FutureNow
Creative and Leisure Industries Training Council

Printing and Graphic Arts

The Printing and Graphic Arts sector facilitates the effective communication of messages through a range of media platforms and assists creative industries to deliver their products.

Current Industry Environment

During 2019-2020, there were over 5,374 printing establishments in Australia turning over $6.5 billion in revenue and employing 25,398 workers.[1] Revenue in this industry has declined over the past five years as demand for traditional print products has fallen and prices have been driven down by improved technology.[2] There are forecast to be less businesses by 2024-25, with 5,154 print establishments, $6 billion in turnover and 24,211 workers.

The Printing and Graphic Arts sector facilitates the effective communication of messages through a range of media platforms and assists creative industries to deliver their products.[3] The sector encompasses a small set of occupations including printer, print binder and finisher, printing assistant and pre-press graphic designer. Print businesses conduct printing and reprographic services such as photocopying, printing corporate documents and labels, printing packaging, and producing advertising material, magazines and newspapers.

The impact of the COVID-19 crisis on printing and printing support services in March was immediate because of significantly reduced demand in the wider business community. Print customers in publishing and the arts, sport, retail, hospitality, tourism, events and real estate were affected by government restrictions and curtailed or completely ceased operations. The sudden nationwide economic downturn led to a steep fall in advertising revenue, the financial model that allows newspapers and magazines to be published. Print orders for newspapers, magazines, signage, and catalogues were cancelled.

Strong economic growth directly impacts print turnover as buoyant retail, tourism, hospitality, business and financial services industries spend on advertising materials, labels, forms, legal contracts and annual reports.[4] At the beginning of the COVID-19 crisis, print businesses experienced acute uncertainty because of the sudden drop in demand for these services. Owners were relieved when the federal government introduced the JobKeeper wage subsidy. The combined effect of support programs, including tax relief measures and the ability to negotiate debt with banks, provided the breathing space the industry needed to wait and see if economic conditions would improve.

Despite a decline in turnover for most businesses as a result of COVID-19 restrictions, no major stand-downs or redundancies occurred in the industry in Western Australia. Businesses used government support to retain workers on reduced hours in the hope that as the economy recovers, demand for printing services will return. Industry believes turnover may only return to 80% of pre-pandemic volumes but if it does not reach this level, redundancies and cost-cutting will be considered when the wage subsidy ends.

Sector Profile

Businesses in this sector operate across the printing, printing support services and packaging services industries, with the majority (77 per cent) in the printing industry.[5] Most are small to medium enterprises, with 51% having one to nineteen employees. The majority of printing and packaging services businesses operate in New South Wales (35 per cent), Victoria (30 per cent) and Queensland (17 per cent).[6] About seven per cent of the workforce in related occupations was based in Western Australia. [7]

The largest proportion of industry products is advertising materials at 51%, but demand has declined in recent years, largely due to the availability of online alternatives and consumer concerns about the environment. Pre-pandemic the next largest product segment was newspapers and magazines at 16.3%.[8]

National employment projections had shown small estimated decreases in employment numbers from 2019 to 2024 of 2% for Binders, Finishers and Screen Printers (from 5,300 to 5,200), 3% for Printers (12,600 to 12,300), and 5% for Printing Assistants and Table Workers (from 2,000 to 1900). No change was forecast for Graphic Pre-press Trades workers (stable at 2,100). The number of Paper and Wood Processing Machine Operators grew between 2015 and 2019 from 4,000 to 9,300, and was expected to grow to 9,900 by 2024.[9] (The 2019 employment projections do not take account of any impact caused by the COVID-19 pandemic and are therefore no longer reflective of current labour market conditions. As such, they should be used, and interpreted, with extreme caution.)

Industry Developments

COVID-19 Impact

In a business survey of the print industry in May, The Real Media Collective (TRMC) found 90.48% of respondents, businesses operating in the print, paper, mail and publishing sectors, experienced considerably negative effects of COVID-19, with a 20 – 90% downturn in work, averaging a downturn of 55.28%.[10] 87.72% of businesses sought and received assistance under the JobKeeper scheme with 78.43% of those businesses having 100% of their employees on JobKeeper. 76.78% believed the JobKeeper scheme would assist in keeping workers in employment for the longer term.[11]

In Western Australia general commercial printing business declined between 50-80% because of reduced demand.[12] Signage in large format experienced major declines, for example for the real estate and events industries. Across Australia in early April, NewsCorp stopped production of 60 community newspapers as advertising fell away[13] and Australian Community Media (ACM) suspended the printing of dozens of regional newspapers in mid-April.[14] Four ACM printing sites were permanently closed in July.[15] At the end of June, the Federal government announced $50 million in support for 107 regional publishers and broadcasters under the Public Interest News Gathering program.[16] Magazine publishers like Bauer Media paused publishing seven fashion, lifestyle and celebrity magazines in early May[17] and ceased publishing them in July.[18] NewsCorp returned to printing three community newspapers in late July.[19]

There has been growth in some segments of this industry in 2020. Due to the high demand for food, cleaning products, and small signage, packaging and label printers have done well during the pandemic. Demand for printed self-adhesive vinyl floor graphics (mapping out social distancing limits) surged as retailers, shopping centres, schools, office buildings, gyms and workplaces re-opened.[20] Early in the pandemic, some 3D printers geared up to help manufacture equipment for medical staff throughout Australia.[21]

Longer term, IBISWorld predicted that COVID-19 would have a moderate effect on the printing industry due to weaker demand from a range of key markets with revenue expected to decrease by 8.2% in 2019-20, continuing the declining trend seen over the past five years.[22] If the pandemic were to be resolved, for example with a vaccine, this may be the case but as long as COVID-19 remains a concern for governments, businesses and households, demand for printing services such as catalogues, books, and magazines, is expected to decrease or remain low.

Industry support and advocacy

In early April, the Australian Manufacturer's Workers Union (AMWU), the Print and Visual Communication Association of Australia (PVCA), and Marvel Bookbinding and Print Finishing joined forces to campaign for all levels of government to shift more than $150 million of printing being sent to China, Vietnam, India and Singapore because it is cheaper, back to Australian print businesses which were sitting idle.[23] The campaign received strong industry support. Some printing returned onshore simply because overseas printers had closed.[24]

When the pandemic began to affect the industry in March, business owners struggled to understand the complexities of standing down or terminating staff, navigating government support programs and implementing JobKeeper payments. Support and information about these matters were provided through webinars facilitated by the industry peak body, the PVCA and TRMC.

Business environment

While an increase in customer demand is likely to occur as restrictions are eased, the possibility of some continued limitations and the prospect of restrictions being reimposed to control outbreaks will keep consumer and business confidence low, making a return to pre-COVID levels of demand unlikely in the short term. In Western Australia, industry fears that demand may not return to pre-pandemic levels.

TRMC's May survey revealed 85.01% of print businesses believed there was a need for ongoing business assistance to ensure future viability. As the industry's turnaround is reliant upon the turnaround of other significantly impacted sectors, this will mean a longer recovery time than will be experienced by other industries.[25]

The announcement of the federal government's extension of the JobKeeper scheme on 21 July, albeit at a reducing rate with tightened eligibility will address some of the industry's immediate concerns for businesses.

Technology, innovation and workforce restructure

Global changes in technology, particularly in digital design and production, have caused significant workforce disruption in this industry for a number of years. Turnaround times have reduced as the end-to-end processes of printing have been streamlined. As workers are freed from technical tasks they can be used elsewhere in businesses. Fewer technical specialists are needed and there are less large offset printers and more smaller businesses. The average age of workers in the sector is between 42 to 46 years while the average age across all occupations is 40 years.[26]

Advances in technology have had a significant effect on demand for printing services. Data management software provides opportunities for printers to offer value-added services like marketing and distribution. Technological developments can also cause a decline in demand for industry products and services. The relative price, quality, and convenience of in-house printing equipment reduces demand for industry printing services. The low price and high quality of small printing machines make small print runs more economical.

As a result of rapid technological and market changes, the printing and graphic arts workforce is undergoing continual readjustment. Traditional pre-press and technical printing skills are still in demand but fewer workers are required. The technical workforce has greater capacity as it is freed up by innovations that improve speed and efficiency. Employment opportunities are emerging with a potential broadening of the services offered by this sector but the skills mix will be different.

As with many other industries, the pandemic restrictions drove the quick adoption of technological solutions that had not previously been considered for this workforce, allowing owners and some employees to work from home, the conduct of business meetings through virtual rooms, attendance at industry support webinars and the capacity to connect with like organisations. Technology facilitated communication between businesses, peak bodies and government to plan and develop strategies that resulted in responses to immediate and ongoing needs.

Sustainable print

Societal attitudes towards environmental issues affect this industry. Broad concerns over issues such as waste and pollution and their effects on the environment reduce demand for print products.[27] Environmental concerns were cited by Coles supermarkets in August 2020 as the reason it ceased production of seven million weekly copies of its catalogue. The catalogue used 10,000 tonnes of paper a year, with presses producing 10 billion pages a year for the job.[28]

The PVCA has a strong focus on promoting and supporting environmentally sustainable practices in the industry and assists businesses to implement Sustainable Green Print (SGP), a three-level environmental compliance framework, based on the international standard ISO14001. SGP shows businesses how to comply with key environmental laws, manage environmental risks, develop control measures to prevent non-compliance, document actions and undertake internal audits. WA print businesses can also attain Green Stamp certification, a Department of Environmental Regulation initiative to assist with waste minimisation, reductions in energy consumption and hazardous chemical storage and handling.[29]

Workforce Opportunities

Market demand for traditional print products is, in some cases, declining while other products are presenting new opportunities. Changing consumer preferences for digital sources of traditional products has seen demand for magazines and newspapers decreasing while printed consumer advertising and packaging is increasing. Printing of food labelling and packaging (55 per cent of the packaging industry) has grown. Demand for consumer books had been expected to increase by 1% each year 2018-2022. Demand for general business products, business cards, brochures, documents and signs, was expected to grow as the number of businesses increase and 400,000 events held each year in Australia were creating a demand for signage and printed products.[30] In the short term, because of the pandemic, demand from many industries has declined. The medium to long term effect is yet to be seen.

To remain competitive, print businesses may need to identify and focus on niche products and services or offer integrated end-to-end services such as designing, marketing consultancy and distribution solutions.[31] Skills are required now in data analytics and managing databases containing personalised data. These skills provide the capability to personalise niche products. Industry anticipates being able to offer services like customising print products designed collaboratively with the consumer, targeted promotional materials, large format printing, radio frequency identification (RFID) embedded printed products, emerging products like vinyl wrap print, glass and metal printing and multi-channel marketing across a range of platforms.[32]

There is no labour shortage in this industry but there is a skills shortage. Some parts of the industry perceive it as a technical manufacturing industry, while others believe it is transforming to a visual communication industry, with skills in marketing, design, and customer service now required. Workers who now have capacity, as improved technology reduces their technical workload, are having to adapt to working in other areas of print businesses.[33]

Skills and training strategies

It is anticipated that employees required to work within multi-disciplinary communications teams need two specific sets of skills:

- Technical skills, for printers, 3D printers, printing assistants, graphic pre-press workers, and binders, finishers and screen printers
- Transferrable enterprise skills, such as managing, delivering and monitoring quality customer service; teamwork; communication; critical and creative problem-solving skills, that are about 'how' a worker operates in the workplace and can transfer across roles.[34]

Since 2013 when there were 338 enrolments in WA in printing and graphic arts qualifications, there have been fewer entrants into the industry through training. Demand for fewer workers has led to a corresponding decline in supply. Between 2015 and 2019, enrolments in technical print qualifications fell from 122 to 41, and in graphic pre-press qualifications from 112 to 91. Enrolments in technical qualifications improved slightly during 2019-2020 possibly because the RTO, Spectra Training, a South Australian training organisation, successfully established itself as a provider in the Western Australian training market.

Overall, vocational qualifications are meeting the needs of the print industry in Western Australia. The most common courses taken for print, lead to the occupations of print machinist, graphic pre-press workers, and print manufacturing occupations like binding, finishing and screen printing.[35] Graphic pre-press qualifications are delivered by North Metropolitan TAFE while print machinist and print manufacturing qualifications are delivered by Spectra Training. These training arrangements both have the support of industry.

Technological change often occurs through the purchase of expensive and complex machinery and there is a long-standing arrangement in industry for vendors of this equipment, like Fuji Xerox, to provide specialised equipment training. Employers also commonly use targeted short courses as needed, for example to skill workers in new software.

Trainees and apprentices

Apprentices and trainee numbers in Western Australia so far seem unaffected by COVID-19 restrictions that affected training, with all students able to continue. There are 30 print machinist apprentices and 10 print manufacturing (binding and finishing apprentices) in Western Australia. There is one graphic pre-press trainee. Access to workplaces had been limited for trainers with some sites closed to the public for safety reasons. The training organisation responsible for apprentices provided remote training sessions for about half the apprentices during the lockdown period. Trainers used virtual rooms to conduct assessments by observation, giving students a list of assessment requirements, with successful results.

Although no apprentices have been stood down, the crisis may affect the capacity of the industry to take on new apprentices with industry concerned about business costs because of the decline in turnover, access to the workplace for trainers and the health and safety of apprentices.

Training package restructure in 2019

A review and restructure of the Printing and Graphic Arts training package was completed in 2019 to make qualifications less technology specific, give them more descriptive and accurate titles and to reflect the need for the workforce to have transferrable skills.

Descriptive naming of qualifications should make them simpler to market to prospective students. For example, the Certificate III in Print Manufacturing has become the Certificate III in Print Binding, Finishing and Packaging.

Core units now cover transferrable skills and specialised technical skills have been moved to electives and twelve new skills sets. This will allow print organisations more flexibility to target specialisation where it is needed. The restructure has ensured qualifications are better aligned to the way the industry is now operating.

Skills required to respond to COVID-19

An ABS release , relating to the impact of COVID-19 on businesses, shows that 59% of manufacturing businesses (including printing) sought external advice about operating in COVID-19 conditions.[36] Of businesses seeking advice, the most common reason was in relation to government support measures (86%) followed by regulation and compliance (76%), health and safety (65%), management of finances (53%) and workforce management (41%).[37] These statistics align closely with the experiences of print business owners in Western Australia.

Please Get in Touch

FutureNow is seeking regular input from stakeholders about workforce matters in the Western Australian Sport and Recreaton industries. If you are interested in providing further information about the workforce in these sectors, the Industry Manager would like to hear from you.

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