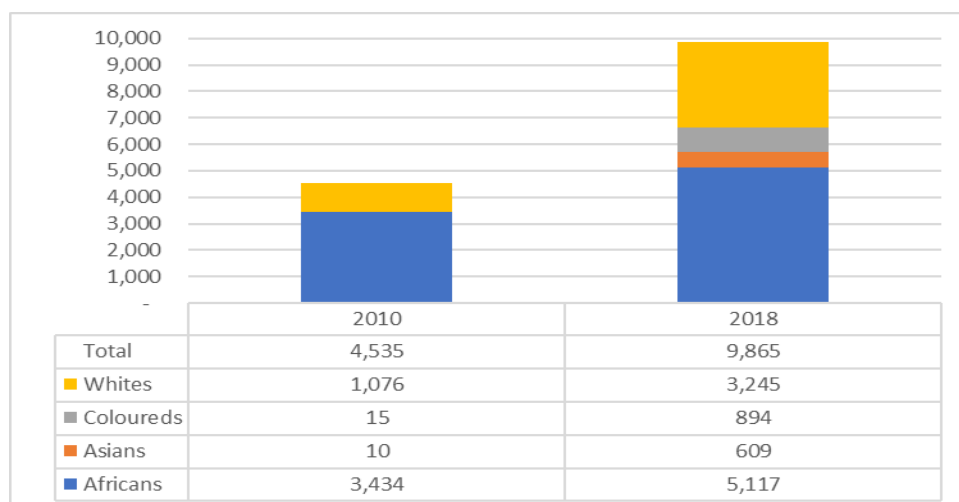
Figure 3.18: Historical Increase in CCI Employment in the Northern Cape (numbers).



Source: Conningarth own calculation

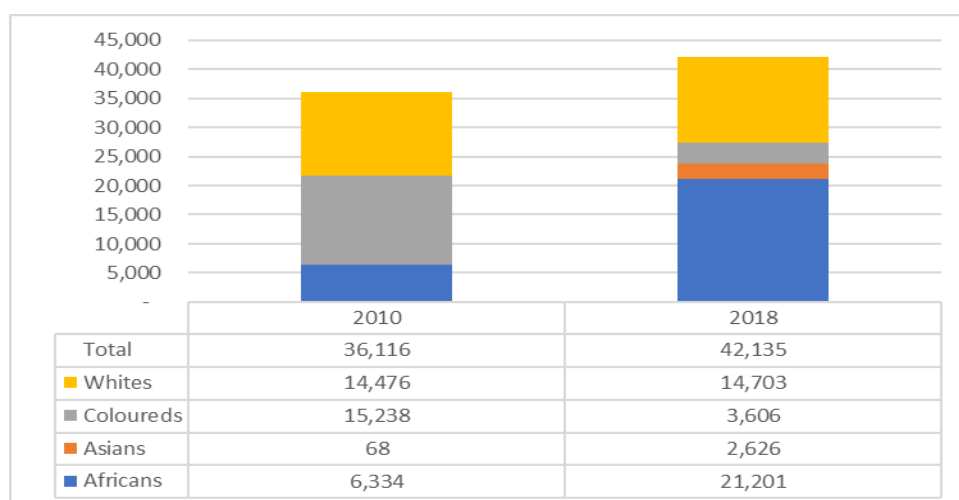


Figure 3.19: Historical Increase in CCI Employment in the North West (numbers).



Source: Conningarth own calculation

Figure 3.20: Historical Increase in CCI Employment in the Western Cape (numbers).



Source: Conningarth own calculation.

3.4 Capital Utilisation per CCI Domain

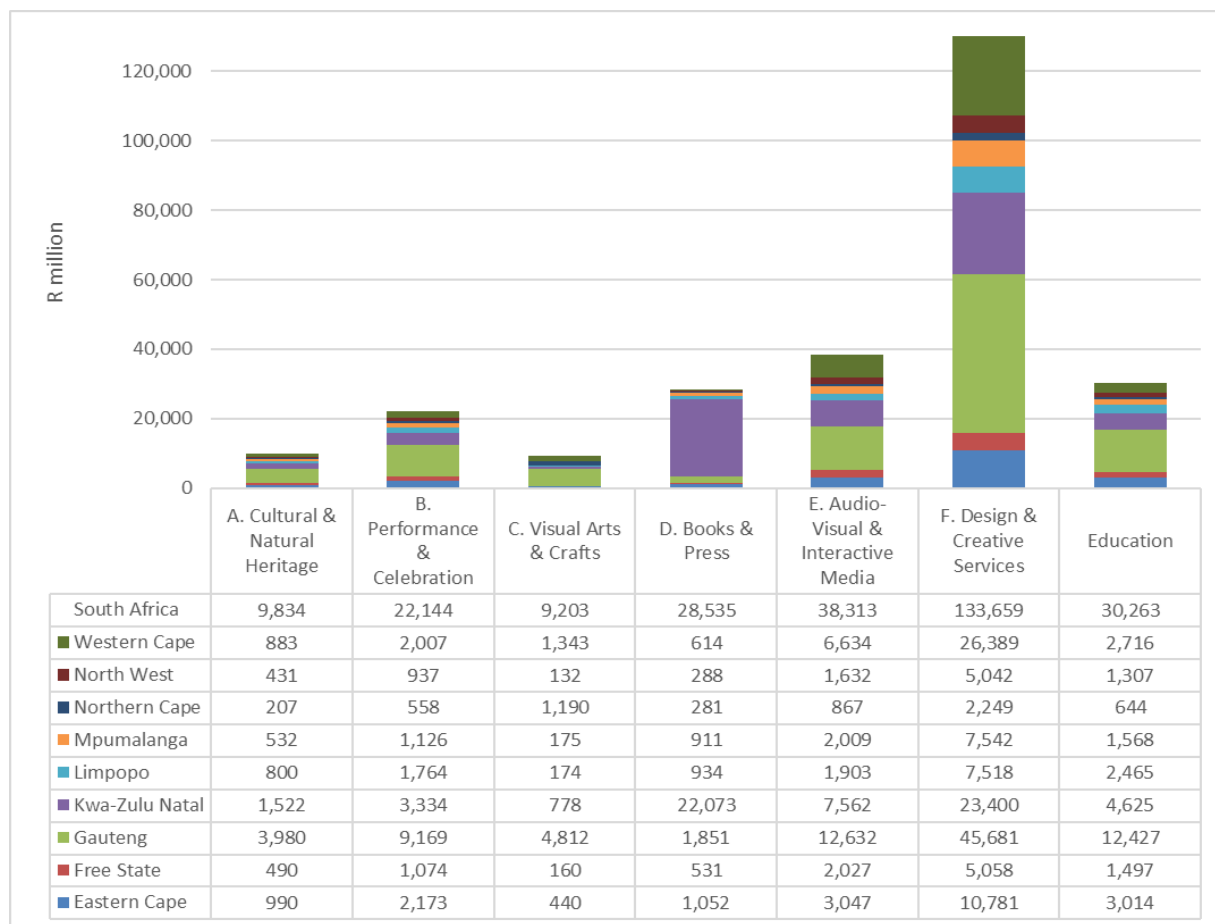
Capital is a scarce resource that must be employed in an optimum manner so that balanced economic growth can be achieved. Economists often use capital and labour - specifically the labour/capital ratio – to define the extent to which a CCI maximises scarce resources in the economy with the objective being to increase employment whilst using the minimum amount of capital, i.e. the higher the labour/capital ratio, the more efficient is the use of scarce capital resources.



Capital Utilisation by CCI domain has been measured in two ways. Firstly, capital utilisation within CCI domain has been broken down according to provinces; and, secondly, capital utilisation within provinces has been broken down by CCI domain.

3.4.1 Capital Utilisation per CCI Domain According to Provinces

Figure 3.21: Capital Utilisation per CCI Domain by Province (R million, 2018 prices)

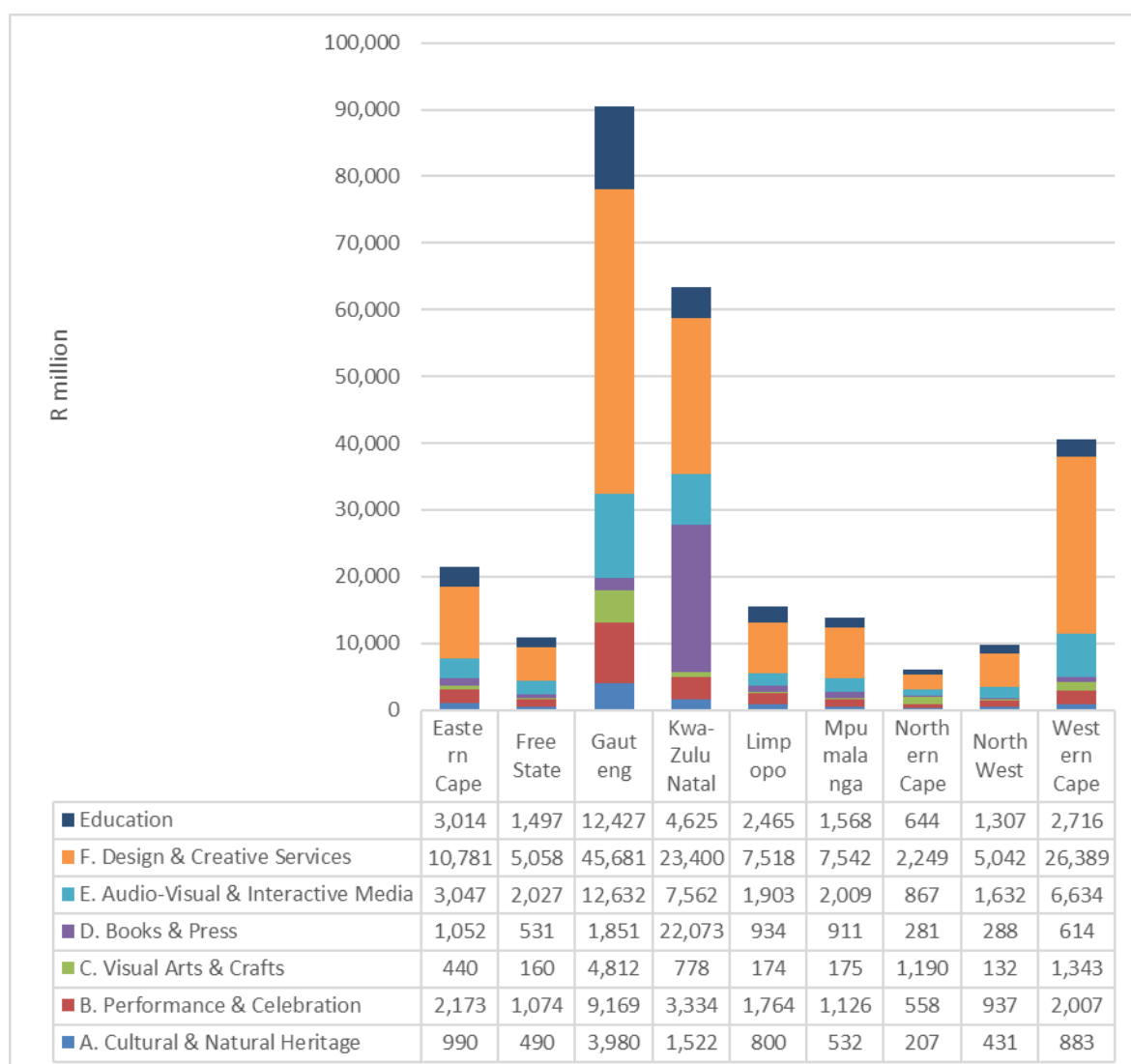


Source: Conningarth own calculation.



3.4.2 CCI Domain Capital Utilisation per Province

Figure 3.22: CCI Domain Capital Utilisation per Province (R million, 2018 prices)



Source: Conningarth own calculation



3.4.3 CCI Domain GDP per Capital Utilisation

In the table below the direct GDP/Capital ratios on a domain provincial level shown.

Table 3.1: Direct GDP/Capital ratios of the CCI domains and Provinces

	Eastern Cape	Free State	Gauteng	Kwa-Zulu Natal	Limpopo	Mpumalanga	Northern Cape	North West	Western Cape	South Africa
A. Cultural & Natural Heritage	0.184	0.184	0.182	0.184	0.183	0.186	0.182	0.184	0.183	0.183
B. Performance & Celebration	0.214	0.214	0.216	0.214	0.214	0.214	0.227	0.214	0.216	0.216
C. Visual Arts & Crafts	0.248	0.258	0.241	0.256	0.268	0.255	0.215	0.260	0.246	0.242
D. Books & Press	0.367	0.368	0.346	0.353	0.394	0.394	0.365	0.387	0.346	0.350
E. Audio-Visual & Interactive Media	0.223	0.220	0.219	0.218	0.226	0.223	0.217	0.222	0.221	0.220
F. Design & Creative Services	0.277	0.272	0.281	0.279	0.277	0.280	0.277	0.274	0.276	0.278
Education	0.278	0.278	0.278	0.278	0.278	0.278	0.278	0.278	0.278	0.278
Total	0.263	0.256	0.273	0.265	0.261	0.265	0.249	0.259	0.270	0.268

Source: Conningarth own calculation

The highest multiplier effect is identified as the Books and Press domain with a national direct GDP/Capital ratio of 0.350 and Design & Creative Services with a ratio of 0.278. These ratios (along with Education) are above the national average GDP/Capital ratio of 0.268. Nationally, the lowest ratio of 0.183 is recorded for the Cultural and Natural Heritage domain.

On a provincial level, Gauteng with a ratio of 0.273 and Western Cape 0.270 are also above the national average.

These ratios are also aligned with the financial base of the national economy.



4. Identification of Possible Clusters within Cultural and Creative Industries

4.1 Introduction

In a series of papers and reports, UNESCO provides an illustration of the connection between culture and economics through a better understanding of the role of cultural industries in the new cultural policy emphasis and economic reality. These reports emphasise that there is a need for governments to take steps to integrate the concept of cultural industries in development strategies and to ensure that it is necessary for countries to recognise the potential of cultural industries.

The UNESCO Framework for Cultural Statistics defines culture through the identification and measurement of the behaviours and practises resulting from the beliefs and values of a society or cultural group.

The cultural domains as defined by UNESCO are grouped under the following headings:

- A: Cultural and Natural Heritage
- B: Performance and Celebration
- C: Visual Arts and Crafts
- D: Books and Press
- E: Audio-visual and Interactive Media; and
- F: Design and Creative Services.

In addition, four transversal domains are included in the UNESCO framework:

- Intangible Cultural Heritage
- Archiving and Preserving
- Education and Training, and
- Equipment and Supporting Materials

4.2 The Concept of a Cluster

The aim of this approach is to estimate the direct contribution of clusters to the broader economy and to estimate the size of macroeconomic activities within different clusters.

A cluster is different from the conventional (SIC) definition because it represents the entire value chain of a broadly defined industry from suppliers to end producers, including supporting services and specialised infrastructure.

There are a large number of different definitions of a cluster. In reality, there are different types of clusters, involving, amongst others, different types of partners from industry, research, education, policy makers, politicians and society. Some of the more influential definitions are provided by:

- Porter (2000):

A cluster is “a geographically proximate group of interconnected companies and associated institutions in a particular field linked by commonalities and complementarities”.



- Krugman (1991):

“Clusters are not seen as fixed flows of goods and services, but rather as dynamic arrangements based on knowledge creation, increasing returns to scale and innovation in a broad sense”.

- Morosini (2004):

A cluster is a “socioeconomic entity characterised by a social community of people and a population of economic agents localised in close proximity in a specific geographic region”.

Most definitions, though, will have the following characteristics:

- A geographic concentration of firms; interconnected by being part of the same industry; supply chain; a common market or resource; a similar philosophy and by facing similar opportunities and challenges.
- A critical mass of actors, resources and competences – also to sustain interaction among actors in the long run.
- Existing cooperation and interaction of firms.
- Clusters include both vertical links as supplier-manufacture-dealer-customer chain and horizontal production links as in sections of the same industry.

Cluster analysis is a tool that can be used to:

- Better understand a grouping of sectors that belong together from an industry point of view.
- Study comparative advantage of regions.
- Analyse gains that can be achieved from a shared location, cooperation among firms, common goals and a large pool of qualified and specialised employees.

Some of the advantages of a well-functioning cluster include the following:

- Decreased transport costs and supply chains.
- Easier access to resources.
- Opportunities for new companies.
- Higher degree of specialisation.
- Greater cooperation among cluster members.
- Creation of a workforce pool that are experienced and specialisation in their field, and
- Greater exchange of ideas and knowledge due to proximity of firms in the same industry.

4.3 Identification of Clusters

Methods to identify clusters can be broadly grouped into qualitative and quantitative approaches. Qualitative approaches tend to follow a bottom-up methodology that is more suitable for stakeholder involvement. This method normally builds on expert knowledge and opinion. The qualitative approach typically employs interviews, focus groups or a Delphi method to identify clusters. In practice, though, it is highly likely (as was done in this study) that various combinations of the different methods will be employed in deriving useful data.

Quantitative methods tend to use top-down formal statistical instruments to identify clusters. Before selecting a method, the exact informational needs should be defined and a decision should be taken whether a detailed study is required. Furthermore, policy makers often have to make their choices in the face of heavy budget constraints and extensive stakeholder involvement to



strengthen buy-in and dedication to a certain policy. This process is not only time-consuming but expensive as well. Some of the quantitative methods available to the researcher for cluster analysis include localisation quotients (Koschatzky and Lo, 2007), Ripley's K-method (Anderson et al, 2006), export data (dii, 2001), graph analysis (de Bresson and Hu, 1999), input-output and related methods (Hoen, no date) and network analysis (von Hofe and Cheruiyot, 2017). As indicated, other methods cited in most literature include the location quotient methodology. However, these methods should be underpinned by accurate and reliable data for a successful implementation.

4.4 UNESCO Cultural Domains as Clusters

Although not often used in this context, it can be argued that UNESCO domains can be viewed as a type of clustering. This argument is based on the similarities between domains and clusters, where both domains and clusters are constructed based on the philosophical view that sub-domains and sectors that logically belong together should be grouped together.

Input-Output methodologies (including SAM's and satellite accounts) group activities together according to the input structure or value chain of a sector - it is sectors that logically belong together. Similarly, CCI domains, as defined in the UNESCO Framework for Cultural Statistics, represent a common set of economic and social activities that traditionally have been regarded as cultural.

4.5 Cluster development of Identified Metro's and Local Municipalities in regard to Cultural and Creative Industries

In principle, a cluster is defined in this document as being very much similar to a domain. This is due to the fact that the backward and forward linkages of a domain/cluster is in most cases not happening in the same geographical area. If an analysis of a specific geographical area is analysed it can give a false indication of the magnitude of that area in terms of a specific cluster. This is due to the unavailability of detail geographical information. This study tries to overcome this shortcoming by identifying the linkages, specifically the backward linkages, of a cluster for a specific regional area.

It will also be noticed that later in the document the sub Cultural and Creative Industry Sectors are analysed in terms of their backward linkages in their demand for intermediate goods and services. This gives the opportunity for further insight in the development of a cluster in a specific geographical location. The mapping of the backward linkages are also quantified and gives an indication of the opportunities to produce locally more of the commodities that are linked to the specific clusters and that are currently imported from other locations in South Africa and abroad.

To eliminate confusion in what follows in this section and to place the emphasis on clusters, reference will be made to clusters rather than domains, keeping in mind that in this study the two concepts are seen as similar.

The following table shows the different metro's and local municipalities located in the provincial sphere that were analysed for purposes of this study.



Table 4.1: Metros and Local Municipalities by province

Province	Local Municipality/Metro
Eastern Cape	Buffalo City (East London)
	Nelson Mandela Bay (Port Elizabeth)
	Dr Beyers Naude (Baviaans) [Graaff-Reinet]
	Makana (Grahamstown)
Free State	Mangaung (Bloemfontein)
Gauteng	City of Johannesburg
	City of Tshwane (Pretoria)
	Ekurhuleni (East Rand)
Kwa-Zulu Natal	eThekweni (Durban)
	Msunduzi (Pietermaritzburg)
Limpopo	Polokwane (Pietersburg)
Mpumalanga	Mbombela (Nelspruit)
Northern Cape	Sol Plaatje (Kimberley)
North-West	Tlokwe City Council (Potchefstroom)
Western Cape	City of Cape Town
	Oudtshoorn

In general, creative and cultural industries tend to concentrate mainly in and around Metros as well as around large and medium-sized cities located in various local municipalities, forming creative local production systems. For purposes of the study, a fair representation of the creative and cultural industry clusters was identified.

Thus, metros and larger towns such as Sol Plaatje local municipality in the Northern Cape was included in this study. As the attention in this study is on the cultural and creative industries, the local municipalities that are known for strong arts and culture festivals, such as Makana/Grahamstown local municipality, were also included. This list is not exhaustive and in future this list of local municipalities can be extended using the same methodology. However, it is probably necessary that more on-the-ground information should be gathered to make the analysis more robust and applicable.

4.6 Economic Size and Structural Analysis of Cultural and Creative Clusters

4.6.1 Methodology to Calculate the Relative Importance of Clusters

In the 2017 study the platform was laid to conceptualise the cluster format for the South African cultural and creative industries (CCIs). For this 2020 study, the emphasis was more on the establishing of clusters on a geographical level with the aim to identify the importance of specific cluster in the broader cultural and creative industry of a specific geographic location. As explained previously, a domain, including all its Standard Industrial Classification (SIC) sectors, is classified as a cluster in the cultural and creative industry.



Technically, the importance of a cluster is measured in terms of the extent to which it has a higher or lower contribution to the economy, relative to the average contribution of the cultural and creative industry of that specific geographical location (local municipality). The economic importance of the various clusters, as well as the importance of the cultural and creative industry itself of a local municipality, are measured in terms of the percentages that they have in terms of the specific clusters or in the case of the culture and creative industry, their impact on the total economy. This exercise was repeated for the various SIC sectors in a specific main cluster.

The next step is to estimate a *relative importance index* for the various clusters (domains) in the broader cultural and creative industry of a specific geographic location. This is done by dividing the percentage importance of a specific cluster by the percentage importance of the total of the cultural and creative industry to the economy. For example, if the Visual Arts and Crafts cluster of a specific local government contributes 6% to the total contribution of the Visual Arts and Crafts cluster in the country, and the Visual Arts and Crafts cluster of that local municipality is double that of its importance of the Culture and Creative Industry in total, namely 3%, for that specific location. (the importance index of the cluster equals to 100. Calculation is: $(6\% / 3\%) - 1 * 100 = 100$).

Qualitatively, the relative importance index is expressed by different colours (green, red and white) with green indicating a value above the average of the index, red below the average and white representing a neutral reading of the index for the 16 geographical regions. The green coloured CCI sectors, for example, would indicate which sectors are performing well in a particular location.

In order to gain further insight into the clusters and to move closer to the traditional definition of a cluster, a backward linkage analysis was conducted. In the context of this study, the emphasis is the direct (on-site) linkages and not on indirect linkages connected to entities outside or away from the location and area of the cluster. The reason for this is that such linkages reflect leakages away from or out of the local area. By providing these linkages local authorities will be in a position to determine which non-local sectors and industries should potentially be encouraged or enticed to relocate or for new enterprises, to locate at a particular area. The mapping in regard to the geographical location distribution of the Cultural and Creative Industries, were based directly on the Conningarth Infrastructure Database (CID). This database makes use of broad Standard Industrial Classification sectors (SICs) to determine the importance of regions (local municipalities). It is possible that using this broad SIC classification could distort the geographic location distribution of the cultural and creative industries. To overcome this issue, a Delphi technique was used to estimate the importance of the clusters for the local municipalities. The Delphi method is based on structural surveys and makes use of the intuitive available information of the participants, who are mainly experts. Therefore, it delivers qualitative as well as quantitative results and has beneath the method its explorative, predictive even normative elements. There is agreement that Delphi is an expert survey in two or more 'rounds' in which in the second and later rounds of the survey the results of the previous round are given as feedback. Therefore, the experts answer from the second round on under the influence of their colleagues' opinions. Thus, the Delphi method is a 'relatively strongly structured group communication process, in which matters, on which naturally unsure and incomplete knowledge is available, are judged upon by experts', according to the definition of Häder and Häder (1995, p. 12).



The original geographical cluster distribution was thus adjusted with the results of the Delphi technique to make the geographic location more representative. In the various tables the results of the cluster analysis is refer to as “Before Delphi” and “After Delphi”.

4.6.2 Culture and Creative Industry’s Clusters turnover mapping per Metro’s and Local Municipalities

In Table 4.2 the 16 geographical areas clusters turnover amounts are show along with the Rest of South Africa turnover that totals R205 680 million. For the selected local municipalities, the clusters turnover amounts to R115 775 million.

The City of Johannesburg has the largest turnover for the Cultural and Creative Industry and except for the Design and Creative Services cluster it also has the biggest individual clusters amounts. The City of Cape Town has in absolute (money) values the biggest Design and Creative Services cluster.



Table 4.2: Culture and Creative Industry's Clusters turnover mapping per Metro's and Local Municipalities (2018, Rand Million)

	Eastern Cape				Free State	Gauteng			Kwa-Zulu Natal		Limpopo	Mpumalanga	North-West	Western Cape				
Local Municipality	Buffalo City	Nelson Mandela Bay	Dr Beyers Naude	Makana	Mangaung	City of Johannesburg	City of Tshwane	Ekurhuleni	eThekweni	Msunduzi	Polokwane	Mbombela	Sol Plaatje	Tlokweng City Council	City of Cape Town	Oudtshoorn	Rest of RSA	Total
A. Cultural and Natural Heritage	93	264	3	4	72	1,161	235	292	373	64	54	18	17	9	377	0	1,628	4,665
B. Performance and Celebration	241	669	8	11	209	3,424	705	838	954	178	150	52	49	24	1,138	1	4,319	12,969
C. Visual Arts and Crafts	97	519	4	16	56	2,930	3,172	2,723	797	48	18	106	14	4	1,920	11	6,043	18,480
D. Books and Press	175	401	43	24	96	11,247	2,690	2,337	1,262	344	35	15	16	11	3,665	20	3,732	26,113
E. Audio-visual and Interactive Media	541	1,738	12	18	431	5,209	1,999	2,485	3,683	494	256	93	141	67	4,496	10	11,551	33,222
F. Design and Creative Services	1,496	4,404	38	74	842	11,974	6,716	8,799	8,999	1,174	805	348	352	173	14,161	25	42,801	103,179
Transversal Cultural Education	314	861	11	14	273	4,422	804	996	1,228	233	196	64	64	31	1,435	0	5,445	16,393
Total	2,957	8,856	119	161	1,979	40,367	16,322	18,471	17,296	2,533	1,514	696	653	319	27,191	68	75,518	215,021

4.6.3 Culture and Creative Industry's Clusters turnover mapping per Metro's and Local Municipalities in terms of Percentages

4.6.3.1 Percentage Mapping – Before Delphi

In Table 4.3 the percentage distribution of the Culture and Creative Industry's Clusters turnover mapping per Metros and Local Municipalities is presented – Before Delphi technique adjustment is applied. This information forms the basis for calculating the adjusted distribution.

Table 4.3: Culture and Creative Industry's Clusters percentage turnover mapping per Metro's and Local Municipalities in terms of Percentage – Before Delphi technique adjustment

	Eastern Cape				Free State	Gauteng			Kwa-Zulu Natal		Limpopo	Mpumalanga	North ern Cape	North- West	Western Cape			Total
Local Municipality	Buffalo City	Nelson Mandela Bay	Dr Beyers Naude	Makana	Mangaung	City of Johannesburg	City of Tshwane	Ekurhuleni	eThekweni	Msunduzi	Polokwane	Mbombela	Sol Plaatje	Tlokwe City Council	City of Cape Town	Oudtshoorn	Rest of RSA	Total
A. Cultural and Natural Heritage	2.0%	5.7%	0.1%	0.1%	1.6%	24.9%	5.0%	6.3%	8.0%	1.4%	1.2%	0.4%	0.4%	0.2%	8.1%	0.0%	34.9%	100.0%
B. Performance and Celebration	1.9%	5.2%	0.1%	0.1%	1.6%	26.4%	5.4%	6.5%	7.4%	1.4%	1.2%	0.4%	0.4%	0.2%	8.8%	0.0%	33.3%	100.0%
C. Visual Arts and Crafts	0.5%	2.8%	0.0%	0.1%	0.3%	15.9%	17.2%	14.7%	4.3%	0.3%	0.1%	0.6%	0.1%	0.0%	10.4%	0.1%	32.7%	100.0%
D. Books and Press	0.7%	1.5%	0.2%	0.1%	0.4%	43.1%	10.3%	9.0%	4.8%	1.3%	0.1%	0.1%	0.1%	0.0%	14.0%	0.1%	14.3%	100.0%
E. Audio-visual and Interactive Media	1.6%	5.2%	0.0%	0.1%	1.3%	15.7%	6.0%	7.5%	11.1%	1.5%	0.8%	0.3%	0.4%	0.2%	13.5%	0.0%	34.8%	100.0%
F. Design and Creative Services	1.4%	4.3%	0.0%	0.1%	0.8%	11.6%	6.5%	8.5%	8.7%	1.1%	0.8%	0.3%	0.3%	0.2%	13.7%	0.0%	41.5%	100.0%
Transversal Cultural Education	1.9%	5.3%	0.1%	0.1%	1.7%	27.0%	4.9%	6.1%	7.5%	1.4%	1.2%	0.4%	0.4%	0.2%	8.8%	0.0%	33.2%	100.0%
Total	1.4%	4.1%	0.1%	0.1%	0.9%	18.8%	7.6%	8.6%	8.0%	1.2%	0.7%	0.3%	0.3%	0.1%	12.6%	0.0%	35.1%	100.0%

4.6.3.2 Percentage Mapping – After Delphi

In Table 4.4 the percentage distribution of the Culture and Creative Industry's Clusters turnover mapping per Metro is given and Local Municipalities – After Delphi technique adjustment is applied. .

Table 4.4: Culture and Creative Industry's Clusters percentage turnover mapping per Metro's and Local Municipalities in terms of Percentage – After Delphi technique adjustment

Eastern Cape				Free State		Gauteng		Kwa-Zulu Natal			Limpopo	Mpumalanga	Northern Cape	North-West	Western Cape		
Local Municipality	Buffalo City	Nelson Mandela Bay	Dr Beyers Naude	Makana	Mangaung	City of Johannesburg	City of Tshwane	Ekurhuleni	eThekweni	Msunduzi	Polokwane	Mbombela	Sol Plaatje	Tlokwe City Council	City of Cape Town	Oudtshoorn	Total Clusters
A. Cultural and Natural Heritage	2.9%	9.1%	0.1%	0.1%	2.7%	35.8%	8.8%	7.6%	12.8%	2.1%	1.6%	0.6%	0.5%	0.3%	14.9%	0.0%	100.0%
B. Performance and Celebration	2.3%	6.6%	0.1%	0.2%	2.5%	38.9%	8.4%	8.7%	13.1%	1.8%	2.5%	0.5%	0.6%	0.3%	13.5%	0.0%	100.0%
C. Visual Arts and Crafts	0.8%	4.1%	0.0%	0.1%	0.5%	25.6%	25.8%	17.3%	7.4%	0.4%	0.2%	0.9%	0.1%	0.0%	16.7%	0.1%	100.0%
D. Books and Press	0.7%	1.7%	0.2%	0.1%	0.4%	52.8%	13.4%	7.8%	5.0%	1.4%	0.1%	0.1%	0.1%	0.0%	16.2%	0.1%	100.0%
E. Audio-visual and Interactive Media	1.9%	6.5%	0.0%	0.1%	1.7%	27.9%	9.2%	9.6%	16.4%	2.0%	0.9%	0.3%	0.5%	0.3%	22.6%	0.0%	100.0%
F. Design and Creative Services	1.5%	4.8%	0.0%	0.1%	1.0%	29.5%	18.0%	10.7%	11.5%	1.4%	0.9%	0.4%	0.4%	0.2%	19.7%	0.0%	100.0%
Transversal Cultural Education	2.3%	7.6%	0.1%	0.1%	2.6%	40.7%	9.1%	7.8%	10.9%	2.1%	1.7%	0.5%	0.5%	0.3%	13.7%	0.0%	100.0%
Total	1.5%	4.9%	0.1%	0.1%	1.2%	33.9%	15.3%	10.2%	11.0%	1.5%	0.9%	0.4%	0.3%	0.2%	18.5%	0.0%	100.0%

4.6.4 Relative Importance of the Culture and Creative Industry's Clusters per Metros and Local Municipalities

As discussed in the methodology section of this report, the relative importance of the various clusters for a local municipality was calculated by expressing the importance of the total prominence culture for that specific local municipality in terms of an index. For instance, if a cluster has a point of 10, the cluster is ten percent more important than the creative industry as such.

The importance of the various clusters of the Culture and Creative Industry for a specific local municipality is depicted in terms of three categories of importance namely: High, neutral and low where high is coded as green, neutral as white and low as red. For the optimisation of clusters in a specific local municipality it is probably only important to identify which cluster is currently rated as high importance.

In order to refine the analysis further two concerns were considered. The first concern relates to the fact that in some cases there is not a clear equivalence or correspondence between the SIC definition of sector and the CCI definition. This concern also includes cases where data from the Annual Financial Statistics are only available at a national level. A second concern relates to the fact that in some cases the presence of government (national or provincial) may distort the data in that the presence of government may result in a higher value for a specific cluster component.

In order to address these issues, it was decided to implement a Delphi technique where a panel consisting of five researchers from Conningarth with expert knowledge concerning economic data were requested to evaluate and adjust where necessary the data used in this section of the research.

In Table 4.5 (Before Delphi) and Table 4.6 (After Delphi), the relative importance of the Culture and Creative Industry's Clusters per Metros and Local Municipalities is shown.

The two tables do not change drastically but in most cases there are some changes in the classification of the relative importance of the clusters (green is above average, red is below average and white is neutral). Only Buffalo City and Mangaung show no change between the before Delphi and after Delphi classification of the importance of the various clusters.



Table 4.5: Relative Importance of the Culture and Creative Industry's Clusters per Metro's and Local Municipalities – Before Delphi Technique

	Eastern Cape				Free State	Gauteng			Kwa-Zulu Natal		Limpopo	Mpumalanga	Northern Cape	North-West	Western Cape	
Local Municipality	Buffalo City (East London)	Nelson Mandela Bay (Port Elizabeth)	Dr Beyers Naude (Baviaans) (Graaff-Reinet)	Makana (Grahamstown)	Mangaung (Bloemfontein)	City of Johannesburg	City of Tshwane (Pretoria)	Ekurhuleni (East Rand)	eThekwin (Durban)	Msunduzi (Pietermaritzburg)	Polokwane (Pietersburg)	Mbombela (Nelspruit)	Sol Plaatje (Kimberley)	Tlokwe City Council (Potchefstroom)	City of Cape Town	Oudtshoorn
A. Cultural and Natural Heritage	44.70	37.24	21.88	17.55	68.67	32.58	-33.76	-27.06	-0.58	15.55	64.92	20.36	22.18	26.14	-36.04	-73.42
B. Performance and Celebration	35.36	25.33	16.57	14.62	75.45	40.63	-28.34	-24.79	-8.57	16.39	63.83	23.11	23.80	22.82	-30.64	-86.99
C. Visual Arts and Crafts	-61.84	-31.79	-58.86	12.45	-66.94	-15.55	126.16	71.53	-46.36	-77.86	-85.78	77.32	-74.30	-84.87	-17.85	92.49
D. Books and Press	-51.24	-62.72	195.68	23.33	-60.26	129.42	35.71	4.20	-39.91	11.68	-81.02	-81.97	-79.80	-70.78	10.98	142.24
E. Audio-visual and Interactive Media	18.37	27.02	-37.53	-27.59	40.84	-16.49	-20.73	-12.94	37.82	26.08	9.31	-13.06	39.52	36.19	7.01	-0.14
F. Design and Creative Services	5.40	3.62	-33.30	-4.21	-11.39	-38.18	-14.25	-0.72	8.42	-3.47	10.79	4.12	12.36	13.06	8.53	-23.34
Transversal Cultural Education Domain	39.43	27.56	20.97	14.65	81.17	43.69	-35.36	-29.26	-6.89	20.76	70.01	19.87	27.84	27.38	-30.78	-93.96

Table 4.6: Relative Importance of the Culture and Creative Industry's Clusters per Metro's and Local Municipalities - After Delphi Technique

	Eastern Cape				Free State	Gauteng			Kwa-Zulu Natal		Limpopo	Mpumalanga	Northern Cape	North-West	Western Cape	
Local Municipality	Buffalo City (East London)	Nelson Mandela Bay (Port Elizabeth)	Dr Beyers Naude (Baviaans)	Makana (Grahamstown)	Mangaung (Bloemfontein)	City of Johannesburg	City of Tshwane (Pretoria)	Ekurhuleni (East Rand)	eThekwin (Durban)	Msunduzi (Pietermaritzburg)	Polokwane (Pietersburg)	Mbombela (Nelspruit)	Sol Plaatje (Kimberley)	Tlokwe City Council	City of Cape Town	Oudtshoorn
A. Cultural and Natural Heritage	49.83	45.59	56.18	20.19	74.23	38.00	-17.38	-41.25	-9.26	9.58	43.02	14.26	32.72	24.70	-36.91	-64.68
B. Performance and Celebration	22.18	11.49	15.42	31.77	66.22	36.83	-15.85	-29.83	-2.31	1.57	83.16	11.00	23.11	36.23	-35.71	-85.58
C. Visual Arts and Crafts	-50.06	-20.80	-46.22	23.23	-61.62	4.16	40.28	61.85	-36.07	-73.55	-82.53	121.75	-64.23	-80.59	-16.09	133.39
D. Books and Press	-52.67	-65.61	144.93	8.55	-65.36	60.97	19.71	-22.24	-53.35	-2.68	-83.67	-83.82	-81.15	-73.55	-12.75	105.34
E. Audio-visual and Interactive Media	11.07	16.49	-46.35	-34.17	23.13	-16.18	-19.97	-17.16	30.70	14.91	-7.97	-23.80	26.45	21.21	15.08	-6.96
F. Design and Creative Services	11.23	8.91	-30.95	-5.28	-6.20	-28.66	-0.47	16.97	16.55	3.61	15.70	10.95	17.51	18.88	13.89	-20.89
Transversal Cultural Education	23.83	31.47	12.31	27.09	80.27	31.10	-11.03	-35.16	-16.43	16.79	71.63	15.01	26.85	23.04	-26.65	-89.42

4.6.4.1 Important Clusters for specific Geographic Locations

In Table 4.7 the more important clusters for specific Local Municipality/Metros are shown. The choice of importance of main clusters per geographical area was done through the inspection by the researcher of the clusters tables for both the before and after the Delphi exercise Table 4.5 and Table 4.6.

Table 4.7: Important Clusters in the CCI's per geographical location per Province

Province	Geographical Location	Cluster
Eastern Cape	Buffalo City (East London)	Cultural and Natural Heritage
	Nelson Mandela Bay (Port Elizabeth)	Cultural and Natural Heritage; Transversal Cultural Education
	Dr Beyers Naude (Baviaans) [Graaff-Reinet]	Books and Press; Cultural and Natural Heritage
	Makana (Grahamstown)	Performance and Celebration; Transversal Cultural Education
Free State	Mangaung (Bloemfontein)	Transversal Cultural Education; Cultural and Natural Heritage
Gauteng	City of Johannesburg	Books and Press
	City of Tshwane (Pretoria)	Visual Arts and Crafts
	Ekurhuleni (East Rand)	Visual Arts and Crafts
Kwa-Zulu Natal	eThekweni (Durban)	Audio-Visual and Interactive Media
	Msunduzi (Pietermaritzburg)	Transversal Cultural Education; Audio-Visual and Interactive Media; Cultural and Natural Heritage
Limpopo	Polokwane (Pietersburg)	Performance and Celebration; Transversal Cultural Education
Mpumalanga	Mbombela (Nelspruit)	Visual Arts and Crafts
Northern Cape	Sol Plaatje (Kimberley)	Cultural and Natural Heritage
North-West	Tlokwe City Council (Potchefstroom)	Performance and Celebration
Western Cape	City of Cape Town	Audio-Visual and Interactive Media; Design and Creative Services
	Oudtshoorn	Visual Arts and Crafts

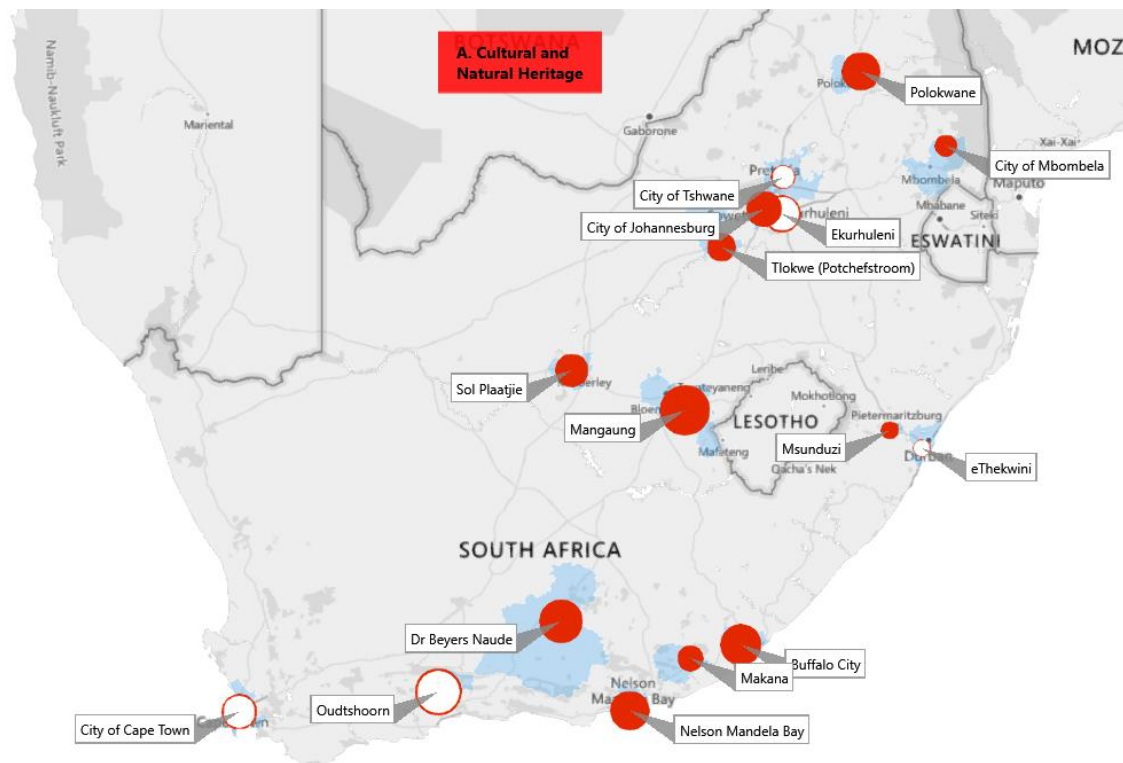


4.6.4.2 Mapping of the CCI Clusters Relative Importance of Turnover

The following maps represent for each CCI Domain the relative important distribution per cluster as determined by the relative importance index.

Figures 4.1 to 4.7 show the clusters separately where the larger the circle, the larger the relative value (negative or positive) as depicted in Table 4.6 above. For example, if the colour as in the Cultural and Natural Heritage cluster is completely red, it shows a positive value. If it is white with a border line of red, it signifies a low (negative) importance. The largest complete red circle is Mangaung, and shows it is the highest relative important cluster in the Cultural and Natural Heritage cluster. The largest complete white circle with a red border is the Oudtshoorn cluster and shows the least relative important cluster in the Cultural and Natural Heritage cluster. Similar logic is followed in the other figures in this section, albeit in different colours.

Figure 4.1: Mapping of the Cultural and Natural Heritage Clusters' Relative Importance of Turnover



B. Performance and Celebration

Map of South Africa showing the locations of 14 water treatment works (WWTWs) highlighted in blue. The map includes labels for major cities and regions: Polokwane, City of Tshwane, City of Johannesburg, Ekurhuleni, Tlokweng (Potchefstroom), Sol Plaatje, Mangaung, Bloemfontein, Lesotho, Msunduzi, Durban, eThekweni, Dr Beyers Naude, Oudtshoorn, Nelson Mandela Bay, Makana, Buffalo City, and City of Cape Town.

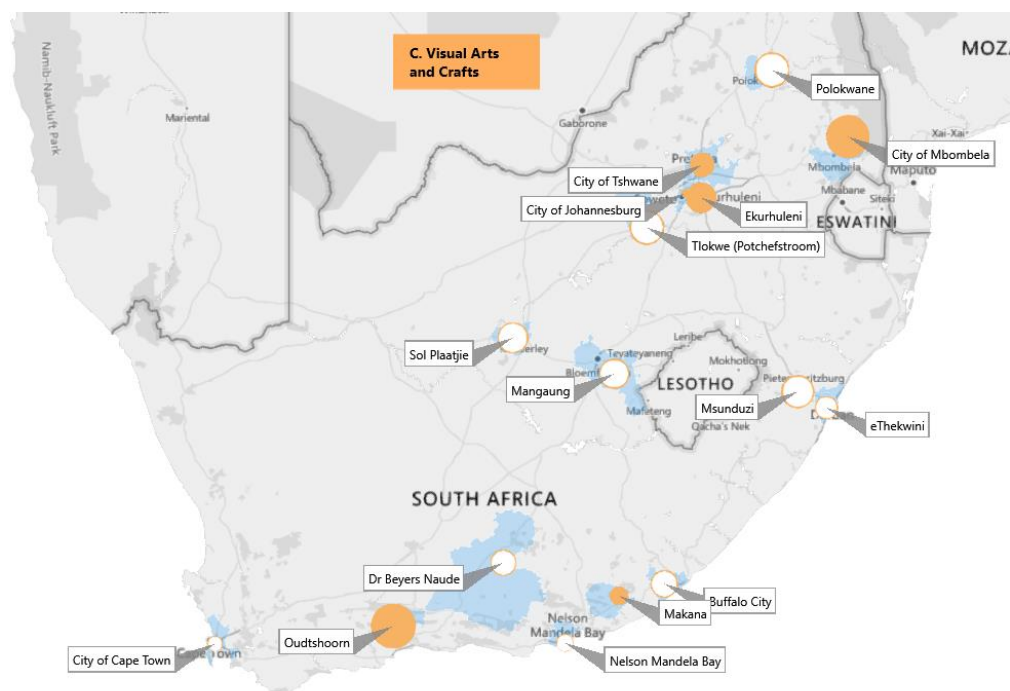


Figure 4.4: Mapping of the Books and Press Clusters' Relative Importance of Turnover

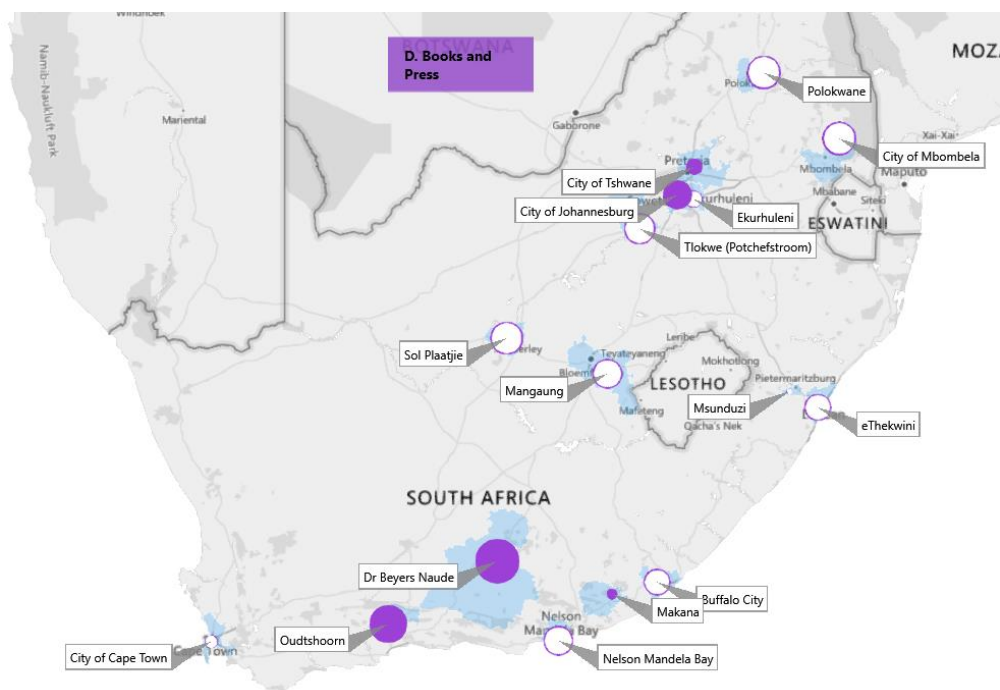


Figure 4.5: Mapping of the Audio-visual and Interactive Media Clusters' Relative Importance of Turnover



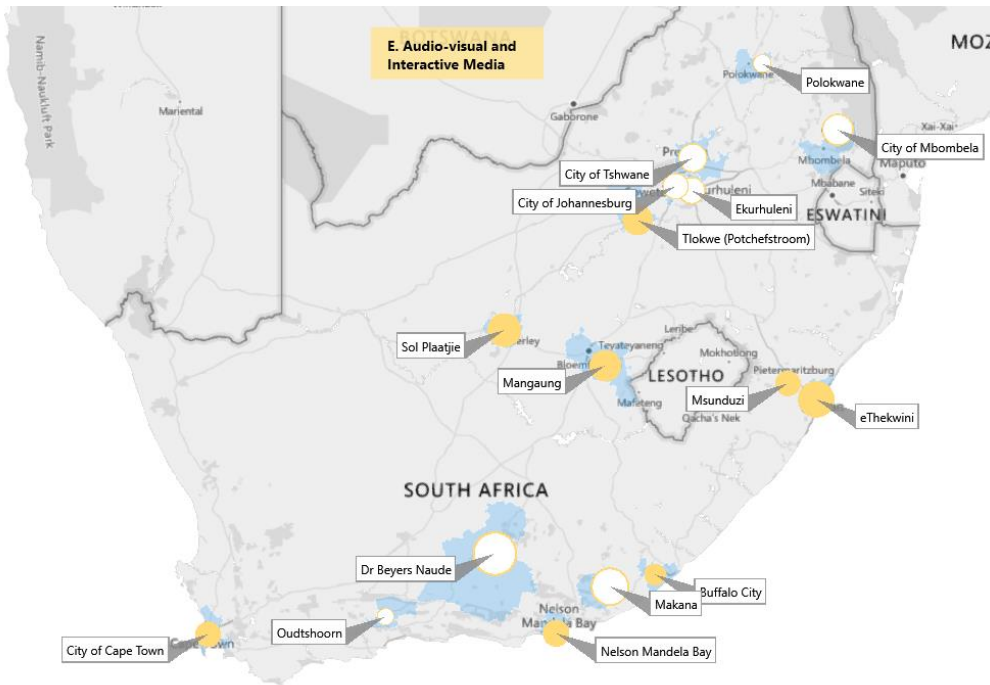


Figure 4.6: Mapping of the Design and Creative Services Clusters' Relative Importance of Turnover

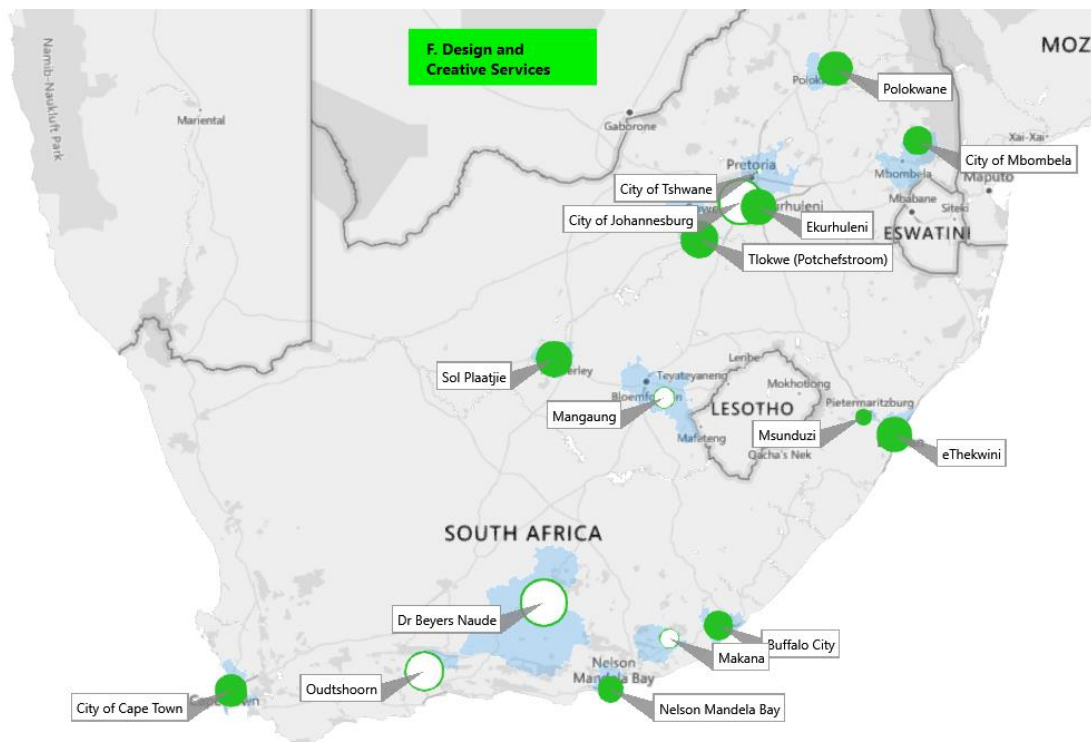
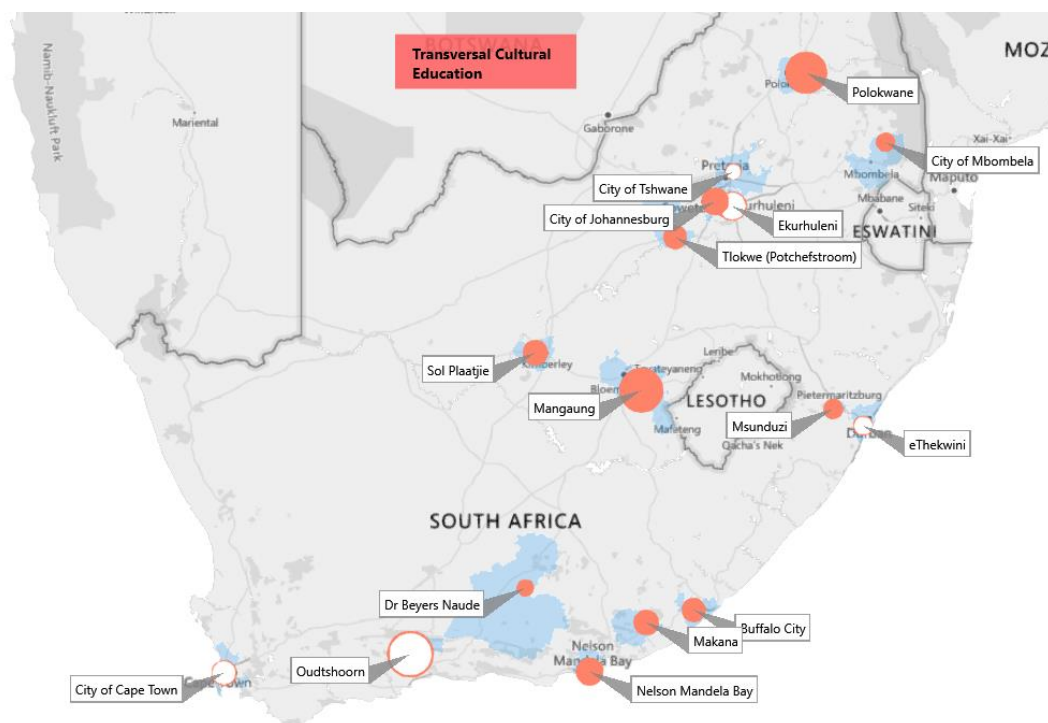


Figure 4.7: Mapping of the Transversal Cultural Education Clusters' Relative Importance of Turnover





Below is a table of the most prominent clusters with its most relative important CCI sector(s) in the geographical locations analysed.

Table 4.8: Important Clusters in the CCI's per geographical location with its most Relative Importance CCI sector

Geographical Location	Cluster	CCI Sector
Buffalo City (East London)	A. Cultural and Natural Heritage	A.Creative, arts and entertainment activities- Stamps and collectors Items; Retail sale of second-hand goods
Nelson Mandela Bay (Port Elizabeth)	A. Cultural and Natural Heritage	A.Creative, arts and entertainment activities- Stamps and collectors Items; Retail sale of second-hand goods
Dr Beyers Naude (Baviaans) [Graaff-Reinet]	D. Books and Press	Other publishing activities
Makana (Grahamstown)	B. Performance and Celebration	B. Creative, arts and entertainment activities-Performing arts and Cultural events
Mangaung (Bloemfontein)	A. Cultural and Natural Heritage	Museums activities and operation of historical sites
City of Johannesburg	D. Books and Press	Book publishing; Publishing of newspapers, journals and periodicals
City of Tshwane (Pretoria)	C. Visual Arts and Crafts	Manufacture of jewellery and related articles
Ekurhuleni (East Rand)	C. Visual Arts and Crafts	C.Creative, arts and entertainment activities - Fine Art and other visual art ex. Cartoonists
eThekweni (Durban)	E. Audio-visual and Interactive Media	Radio broadcasting
Msunduzi (Pietermaritzburg)	E. Audio-visual and Interactive Media	News agency activities
Polokwane (Pietersburg)	B. Performance and Celebration	B. Creative, arts and entertainment activities-Performing arts and Cultural events



Mbombela (Nelspruit)	C. Visual Arts and Crafts	Manufacture of jewellery and related articles; C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists
Sol Plaatje (Kimberley)	A. Cultural and Natural Heritage	Museums activities and operation of historical sites
Tlokwe City Council (Potchefstroom)	B. Performance and Celebration	B. Creative, arts and entertainment activities - Performing arts and Cultural events
City of Cape Town	E. Audio-visual and Interactive Media	Motion picture, video and television programme production activities
Oudtshoorn	C. Visual Arts and Crafts	Manufacture of jewellery and related articles

In the section below each cluster will be described in detail.

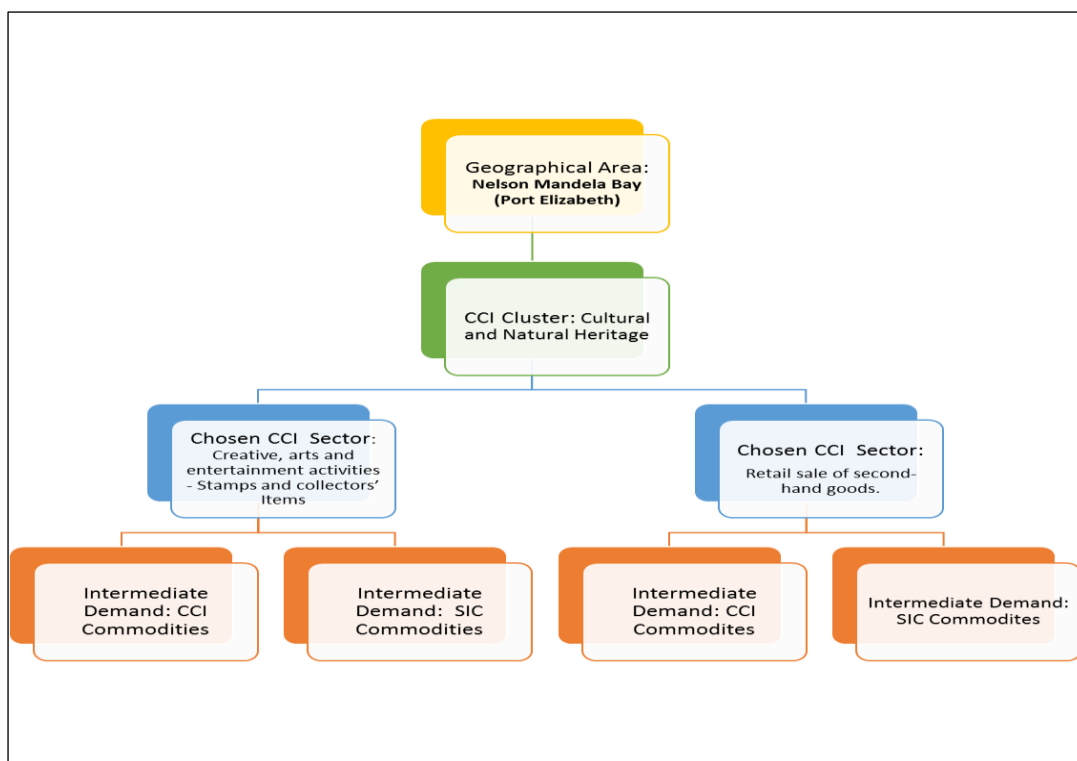
Summary of key CCI clusters per Geographic Locations

In this section the key clusters per Geographical Location are analysed and discussed. Specific attention is also given to the linkage effects of the key clusters and their constituents. Although there exist linkage effects between provincial and local government economies (due to imports from other locations in South Africa), in this analysis such indirect linkage effects which can be attributed to leakages, are excluded from the study of specific geographical location. However, this analysis provides an indication of probable leakage effects to other areas of the country through commodities which are used as input materials in producing goods and services for the CCI cluster. It is often policy in local/regional analysis to attempt to limit such leakages through various means by producing such imported goods and services and services locally.

The flow chart in Figure 4.7 below demonstrates the mapping of a chosen cluster for a specific geographical location (Nelson Mandela Bay) for the exposition of key CCI Sectors. All the figures provided in this section are in Rand Million, 2018 prices.

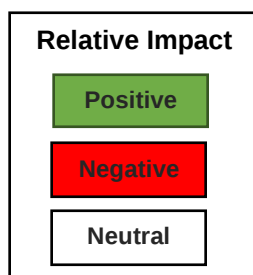
Figure 4.8: Example of mapping a chosen cluster for a specific geographical location (i.e. Nelson Mandela Bay)





The methodology in the above figure will be applied in the next section to the 16 selected geographical areas. The colour keys used to represent the relative impact indicators in the following tables are as follows; green as positive, but also signifies an above average than neutral relativity.

Red represented as negative or can be defined as below the neutral range.



4.6.4.3.1 Buffalo City (East London)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Buffalo City (East London)
A. Cultural and Natural Heritage	49.83



B. Performance and Celebration	22.18
C. Visual Arts and Crafts	-50.06
D. Books and Press	-52.67
E. Audio-visual and Interactive Media	11.07
F. Design and Creative Services	11.23
Transversal Cultural Education	23.83

Chosen cluster for further analysis:

- Cultural and Natural Heritage = R79.7 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

A. Cultural and Natural Heritage	Buffalo City
A. Creative, arts and entertainment activities- Stamps and collectors' Items	32
Museums activities and operation of historical sites	-13
Botanical and Zoological Gardens and Nature Reserve Activities	-3
Retail sale of second-hand goods	20

Key (CCI) sector/s for further exposition:

- Creative, arts and entertainment activities - Stamps and collectors' Items [*defined as this class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers.*] = R4.1 Million; and
- Retail sale of second--hand goods [*defined as retail sale of second-hand books; retail sale of antiques; activities of auctioning houses.*] = R 17.7 Million.

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised,

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.



CCI Sector - Creative, arts and entertainment activities - Stamps and collectors' Items

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	A.Creative, arts and entertainment activities- Stamps and collectors Items	0.0290	1	Business services	1.4634
2	Retail sale of second-hand goods	0.0215	2	Finance and insurance	0.3620
3	Web portals	0.0212	3	Transport and storage	0.2534
4	Publishing of newspapers, journals and periodicals	0.0121	4	Communication	0.2129
5	Retail sale of books, newspapers and stationery in specialised stores	0.0110	5	Wholesale and retail trade	0.1212
6	Advertising	0.0107	6	Publishing and Printing	0.1177
7	Museums activities and operation of historical sites	0.0101	7	Paper and Paper Products	0.1018
8	Radio broadcasting	0.0099	8	Petroleum	0.0828
9	Library and Archives activities	0.0078	9	Basic and Other chemicals (incl. Plastics products)	0.0805
10	Photographic activities	0.0070	10	Water	0.0414

CCI Sector - Retail sale of second-hand goods

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Retail sale of second-hand goods	0.1430	1	Business services	7.5248
2	Museums activities and operation of historical sites	0.0952	2	Finance and insurance	1.5257
3	C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	0.0952	3	Transport and storage	0.6158



4	A.Creative, arts and entertainment activities- Stamps and collectors Items	0.0812	4	Water	0.5440
5	Publishing of newspapers, journals and periodicals	0.0643	5	Wholesale and retail trade	0.4798
6	Library and Archives activities	0.0238	6	Paper and Paper Products	0.4190
7	Other publishing activities	0.0238	7	Communication	0.4125
8	Web portals	0.0238	8	Publishing and Printing	0.4092
9	Advertising	0.0238	9	Basic and Other chemicals (incl. Plastics products)	0.3798
10	Botanical and Zoological Gardens and Nature Reserve Activities	0.0204	10	Electricity	0.3496

4.6.4.3.2 Nelson Mandela Bay (Port Elizabeth)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Nelson Mandela Bay (Port Elizabeth)
A. Cultural and Natural Heritage	45.59
B. Performance and Celebration	11.49
C. Visual Arts and Crafts	-20.80
D. Books and Press	-65.61
E. Audio-visual and Interactive Media	16.49
F. Design and Creative Services	8.91
Transversal Cultural Education	31.47

Chosen cluster for further analysis:

- Cultural and Natural Heritage = R247.7 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

A. Cultural and Natural Heritage	Nelson Mandela Bay
A. Creative, arts and entertainment activities- Stamps and collectors' Items	59
Museums activities and operation of historical sites	-27
Botanical and Zoological Gardens and Nature Reserve Activities	-3
Retail sale of second-hand goods	32

Key (CCI) sector/s for further exposition:



- Creative, arts and entertainment activities - Stamps and collectors' Items [*defined as this class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers.*] = R15.4 Million; and
- Retail sale of second-hand goods [*defined as retail sale of second-hand books; retail sale of antiques; activities of auctioning houses.*] = R60.4 Million.

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Creative, arts and entertainment activities - Stamps and collectors' Items

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	A.Creative, arts and entertainment activities- Stamps and collectors Items	0.1082	1	Business services	5.4600
2	Retail sale of second-hand goods	0.0801	2	Finance and insurance	1.3505
3	Web portals	0.0789	3	Transport and storage	0.9454
4	Publishing of newspapers, journals and periodicals	0.0451	4	Communication	0.7942
5	Retail sale of books, newspapers and stationery in specialised stores	0.0411	5	Wholesale and retail trade	0.4523
6	Advertising	0.0401	6	Publishing and Printing	0.4392
7	Museums activities and operation of historical sites	0.0376	7	Paper and Paper Products	0.3799
8	Radio broadcasting	0.0369	8	Petroleum	0.3088



9	Library and Archives activities	0.0292	9	Basic and Other chemicals (incl. Plastics products)	0.3005
10	Photographic activities	0.0261	10	Water	0.1544

CCI Sector - Retail sale of second-hand goods

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Retail sale of second-hand goods	0.4869	1	Business services	25.6247
2	Museums activities and operation of historical sites	0.3242	2	Finance and insurance	5.1954
3	C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	0.3242	3	Transport and storage	2.0968
4	A.Creative, arts and entertainment activities- Stamps and collectors Items	0.2765	4	Water	1.8525
5	Publishing of newspapers, journals and periodicals	0.2189	5	Wholesale and retail trade	1.6338
6	Library and Archives activities	0.0811	6	Paper and Paper Products	1.4269
7	Other publishing activities	0.0811	7	Communication	1.4047
8	Web portals	0.0811	8	Publishing and Printing	1.3934
9	Advertising	0.0811	9	Basic and Other chemicals (incl. Plastics products)	1.2934
10	Botanical and Zoological Gardens and Nature Reserve Activities	0.0693	10	Electricity	1.1904

4.6.4.3.3 Dr Beyers Naude (Baviaans) [Graaff-Reinet]

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Dr Beyers Naude (Baviaans) [Graaff-Reinet]
A. Cultural and Natural Heritage	56.18
B. Performance and Celebration	15.42
C. Visual Arts and Crafts	-46.22
D. Books and Press	144.93



E. Audio-visual and Interactive Media	-46.35
F. Design and Creative Services	-30.95
Transversal Cultural Education	12.31

Chosen cluster for further analysis:

- Books and Press = R36.6 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

D. Books and Press	Dr Beyers Naude
Library and Archives activities	-31.01
Book publishing	5.00
Publishing of newspapers, journals and periodicals	4.84
Other publishing activities	24.26
Retail sale of books, newspapers and stationery in specialised stores	-31.87
News agency activities	-75.62
Other information service activities n.e.c.	-69.07
Wholesale of other household goods*	-33.63
D.Creative arts and entertainment activities-Services of authors, composers, sculptors and other artists, except performing artists	-99.88

Key (CCI) sector/s for further exposition:

- Other publishing activities [*defined as publishing of catalogues; photos, engravings and postcards; greeting cards; forms; posters, reproduction of works of art; advertising material; other printed matter; on-line publishing of statistics or other information.*] = R1.6 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.



CCI Sector - Other publishing activities

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Other publishing activities	0.0339	1	Paper and Paper Products	0.4638
2	Advertising	0.0297	2	Business services	0.2095
3	Software Publishing	0.0265	3	Finance and insurance	0.1383
4	Web portals	0.0106	4	Wholesale and retail trade	0.1184
5	Research and experimental development on social sciences and humanities	0.0064	5	Basic and Other chemicals (incl. Plastics products)	0.0439
6	B. Creative, arts and entertainment activities- Performing arts and Cultural events	0.0057	6	Community, social and personal services excl. Government	0.0412
7	Specialised design activities	0.0043	7	Transport and storage	0.0358
8	Other information service activities n.e.c.	0.0042	8	Communication	0.0273
9	Architectural and engineering activities and related technical consultancy	0.0037	9	Publishing and Printing	0.0164
10	Television programming and broadcasting activities	0.0027	10	Manufacturing of Transport Equipment	0.0154

4.6.4.3.4 Makana (Grahamstown)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Makana (Grahamstown)
A. Cultural and Natural Heritage	20.19
B. Performance and Celebration	31.77
C. Visual Arts and Crafts	23.23
D. Books and Press	8.55



E. Audio-visual and Interactive Media	-34.17
F. Design and Creative Services	-5.28
Transversal Cultural Education	27.09

Chosen cluster for further analysis:

- Performance and Celebration = R12.8 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

B. Performance and Celebration	Makana
B. Creative, arts and entertainment activities- Performing arts and Cultural events	0.45
Manufacture of musical instruments	-12.96
Sound recording and music publishing activities	-9.09
Retail sale of music and video recordings in specialised stores	-13.04

Key Standard Industrial Clarification (SIC) sector/s for further exposition:

- Creative, arts and entertainment activities - Performing arts and Cultural events
Creative, arts and entertainment activities - Stamps and collectors' Items [*defined as this class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers.*] = R12.4 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Creative, arts and entertainment activities - Performing arts and Cultural events



Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Advertising	0.1556	1	Business services	2.8038
2	Retail sale of second-hand goods	0.1249	2	Manufacturing of Transport Equipment	0.4563
3	Specialised design activities	0.0960	3	Electronic Equipment	0.4151
4	B. Creative, arts and entertainment activities- Performing arts and Cultural events	0.0728	4	Community, social and personal services excl. Government	0.3862
5	Research and experimental development on social sciences and humanities	0.0653	5	Wholesale and retail trade	0.3508
6	Manufacture of jewellery and related articles	0.0618	6	Basic and Other chemicals (incl. Plastics products)	0.3030
7	Motion picture, video and television programme distribution activities	0.0596	7	Finance and insurance	0.1955
8	Photographic activities	0.0423	8	Communication	0.1931
9	Motion picture, video and television programme production activities	0.0391	9	Publishing and Printing	0.1573
10	Museums activities and operation of historical sites	0.0384	10	Transport and storage	0.1436

4.6.4.3.5 Mangaung (Bloemfontein)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Mangaung (Bloemfontein)
A. Cultural and Natural Heritage	74.23
B. Performance and Celebration	66.22
C. Visual Arts and Crafts	-61.62
D. Books and Press	-65.36
E. Audio-visual and Interactive Media	23.13
F. Design and Creative Services	-6.20



Transversal Cultural Education

80.27

Note: Although the Transversal Cultural Education cluster is the largest positive relatively, it was excluded during the CCI analysis due to its different production behaviour and calculated externally. The subsequent largest positive cluster - A. Cultural and Natural Heritage and its CCI sectors will be shown.

Chosen cluster for further analysis:

- Cultural and Natural Heritage = R73.7 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

A. Cultural and Natural Heritage	Mangaung
A.Creative, arts and entertainment activities- Stamps and collectors' Items	-4
Museums activities and operation of historical sites	35
Botanical and Zoological Gardens and Nature Reserve Activities	-9
Retail sale of second-hand goods	-17

Key (CCI) sector/s for further exposition:

- Museums activities and operation of historical sites [*defined as operation of museums of all kinds as well as operation of historical sites and buildings.*] = R23.7 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Museums activities and operation of historical sites

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
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1	A.Creative, arts and entertainment activities- Stamps and collectors Items	0.2082	1	Business services	3.9866
2	Advertising	0.1359	2	Community, social and personal services excl. Government	0.5957
3	Web portals	0.1165	3	Manufacturing of Transport Equipment	0.5549
4	Specialised design activities	0.1032	4	Electronic Equipment	0.5041
5	C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	0.0915	5	Wholesale and retail trade	0.4327
6	Museums activities and operation of historical sites	0.0654	6	Basic and Other chemicals (incl. Plastics products)	0.3709
7	News agency activities	0.0453	7	Communication	0.3148
8	Motion picture projection activities	0.0408	8	Finance and insurance	0.2289
9	Library and Archives activities	0.0326	9	Publishing and Printing	0.2057
10	Retail sale of second-hand goods	0.0324	10	Transport and storage	0.1710

4.6.4.3.6 City of Johannesburg

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	City of Johannesburg
A. Cultural and Natural Heritage	38.00
B. Performance and Celebration	36.83
C. Visual Arts and Crafts	4.16
D. Books and Press	60.97
E. Audio-visual and Interactive Media	-16.18
F. Design and Creative Services	-28.66
Transversal Cultural Education	31.10

Chosen cluster for further analysis:

- Books and Press = R8 997.6 Million



ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

D. Books and Press	City of Johannesburg
Library and Archives activities	-24.84
Book publishing	5.90
Publishing of newspapers, journals and periodicals	5.74
Other publishing activities	5.28
Retail sale of books, newspapers and stationery in specialised stores	-40.93
News agency activities	-61.30
Other information service activities n.e.c.	-62.69
Wholesale of other household goods*	-42.45
D.Creative arts and entertainment activities- Services of authors, composers, sculptors and other artists, except performing artists	-68.39

Note: The level of relativity compared to the other clusters, resulted in a low range although the production values are quite significant compared to other CCI clusters in City of Johannesburg.

Key (CCI) sector/s for further exposition:

- Book publishing [defined as the activities of publishing books in print, electronic or audio form or on the Internet as well as publishing of atlases, maps and charts; audio books; encyclopaedias on CD-ROM.] = R1 886.5 Million
- Publishing of newspapers, journals and periodicals [defined as publishing of newspapers, including advertising newspapers; publishing of periodicals and other journals; Publishing can be done in print or electronic form.] = R6 239.1 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Book publishing

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
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1	Advertising	32.6861	1	Business services	209.2260
2	Web portals	10.3016	2	Publishing and Printing	162.4100
3	Specialised design activities	8.7177	3	Transport and storage	142.7710
4	Other publishing activities	7.2643	4	Paper and Paper Products	132.8134
5	Library and Archives activities	3.9858	5	Wholesale and retail trade	87.7011
6	Photographic activities	3.1336	6	Community, social and personal services excl. Government	58.7833
7	C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	2.6275	7	Basic and Other chemicals (incl. Plastics products)	52.9363
8	Other publishing activities	2.5069	8	Communication	48.5999
9	Retail sale via mail order houses or via Internet	2.2204	9	Finance and insurance	29.9929
10	Research and experimental development on social sciences and humanities	2.0559	10	Buildings and Other Construction	5.0929

CCI Sector - Publishing of newspapers, journals and periodicals

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	News agency activities	148.0997	1	Paper and Paper Products	727.7210
2	Advertising	130.5772	2	Business services	651.9973
3	News agency activities	45.2706	3	Publishing and Printing	459.2700
4	Publishing of newspapers, journals and periodicals	39.6680	4	Community, social and personal services excl. Government	367.2911
5	Specialised design activities	36.4946	5	Wholesale and retail trade	322.8302
6	Other information service activities n.e.c.	34.9231	6	Transport and storage	298.1296
7	Photographic activities	29.5714	7	Communication	134.7271



8	Library and Archives activities	25.1446	8	Basic and Other chemicals (incl. Plastics products)	115.3972
9	Other publishing activities	24.5155	9	Finance and insurance	68.9347
10	Other publishing activities	23.6571	10	Buildings and Other Construction	28.1779

4.6.4.3.7 City of Tshwane (Pretoria)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	City of Tshwane (Pretoria)
A. Cultural and Natural Heritage	-17.38
B. Performance and Celebration	-15.85
C. Visual Arts and Crafts	40.28
D. Books and Press	19.71
E. Audio-visual and Interactive Media	-19.97
F. Design and Creative Services	-0.47
Transversal Cultural Education	-11.03

Chosen cluster for further analysis:

- Visual Arts and Crafts = R1 586.2 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

C. Visual Arts and Crafts	City of Tshwane
C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	12.03
Photographic activities	-84.78
Other publishing activities	-58.59
Manufacture of jewellery and related articles	26.35
Research and experimental development on social sciences and humanities	-76.12

Key (CCI) sector/s for further exposition:

- Manufacture of jewellery and related articles [*defined as production of worked pearls; production of precious and semi-precious stones in the worked state; working of diamonds; manufacture of jewellery of precious metal.*] = R1 406.7 Million



iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Manufacture of jewellery and related articles

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Advertising	25.2451	1	Mining	780.4877
2	B. Creative, arts and entertainment activities- Performing arts and Cultural events	11.8021	2	Other Manufacturing and Recycling	203.8854
3	Manufacture of jewellery and related articles	11.7007	3	Wholesale and retail trade	101.3628
4	Specialised design activities	6.8679	4	Basic Metal Products	50.4235
5	Web portals	4.2075	5	Finance and insurance	23.6124
6	Manufacture of musical instruments	2.9505	6	Transport and storage	21.8588
7	Photographic activities	2.4824	7	Business services	5.4667
8	Other publishing activities	1.9859	8	Community, social and personal services excl. Government	4.4548
9	Retail sale of books, newspapers and stationery in specialised stores	0.8415	9	Communication	1.4434
			10	Electricity	0.7803



4.6.4.3.8 Ekurhuleni (East Rand)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Ekurhuleni (East Rand)
A. Cultural and Natural Heritage	-41.25
B. Performance and Celebration	-29.83
C. Visual Arts and Crafts	61.85
D. Books and Press	-22.24
E. Audio-visual and Interactive Media	-17.16
F. Design and Creative Services	16.97
Transversal Cultural Education	-35.16

Chosen cluster for further analysis:

- Visual Arts and Crafts = R1 907.4 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

C. Visual Arts and Crafts	Ekurhuleni
C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	39.54
Photographic activities	-69.54
Other publishing activities	-54.06
Manufacture of jewellery and related articles	21.60
Research and experimental development on social sciences and humanities	-56.71

Key (CCI) sector/s for further exposition:

- Creative, arts and entertainment activities - Fine Art and other visual art ex. Cartoonists [*defined as this class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers.*] = R64.0 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing



intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Creative, arts and entertainment activities - Fine Art and other visual art ex. Cartoonists

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	0.8336	1	Business services	11.3121
2	B. Creative, arts and entertainment activities- Performing arts and Cultural events	0.6406	2	Wholesale and retail trade	4.0750
3	Advertising	0.3238	3	Agriculture Forestry and Fishing	2.8687
4	Research and experimental development on social sciences and humanities	0.1619	4	Community, social and personal services excl. Government	2.7839
5	Other publishing activities	0.1619	5	Processed Food	2.5542
6	Manufacture of musical instruments	0.1601	6	Transport and storage	2.0442
7	Specialised design activities	0.1550	7	Basic and Other chemicals (incl. Plastics products)	1.9816
8	Photographic activities	0.0955	8	Mining	1.9668
9	Museums activities and operation of historical sites	0.0809	9	Petroleum	1.7839
10	Web portals	0.0809	10	Publishing and Printing	1.7641

4.6.4.3.9 eThekweni (Durban)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters



CCI Cluster	eThekwini (Durban)
A. Cultural and Natural Heritage	-9.26
B. Performance and Celebration	-2.31
C. Visual Arts and Crafts	-36.07
D. Books and Press	-53.35
E. Audio-visual and Interactive Media	30.70
F. Design and Creative Services	16.55
Transversal Cultural Education	-16.43

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Chosen cluster for further analysis:

- Audio-visual and Interactive Media = R3 679.2 Million

ii. **Key CCI Sectors involved in the chosen CCI Cluster**

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

E. Audio-visual and Interactive Media	eThekwini
Software Publishing	-19.33
Motion picture, video and television programme production activities	-12.08
Motion picture, video and television programme post-production activities	-3.92
Motion picture, video and television programme distribution activities	-1.49
Sound recording and music publishing activities	-5.76
Motion picture projection activities	-6.51
Radio broadcasting	14.79
Television programming and broadcasting activities	11.59
Web portals	1.66
Renting of video tapes and disks	-11.41
News agency activities	5.30
Retail sale of music and video recordings in specialised stores	10.52
Retail sale via mail order houses or via Internet	-8.28

Key (CCI) sector/s for further exposition:



- Radio broadcasting [defined as broadcasting audio signals through radio broadcasting studios and facilities for the transmission of aural programming to the public; activities of radio networks; data broadcasting.] = R649.8 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Radio broadcasting

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Advertising	20.9750	1	Petroleum	79.7749
2	Motion picture projection activities	19.1096	2	Business services	79.6378
3	B. Creative, arts and entertainment activities- Performing arts and Cultural events	15.4994	3	Wholesale and retail trade	40.4953
4	Radio broadcasting	9.2169	4	Transport and storage	33.7847
5	Sound recording and music publishing activities	7.6438	5	Finance and insurance	24.3797
6	Retail sale of music and video recordings in specialised stores	5.0320	6	Communication	21.2178
7	Publishing of newspapers, journals and periodicals	3.9188	7	Community, social and personal services excl. Government	18.4849
8	Manufacture of musical instruments	3.8749	8	Manufacturing of Transport Equipment	17.6590
9	News agency activities	2.5110	9	Rubber Products	10.0621



10	Sound recording and music publishing activities	1.7787	10	Catering and accommodation services	9.3970
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4.6.4.3.10 Msunduzi (Pietermaritzburg)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Msunduzi (Pietermaritzburg)
A. Cultural and Natural Heritage	9.58
B. Performance and Celebration	1.57
C. Visual Arts and Crafts	-73.55
D. Books and Press	-2.68
E. Audio-visual and Interactive Media	14.91
F. Design and Creative Services	3.61
Transversal Cultural Education	16.79

Note: Although the Transversal Cultural Education (related) cluster is the largest positive relatively, it was excluded during the CCI analysis due to its different production behaviour and calculated externally. The subsequent largest positive cluster - Audio-visual and Interactive Media and its CCI sectors will be shown.

Chosen cluster for further analysis:

- Audio-visual and Interactive Media = R439.7 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

E. Audio-visual and Interactive Media	Msunduzi
Software Publishing	-9.87
Motion picture, video and television programme production activities	-25.41
Motion picture, video and television programme post-production activities	-17.55
Motion picture, video and television programme distribution activities	-18.60
Sound recording and music publishing activities	-27.94
Motion picture projection activities	-18.69
Radio broadcasting	18.50



Television programming and broadcasting activities	24.40
Web portals	23.19
Renting of video tapes and disks	-12.90
News agency activities	32.92
Retail sale of music and video recordings in specialised stores	-9.40
Retail sale via mail order houses or via Internet	-27.85

Key (CCI) sector/s for further exposition:

- News agency activities [*defined as news syndicate and news agency activities furnishing news, pictures and features to the media.*] = R5.8 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - News agency activities

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Advertising	0.2671	1	Business services	0.7915
2	News agency activities	0.2427	2	Petroleum	0.2137
3	Web portals	0.1820	3	Wholesale and retail trade	0.1976
4	Retail sale of music and video recordings in specialised stores	0.0487	4	Finance and insurance	0.1780



5	Television programming and broadcasting activities	0.0486	5	Community, social and personal services excl. Government	0.1763
6	Publishing of newspapers, journals and periodicals	0.0309	6	Transport and storage	0.1733
7	News agency activities	0.0243	7	Communication	0.1620
8	Research and experimental development on social sciences and humanities	0.0182	8	Manufacturing of Transport Equipment	0.1234
9	Radio broadcasting	0.0182	9	Publishing and Printing	0.0849
10	Motion picture, video and television programme production activities	0.0122	10	Basic and Other chemicals (incl. Plastics products)	0.0816

4.6.4.3.11 Polokwane (Pietersburg)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Polokwane (Pietersburg)
A. Cultural and Natural Heritage	43.02
B. Performance and Celebration	83.16
C. Visual Arts and Crafts	-82.53
D. Books and Press	-83.67
E. Audio-visual and Interactive Media	-7.97
F. Design and Creative Services	15.70
Transversal Cultural Education	71.63

Chosen cluster for further analysis:

- Performance and Celebration = R161.5 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The relative Importance index of the various Cultural and Creative Industries (CCI) sectors pertaining to the cluster involved are as follows:

B. Performance and Celebration	Polokwane
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B. Creative, arts and entertainment activities- Performing arts and Cultural events	3.80
Manufacture of musical instruments	N/A
Sound recording and music publishing activities	N/A
Retail sale of music and video recordings in specialised stores	N/A

Note: According to the SIC sector in the SID the sectors not applicable (N/A) do not contain any production activities in those sectors

Key (CCI) sector/s for further exposition:

- Creative, arts and entertainment activities - Performing arts and Cultural events
[defined as this class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers.] = R161.5 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Creative, arts and entertainment activities - Performing arts and Cultural events

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Advertising	2.0232	1	Business services	36.4488
2	Retail sale of second-hand goods	1.6231	2	Manufacturing of Transport Equipment	5.9312
3	Specialised design activities	1.2475	3	Electronic Equipment	5.3967
4	B. Creative, arts and entertainment activities- Performing arts and Cultural events	0.9464	4	Community, social and personal services excl. Government	5.0198



5	Research and experimental development on social sciences and humanities	0.8489	5	Wholesale and retail trade	4.5607
6	Manufacture of jewellery and related articles	0.8029	6	Basic and Other chemicals (incl. Plastics products)	3.9395
7	Motion picture, video and television programme distribution activities	0.7741	7	Finance and insurance	2.5412
8	Photographic activities	0.5498	8	Communication	2.5097
9	Motion picture, video and television programme production activities	0.5083	9	Publishing and Printing	2.0451
10	Museums activities and operation of historical sites	0.4993	10	Transport and storage	1.8663

4.6.4.3.12 Mbombela (Nelspruit)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Mbombela (Nelspruit)
A. Cultural and Natural Heritage	14.26
B. Performance and Celebration	11.00
C. Visual Arts and Crafts	121.75
D. Books and Press	-83.82
E. Audio-visual and Interactive Media	-23.80
F. Design and Creative Services	10.95
Transversal Cultural Education	15.01

Chosen cluster for further analysis:

- Visual Arts and Crafts = R98.1 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

C. Visual Arts and Crafts	Mbombela
C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	20.15
Photographic activities	-56.04



Other publishing activities	-99.33
Manufacture of jewellery and related articles	29.86
Research and experimental development on social sciences and humanities	-38.97

Key (CCI) sector/s for further exposition:

- Manufacture of jewellery and related articles [*defined as production of worked pearls; production of precious and semi-precious stones in the worked state; working of diamonds; manufacture of jewellery of precious metal.*] = R89.4 Million
- Creative, arts and entertainment activities - Fine Art and other visual art ex. Cartoonists [*defined as this class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers.*] = R2.8 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Manufacture of jewellery and related articles

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Advertising	1.6049	1	Mining	49.6169
2	B. Creative, arts and entertainment activities- Performing arts and Cultural events	0.7503	2	Other Manufacturing and Recycling	12.9613
3	Manufacture of jewellery and related articles	0.7438	3	Wholesale and retail trade	6.4438
4	Specialised design activities	0.4366	4	Basic Metal Products	3.2055
5	Web portals	0.2675	5	Finance and insurance	1.5011



6	Manufacture of musical instruments	0.1876	6	Transport and storage	1.3896
7	Photographic activities	0.1578	7	Business services	0.3475
8	Other publishing activities	0.1262	8	Community, social and personal services excl. Government	0.2832
9	Retail sale of books, newspapers and stationery in specialised stores	0.0535	9	Communication	0.0918
			10	Electricity	0.0496

CCI Sector - Creative, arts and entertainment activities - Fine Art and other visual art ex. Cartoonists

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	0.0369	1	Business services	0.5010
2	B. Creative, arts and entertainment activities- Performing arts and Cultural events	0.0284	2	Wholesale and retail trade	0.1805
3	Advertising	0.0143	3	Agriculture Forestry and Fishing	0.1271
4	Research and experimental development on social sciences and humanities	0.0072	4	Community, social and personal services excl. Government	0.1233
5	Other publishing activities	0.0072	5	Processed Food	0.1131
6	Manufacture of musical instruments	0.0071	6	Transport and storage	0.0905
7	Specialised design activities	0.0069	7	Basic and Other chemicals (incl. Plastics products)	0.0878
8	Photographic activities	0.0042	8	Mining	0.0871
9	Museums activities and operation of historical sites	0.0036	9	Petroleum	0.0790
10	Web portals	0.0036	10	Publishing and Printing	0.0781

4.6.4.3.13 Sol Plaatje (Kimberley)



i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	Sol Plaatje (Kimberley)
A. Cultural and Natural Heritage	32.72
B. Performance and Celebration	23.11
C. Visual Arts and Crafts	-64.23
D. Books and Press	-81.15
E. Audio-visual and Interactive Media	26.45
F. Design and Creative Services	17.51
Transversal Cultural Education	26.85

Chosen cluster for further analysis:

- Cultural and Natural Heritage = R15.9 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

A. Cultural and Natural Heritage	Sol Plaatje
A.Creative, arts and entertainment activities- Stamps and collectors' Items	-4
Museums activities and operation of historical sites	32
Botanical and Zoological Gardens and Nature Reserve Activities	-12
Retail sale of second-hand goods	-5

Key (CCI) sector/s for further exposition:

- Museums activities and operation of historical sites [*defined as operation of museums of all kinds as well as operation of historical sites and buildings.*] = R5.0 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing



intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Museums activities and operation of historical sites

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	A.Creative, arts and entertainment activities- Stamps and collectors Items	0.0440	1	Business services	0.8433
2	Advertising	0.0288	2	Community, social and personal services excl. Government	0.1260
3	Web portals	0.0246	3	Manufacturing of Transport Equipment	0.1174
4	Specialised design activities	0.0218	4	Electronic Equipment	0.1066
5	C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	0.0193	5	Wholesale and retail trade	0.0915
6	Museums activities and operation of historical sites	0.0138	6	Basic and Other chemicals (incl. Plastics products)	0.0785
7	News agency activities	0.0096	7	Communication	0.0666
8	Motion picture projection activities	0.0086	8	Finance and insurance	0.0484
9	Library and Archives activities	0.0069	9	Publishing and Printing	0.0435
10	Retail sale of second-hand goods	0.0068	10	Transport and storage	0.0362

4.6.4.3.14 Tlokwe City Council (Potchefstroom)

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters



CCI Cluster	Tlokwe City Council (Potchefstroom)
A. Cultural and Natural Heritage	24.70
B. Performance and Celebration	36.23
C. Visual Arts and Crafts	-80.59
D. Books and Press	-73.55
E. Audio-visual and Interactive Media	21.21
F. Design and Creative Services	18.88
Transversal Cultural Education	23.04

Chosen cluster for further analysis:

- Performance and Celebration = R26.5 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

B. Performance and Celebration	Tlokwe City Council
B. Creative, arts and entertainment activities- Performing arts and Cultural events	3.75
Manufacture of musical instruments	-98.75
Sound recording and music publishing activities	-98.47
Retail sale of music and video recordings in specialised stores	-98.35

Key (CCI) sector/s for further exposition:

- Creative, arts and entertainment activities - Performing arts and Cultural events
[defined as this class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers.] = R26.5 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.



CCI Sector - Creative, arts and entertainment activities - Performing arts and Cultural events

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Advertising	0.3314	1	Business services	5.9707
2	Retail sale of second-hand goods	0.2659	2	Manufacturing of Transport Equipment	0.9716
3	Specialised design activities	0.2044	3	Electronic Equipment	0.8840
4	B. Creative, arts and entertainment activities- Performing arts and Cultural events	0.1550	4	Community, social and personal services excl. Government	0.8223
5	Research and experimental development on social sciences and humanities	0.1391	5	Wholesale and retail trade	0.7471
6	Manufacture of jewellery and related articles	0.1315	6	Basic and Other chemicals (incl. Plastics products)	0.6453
7	Motion picture, video and television programme distribution activities	0.1268	7	Finance and insurance	0.4163
8	Photographic activities	0.0901	8	Communication	0.4111
9	Motion picture, video and television programme production activities	0.0833	9	Publishing and Printing	0.3350
10	Museums activities and operation of historical sites	0.0818	10	Transport and storage	0.3057

4.6.4.3.15 City of Cape Town

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters

CCI Cluster	City of Cape Town
A. Cultural and Natural Heritage	-36.91
B. Performance and Celebration	-35.71
C. Visual Arts and Crafts	-16.09
D. Books and Press	-12.75



E. Audio-visual and Interactive Media	15.08
F. Design and Creative Services	13.89
Transversal Cultural Education	-26.65

Chosen cluster for further analysis:

- Audio-visual and Interactive Media = R5 574.3 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

E. Audio-visual and Interactive Media	City of Cape Town
Software Publishing	23.84
Motion picture, video and television programme production activities	37.41
Motion picture, video and television programme post-production activities	22.37
Motion picture, video and television programme distribution activities	24.72
Sound recording and music publishing activities	31.48
Motion picture projection activities	12.10
Radio broadcasting	-30.01
Television programming and broadcasting activities	-32.17
Web portals	-18.08
Renting of video tapes and disks	15.07
News agency activities	-30.55
Retail sale of music and video recordings in specialised stores	-59.52
Retail sale via mail order houses or via Internet	19.15

Key (CCI) sector/s for further exposition:

- Motion picture, video and television programme production activities [*defined as production of motion pictures, videos, television programmes or television commercials.*] = R329.7 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing



intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Motion picture, video and television programme production activities

Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Advertising	9.3841	1	Business services	72.0110
2	B. Creative, arts and entertainment activities- Performing arts and Cultural events	7.8996	2	Finance and insurance	16.1429
3	Motion picture, video and television programme post- production activities	7.1142	3	Manufacturing of Transport Equipment	13.1643
4	Motion picture, video and television programme distribution activities	4.3700	4	Communication	10.7058
5	Specialised design activities	3.5381	5	Electronic Equipment	10.3499
6	Motion picture, video and television programme production activities	2.0341	6	Wholesale and retail trade	9.2340
7	Manufacture of musical instruments	1.9749	7	Basic and Other chemicals (incl. Plastics products)	7.6205
8	Research and experimental development on social sciences and humanities	1.5525	8	Community, social and personal services excl. Government	7.5190
9	Web portals	1.4694	9	Publishing and Printing	4.2678
10	Other publishing activities	1.4200	10	Processed Food	3.3248

4.6.4.3.16 Oudtshoorn

i. Identification of Key cluster/s for the geographical location under discussion

Relative Importance of CCI Clusters



CCI Cluster	Oudtshoorn
A. Cultural and Natural Heritage	-64.68
B. Performance and Celebration	-85.58
C. Visual Arts and Crafts	133.39
D. Books and Press	105.34
E. Audio-visual and Interactive Media	-6.96
F. Design and Creative Services	-20.89
Transversal Cultural Education	-89.42

Chosen cluster for further analysis:

- Visual Arts and Crafts = R8.7 Million

ii. Key CCI Sectors involved in the chosen CCI Cluster

The Relative Importance Index of the various Cultural and Creative Industries (CCI) sectors relating to the cluster involved are as follows:

C. Visual Arts and Crafts	Oudtshoorn
C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	-19.91
Photographic activities	-64.82
Other publishing activities	-25.11
Manufacture of jewellery and related articles	19.06
Research and experimental development on social sciences and humanities	-97.92

Key (CCI) sector/s for further exposition:

- Manufacture of jewellery and related articles [*defined as production of worked pearls; production of precious and semi-precious stones in the worked state; working of diamonds; manufacture of jewellery of precious metal.*] = R7.3 Million

iii. Linkage Effect of key SIC sectors

Specific attention is also given to the linkage impacts of the key CCI sectors that are chosen. Most of the linkage impacts are currently not applicable to the specific geographical location since they impact on the rest of South Africa. However, the linkages reported here can assist in identifying probable leakages to other areas of the country through the use of goods and services from other CCI sectors and SIC sectors in the production process of a specific CCI sector. By employing intervention mechanisms such as encouraging localised production, these leakages can be minimised.

The linkage effects are divided into two components, namely, CCI sectors and SIC sectors of the key SIC sector chosen. The linkages show the sector's most important input sectors. In the table below ten sectors for the chosen SIC sector are listed ranked in order of importance.

CCI Sector - Manufacture of jewellery and related articles



Rank	Intermediate Demand: Culture and Creative Industry's (CCI) Commodities	R Million	Rank	Intermediate Demand: Standard Industrial Classification (SIC) Commodities	R Million
1	Advertising	0.1310	1	Mining	4.0506
2	B. Creative, arts and entertainment activities- Performing arts and Cultural events	0.0613	2	Other Manufacturing and Recycling	1.0581
3	Manufacture of jewellery and related articles	0.0607	3	Wholesale and retail trade	0.5261
4	Specialised design activities	0.0356	4	Basic Metal Products	0.2617
5	Web portals	0.0218	5	Finance and insurance	0.1225
6	Manufacture of musical instruments	0.0153	6	Transport and storage	0.1134
7	Photographic activities	0.0129	7	Business services	0.0284
8	Other publishing activities	0.0103	8	Community, social and personal services excl. Government	0.0231
9	Retail sale of books, newspapers and stationery in specialised stores	0.0044	9	Communication	0.0075
10	A.Creative, arts and entertainment activities- Stamps and collectors Items	0.0000	10	Electricity	0.0040

5. Summary and Recommendations

Report 3 of this study considered the contribution of CCI industries towards the South African economy in terms of impact measured by individual indicators such as GDP, employment and capital utilised. Since there is no direct distribution of CCI domain activities on a provincial basis, a primary objective of this report, Report 4, was to study the provincial size and distribution of the CCI activities in South Africa again in terms of the macroeconomic indicators of Report 2.

Due to the fact that information is also provided regarding the usage of production resources by CCI activities within provinces, this can assist in the optimisation of scarce resources such as capital and labour at the regional level. For example, in South Africa, with its structural unemployment issue, CCIs with high labour/capital ratios should be given preference for investment and expansion.

A second objective was to consider the concept of clusters in the context of CCI domains. Due to the close correspondence between the ideas of a cluster and a domain these two concepts are



used interchangeably in the second part of this report. It is argued in the report that for a cluster or a hub of activity data at a municipality level is more relevant than data at the provincial level. In general, creative and cultural industries tend to concentrate mainly around Metro's as well as around large and medium-sized cities located in various local municipalities, forming creative local production systems. Consequently, a number of municipalities were chosen (16 in total), based on their size (metros) and other smaller cities/large towns known for their arts and cultural festivals.

In order to refine the data further two concerns were considered by applying a Delphi technique. The first concern relates to the fact that in some cases there is not a clear equivalence or correspondence between the SIC definition of sector and the CCI definition. A second concern relates to the fact that in some cases the presence of government (national or provincial) may distort the data in that the presence of government may result in a higher value for a specific cluster component.

The results of the study are presented in terms of absolute and values and relative indices reflecting the significance of the various clusters as well as the importance of the clusters in the local municipalities.

Technically, the importance of a cluster is measured in terms of the extent of which it has a higher or lower contribution to the economy, relative to the average contribution of the cultural and creative industry of that specific geographical location (local municipality). The economic importance of the various clusters, as well as the importance of the cultural and creative industry itself of a local municipality, are measured in terms of the percentages that they have in relation to the specific clusters or in the case of the culture and creative industry, their impact on the total economy. This exercise was repeated for the various SIC sectors in a specific main cluster.

The next step is to estimate a relative importance index for the various clusters (domains) in the broader cultural and creative industry of a specific geographic location. This is done by dividing the percentage importance of a specific cluster by the percentage importance the total of the cultural and creative industry to the economy. Qualitatively, the relative importance index is expressed by different colours (green, red and white) with green indicating a value above the average of the index, red below the average and white representing a neutral reading of the index for the 16 geographical regions. The green coloured CCI sectors, for example, would indicate which sectors are performing well in a particular location.

In order to gain further insight into the clusters and to move closer to the traditional definition of a cluster, a backward linkage analysis was conducted. In the context of this study, the emphasis is the direct (on-site) linkages and not on indirect linkages connected to entities outside or away from the location and area of the cluster. The reason for this is that such linkages reflect leakages away or from or out of the local area. By providing these linkages local authorities will be in a position to determine which non-local sectors and industries should potentially be encouraged or enticed to relocate or for new enterprises, to locate at a particular area.

There are a number of directions in which the study could be refined. Some other definitions of clusters could be considered for analysis. Although this study suggests that UNESCO's domains represent, to a large extent, various clusters within CCI domains, we recommend that consideration be given to the idea of using techniques such as those employed by Cheruiyot and Vom Hofe to undertake more sophisticated cluster analysis that will identify and quantify the linkages that exist between CCI activities within CCI domains, and, more importantly, between CCI activities and activities in other non-CCI sectors of the South African economy. This possibility has not been pursued in this study as a result of time and budget constraints.



Further, the analysis in this report was based on turnover or production of CCI industries for provinces and clusters. The analysis can also be extended by considering the employment and capital impact of clusters. The creation of clusters of CCI activities can assist in identifying development opportunities. Micro business studies will contribute to the identification of CCI clusters with the objective of developing strategies that will enable the identified clusters to perform more effectively. It is important to note that the development of a specific CCI cluster will not only create jobs in its own right, but will also have positive effects on broader economic growth and job creation through backward and forward linkages. Furthermore, micro studies can also identify CCI clusters within specific provinces that are not operating efficiently so that strategies can be developed to optimise the workings of these inefficient clusters.

The cluster analysis conducted in the 2020 study, differs from the 2017 study in that the mapping of the backward linkages are provided and also quantified. It provides an indication of the opportunities to produce locally more of the commodities that serve as inputs to the specific clusters, that are currently imported from other locations in South Africa and abroad.

Further recommendations that stem from the research are that it may be sensible to separate cultural and creative activities and that each warrant a study on its own. It is also likely that drivers of these two groups may differ in important ways and that different indicators should be involved for different types of clusters.

Another recommendation is that more attention be given to the availability and quality of data at provincial and local levels.

Finally, reflection is required regarding the definition of clusters in the present context. It is clear that ways at which to look at clusters are changing and that old definitions may not capture reality. A new and different definition will likely contain elements from the current understanding of clusters as indicated by agglomeration of industries, an industrial complex definition or sectoral network models and other definitions.



6. APPENDIX A

Figure 6.1: SIC Input Structure of the Cultural Satellite Account for South Africa

Cultural Domains/Clusters	SIC 7/ ISIC 4.1	Cultural and Creative Industry Activities / CCI Sectors
A. Cultural & Natural Heritage	9000	A.Creative, arts and entertainment activities- Stamps and collectors' Items
	9102	Museums activities and operation of historical sites
	9103	Botanical and Zoological Gardens and Nature Reserve Activities
	4774	Retail sale of second-hand goods
B. Performance & Celebration	9000	B. Creative, arts and entertainment activities-Performing arts and Cultural events
	3220	Manufacture of musical instruments
	5920	Sound recording and music publishing activities
	4762	Retail sale of music and video recordings in specialised stores
C. Visual Arts & Crafts	9000	C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists
	7420	Photographic activities
	5819	C. Visual Arts & Crafts: Other publishing activities
	3211	Manufacture of jewellery and related articles
	7220	Research and experimental development on social sciences and humanities
D. Books & Press	9101	Library and Archives activities
	5811	Book publishing
	5813	Publishing of newspapers, journals and periodicals
	5819	D. Books & Press: Other publishing activities
	4761	Retail sale of books, newspapers and stationery in specialised stores
	6391	News agency activities
	6399	Other information service activities n.e.c.
	4649	Wholesale of other household goods*
	9000	D.Creative arts and entertainment activities-Services of authors, composers, sculptors and other artists, except performing artists
E. Audio-Visual & Interactive Media	5820	Software Publishing
	5911	Motion picture, video and television programme production activities
	5912	Motion picture, video and television programme post-production activities
	5913	Motion picture, video and television programme distribution activities
	5920	Sound recording and music publishing activities
	5914	Motion picture projection activities
	6010	Radio broadcasting
	6020	Television programming and broadcasting activities
	6312	Web portals
	7722	Renting of video tapes and disks
	6391	News agency activities
	4762	Retail sale of music and video recordings in specialised stores
	4791	Retail sale via mail order houses or via Internet
F. Design & Creative Services	7410	Specialised design activities
	7110	Architectural and engineering activities and related technical consultancy
	7310	Advertising
Transversal Cultural Education Domain	8522 & 8530	Education

Note: SIC 7/ ISIC 4.1 category of **9000** are divided into the relating SIC sectors of domains/clusters A, B, C and D. SIC 7/ ISIC 4.1 category of **5819** are divided into the relating SIC sectors of domains/clusters C and D.



7. APPENDIX B

Appendix B

This set of tables of the clusters will provide background to highlight each CCI cluster, representing a metro or selected town for cultural and creative industries.

The order of the clusters is as follows:

- Buffalo City (East London)
- Nelson Mandela Bay (Port Elizabeth)
- Dr Beyers Naude (Baviaans) [Graaff-Reinet]
- Makana (Grahamstown)
- Mangaung (Bloemfontein)
- City of Johannesburg
- City of Tshwane (Pretoria)
- Ekurhuleni (East Rand)
- eThekweni (Durban)
- Msunduzi (Pietermaritzburg)
- Polokwane (Pietersburg)
- Mbombela (Nelspruit)
- Sol Plaatje (Kimberley)
- Tlokwe City Council (Potchefstroom)
- City of Cape Town
- Oudtshoorn



Relative Importance Index on CCI sectors per cluster of Buffalo City (East London)

A. Cultural and Natural Heritage	Buffalo City
A.Creative, arts and entertainment activities- Stamps and collectors Items	32
Museums activities and operation of historical sites	-13
Botanical and Zoological Gardens and Nature Reserve Activities	-3
Retail sale of second-hand goods	20

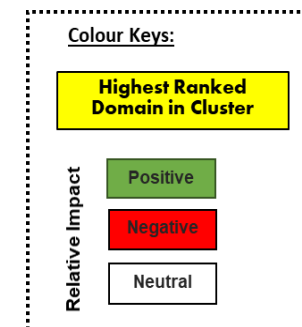
B. Performance and Celebration	Buffalo City
B. Creative, arts and entertainment activities-Performing arts and Cultural events	2.96
Manufacture of musical instruments	-78.37
Sound recording and music publishing activities	-79.08
Retail sale of music and video recordings in specialised stores	-73.32

C. Visual Arts and Crafts	Buffalo City
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	-16.26
Photographic activities	197.38
Other publishing activities	-41.34
Manufacture of jewellery and related articles	-23.05
Research and experimental development on social sciences and humanities	193.45

D. Books and Press	Buffalo City
Library and Archives activities	259.28
Book publishing	-37.47
Publishing of newspapers, journals and periodicals	-34.85
Other publishing activities	-32.43
Retail sale of books, newspapers and stationary in specialised stores	357.68
News agency activities	146.81
Other information service activities n.e.c.	183.31
Wholesale of other household goods*	364.48
D.Creative arts and entertainment activities-Services of authors, composers, sculptors and other artists, except performing artists	-25.04

E. Audio-visual and Interactive Media	Buffalo City
Software Publishing	29.99
Motion picture, video and television programme production activities	-4.51
Motion picture, video and television programme post-production activities	-1.31
Motion picture, video and television programme distribution activities	-2.57
Sound recording and music publishing activities	3.11
Motion picture projection activities	32.78
Radio broadcasting	-4.66
Television programming and broadcasting activities	-4.67
Web portals	-16.12
Renting of video tapes and disks	30.85
News agency activities	3.08
Retail sale of music and video recordings in specialised stores	72.52
Retail sale via mail order houses or via Internet	8.39

F. Design and Creative Services	Buffalo City
Specialised design activities	3.09
Architectural and engineering activities and related technical consultancy	-4.98
Advertising	3.84



Relative Importance Index on CCI sectors per cluster of Nelson Mandela Bay (Port Elizabeth)

A. Cultural and Natural Heritage	Nelson Mandela Bay
activities- Stamps and collectors Items	59
Museums activities and operation of historical sites	-27
Botanical and Zoological Gardens and Nature Reserve Activities	-3
Retail sale of second-hand goods	32

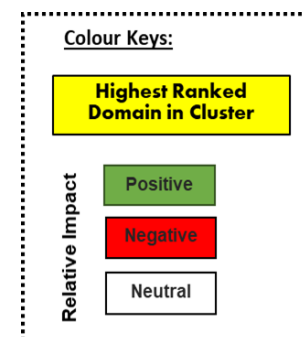
B. Performance and Celebration	Nelson Mandela Bay
activities-Performing arts and Cultural events	1.59
Manufacture of musical instruments	-44.13
Sound recording and music publishing activities	-41.06
Retail sale of music and video recordings in specialised stores	-34.23

C. Visual Arts and Crafts	Nelson Mandela Bay
C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	5.58
Photographic activities	89.34
Other publishing activities	-78.74
Manufacture of jewellery and related articles	4.18
Research and experimental development on social sciences and humanities	58.68

D. Books and Press	Nelson Mandela Bay
Library and Archives activities	340.97
Book publishing	-52.35
Publishing of newspapers, journals and periodicals	-52.43
Other publishing activities	-50.66
Retail sale of books, newspapers and stationary in specialised stores	512.97
News agency activities	259.59
Other information service activities n.e.c.	276.87
Wholesale of other household goods*	522.07
activities-Services of authors, composers, sculptors and other	149.90

E. Audio-visual and Interactive Media	Nelson Mandela Bay
Software Publishing	19.50
Motion picture, video and television programme production activities	0.09
Motion picture, video and television programme post-production activities	-3.25
Motion picture, video and television programme distribution activities	-4.48
Sound recording and music publishing activities	3.40
Motion picture projection activities	27.83
Radio broadcasting	0.42
Television programming and broadcasting activities	-3.35
Web portals	-22.69
Renting of video tapes and disks	31.22
News agency activities	3.63
Retail sale of music and video recordings in specialised stores	66.75
Retail sale via mail order houses or via Internet	14.13

F. Design and Creative Services	Nelson Mandela Bay
Specialised design activities	1.94
Architectural and engineering activities and related technical consultancy	-4.26
Advertising	3.67



Relative Importance Index on CCI sectors per cluster of Dr Beyers Naude (Baviaans) [Graaff-Reinet]

A. Cultural and Natural Heritage	Dr Beyers Naude
A.Creative, arts and entertainment activities- Stamps and collectors Items	28
Museums activities and operation of historical sites	14
Botanical and Zoological Gardens and Nature Reserve Activities	-6
Retail sale of second-hand goods	-7

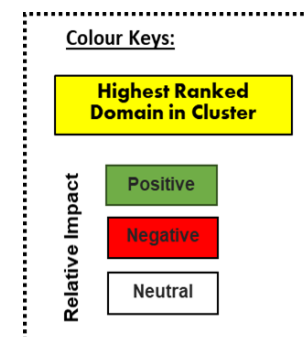
B. Performance and Celebration	Dr Beyers Naude
B. Creative, arts and entertainment activities-Performing arts and Cultural events	3.79
Manufacture of musical instruments	-99.82
Sound recording and music publishing activities	-99.81
Retail sale of music and video recordings in specialised stores	-99.82

C. Visual Arts and Crafts	Dr Beyers Naude
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	-99.43
Photographic activities	21.35
Other publishing activities	418.33
Manufacture of jewellery and related articles	-99.50
Research and experimental development on social sciences and humanities	125.64

D. Books and Press	Dr Beyers Naude
Library and Archives activities	-31.01
Book publishing	5.00
Publishing of newspapers, journals and periodicals	4.84
Other publishing activities	24.26
Retail sale of books, newspapers and stationary in specialised stores	-31.87
News agency activities	-75.62
Other information service activities n.e.c.	-69.07
Wholesale of other household goods*	-33.63
activities-Services of authors, composers, sculptors and other	-99.88

E. Audio-visual and Interactive Media	Dr Beyers Naude
Software Publishing	4.25
Motion picture, video and television programme production activities	-13.99
Motion picture, video and television programme post-production activities	-10.32
Motion picture, video and television programme distribution activities	-11.46
Sound recording and music publishing activities	-9.79
Motion picture projection activities	-11.72
Radio broadcasting	6.20
Television programming and broadcasting activities	11.49
Web portals	3.88
Renting of video tapes and disks	14.48
News agency activities	15.07
Retail sale of music and video recordings in specialised stores	142.11
Retail sale via mail order houses or via Internet	-9.92

F. Design and Creative Services	Dr Beyers Naude
Specialised design activities	-27.30
Architectural and engineering activities and related technical consultancy	7.79
Advertising	6.56



Relative Importance Index on CCI sectors per cluster of Makana (Grahamstown)

A. Cultural and Natural Heritage	Makana
activities- Stamps and collectors Items	28
Museums activities and operation of historical sites	16
Botanical and Zoological Gardens and Nature Reserve Activities	-17
Retail sale of second-hand goods	22

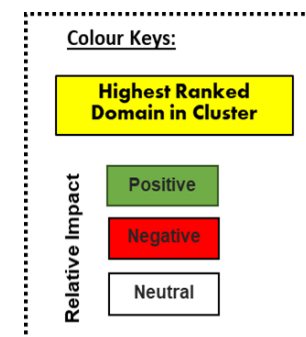
B. Performance and Celebration	Makana
activities-Performing arts and Cultural events	0.45
Manufacture of musical instruments	-12.96
Sound recording and music publishing activities	-9.09
Retail sale of music and video recordings in specialised stores	-13.04

C. Visual Arts and Crafts	Makana
C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	30.57
Photographic activities	-35.47
Other publishing activities	-17.63
Manufacture of jewellery and related articles	6.95
Research and experimental development on social sciences and humanities	-3.11

D. Books and Press	Makana
Library and Archives activities	27.33
Book publishing	-0.22
Publishing of newspapers, journals and periodicals	-4.36
Other publishing activities	-0.81
Retail sale of books, newspapers and stationary in specialised stores	61.46
News agency activities	-39.16
Other information service activities n.e.c.	-30.16
Wholesale of other household goods*	40.45
activities-Services of authors, composers, sculptors and other	28.30

E. Audio-visual and Interactive Media	Makana
Software Publishing	14.96
Motion picture, video and television programme production activities	-9.42
Motion picture, video and television programme post-production activities	-9.01
Motion picture, video and television programme distribution activities	-10.17
Sound recording and music publishing activities	-8.08
Motion picture projection activities	-5.31
Radio broadcasting	3.94
Television programming and broadcasting activities	13.67
Web portals	-5.87
Renting of video tapes and disks	11.09
News agency activities	2.79
Retail sale of music and video recordings in specialised stores	118.67
Retail sale via mail order houses or via Internet	-7.98

F. Design and Creative Services	Makana
Specialised design activities	-37.91
Architectural and engineering activities and related technical consultancy	8.18
Advertising	12.05



Relative Importance Index on CCI sectors per cluster of Mangaung (Bloemfontein)

A. Cultural and Natural Heritage	Mangaung
A.Creative, arts and entertainment activities- Stamps and collectors Items	-4
Museums activities and operation of historical sites	35
Botanical and Zoological Gardens and Nature Reserve Activities	-9
Retail sale of second-hand goods	-17

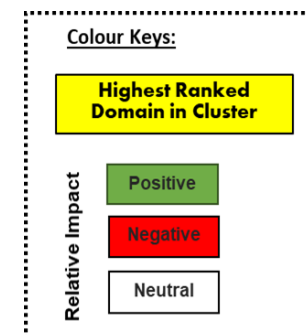
B. Performance and Celebration	Mangaung
B. Creative, arts and entertainment activities-Performing arts and Cultural events	3.29
Manufacture of musical instruments	-86.80
Sound recording and music publishing activities	-86.17
Retail sale of music and video recordings in specialised stores	-86.26

C. Visual Arts and Crafts	Mangaung
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	-29.65
Photographic activities	126.18
Other publishing activities	-56.91
Manufacture of jewellery and related articles	-23.96
Research and experimental development on social sciences and humanities	411.61

D. Books and Press	Mangaung
Library and Archives activities	478.82
Book publishing	-45.47
Publishing of newspapers, journals and periodicals	-45.55
Other publishing activities	-47.88
Retail sale of books, newspapers and stationary in specialised stores	359.80
News agency activities	410.12
Other information service activities n.e.c.	434.64
Wholesale of other household goods*	330.74
activities-Services of authors, composers, sculptors and other	-28.46

E. Audio-visual and Interactive Media	Mangaung
Software Publishing	-31.45
Motion picture, video and television programme production activities	-37.71
Motion picture, video and television programme post-production activities	-21.13
Motion picture, video and television programme distribution activities	-22.13
Sound recording and music publishing activities	-45.63
Motion picture projection activities	-32.78
Radio broadcasting	41.43
Television programming and broadcasting activities	42.54
Web portals	16.82
Renting of video tapes and disks	-31.00
News agency activities	45.95
Retail sale of music and video recordings in specialised stores	14.44
Retail sale via mail order houses or via Internet	-37.13

F. Design and Creative Services	Mangaung
Specialised design activities	-10.46
Architectural and engineering activities and related technical consultancy	-0.73
Advertising	6.67



Relative Importance Index on CCI sectors per cluster of City of Johannesburg

A. Cultural and Natural Heritage	City of Johannesburg
A.Creative, arts and entertainment activities- Stamps and collectors Items	-24
Museums activities and operation of historical sites	5
Botanical and Zoological Gardens and Nature Reserve Activities	6
Retail sale of second-hand goods	-18

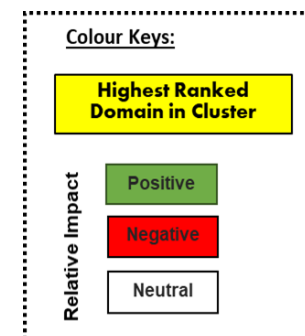
B. Performance and Celebration	City of Johannesburg
B. Creative, arts and entertainment activities-Performing arts and Cultural events	2.20
Manufacture of musical instruments	-57.13
Sound recording and music publishing activities	-58.54
Retail sale of music and video recordings in specialised stores	-60.34

C. Visual Arts and Crafts	City of Johannesburg
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	-30.70
Photographic activities	-4.69
Other publishing activities	94.04
Manufacture of jewellery and related articles	-21.85
Research and experimental development on social sciences and humanities	42.18

D. Books and Press	City of Johannesburg
Library and Archives activities	-24.84
Book publishing	5.90
Publishing of newspapers, journals and periodicals	5.74
Other publishing activities	5.28
Retail sale of books, newspapers and stationary in specialised stores	-40.93
News agency activities	-61.30
Other information service activities n.e.c.	-62.69
Wholesale of other household goods*	-42.45
activities-Services of authors, composers, sculptors and other	-68.39

E. Audio-visual and Interactive Media	City of Johannesburg
Software Publishing	19.94
Motion picture, video and television programme production activities	9.72
Motion picture, video and television programme post-production activities	4.35
Motion picture, video and television programme distribution activities	3.03
Sound recording and music publishing activities	14.17
Motion picture projection activities	17.62
Radio broadcasting	-15.79
Television programming and broadcasting activities	-11.59
Web portals	-8.48
Renting of video tapes and disks	15.91
News agency activities	-13.10
Retail sale of music and video recordings in specialised stores	25.43
Retail sale via mail order houses or via Internet	20.01

F. Design and Creative Services	City of Johannesburg
Specialised design activities	43.90
Architectural and engineering activities and related technical consultancy	-11.12
Advertising	-12.12



Relative Importance Index on CCI sectors per cluster of City of Tshwane (Pretoria)

A. Cultural and Natural Heritage	City of Tshwane
A.Creative, arts and entertainment activities- Stamps and collectors Items	-8
Museums activities and operation of historical sites	-5
Botanical and Zoological Gardens and Nature Reserve Activities	-4
Retail sale of second-hand goods	19

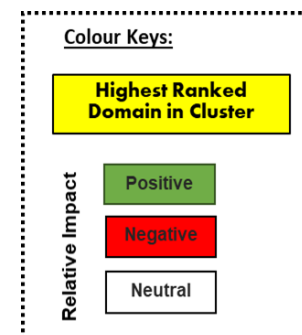
B. Performance and Celebration	City of Tshwane
B. Creative, arts and entertainment activities-Performing arts and Cultural events	-9.77
Manufacture of musical instruments	264.28
Sound recording and music publishing activities	252.29
Retail sale of music and video recordings in specialised stores	236.99

C. Visual Arts and Crafts	City of Tshwane
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	12.03
Photographic activities	-84.78
Other publishing activities	-58.59
Manufacture of jewellery and related articles	26.35
Research and experimental development on social sciences and humanities	-76.12

D. Books and Press	City of Tshwane
Library and Archives activities	-42.84
Book publishing	2.33
Publishing of newspapers, journals and periodicals	2.17
Other publishing activities	1.73
Retail sale of books, newspapers and stationary in specialised stores	-27.64
News agency activities	-1.28
Other information service activities n.e.c.	-4.81
Wholesale of other household goods* activities-Services of authors, composers, sculptors and other	-29.51
	131.34

E. Audio-visual and Interactive Media	City of Tshwane
Software Publishing	-45.98
Motion picture, video and television programme production activities	-41.29
Motion picture, video and television programme post-production activities	-24.09
Motion picture, video and television programme distribution activities	-25.06
Sound recording and music publishing activities	-48.58
Motion picture projection activities	-47.03
Radio broadcasting	33.89
Television programming and broadcasting activities	40.56
Web portals	45.51
Renting of video tapes and disks	-47.80
News agency activities	38.16
Retail sale of music and video recordings in specialised stores	-4.25
Retail sale via mail order houses or via Internet	-45.95

F. Design and Creative Services	City of Tshwane
Specialised design activities	-47.46
Architectural and engineering activities and related technical consultancy	13.14
Advertising	11.86



Relative Importance Index on CCI sectors per cluster of Ekurhuleni (East Rand)

A. Cultural and Natural Heritage	Ekurhuleni
A.Creative, arts and entertainment activities- Stamps and collectors Items	13
Museums activities and operation of historical sites	1
Botanical and Zoological Gardens and Nature Reserve Activities	-9
Retail sale of second-hand goods	23

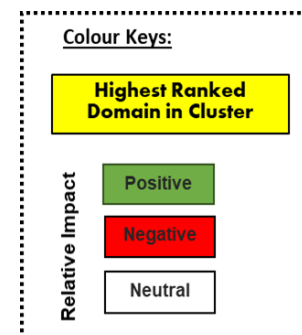
B. Performance and Celebration	Ekurhuleni
B. Creative, arts and entertainment activities-Performing arts and Cultural events	-5.72
Manufacture of musical instruments	161.56
Sound recording and music publishing activities	118.45
Retail sale of music and video recordings in specialised stores	163.96

C. Visual Arts and Crafts	Ekurhuleni
C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	39.54
Photographic activities	-69.54
Other publishing activities	-54.06
Manufacture of jewellery and related articles	21.60
Research and experimental development on social sciences and humanities	-56.71

D. Books and Press	Ekurhuleni
Library and Archives activities	0.37
Book publishing	-4.23
Publishing of newspapers, journals and periodicals	-4.38
Other publishing activities	10.23
Retail sale of books, newspapers and stationary in specialised stores	13.79
News agency activities	44.54
Other information service activities n.e.c.	74.21
Wholesale of other household goods*	26.70
activities-Services of authors, composers, sculptors and other	155.89

E. Audio-visual and Interactive Media	Ekurhuleni
Software Publishing	-49.78
Motion picture, video and television programme production activities	-45.57
Motion picture, video and television programme post-production activities	-26.37
Motion picture, video and television programme distribution activities	-30.77
Sound recording and music publishing activities	-47.42
Motion picture projection activities	-38.45
Radio broadcasting	47.60
Television programming and broadcasting activities	42.04
Web portals	33.68
Renting of video tapes and disks	-39.34
News agency activities	45.97
Retail sale of music and video recordings in specialised stores	7.98
Retail sale via mail order houses or via Internet	-39.70

F. Design and Creative Services	Ekurhuleni
Specialised design activities	-53.14
Architectural and engineering activities and related technical consultancy	16.93
Advertising	10.79



Relative Importance Index on CCI sectors per cluster of eThekweni (Durban)

A. Cultural and Natural Heritage	eThekwini
A.Creative, arts and entertainment activities- Stamps and collectors Items	37
Museums activities and operation of historical sites	-14
Botanical and Zoological Gardens and Nature Reserve Activities	-5
Retail sale of second-hand goods	25

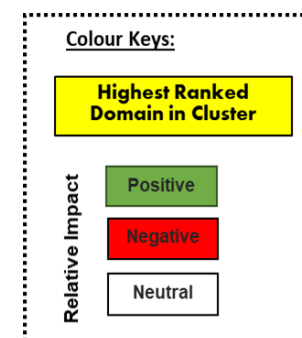
B. Performance and Celebration	eThekwini
B. Creative, arts and entertainment activities-Performing arts and Cultural events	1.77
Manufacture of musical instruments	-49.84
Sound recording and music publishing activities	-39.36
Retail sale of music and video recordings in specialised stores	-46.96

C. Visual Arts and Crafts	eThekwini
C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	-12.40
Photographic activities	92.47
Other publishing activities	-31.95
Manufacture of jewellery and related articles	-5.01
Research and experimental development on social sciences and humanities	41.99

D. Books and Press	eThekwini
Library and Archives activities	114.58
Book publishing	-25.42
Publishing of newspapers, journals and periodicals	-22.15
Other publishing activities	-15.74
Retail sale of books, newspapers and stationary in specialised stores	180.01
News agency activities	228.48
Other information service activities n.e.c.	216.73
Wholesale of other household goods*	184.17
activities-Services of authors, composers, sculptors and other	-2.38

E. Audio-visual and Interactive Media	eThekwini
Software Publishing	-19.33
Motion picture, video and television programme production activities	-12.08
Motion picture, video and television programme post-production activities	-3.92
Motion picture, video and television programme distribution activities	-1.49
Sound recording and music publishing activities	-5.76
Motion picture projection activities	-6.51
Radio broadcasting	14.79
Television programming and broadcasting activities	11.59
Web portals	1.66
Renting of video tapes and disks	-11.41
News agency activities	5.30
Retail sale of music and video recordings in specialised stores	10.52
Retail sale via mail order houses or via Internet	-8.28

F. Design and Creative Services	eThekwini
Specialised design activities	-4.18
Architectural and engineering activities and related technical consultancy	5.46
Advertising	-3.76



Relative Importance Index on CCI sectors per cluster of Msunduzi (Pietermaritzburg)

A. Cultural and Natural Heritage	Msunduzi
A.Creative, arts and entertainment activities- Stamps and collectors Items	6
Museums activities and operation of historical sites	13
Botanical and Zoological Gardens and Nature Reserve Activities	-4
Retail sale of second-hand goods	-7

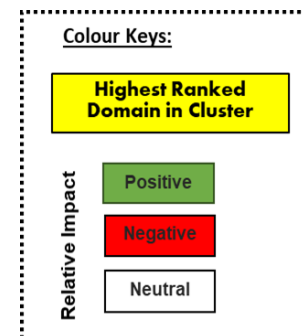
B. Performance and Celebration	Msunduzi
B. Creative, arts and entertainment activities-Performing arts and Cultural events	3.78
Manufacture of musical instruments	-99.51
Sound recording and music publishing activities	-99.55
Retail sale of music and video recordings in specialised stores	-99.53

C. Visual Arts and Crafts	Msunduzi
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	-97.70
Photographic activities	255.71
Other publishing activities	217.63
Manufacture of jewellery and related articles	-97.41
Research and experimental development on social sciences and humanities	417.97

D. Books and Press	Msunduzi
Library and Archives activities	49.09
Book publishing	-1.06
Publishing of newspapers, journals and periodicals	-5.17
Other publishing activities	-1.65
Retail sale of books, newspapers and stationary in specialised stores	25.98
News agency activities	61.05
Other information service activities n.e.c.	61.76
Wholesale of other household goods*	22.74
activities-Services of authors, composers, sculptors and other	-99.40

E. Audio-visual and Interactive Media	Msunduzi
Software Publishing	-9.87
Motion picture, video and television programme production activities	-25.41
Motion picture, video and television programme post-production activities	-17.55
Motion picture, video and television programme distribution activities	-18.60
Sound recording and music publishing activities	-27.94
Motion picture projection activities	-18.69
Radio broadcasting	18.50
Television programming and broadcasting activities	24.40
Web portals	23.19
Renting of video tapes and disks	-12.90
News agency activities	32.92
Retail sale of music and video recordings in specialised stores	-9.40
Retail sale via mail order houses or via Internet	-27.85

F. Design and Creative Services	Msunduzi
Specialised design activities	-14.69
Architectural and engineering activities and related technical consultancy	6.52
Advertising	0.93



Relative Importance Index on CCI sectors per cluster of Polokwane (Pietersburg)

A. Cultural and Natural Heritage	Polokwane
A.Creative, arts and entertainment activities- Stamps and collectors Items	-6
Museums activities and operation of historical sites	-3
Botanical and Zoological Gardens and Nature Reserve Activities	3
Retail sale of second-hand goods	-3

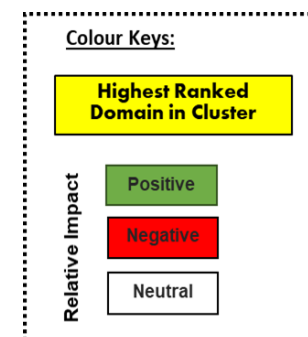
B. Performance and Celebration	Polokwane
B. Creative, arts and entertainment activities-Performing arts and Cultural events	3.80
Manufacture of musical instruments	
Sound recording and music publishing activities	
Retail sale of music and video recordings in specialised stores	

C. Visual Arts and Crafts	Polokwane
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	
Photographic activities	658.69
Other publishing activities	-100.00
Manufacture of jewellery and related articles	
Research and experimental development on social sciences and humanities	924.69

D. Books and Press	Polokwane
Library and Archives activities	1,066.05
Book publishing	-100.00
Publishing of newspapers, journals and periodicals	-100.00
Other publishing activities	-100.00
Retail sale of books, newspapers and stationary in specialised stores	934.91
News agency activities	429.44
Other information service activities n.e.c.	507.73
Wholesale of other household goods*	1,045.77
activities-Services of authors, composers, sculptors and other	

E. Audio-visual and Interactive Media	Polokwane
Software Publishing	39.48
Motion picture, video and television programme production activities	-2.06
Motion picture, video and television programme post-production activities	-8.26
Motion picture, video and television programme distribution activities	-9.42
Sound recording and music publishing activities	2.59
Motion picture projection activities	30.56
Radio broadcasting	-6.74
Television programming and broadcasting activities	-2.09
Web portals	-16.27
Renting of video tapes and disks	53.17
News agency activities	0.42
Retail sale of music and video recordings in specialised stores	69.79
Retail sale via mail order houses or via Internet	14.19

F. Design and Creative Services	Polokwane
Specialised design activities	-15.60
Architectural and engineering activities and related technical consultancy	2.49
Advertising	5.94



Relative Importance Index on CCI sectors per cluster of Mbombela (Nelspruit)

A. Cultural and Natural Heritage	Mbombela
A.Creative, arts and entertainment activities- Stamps and collectors Items	-1
Museums activities and operation of historical sites	-12
Botanical and Zoological Gardens and Nature Reserve Activities	3
Retail sale of second-hand goods	7

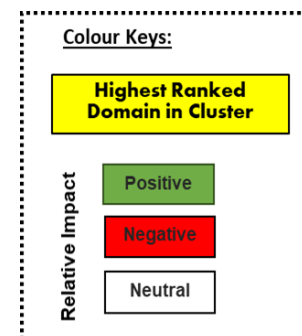
B. Performance and Celebration	Mbombela
B. Creative, arts and entertainment activities-Performing arts and Cultural events	-3.29
Manufacture of musical instruments	86.94
Sound recording and music publishing activities	80.78
Retail sale of music and video recordings in specialised stores	95.49

C. Visual Arts and Crafts	Mbombela
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	20.15
Photographic activities	-56.04
Other publishing activities	-99.33
Manufacture of jewellery and related articles	29.86
Research and experimental development on social sciences and humanities	-38.97

D. Books and Press	Mbombela
Library and Archives activities	719.76
Book publishing	-91.46
Publishing of newspapers, journals and periodicals	-91.48
Other publishing activities	-90.74
Retail sale of books, newspapers and stationary in specialised stores	817.94
News agency activities	424.67
Other information service activities n.e.c.	502.26
Wholesale of other household goods*	872.08
activities-Services of authors, composers, sculptors and other	1,410.82

E. Audio-visual and Interactive Media	Mbombela
Software Publishing	8.83
Motion picture, video and television programme production activities	-17.48
Motion picture, video and television programme post-production activities	-17.35
Motion picture, video and television programme distribution activities	-18.40
Sound recording and music publishing activities	-16.14
Motion picture projection activities	21.97
Radio broadcasting	5.84
Television programming and broadcasting activities	11.11
Web portals	-0.66
Renting of video tapes and disks	25.20
News agency activities	9.22
Retail sale of music and video recordings in specialised stores	64.97
Retail sale via mail order houses or via Internet	-6.66

F. Design and Creative Services	Mbombela
Specialised design activities	-30.66
Architectural and engineering activities and related technical consultancy	6.30
Advertising	10.10



Relative Importance Index on CCI sectors per cluster of Sol Plaatje (Kimberley)

A. Cultural and Natural Heritage	Sol Plaatje
A.Creative, arts and entertainment activities- Stamps and collectors Items	-4
Museums activities and operation of historical sites	32
Botanical and Zoological Gardens and Nature Reserve Activities	-12
Retail sale of second-hand goods	-5

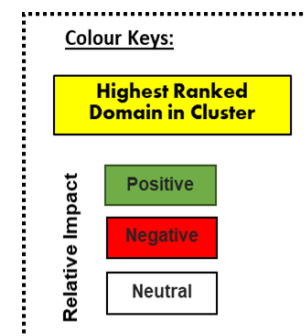
B. Performance and Celebration	Sol Plaatje
B. Creative, arts and entertainment activities-Performing arts and Cultural events	3.31
Manufacture of musical instruments	-87.93
Sound recording and music publishing activities	-85.99
Retail sale of music and video recordings in specialised stores	-86.60

C. Visual Arts and Crafts	Sol Plaatje
C.Creative, arts and entertainment activities- Fine Art and other visual art ex. Cartoonists	-30.97
Photographic activities	271.68
Other publishing activities	-90.17
Manufacture of jewellery and related articles	-25.04
Research and experimental development on social sciences and humanities	283.88

D. Books and Press	Sol Plaatje
Library and Archives activities	676.13
Book publishing	-81.92
Publishing of newspapers, journals and periodicals	-81.16
Other publishing activities	-80.46
Retail sale of books, newspapers and stationary in specialised stores	600.03
News agency activities	789.09
Other information service activities n.e.c.	874.18
Wholesale of other household goods*	641.32
activities-Services of authors, composers, sculptors and other	-1.70

E. Audio-visual and Interactive Media	Sol Plaatje
Software Publishing	-2.38
Motion picture, video and television programme production activities	-27.14
Motion picture, video and television programme post-production activities	-22.35
Motion picture, video and television programme distribution activities	-23.34
Sound recording and music publishing activities	-28.20
Motion picture projection activities	0.07
Radio broadcasting	20.18
Television programming and broadcasting activities	26.17
Web portals	12.80
Renting of video tapes and disks	7.19
News agency activities	24.02
Retail sale of music and video recordings in specialised stores	-11.69
Retail sale via mail order houses or via Internet	-20.09

F. Design and Creative Services	Sol Plaatje
Specialised design activities	-3.42
Architectural and engineering activities and related technical consultancy	1.45
Advertising	0.30



Relative Importance Index on CCI sectors per cluster of Tlokwe City Council (Potchefstroom)

A. Cultural and Natural Heritage	Tlokwe City Council
A.Creative, arts and entertainment activities- Stamps and collectors Items	15
Museums activities and operation of historical sites	9
Botanical and Zoological Gardens and Nature Reserve Activities	-7
Retail sale of second-hand goods	5

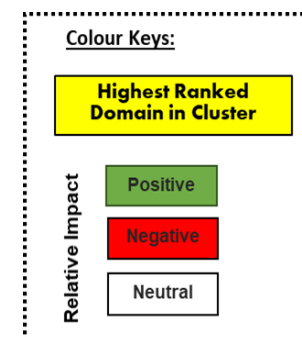
B. Performance and Celebration	Tlokwe City Council
B. Creative, arts and entertainment activities-Performing arts and Cultural events	3.75
Manufacture of musical instruments	-98.75
Sound recording and music publishing activities	-98.47
Retail sale of music and video recordings in specialised stores	-98.35

C. Visual Arts and Crafts	Tlokwe City Council
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	-85.76
Photographic activities	547.33
Other publishing activities	-43.63
Manufacture of jewellery and related articles	-84.59
Research and experimental development on social sciences and humanities	643.81

D. Books and Press	Tlokwe City Council
Library and Archives activities	519.04
Book publishing	-58.08
Publishing of newspapers, journals and periodicals	-59.82
Other publishing activities	-58.33
Retail sale of books, newspapers and stationary in specialised stores	514.90
News agency activities	491.44
Other information service activities n.e.c.	494.04
Wholesale of other household goods*	454.70
activities-Services of authors, composers, sculptors and other	-90.80

E. Audio-visual and Interactive Media	Tlokwe City Council
Software Publishing	-3.44
Motion picture, video and television programme production activities	-19.46
Motion picture, video and television programme post-production activities	-15.33
Motion picture, video and television programme distribution activities	-16.41
Sound recording and music publishing activities	-16.08
Motion picture projection activities	-1.20
Radio broadcasting	7.27
Television programming and broadcasting activities	22.86
Web portals	11.29
Renting of video tapes and disks	1.42
News agency activities	15.73
Retail sale of music and video recordings in specialised stores	5.53
Retail sale via mail order houses or via Internet	-11.79

F. Design and Creative Services	Tlokwe City Council
Specialised design activities	-4.89
Architectural and engineering activities and related technical consultancy	-0.29
Advertising	3.06



Relative Importance Index on CCI sectors per cluster of City of Cape Town

A. Cultural and Natural Heritage	City of Cape Town
A.Creative, arts and entertainment activities- Stamps and collectors Items	-6
Museums activities and operation of historical sites	11
Botanical and Zoological Gardens and Nature Reserve Activities	0
Retail sale of second-hand goods	-14

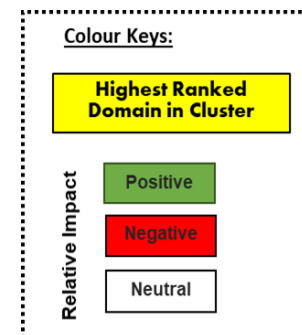
B. Performance and Celebration	City of Cape Town
B. Creative, arts and entertainment activities-Performing arts and Cultural events	-0.40
Manufacture of musical instruments	0.93
Sound recording and music publishing activities	27.64
Retail sale of music and video recordings in specialised stores	18.51

C. Visual Arts and Crafts	City of Cape Town
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	6.14
Photographic activities	64.19
Other publishing activities	-5.15
Manufacture of jewellery and related articles	-5.07
Research and experimental development on social sciences and humanities	-17.71

D. Books and Press	City of Cape Town
Library and Archives activities	-24.96
Book publishing	4.19
Publishing of newspapers, journals and periodicals	4.03
Other publishing activities	-4.39
Retail sale of books, newspapers and stationary in specialised stores	-40.55
News agency activities	-3.86
Other information service activities n.e.c.	-14.17
Wholesale of other household goods*	-44.31
activities-Services of authors, composers, sculptors and other	-13.16

E. Audio-visual and Interactive Media	City of Cape Town
Software Publishing	23.84
Motion picture, video and television programme production activities	37.41
Motion picture, video and television programme post-production activities	22.37
Motion picture, video and television programme distribution activities	24.72
Sound recording and music publishing activities	31.48
Motion picture projection activities	12.10
Radio broadcasting	-30.01
Television programming and broadcasting activities	-32.17
Web portals	-18.08
Renting of video tapes and disks	15.07
News agency activities	-30.55
Retail sale of music and video recordings in specialised stores	-59.52
Retail sale via mail order houses or via Internet	19.15

F. Design and Creative Services	City of Cape Town
Specialised design activities	20.48
Architectural and engineering activities and related technical consultancy	-8.88
Advertising	-1.53



Relative Importance Index on CCI sectors per cluster of Oudtshoorn

A. Cultural and Natural Heritage	Oudtshoorn
A.Creative, arts and entertainment activities- Stamps and collectors Items	307
Museums activities and operation of historical sites	-76
Botanical and Zoological Gardens and Nature Reserve Activities	-78
Retail sale of second-hand goods	258

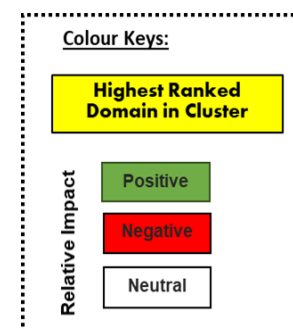
B. Performance and Celebration	Oudtshoorn
B. Creative, arts and entertainment activities-Performing arts and Cultural events	-48.51
Manufacture of musical instruments	1,267.81
Sound recording and music publishing activities	1,288.91
Retail sale of music and video recordings in specialised stores	1,291.85

C. Visual Arts and Crafts	Oudtshoorn
C.Creative, arts and entertainment activities-Fine Art and other visual art ex. Cartoonists	-19.91
Photographic activities	-64.82
Other publishing activities	-25.11
Manufacture of jewellery and related articles	19.06
Research and experimental development on social sciences and humanities	-97.92

D. Books and Press	Oudtshoorn
Library and Archives activities	-96.48
Book publishing	5.35
Publishing of newspapers, journals and periodicals	5.19
Other publishing activities	24.68
Retail sale of books, newspapers and stationary in specialised stores	-46.89
News agency activities	-51.80
Other information service activities n.e.c.	-41.90
Wholesale of other household goods*	-41.20
activities-Services of authors, composers, sculptors and other	17.18

E. Audio-visual and Interactive Media	Oudtshoorn
Software Publishing	11.02
Motion picture, video and television programme production activities	-16.49
Motion picture, video and television programme post-production activities	-15.69
Motion picture, video and television programme distribution activities	-16.76
Sound recording and music publishing activities	-15.46
Motion picture projection activities	3.43
Radio broadcasting	12.50
Television programming and broadcasting activities	12.49
Web portals	4.80
Renting of video tapes and disks	34.11
News agency activities	21.63
Retail sale of music and video recordings in specialised stores	15.20
Retail sale via mail order houses or via Internet	-0.02

F. Design and Creative Services	Oudtshoorn
Specialised design activities	-3.10
Architectural and engineering activities and related technical consultancy	3.93
Advertising	-2.66



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