



# NSW CREATIVE INDUSTRIES: AN ECONOMIC SNAPSHOT

Authors: Rachel Smithies, Hung-Yen Yang, Jackie  
Bailey

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## 1. Executive Summary

The creative industries are major drivers of the world economy. The global creative industries contribute \$2,250 billion USD to the global economy annually, an estimated 3% of world GDP.<sup>1</sup>

In Australia, creative industries comprise 5.6% of all businesses and contribute \$47.4 billion to national GDP. They employ more than half a million people and generate \$4.3 billion in export revenue.<sup>2</sup>

NSW has the largest, most dynamic and most diverse creative economy in Australia. NSW has 39% of the nation's creative businesses, 42% of creative industry jobs and 70% of creative industry exports.<sup>3</sup>

The creative industries are a growing share of the NSW economy. Over the past five years, employment growth in the creative industries has been 2.9% per annum, compared to the general rate of 1.6% per annum.

Creative industries services exports are growing faster than other NSW service exports. They represent about 10% of NSW's total services exports, an increase from 7% in 2010-11. NSW's creative industries service exports are also growing faster than at the national level. On average, creative services exports grew by 16% per annum in NSW from 2010-11 to 2015-16, compared to 11% per annum across Australia. The largest share of creative services exports, and the source of much of its growth over the past five years, is computer and information services, followed by advertising services.<sup>4</sup>

Most creative industry businesses are very small - 60% have no employees, and 39% have fewer than 20 employees. However, creative industry businesses are scaling up, with growth in the number of businesses as employers.

Creative industries employees predominantly live in the Greater Sydney area (87%), with the greatest concentrations as a percentage of local employment in inner areas such as the City and Inner South, Eastern Suburbs, and North Sydney and Hornsby. Many Greater Sydney areas appear to have experienced substantial growth in the number of creative industries employees over the past five years. Areas with over 30% growth - as compared to the NSW average of 16% - include the Inner West, Parramatta, the South West, and the Northern Beaches.<sup>5</sup>

Around 12% of creative industries employees live in regional NSW. For example, the Illawarra has doubled its number of creative industries employees and now has the second-largest number of creative industries employees of the NSW regional areas.<sup>6</sup>

On balance, the next five years present a diverse picture for the creative industries. Overall, IVA growth over the next five years is forecast to be 1.9% per annum, which is lower than the economy-wide forecast rate of 2.4-3.7%. But this hides big variations by segment: at one extreme, Internet and digital services IVA is expected to grow by 3% per annum; at the other extreme, the Publishing IVA is expected to shrink by -4.7% per annum.

<sup>1</sup> EY. (2015). *Cultural Times – The First Global Map of Cultural and Creative Industries*. The report examines 11 cultural and creative industries: advertising, architecture, books, gaming, movies, music, newspapers/magazines, performing arts, radio, television and visual arts.

<sup>2</sup> BYP Group estimates based on: ABS Counts of Australian Businesses, including Entries and Exits, June 2012 to June 2016; ABS Census 2011, ABS Labour Force, Detailed, Quarterly, May 2017; ABS International Trade: Supplementary information, Financial Year, 2015-16; ABS International Trade in Goods and Services, Australia, June 2017; and IBISWorld Reports.

<sup>3</sup> Ibid.

<sup>4</sup> ABS International Trade: Supplementary Information, Financial Year, 2015-16; ABS International Trade in Goods and Services, Australia, June 2017; BYP estimates.

<sup>5</sup> ABS Census 2011; ABS Labour Force, Detailed, Quarterly, May 2017; BYP estimates.

<sup>6</sup> Ibid.

## Summary of the creative industries in Australia and NSW

Indicator	Australia	NSW	Notes
<b>Number of Businesses</b>	122,500 businesses.	47,300 businesses.	Creative industry businesses comprise: <ul style="list-style-type: none"> <li>• 5.6% of all Australian businesses.</li> <li>• 6.5% of all NSW businesses which in turn make up 39% of all national creative industry businesses</li> </ul>
<b>Industry Value Add<sup>7</sup></b>	\$47.4 billion	Not available.	Industry Value Add measures the contribution of an industry to GDP. It is calculated as the market value of goods and services produced, minus the cost of goods and services used in their production.
<b>Direct Employment</b>	501,200	212,600	This is the number of people working in creative industries. <sup>8</sup>
<b>Embedded employment</b>	192,600	68,300	This is the number of people working in creative occupations in non-creative industries.
<b>Exports</b>	\$4.3 billion	\$3.0 billion	NSW comprises 70% of Australia's creative industries services exports. Creative industries service exports comprise 10% of NSW's total service exports.

Sources: BYP Group Estimates based on: ABS Counts of Australian Businesses, including Entries and Exits, Jun 2012 to Jun 2016; ABS Census 2011, ABS Labour Force, Detailed, Quarterly, May 2017; ABS International Trade: Supplementary information, Financial Year, 2015-16; ABS International Trade in Goods and Services, Australia, June 2017; and IBISWorld Reports.

<sup>7</sup> These figures are based on IBISWorld reports which do not drill down to State level. ABS does not report on revenue by industry by State to a level of detail to identify Creative Industries.

<sup>8</sup> BYP Group estimates based on ABS Labour Force, Detailed, Quarterly, May 2017 and Higgs, P., Lennon, S. (2014) *Australian Creative Employment in 2011 – applying the NESTA Dynamic Mapping definition methodology* Mimeo.

## 2. Introduction

This document sets out an economic profile of the creative industries in NSW based on BYP Group analysis and estimates using Australian Bureau of Statistics Census 2016 data and other sources, specifically:

- The contribution of the sector to NSW and national economies, including employment, GDP, and exports.
- Make-up of the sector including size and turnover of firms.
- Geographical location of the industry within metropolitan and regional NSW.

### Defining the creative industries

Creative industries are defined as “those industries which have their origin in individual creativity, skill and talent, and that have a potential for wealth and job creation through the generation and exploitation of intellectual property”.<sup>9</sup>

In this paper, we use the ‘creative intensities’ approach to estimating the economic size of the creative industries. This is a technique for identifying which specific industry sub-segments should be included in the definition of the creative industries.<sup>10</sup> It looks at the distribution of ‘creative’ jobs: an industry is designated as creative if a substantial proportion of employment in that sector hold ‘creative’ jobs. The ‘creative intensities’ approach has been endorsed by the ARC Centre of Excellence for Creative Industries and Innovation (CCI), Australia’s foremost experts on the study of the creative industries. The CCI plan to use this approach in their upcoming analysis of 2016 Census data on creative jobs and industries (to be published in 2018).

The benefits of this definition are:

- **Credibility:** this is the definitional approach endorsed by the CCI, Australia’s foremost experts on the creative industries.
- **Clarity:** this definition has a clear focus on creative jobs, and thus a coherent rationale for why specific segments and sub-segments are included.

### Data limitations

Many of the figures given for the creative industries in this paper (and in most other analyses of Australia’s creative industries) are estimates. Estimation is necessary because national industry data is often not published at a sufficiently detailed level, so the precise figure cannot be identified.

The basis of most estimations is data from the ABS Census. The Census is the only data source that breaks down employment figures to the required level of detail. The appendix provides further technical detail.

<sup>9</sup> UK Department of Culture, Media and Sport, 2001.

<sup>10</sup> The ‘creative intensities’ approach was developed by NESTA, the UK’s National Endowment for Science, Technology and the Arts, 2012.

### 3. Creative Industries Employment

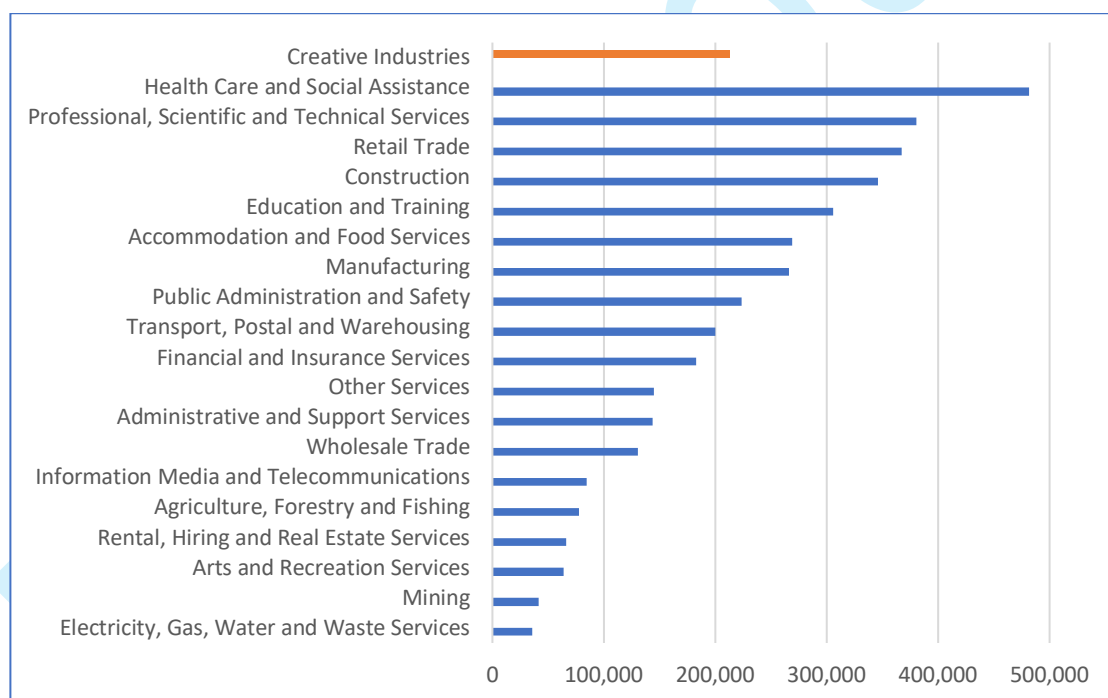
#### Direct employment

NSW has the largest share of creative industries employment in Australia, and its share has been increasing. The NSW creative industries directly employ about 212,600 people, which accounts for 42% of national creative industries employment, up from 40% in 2011-12.

The creative industries make up a larger proportion of employment in NSW than they do in other states. Across Australia on average they are 4.2% of total employment, while in NSW they are 5.6% of employment. This makes the creative industries slightly larger than the NSW transport, postal and warehousing industry, and close in size to the public administration and safety industry.

The importance of the creative industries to the NSW economy has been increasing: its share of NSW employment has risen from 5.2% in 2011-12 to 5.6% in 2016-17.

Figure 1: NSW direct employment by industry, 2016-17



Sources: ABS Census 2011; ABS Labour Force, Detailed, Quarterly, May 2017; BYP estimates.  
 Note: The Creative Industries figure includes components from other industries included in this chart.

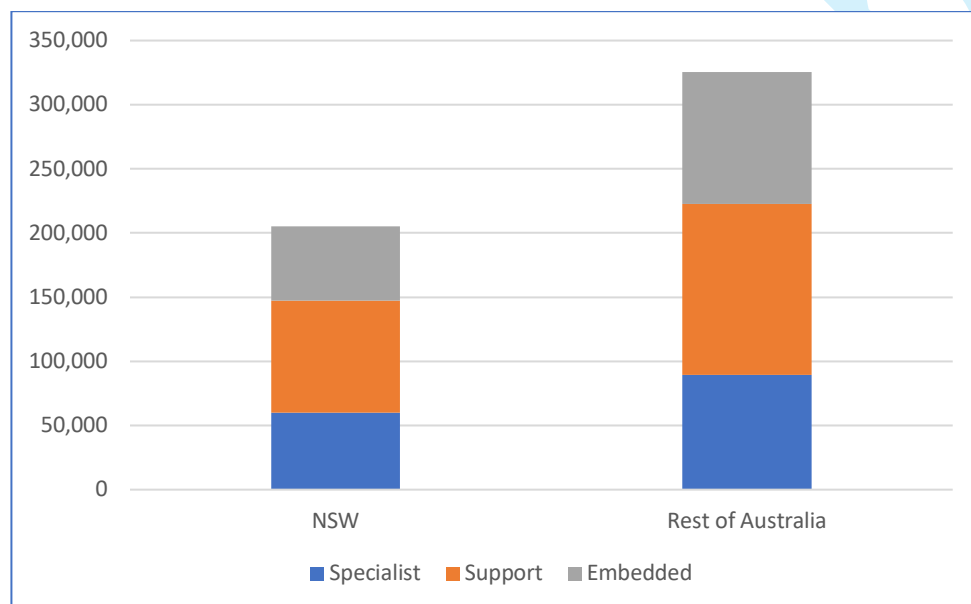
Within the creative industries, some segments are much larger than others in terms of employment. The largest by far is Internet and digital services, accounting for 44% of all direct creative industries employment. This is followed by Design, at 20%; and Media production and broadcasting at 12%. All other segments account for less than 10% each (see Figure 4, below, for details).

## Embedded employment

Around 68,300 people in NSW work in creative occupations within non-creative industries. These are called ‘embedded’ workers, and examples include designers working in the NSW public administration industry.

Adding together these embedded workers with those employed directly by the creative industries, the total creative workforce in NSW is about 280,900 people or 6.6% of total employment. Figure 2 shows the distribution of the creative workforce across its different types: those directly employed in the creative industries, either in creative occupations (‘specialist’) or in non-creative occupations (‘support’); and embedded employment.

**Figure 2: Creative industries employment by type, 2011**



Source: Higgs and Lennon, 2014.

Table 1 shows the percentage of employment in each industry in NSW accounted for by creative employment. In most cases this is embedded employment. In four cases, the overarching industries in Table 1 include within them parts of the creative industries.



**Table 1: Creative employment across non-creative industries, NSW, 2011**

Industry	% Creative employment (both embedded and direct)
Agriculture, forestry and fishing	0.2%
Mining	0.5%
Manufacturing	3.1%
Electricity, gas, water and waste services	1.8%
Construction	0.8%
Wholesale trade*	4.0%
Retail trade	1.6%
Accommodation and food services	0.5%
Transport, postal and warehousing	0.7%
Information, media and telecommunication*	58.7%
Financial and insurance services	4.7%
Rental, hiring and real estate services	1.7%
Professional, scientific and technical services*	39.2%
Administrative and support services	2.0%
Public administration and safety	3.3%
Education and training	1.7%
Health care and social assistance	0.5%
Arts and recreation services*	33.9%
Other services	2.0%
<b>Total</b>	<b>6.5%</b>

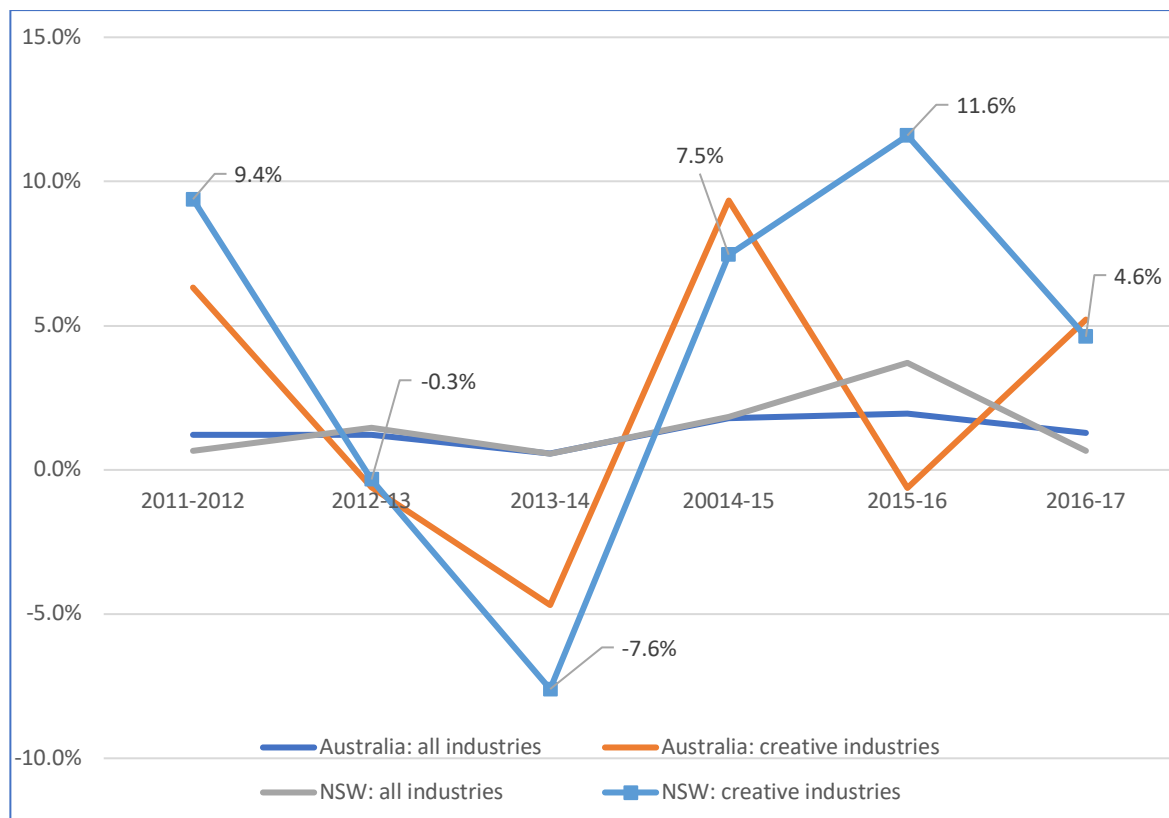
Sources: Higgs and Lennon, 2014; ABS Labour Force, Detailed, Quarterly, May 2017; BYP estimates.  
 Note: \* means the overarching industry includes sub-industries designated as creative industries in this analysis.

## Employment growth

Over the five-year period of 2011-12 to 2016-17, the employment growth rate across NSW was 1.6% per annum. The creative industries employment growth rate in NSW outstripped this, at 2.9% per annum.

As can be seen in Figure 3, the creative industries employment growth rate in NSW has generally mirrored that of Australia as a whole but rose noticeably higher than the Australian average in 2015-16.

Figure 3: Annual employment growth rates, 2011-12 to 2016-17



Sources: ABS Census 2011; ABS Labour Force, Detailed, Quarterly, May 2017; BYP estimates.

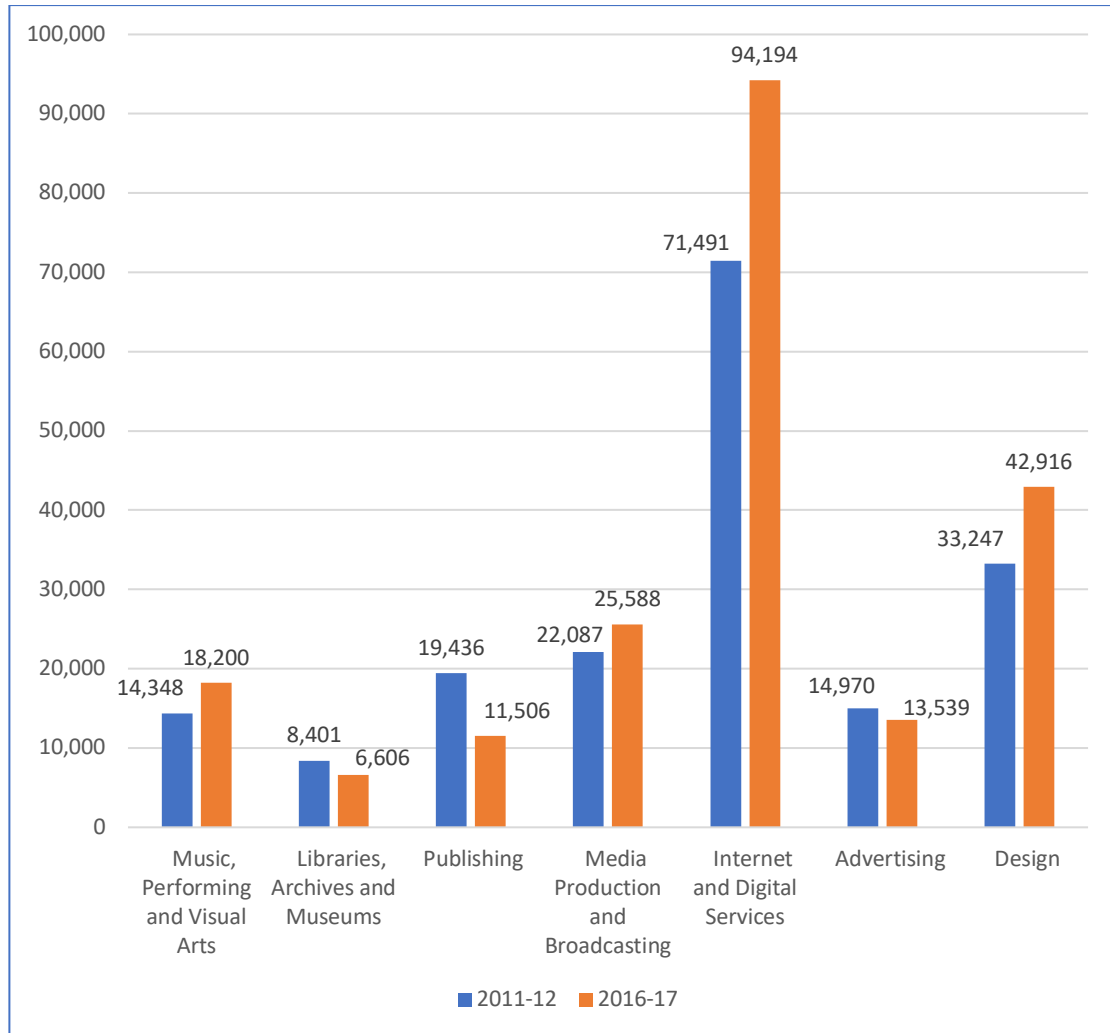
While the overall employment growth rate of the creative industries has been positive, this is not the case for every segment within the creative industries. Segments with falling employment are:

- Publishing – annual employment growth rate of -10%
- Libraries, archives and museums – annual employment growth rate of -4.7%
- Advertising - annual employment growth rate of -2%

In contrast, other segments have had noticeably higher growth rates:

- Internet and digital services – annual employment growth rate of 5.7%
- Design – annual employment growth rate of 5.2%
- Music, performing and visual arts - annual employment growth rate of 4.9%

Figure 4: NSW employment growth by creative industry segment



Sources: ABS Census 2011; ABS Labour Force, Detailed, Quarterly, May 2017; BYP estimates.

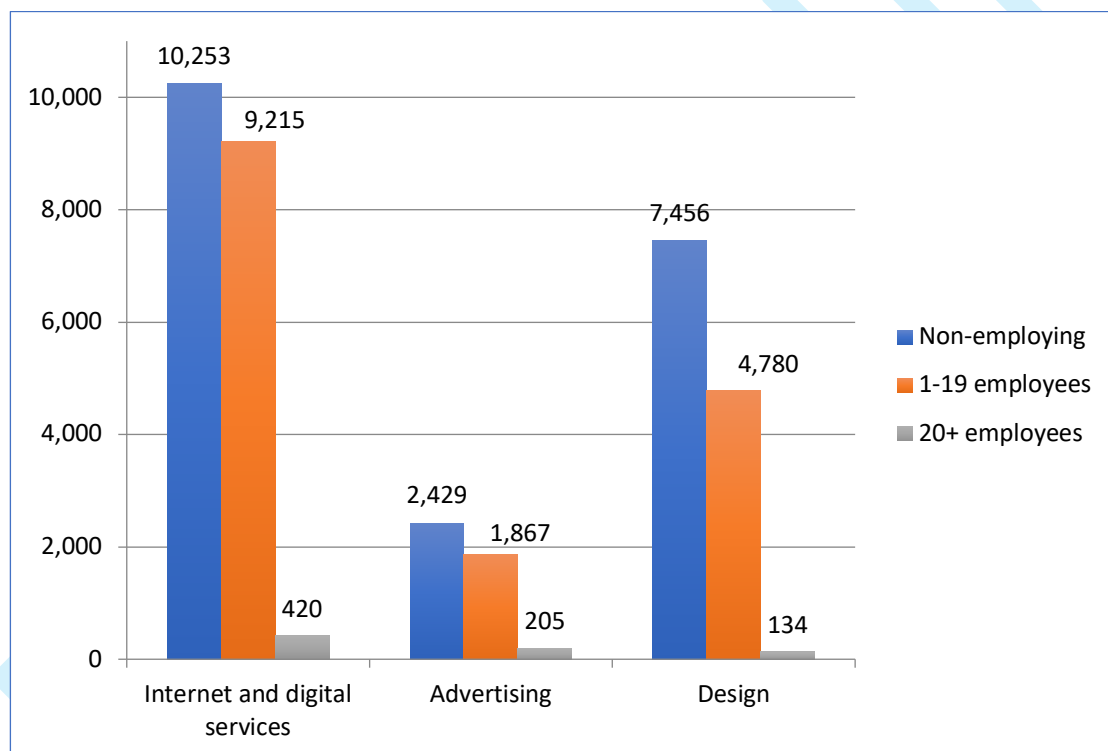
## 4. Businesses

### Business counts and characteristics

There are approximately 47,300 creative industries businesses in NSW. This accounts for 6.5% of all NSW businesses; and 39% of all national creative industries businesses. NSW has the largest share of creative industries businesses of any state or territory.

Most creative industry businesses are very small – 60% have no employees, and 39% have less than 20 employees. This pattern is particularly striking in the Music, performing and visual arts segment, where 78% of businesses are sole traders with no employees. At the other end of the scale, Internet and digital services, Advertising, and Publishing all have relatively even numbers of sole traders and businesses with employees.

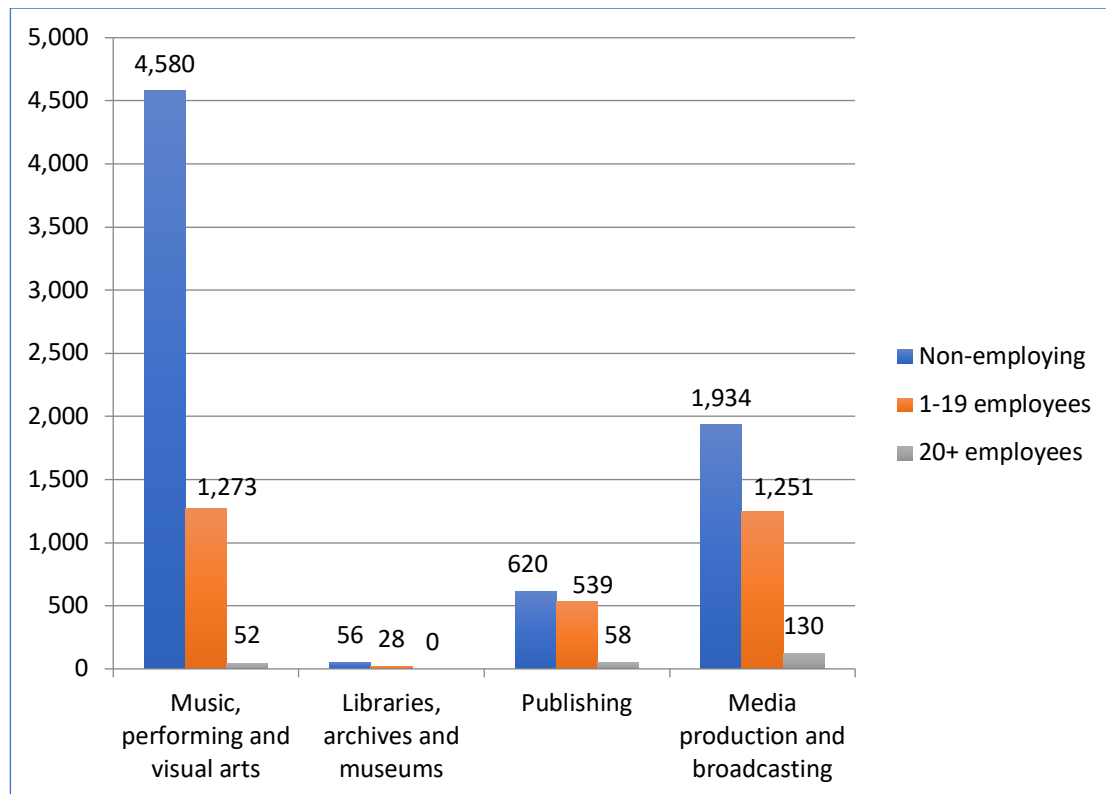
Figure 5: NSW business size: creative industry segments, 2016



Source: ABS Counts of Australian Businesses, including Entries and Exits, Jun 2012 to Jun 2016.

Note: ABS does not publish business data on some of the smallest creative industries sub-segments.

Figure 6: NSW business size: cultural production segments, 2016



Source: ABS Counts of Australian Businesses, including Entries and Exits, Jun 2012 to Jun 2016.

Note: ABS does not publish business data on some of the smallest creative industries sub-segments.

The creative industries have a start-up rate similar to that of other businesses in NSW. In 2016, there was a 15% entry rate for both creative industries and across all businesses.<sup>11</sup>

New entry rates were noticeably lower for publishing, at 10%, and libraries archives and museums, at 11%. They were slightly higher for advertising (17%), internet and digital services (16%), and media production and broadcasting (16%).

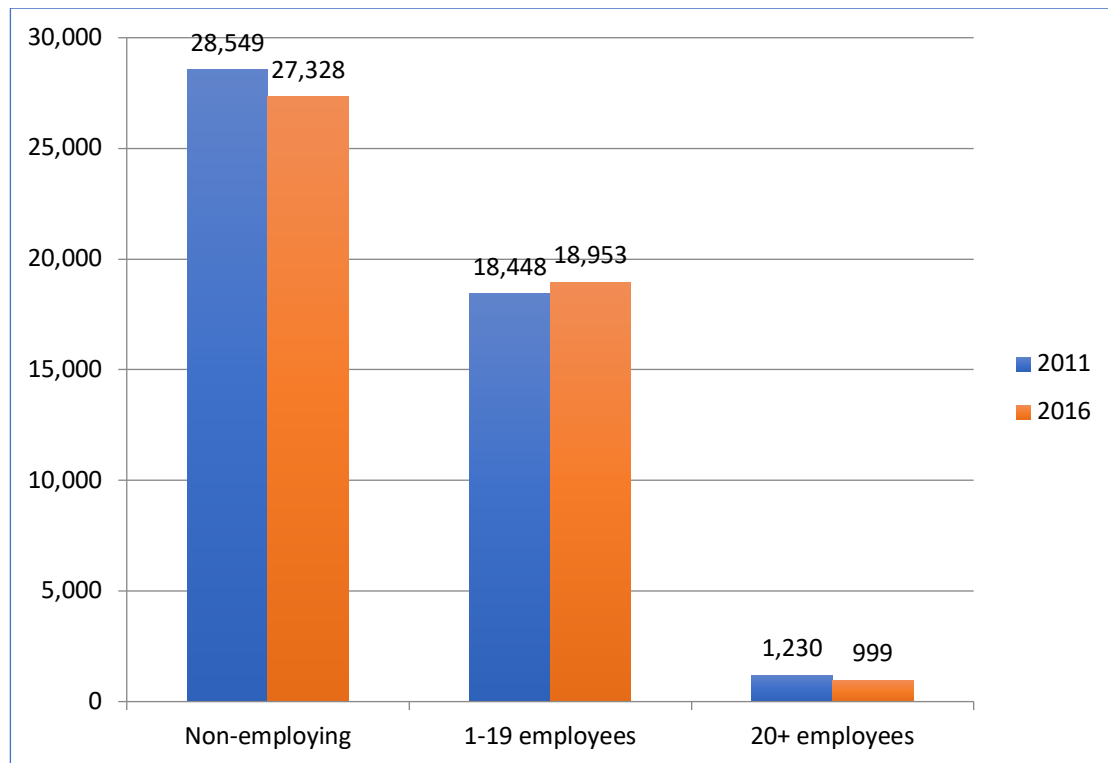
The business exit rate across the creative industries was 14.5%. Again, this is similar to the overall exit rate for businesses in NSW. Two segments had higher exit rates than entry rates: libraries, archives and museums; and publishing.

### Trends over time

Overall, the number of creative industries businesses has been relatively steady (a drop of 0.4% from 2011 to 2016, set against an overall growth in NSW business numbers of 0.6%). As can be seen in Figure 7, there has been an increase in the number of businesses employing 1-19 people, and a drop in the number of sole traders; this explains why the overall number of businesses is steady while creative industry employment is up.

<sup>11</sup> The entry rate is calculated as the number of new entrants during the year, as a percentage of the initial number of businesses at the start of the year.

Figure 7: NSW business size: change, 2011-2016



Source: ABS Counts of Australian Businesses, including Entries and Exits, Jun 2012 to Jun 2016.

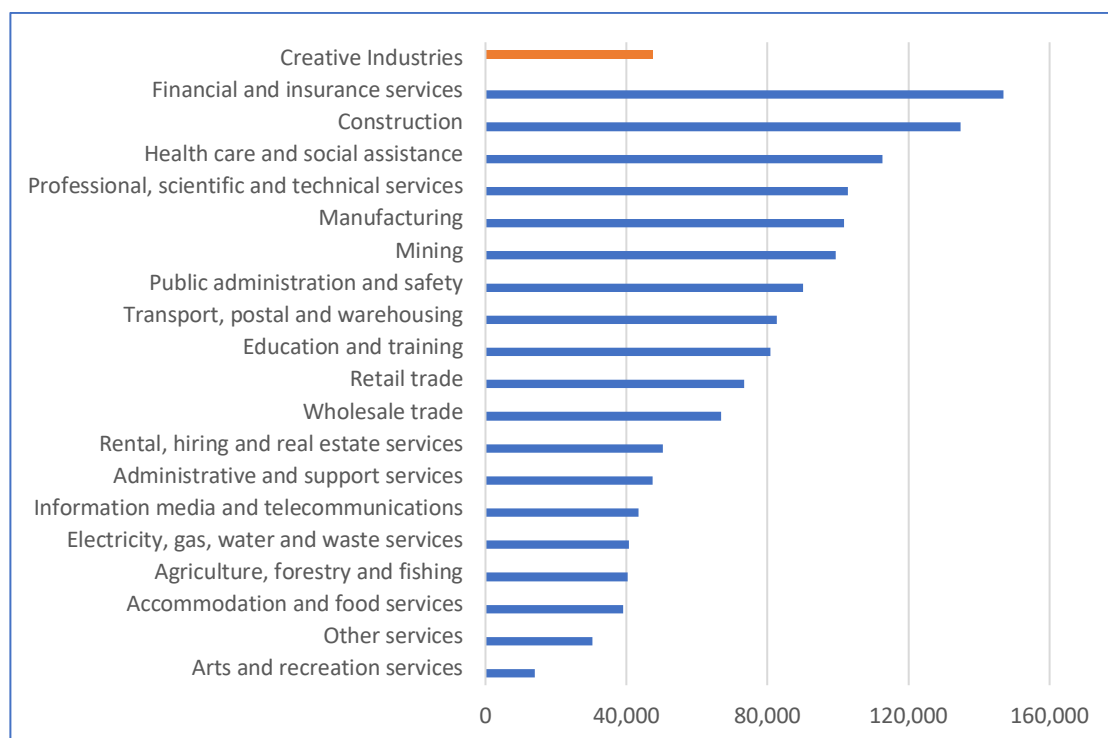
Note: ABS does not publish business data on some of the smallest creative industries sub-segments.

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## 5. Industry Value Add

Industry Value Add (IVA) measures the contribution an industry makes to national Gross Domestic Product (GDP). It is calculated as the market value of goods and services produced, minus the cost of goods and services used in their production. The Australian creative industries had an estimated IVA of \$47.4 billion in 2016-17.

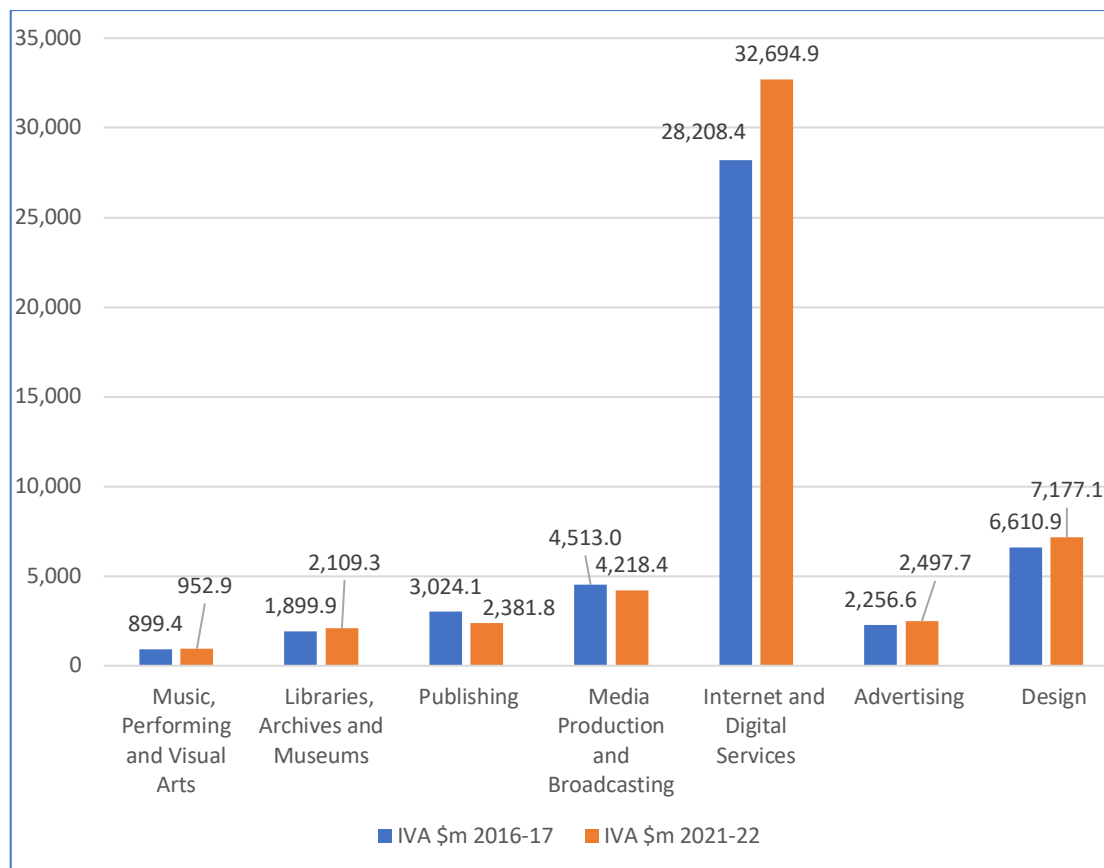
Figure 8: Australia Industry Value Added, 2015-2016, \$mill



Sources: IBISWorld reports; ABS Australian system of national accounts, 2015-16; BYP estimates.  
 Note: The Creative Industries figure includes components from other industries included in this chart.

Among the segments making up the creative industries, the largest contributor to IVA is the Internet and digital services segment.

Figure 9: Industry Value Added and 5-year forecast by creative industry segment (\$mill)



Sources: IBISWorld reports; BYP estimates.

Note: Figures are in real terms, inflation adjusted 2017 dollars. These figures are for all of Australia.

Note: IBISWorld does not publish data on some of the smallest creative industries sub-segments.

Overall, the creative industries IVA is forecast to grow 9.7% over the coming five years. This growth is driven by creative services (14.3% growth), and especially the Internet and digital services segment. The cultural production sector of the creative industries is forecast to experience a fall in IVA over the next five years of -6.5% and the largest segment contribution to this fall comes from Publishing.

On an annual basis, these rates equate to an average growth of 1.9%: 2.7% for creative services, and -1.3% for cultural production. This compares to the OECD's forecast for the overall Australian economy of 2.4% GDP growth in 2017, 2.9% in 2018, and 3.7% per annum through to 2021.



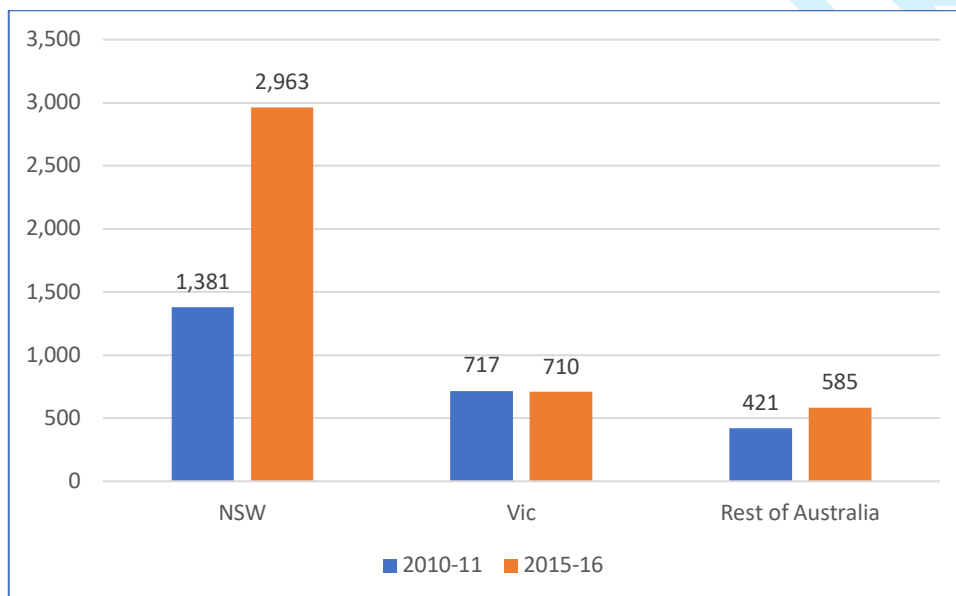
## 6. Exports

NSW accounts for the majority of Australia’s creative services exports, and its share has risen from 55% in 2010-11 to 70% in 2015-16. The next largest exporting state is Victoria, with 17% (a decline from 2010-11 when it was at 28%).

Creative industries services exports from NSW are about 10% of the State’s total services exports, an increase from 7% in 2010-11.

Over the past five years, Australian services exports have grown an average of 6% per annum, and 7% in NSW. Creative services exports have grown even faster: by an average of 11% per annum across Australia, and 16% per annum in NSW.

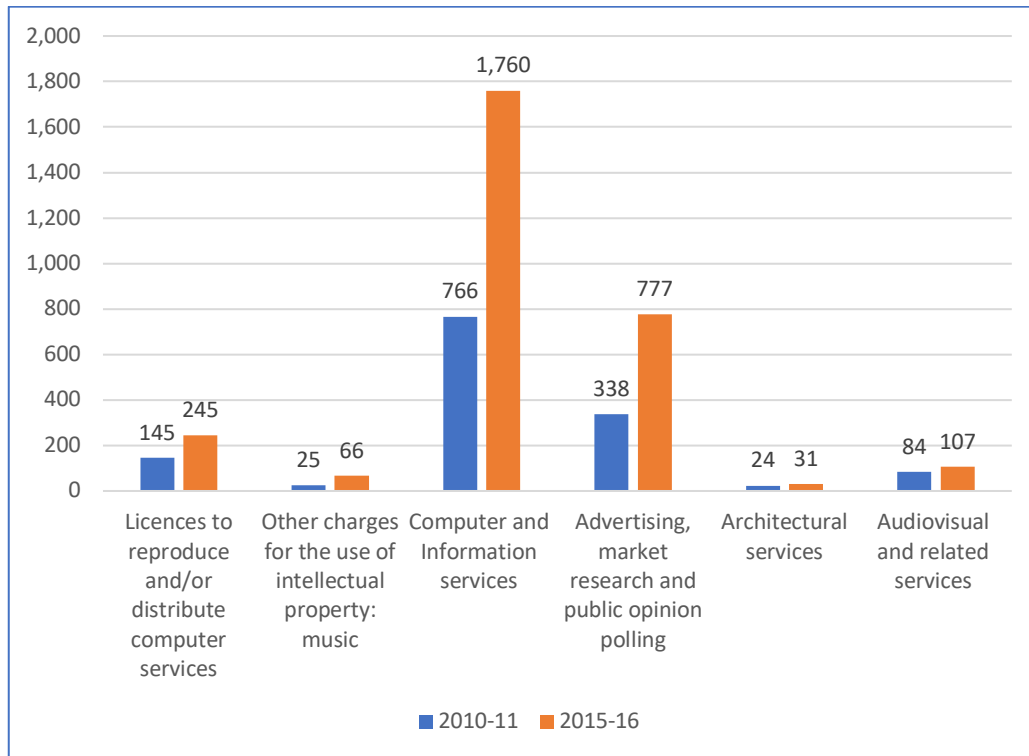
**Figure 10: Creative services exports, \$mill**



Sources: ABS International Trade: Supplementary Information, Financial Year, 2015-16; ABS International Trade in Goods and Services, Australia, June 2017; BYP estimates.

The largest share of creative services exports, and the source of much of its growth over the past five years, is Computer and information services, followed by Advertising services.

Figure 11: NSW creative services exports by type, \$mill



Sources: ABS International Trade: Supplementary Information, Financial Year, 2015-16; ABS International Trade in Goods and Services, Australia, June 2017; BYP estimates.

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## 7. Regional Analysis

Creative industries employees predominantly live in the Greater Sydney area (87%), with the greatest concentrations as a percentage of local employment in inner areas such as the City and Inner South, Eastern Suburbs, and North Sydney and Hornsby.

Many Greater Sydney areas appear to have experienced substantial growth in the number of creative industries employees over the past five years. Areas with over 30% growth – as compared to the NSW average of 16% - include the Inner West, Parramatta, the South West, and the Northern Beaches. Only two areas experienced a shrinkage: the Inner South West, and the Outer South West.

Around 12% of creative industries employees live in regional NSW. Trends over the past five years in regional NSW look more volatile than those in the Greater Sydney area, but this is partly due to the relatively smaller number of employees in many regional areas. One area with notable growth is the Illawarra, which appears to have doubled its number of creative industries employees and now has the second-largest number of creative industries employees of the NSW regional areas.

Table 2: Creative industries employment across NSW regions

Region (SA4 level)	Total CI	Share of NSW CI employment %	CI share of total employment %	Growth 2012-2017
<b>Greater Sydney</b>	<b>184,447</b>	<b>86.8%</b>	<b>7.2%</b>	<b>16.1%</b>
Central Coast	5,941	2.8%	3.4%	27.0%
Baulkham Hills and Hawkesbury	8,641	4.1%	6.7%	20.6%
Blacktown	6,973	3.3%	4.1%	20.5%
City and Inner South	30,191	14.2%	15.3%	27.2%
Eastern Suburbs	21,641	10.2%	13.5%	26.6%
Inner South West	11,446	5.4%	4.2%	-14.5%
Inner West	18,935	8.9%	10.7%	39.4%
North Sydney and Hornsby	25,579	12.0%	11.6%	-8.5%
Northern Beaches	16,874	7.9%	10.8%	30.1%
Outer South West	3,332	1.6%	2.7%	-10.9%
Outer West and Blue Mountains	5,602	2.6%	3.6%	20.3%
Parramatta	12,255	5.8%	5.4%	34.1%
Ryde	7,005	3.3%	7.4%	1.7%
South West	4,445	2.1%	2.5%	32.2%
Sutherland	5,588	2.6%	4.4%	19.2%
<b>Regional NSW</b>	<b>26,360</b>	<b>12.4%</b>	<b>2.1%</b>	<b>10.7%</b>
Capital Region	3,143	1.5%	3.0%	-17.8%
NSW Central West	1,290	0.6%	1.2%	4.4%
Coffs Harbour - Grafton	813	0.4%	1.4%	-28.3%
Far West and Orana	188	0.1%	0.3%	-73.2%
Hunter Valley exc Newcastle	2,112	1.0%	1.7%	45.8%
Illawarra	4,638	2.2%	3.2%	103.5%
Mid North Coast	1,627	0.8%	1.8%	70.3%
Murray	541	0.3%	1.2%	-6.8%
New England and North West	1,022	0.5%	1.2%	-18.7%
Newcastle and Lake Macquarie	5,470	2.6%	2.9%	27.5%
Richmond - Tweed	3,667	1.7%	3.4%	17.1%
Riverina	1,129	0.5%	1.4%	-9.8%
Southern Highlands and Shoalhaven	720	0.3%	1.4%	-58.2%
<b>Total NSW</b>	<b>212,550</b>	<b>100.0%</b>	<b>5.6%</b>	<b>15.50%</b>

Sources: ABS Census 2011; ABS Labour Force, Detailed, Quarterly, May 2017; BYP estimates.

## 8. Sector Analysis: Cultural Production

### Music, performing and visual arts

The Music, performing and visual arts (MPVA) segment is one of only three creative industries segments with both positive growth in employment over the past five years as well as positive forecast growth in Industry Value Add (IVA) over the next five years.

NSW accounts for 40% of Australia's MPVA employment, more than its share of total Australian employment (which is 31.7%).

The segment is dominated in employee and business numbers by creative artists, musicians, writers and performers. This group has the highest rate of sole trader / non-employed businesses of all creative industries groups, at 82%.

Data on the IVA contributions of the MPVA segment is only available for two of its sub-segments: performing arts operations, and performing arts venues.

Performing arts operations is the production of live theatrical, music and dance performances. IBIS reports note that this sub-segment includes both more traditional performing arts production, which tends to be heavily reliant on government subsidy, and contemporary music production which relies on appealing and selling to a wide audience. The performing arts operation sub-segment has recorded positive growth in box office revenues over the past five years but this is expected to slow in the next five years due to intensifying competition from other leisure activities.

Performing arts venues are operations such as concert halls, opera houses, and theatre venues. According to IBIS reports, one quarter of total market share in this sub-segment is the Sydney Opera House Trust. Many businesses in this sub-segment are highly dependent on government funding and private sponsors; recent years have seen them concentrating on ways to stabilise cash-flow in case of fluctuations in government funding, through building commercial activities and sponsorship. The sub-segment is forecast to have modest revenue increases in the next five years, limited by increased competition from alternative venue types such as stadiums and pubs, increased mortality in their core demographic, as well as potential variations in government funding.

**Table 3: Music, performing and visual art key statistics**

	NSW business count, 2016	NSW share of Aus business count	NSW direct empl., 2016-17	NSW share of Aus empl.	Empl. growth 2011-12 to 2016-17	Aus IVA 2016-17 (\$mill)
<b>Music, performing and visual arts</b>	<b>5,892</b>	<b>39.9%</b>	<b>18,200</b>	<b>39.7%</b>	<b>26.8%</b>	<b>840</b>
5522 - Music and other sound recording activities	542	42.5%	601	33.5%	69.2%	n.a.
9001 - Performing arts operations	530	40.4%	2,712	35.3%	29.7%	571
9002 - Creative artists, musicians, writers and performers	4,653	39.8%	11,907	40.8%	29.7%	n.a.
9003 - Performing arts venue operation	167	35.3%	1,711	36.0%	29.7%	269
9000 - Creative and performing arts activities, nfd	n.a.	n.a.	602	41.0%	29.7%	n.a.
R000 – Arts and recreation services, nfd	n.a.	n.a.	668	67.9%	-29.1%	n.a.

## Libraries, archives and museums

The Libraries, archives and museums (LAM) segment has had falling employment over the past five years, but is forecast to experience modest positive growth in IVA over the next five years.

The LAM segment is the only creative industries segment where NSW accounts for a lower proportion of Australia-wide employment, at 30%, than its share of general Australian employment (31.7%). This figure is driven by relatively lower employment in the museums sub-segment.

IBIS reports the museums industry has achieved modest growth in recent years and is expected to maintain revenue stability into the future. This is due to continuing to appeal to audiences and achieving increased ticket admissions and private donations, as well as continued government funding. On-line access to their information and displays are an increasingly critical part of their operations.

Similarly, libraries are integrating new technologies into their services and offerings. This sub-segment is heavily dependent on government funding for over 90% of its revenue. The industry has struggled to obtain increases in funding in recent years.

**Table 4: Libraries, archives and museums key statistics**

	<b>NSW business count, 2016</b>	<b>NSW share of Aus business count</b>	<b>NSW direct empl., 2016-17</b>	<b>NSW share of Aus empl.</b>	<b>Empl. growth 2011-12 to 2016-17</b>	<b>Aus IVA 2016-17 (\$mill)</b>
<b>Libraries, archives and museums</b>	<b>82</b>	<b>29.8%</b>	<b>6,606</b>	<b>30.0%</b>	<b>-21.4%</b>	<b>1,790</b>
6010 - Libraries and archives	43	34.7%	3,847	30.1%	-13.6%	1,013
8910 - Museum operation	39	25.8%	2,759	29.9%	-30.2%	777

## Publishing

Publishing has had falling employment over the past five years, and is forecast to experience declining contributions to IVA over the next five years.

NSW accounts for 40% of Australia's publishing employment, more than its share of total Australian employment (31.7%). NSW particularly dominates the magazine publishing sub-segment, at 66% of Australian employment, and the music publishing sub-segment, at 51% of Australian employment.

Publishing is one of the few creative industries areas where sole trading businesses do not dominate. Overall, 49% of businesses have 1 or more employee, and in newspaper publishing 59% of businesses fall in the 1-19 employees category.

IBIS reports that the newspaper publishing sub-segment has been hard-hit by the reader switch to on-line news: revenue generated from on-line advertising is lower than in printed media, and foreign news sources are increasingly entering Australia. The decline in revenue is projected to continue, at a slower rate, over the next five years.

The magazine and other periodical sub-segment has also declined in recent years due to competition from on-line mediums. This sub-segment includes directories, such as the Yellow Pages, and these have shown the largest drop in revenues. The decline is forecast to continue, but slow down, over the next five years.

Book publishing has also contracted, which IBIS reports attribute largely to consumers increasingly purchasing books and e-books from foreign on-line book retailers. There have been structural retail changes in the sector with the closure of retail channels such as Borders, and the upcoming launch of an Australian arm of Amazon is set to continue this trend.

Music publishing includes companies that acquire musical copyrights and authorize their use in platforms such as television and radio; and companies that do sound recording activities. This is the only publishing sub-segment that has had substantial positive employment growth over the past five years. IBIS reports note growth is constrained: a shift to online music formats has increased demand but also introduced challenges for this industry, as physical music sales fall, opportunities for self-management among smaller artists have increased, and online piracy occurs.

It should be noted that the sub-segment 'Internet publishing and broadcasting' is not included here, but rather is categorised as part of the 'internet and digital' segment. It is experiencing positive growth in both employment and forecast contributions to IVA. However, it is smaller in employment terms than any of the main publishing sub-segments of newspaper, magazine or book publishing.

Table 5: Publishing key statistics

	NSW business count, 2016	NSW share of Aus business count	NSW direct empl., 2016-17	NSW share of Aus empl.	Empl. growth 2011-12 to 2016-17	Aus IVA 2016-17 (\$mill)
<b>Publishing</b>	1,221	40.3%	11,506	40.1%	-40.8%	4,458
5411 - Newspaper publishing	165	41.5%	5,210	36.4%	-36.4%	2,637
5412 - Magazine and other periodical publishing	396	40.9%	3,248	66.4%	-36.4%	965
5413 - Book publishing	397	36.8%	1,431	38.5%	-36.4%	554
5419 - Other publishing (except software, music, internet)	66	n.a.	34	26.9%	-36.4%	n.a.
1612 - Printing support services.	197	33.7%	1,143	39.7%	4.9%	123
5400 - Publishing (except internet and music publishing), nfd	n.a.	n.a.	362	14.0%	-86.5%	n.a.
5410 - Newspaper, periodical, book and directory publishing, nfd	n.a.	n.a.	22	30.3%	-36.4%	n.a.
5520 – Sound recording and music publishing	n.a.	n.a.	57	51.2%	69.2%	179

## Media production and broadcasting

Media production and broadcasting (MPB) has had some growth in employment over the past five years, particularly in radio broadcasting and motion picture related activities. However, the segment is forecast to have a falling contribution to IVA over the next five years.

NSW accounts for the lion's share of MPB employment in Australia, at 57%. In particular, the majority of television-related businesses and employment are in NSW – accounting for 65% of free-to-air TV employment and 75% of cable and subscription TV employment.

The 2015-16 Film, television and digital games survey by the ABS notes that the only area where NSW does not dominate is digital games: 52% of employment is in Victoria, compared to 20% in NSW. A dedicated survey is needed to obtain data on digital games because this industry does not have a dedicated industry code in the standard statistical framework (ANZSIC).

The motion picture industry has experienced growth in the past five years, and this is forecast by IBIS reports to continue. Factors include increases in government incentives and rebates, as well as demand for industry products from film studios and the television industry. In the Post-production services sub-segment, rapid changes in visual and sound editing technology have made post-production work more accessible, including to international clients, and driven high demand for sophisticated and high-quality special effects services. The 2015-16 Film, television and digital games survey found 38% of post-production services income was sourced from overseas.

The television industry has had a challenging five years. Revenue is expected to decline as viewers shift to media on other platforms including online and international providers, and subscription video-on-demand services. The 2015-16 Film, television and digital games survey found income for subscription broadcasters



exceeded that of free-to-air broadcasters. While revenues are falling, domestic production levels are increasing, with larger numbers and hours of content production recorded than in the previous survey of 2011-12.

Radio broadcasting has also experienced increased competition from alternative media platforms, and digital radio has not expanded demand to the hoped-for degree. While this has constrained revenue, consumer demand for radio remains relatively strong and revenue is forecast to fall at a relatively slow rate. IBIS reports note this is projected to affect smaller regional broadcasters most strongly, as high fixed operating costs make it difficult for these to compete.

It should be noted that the sub-segment 'Internet publishing and broadcasting' is not included here, but rather is categorised as part of the 'internet and digital' segment. While it is experiencing positive growth, its employment numbers are smaller than those of traditional media formats.

**Table 6: Media production and broadcasting key statistics**

	NSW business count, 2016	NSW share of Aus business count	NSW direct empl., 2016-17	NSW share of Aus empl.	Empl. growth 2011-12 to 2016-17	Aus IVA 2016-17 (\$mill)
<b>Media production and broadcasting</b>	<b>3,322</b>	<b>47.7%</b>	<b>25,588</b>	<b>56.7%</b>	<b>15.9%</b>	<b>4,273</b>
5511 - Motion picture and video production	2,680	46.7%	7,100	55.4%	29.0%	912
5514 - Post-production services & other motion picture and video activities	389	49.9%	866	48.6%	29.0%	205
5621 - Free to air television broadcasting	68	59.1%	11,120	65.0%	4.1%	1,428
5622 - Cable and other subscription broadcasting	59	67.8%	2,972	75.4%	4.1%	981
5610 - Radio broadcasting	126	52.3%	2,691	36.7%	80.6%	747
5500 - Motion picture and sound recording activities, nfd	n.a.	n.a.	0	n.r.	n.r.	n.a.
5510 - Motion picture and video activities, nfd	n.a.	n.a.	326	50.7%	29.0%	n.a.
5600 - Broadcasting (except internet), nfd	n.a.	n.a.	407	32.1%	-2.1%	n.a.
5620 - Television broadcasting, nfd	n.a.	n.a.	108	70.0%	4.1%	n.a.
J000 - Information media and telecommunications, nfd	n.a.	n.a.	0	0.0%*	-100.0%*	n.a.

Note: n.r. means not relevant, because no employment was recorded against this category in Australia in either 2016-17 or 2011-12.

Note: \* means data in this category is volatile due to low employment numbers. In 2016-17 there were 80 people recorded in this category in Australia, none of whom were in NSW. In 2011-12, there were 130 people recorded in this category in Australia, 110 of whom were in NSW.

## 9. Sector Analysis: Creative Services

### Internet and digital services

The Internet and digital services (IDS) segment is the single largest creative industries segment in terms of employment. It has experienced positive growth in employment over the past five years, and is forecast to have positive growth in its IVA over the next five years.

Overall, 44% of employment in the IDS is based in NSW, more than its share of total Australian employment (31.7%). NSW is most dominant in the 'Internet publishing and broadcasting' sub-segment, with 60% of Australia's employment in this area.

The largest sub-segment within IDS is 'computer system design and related services', with over 93,000 jobs in NSW. This area is otherwise known as IT consulting: designing and implementing computer systems for clients, as well as providing clients with support for customised software. Growth is driven by the increased online connectivity of businesses, and it is expected to continue due to ongoing technological and infrastructure advancements fuelling a need for regular system upgrades.

The sub-segment of internet publishing and broadcasting has experienced particularly high growth in employment numbers in NSW over the past five years, at over 80%. The area has expanded quickly as consumers have turned to online sources of news, entertainment, services, and classifieds (for jobs, second-hand cars, etc). Growth in streaming websites, a relatively new area in Australia, is expected to drive continued growth over the next five years.

The sub-segment of software publishing deals in the creation and distribution of ready-made (non-customised) computer software. Labour force data for this area appear to be unreliable: ABS business data shows over 500 NSW businesses in 2016, while the Labour Force survey shows low-to-no employment. We assume the business data is the more reliable source.<sup>12</sup> As such, it appears NSW has a healthy share of Australia's activity in this area. IBIS analysis shows strong revenue growth in this industry over the past five years, driven by increased online connectivity and new technology. Revenue growth has been higher than employment growth. The sector's IVA is forecast to continue growing over the next five years with increasing reliance on cloud-based computing and associated software, and shifts to monthly subscription models for software.

<sup>12</sup> It is supported by employment data in the 2011 Census that showed over 400 people employed in this area in NSW (accounting for 60% of Australia's employment in this sub-segment).

Table 7: Internet and digital services key statistics

	NSW business count, 2016	NSW share of Aus business count	NSW direct empl., 2016-17	NSW share of Aus empl.	Empl. growth 2011-12 to 2016-17	Aus IVA 2016-17 (\$mill)
<b>Internet and digital services</b>	<b>19,886</b>	<b>38.4%</b>	<b>94,194</b>	<b>43.6%</b>	<b>31.8%</b>	<b>23,538</b>
7000 - Computer system design and related services	18,743	38.4%	93,151	43.4%	31.4%	22,062
5420 - Software publishing	512	38.5%	0	0.0%*	0.0%*	706
5700 - Internet publishing and broadcasting	631	40.4%	1,043	60.4%	81.4%	770
5900 – Internet service providers, web search portals, and data processing services, nfd	n.a.	n.a.	0	n.r.	n.r.	n.a.

Note: \* means data in this category is volatile due to low employment numbers recorded in the ABS Labour Force survey. In 2016-17 the Labour Force survey recorded 120 people in this category in Australia, none of whom were in NSW. In 2011-12, it recorded no people in this category in Australia. This differs from the 2011 Census which found 696 people employed in this category, 59.8% of whom were in NSW (n=416).

Note: n.r. means not relevant, because no employment was recorded against this category in Australia in either 2016-17 or 2011-12.

## Design

The design segment is one of the three creative industry segments that have had positive employment growth over the past five years and also have forecast positive growth in IVA over the next five years. Around 36% of employment in the design industry is based in NSW, slightly more than NSW’s share of overall employment (31.7%).

The largest sub-segment within design is ‘other specialised design services’. This includes firms who provide a range of professional design services for clients in other industries, including graphic, website and interior design. Much demand in this industry is driven by the advertising segment outsourcing visual design work. It also includes areas such as textiles, fashion and commercial art design. A shift to digital platforms in advertising and other areas has allowed more small and sole proprietor businesses to gain niche market share. Growth in the sub-segment is forecast to continue due to positive operating conditions for its downstream industries.

Another large sub-segment within design is architectural services. This is an area where NSW is currently experiencing skill shortages: for architects in metropolitan NSW, and for architectural draftspersons across all of NSW (Labour Economics Office NSW, 2016). The architecture area has experienced growth in the past five years due to increases in residential construction. IBIS forecasts growth will slow over the next five years: there is increased competition from international firms, and while there is expected to be expansion in the commercial building market, the residential building market is expected to slow down due to over-supply of apartments. IBIS notes that conditions are more difficult for smaller firms, as the industry faces growing competition from vertically integrated building and engineering firms.

The professional photographic services sub-segment is the only design area that has experienced small falls in employment. Demand for services is subdued due to improvements in consumer digital camera technology and growth in amateur photography. The forecast is for modest growth, particularly for operators who can capitalise on opportunities given by new technology and online markets.

The smallest of the design sub-segments is jewellery and silverware manufacture. The industry, especially the area of fine jewellery, has benefited from declines in gold and silver prices in recent years which have boosted consumer demand. Producers of costume jewellery have done less well due to competition from cheaper foreign manufacturers. The IBIS forecast is for continued modest growth as gold and silver prices are likely to decline further.

**Table 8: Design key statistics**

	NSW business count, 2016	NSW share of Aus business count	NSW direct empl., 2016-17	NSW share of Aus empl.	Empl. growth 2011-12 to 2016-17	Aus IVA 2016-17 (\$mill)
<b>Design</b>	<b>12,371</b>	<b>35.9%</b>	<b>42,916</b>	<b>39.0%</b>	<b>29.1%</b>	<b>5,835</b>
2591 - Jewellery and silverware manufacturing	500	36.8%	2,174	43.2%	13.0%	259
6921 - Architectural services	4,247	32.4%	19,225	35.0%	36.3%	2,494
6924 - Other specialised design services	5,444	38.6%	16,639	45.7%	36.3%	2,429
6991 - Professional photographic services	2,180	36.9%	4,877	35.3%	-2.7%	653

## Advertising

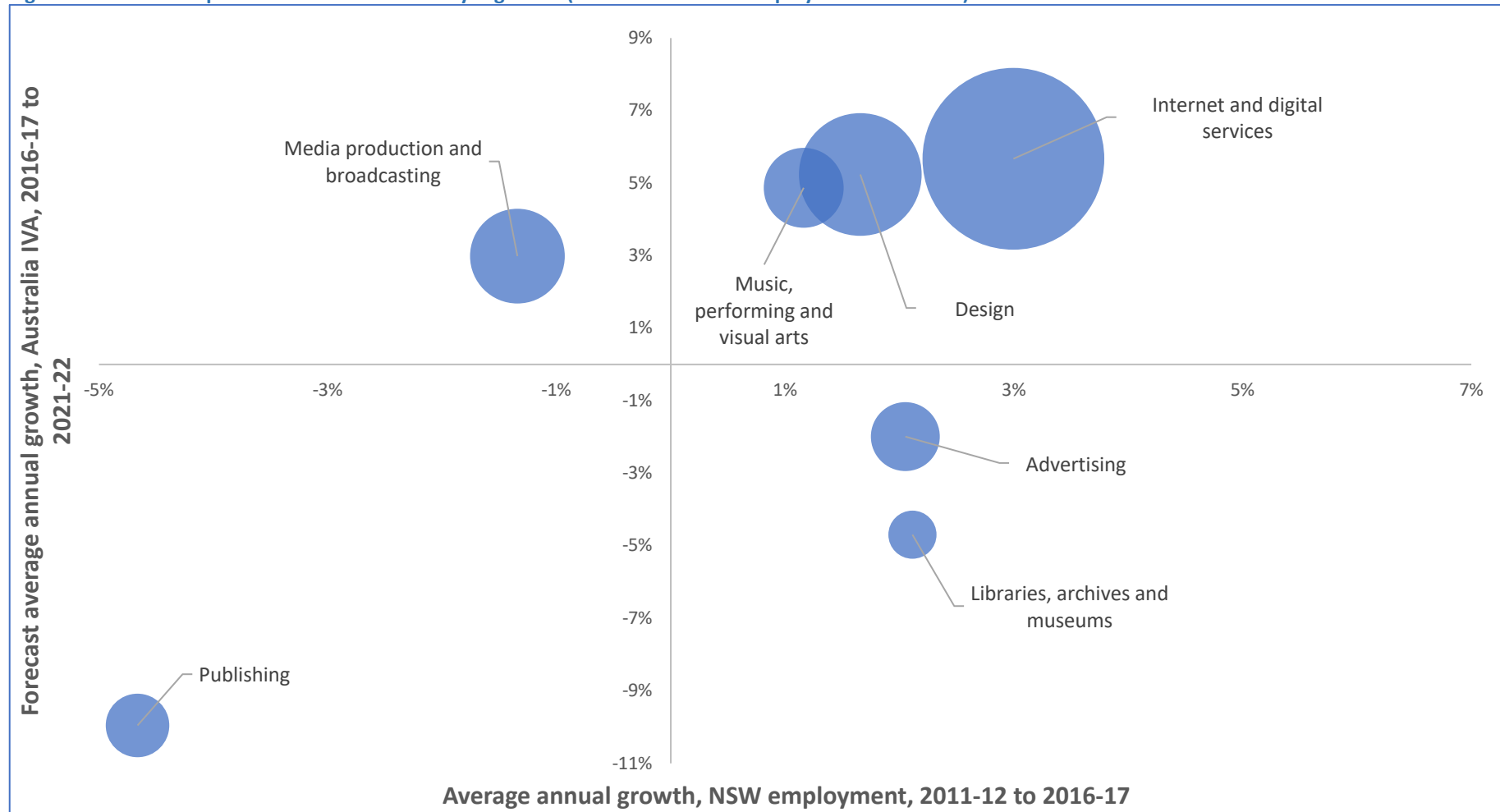
The advertising segment has had some falls in employment over the past five years, but is forecast to have positive growth in its contributions to IVA over the next five years.

IBIS identify two key types of firms within the advertising industry: advertising agencies, and media buying agencies. Both have had modest positive growth in revenues in recent years, with growth in online advertising partially offsetting declines in print and broadcast media advertising. The media environment is increasingly fragmented due to new media and technological innovations, leading firms to move away from traditional mass media advertising and toward more specialised approaches such as direct mail, social media advertising and email, and offering complementary services such as public relations and market research. The trend of modest growth in revenue and IVA is expected to continue over the next five years. BYP Group predicts that this growth will occur in the digital media space. BYP Group also predicts that Augmented Reality (AR) advertising will win marketshare from Out-Of-Home advertising such as billboards.

**Table 9: Advertising key statistics**

	NSW business count, 2016	NSW share of Aus business count	NSW direct empl., 2016-17	NSW share of Aus empl.	Empl. growth 2011-12 to 2016-17	Aus IVA 2016-17 (\$mill)
6940 - Advertising services	4,504	40.6%	13,539	40.9%	-9.6%	13,539

Figure 12: Relative importance of creative industry segments (bubble size = NSW employment in 2016-17)



## 10. Technical Appendix

Over time there have been a variety of efforts made to define the creative industries, both in Australia and internationally. What these efforts generally have in common is that they are rooted in industry classification systems, the internationally-agreed ways of grouping and classifying industries for the purposes of national economic statistics. In Australia this is the ANZSIC system – the Australian and New Zealand Standard Industrial Classification System.

The ANZSIC system itself does not have a grouping for the creative industries. Therefore, definitions of the creative industries aim to pick out those industry segments (classified by ANZSIC within other groupings) that are in fact ‘creative’. For example, architecture is generally considered part of the creative industries; in ANZSIC it is grouped in the category of ‘professional, scientific and technical services’. Another example is jewellery making, grouped by ANZSIC in the broad ‘manufacturing’ category.

### Alternative definitions

This paper defines the creative industries using the 2013 NSW Action Plan definition, refined by applying a ‘creative intensities’ approach to choose the sub-segments included in the definition. (That is: industries are considered creative if a substantial proportion of jobs in that industry are creative jobs.)

The main alternative definition currently in use in Australia is that of the Victorian Government’s Creative Industries Strategy 2016-2020. It is broader than that used in this paper, because it includes segments such as motion picture exhibition, clothing and footwear manufacture, and arts education. (The Victorian definition is based on the ABS Experimental Creative and Cultural Satellite Account, but does not include all the sectors that are in the Satellite Account.)

Table 10, below, outlines which specific industry segments are included under the various definitions of the creative industries.

Table 10: NSW employment figures under alternative definitions (2011 Census)

ANZSIC code - Name	Segments	NSW employment (2011)	2013 NSW Action Plan definition	'Creative intensities' definition* - this paper's definition	Victorian Creative Industries Strategy 2016-2020 definition
<b>CULTURAL PRODUCTION</b>					
<b>Music, Performing and Visual Arts</b>					
5522 - Music and other sound recording activities		337	√	√	√
9001 - Performing arts operations		1,937	√	√	√
9002 - Creative artists, musicians, writers and performers		8,510	√	√	√
9003 - Performing arts venue operation		1,223	√	√	√
9000 - Creative and performing arts activities, nfd		430		√	
R000 – Arts and recreation services, nfd		829		√	
<b>Libraries, Archives and Museums</b>					
6010 - Libraries and archives		1,864	√	√	√
8910 - Museum operation		2,118	√	√	√
<b>Publishing</b>					
5521 - Music publishing		162	√		√
5414 - Directory and mail list publishing		1,070	√		√
5411 - Newspaper publishing		8,594	√	√	√
5412 - Magazine and other periodical publishing		5,358	√	√	√
5413 - Book publishing		2,360	√	√	√
5419 - Other publishing (except software, music, internet)		56	√	√	√
1611 - Printing		10,292			√
1612 - Printing support services.		774		√	√
5400 - Publishing (except internet and music publishing), nfd		873		√	
5410 - Newspaper, periodical, book and directory publishing, nfd		35		√	
5520 – Sound recording and music publishing		32		√	
<b>Media Production and Broadcasting</b>					
5511 - Motion picture and video production		4,733	√	√	√
5514 - Post-production services & other motion picture and video activities		576	√	√	√
5621 - Free to air television broadcasting		7,297	√	√	√
5622 - Cable and other subscription broadcasting		1,950	√	√	√
5610 - Radio broadcasting		1,839	√	√	√
1620 - Reproduction of recorded media		1,100	√		√
5500 - Motion picture and sound recording activities, nfd		84		√	
5510 - Motion picture and video activities, nfd		217		√	
5512 – Motion picture and video distribution		401			√
5513 – Motion picture exhibition		3,058			√
5600 - Broadcasting (except internet), nfd		217		√	
5620 - Television broadcasting, nfd		71		√	
6632 – Video and other electronic media rental and hiring		2,241			√
J000 - Information media and telecommunications, nfd		1,371		√	

Note: \* as applied in Higgs and Lennon, 2014.

ANZSIC code - Name	Segments	NSW employment (2011)	Action Plan definition	'Creative intensities' definition* - this paper's definition	Victorian Creative Industries Strategy 2016-2020 definition
<b>CREATIVE SERVICES</b>					
<b>Internet and Digital Services</b>					
5910 - Internet service providers and web search portals		2,744	√		
5921 - Data processing and web hosting services		461	√		
7000 - Computer system design and related services		53,476	√	√	√
5420 - Software publishing		416	√	√	√
5700 - Internet publishing and broadcasting		1,608	√	√	√
5900 - Internet service providers, web search portals, and data processing services, nfd		32		√	
<b>Advertising</b>					
6940 - Advertising services		13,943	√	√	√
<b>Design</b>					
2591 - Jewellery and silverware manufacturing		1,099	√	√	√
6921 - Architectural services		10,408	√	√	√
6924 - Other specialised design services		9,008	√	√	√
6991 - Professional photographic services		3,395	√	√	√
<b>Possible new segments (not included in Action Plan)</b>					
1351 - Clothing manufacture		5,554			√
1352 - Footwear manufacture		428			√
8212 - Arts education		6,386			√
<b>TOTAL NSW EMPLOYMENT</b>			<b>147,600</b>	<b>146,500</b>	<b>173,600</b>

Note: \* as applied in Higgs and Lennon, 2014.

## Estimation approach

The creative industries definition picks out the industries that are creative, selected at the most detailed possible level of the ANZSIC classification system, the fourth level. However, not all published data on industries is broken down to the fourth level – often data goes only to the first or second level. This means that figures for the creative industries sometimes have to be estimated.

The basis of most estimations is data from the 2011 Census. The Census is the only data source that breaks down employment figures to the fourth level of the ANZSIC codes.

An example of how this estimation works is as follows:

- The 2011 Census tells us there were 1,099 people in NSW working in the fourth-level industry classification of 'jewellery and silverware manufacture'. This industry sits within a broader third-level grouping called 'other manufacturing', and we can calculate it accounts for 40% of employment in that broader grouping.
- The most recent labour market data from May 2017 only gives data at the third-level grouping. It tells us there were 5,473 people employed in 'other manufacturing'. We then estimate there must be around 2,189 people employed in 'jewellery and silverware manufacture' (calculated as 40% of 5,473).



## 11. References

ABS *Census of Population and Housing 2011*, accessed at <http://www.abs.gov.au/census> (last accessed August 2017).

ABS (2017) *5368.0 International Trade in Goods and Services, Australia, June 2017* Canberra: ABS.

ABS (2016) *5368.0.55.003 - International Trade: Supplementary Information, Financial Year, 2015-16* Canberra: ABS.

ABS (2017) *6291.0.55.003 Labour Force, Detailed, Quarterly, May 2017* Canberra: ABS.

ABS (2017) *8679.0 Film, Television and Digital Games, Australia, 2015-16* Canberra: ABS.

Department of Culture, Media and Sport (DCMS) (2001) *Creative industries mapping document 2001* (2<sup>nd</sup> ed) London: DCMS.

Higgs, P., Lennon, S. (2014) *Australian Creative Employment in 2011 – applying the NESTA Dynamic Mapping definition methodology* Mimeo.

IBISWorld (2016), Melbourne: IBISWorld

*IBISWorld Industry Report C1612: Printing support services in Australia*

*IBISWorld Industry Report J5412: Magazine and directory publishing in Australia*

*IBISWorld Industry Report J5413: Book publishing in Australia*

*IBISWorld Industry Report J5514: Video postproduction services in Australia*

*IBISWorld Industry Report J5621: Free-to-air television broadcasting in Australia*

*IBISWorld Industry Report J5700 Internet publishing and broadcasting in Australia*

*IBISWorld Industry Report M6942: Media Buying Agencies in Australia*

*IBISWorld Industry Report M6924: Specialised design services in Australia*

*IBISWorld Industry Report R8910: Art galleries and museums in Australia*

*IBISWorld Industry Report J5610: Radio broadcasting in Australia*

IBISWorld (2017), Melbourne: IBISWorld

*IBISWorld Industry Report C2591: Jewellery manufacturing in Australia*

*IBISWorld Industry Report J5411: Newspaper publishing in Australia*

*IBISWorld Industry Report J5420: Software publishing in Australia*

*IBISWorld Industry Report J5511: Motion picture and video production in Australia*

*IBISWorld Industry Report J5520: Music publishing and sound recording in Australia*

*IBISWorld Industry Report J6010: Libraries and archives in Australia*

*IBISWorld Industry Report J5622: Pay television in Australia*

*IBISWorld Industry Report M6921: Architectural services in Australia*

*IBISWorld Industry Report M6941: Advertising Agencies in Australia*

*IBISWorld Industry Report M6991: Professional photographic services in Australia*

*IBISWorld Industry Report M7000: Computer system design services in Australia*

*IBISWorld Industry Report R9001: Music and theatre productions in Australia*

*IBISWorld Industry Report R9003: Performing arts venues in Australia*

Labour Economics Office New South Wales, Department of Employment (2016) *ANZSCO 2321-11 Architect, New South Wales, March 2016* Sydney: Department of Employment.

Labour Economics Office New South Wales, Department of Employment (2016) *ANZSCO 3021-11 Architectural Draftsperson, New South Wales, April 2016* Sydney: Department of Employment.

NESTA (National Endowment for Science, Technology and the Arts) (2012) *A dynamic mapping of the UK's creative industries* London: NESTA.

OECD *GDP long-term forecast (indicator)* accessed at doi: 10.1787/d927bc18-en (last accessed August 2017).

RBA (2017) *Statement on Monetary Policy: August 2017* Sydney: RBA.

BYP Group

## BYP Group

BYP Group is a specialist evaluation, research and strategy consulting firm in the creative industries and social impact sectors. We work in Australia and internationally. BYP Group comprises three core principals: Jackie Bailey, Hung-Yen Yang and Sarah Penhall. We also work with a network of professionals on a project needs basis.

Our clients include the USA National Performance Network, Australia Council for the Arts, Diversity Arts Australia, Create NSW, Creative Victoria, Film Victoria, Museums & Galleries NSW, Arts Centre Melbourne, The Australian Ballet, Multicultural Arts Victoria, Asialink, Deakin University, Western Sydney University, Macquarie University, Cox Inall Ridgeway, City of Sydney, Penrith City Council, Wagga Wagga City Council and others.

We are professional members of the Australian Social and Market Research Society and the Australasian Evaluation Society. We are also members of the Federal government's select research and evaluation panel, the NSW Government's prequalified supplier list, and the Ian Potter Foundation Evaluation Panel.

## Contact Details

Jackie Bailey  
Principal  
BYP Group  
T: +61 428 576 372  
E: [jackie@bypgroup.com](mailto:jackie@bypgroup.com)  
W: <http://bypgroup.com>