



Intellectual property rights and enterprise growth

SMEs employ more people after registering IP rights

The exponential growth achieved by some small firms is a key force that propels the economy forward. A new study by IP Australia shows that after filing for IP rights, small and medium enterprise (SMEs) in Australia are more likely to experience high growth than their peers with no recent IP filings.

IP Australia has conducted research to understand the employment effects of IP activity and the role of IP rights in the growth of SMEs.

The study used data on the full population of Australian businesses, focusing on around 600,000 SMEs over the period 2002–2017. High growth SMEs were identified as those that achieve over 20% growth per annum in employment or (separately) turnover over 3 consecutive years.

Key points

- The share of Australian SMEs that own IP rights has doubled from 2% to 4% from 2002 to 2017.
- SMEs that own IP rights on average are 3.5 times larger than their peers with no IP rights and pay a higher median wage.
- All else being equal, SMEs that file for IP rights employ more people – for a firm with 100 employees, 12 extra people after adding a trade mark, 4 extra people after adding a design right, and 3 extra people after adding a patent in the 12 months after filing.
- After filing for an IP right, SMEs are 16% more likely to experience high employment growth than their peers with no recent filings.
- SMEs that file for patents, trade marks and design rights are more than 2 times more likely to achieve high turnover growth than their peers with no recent filings

IP activity indicates the growth potential of SMEs

After registering IP rights, SMEs are more likely to achieve high growth than their peers

Unlocking value within SMEs is vital for Australia to achieve a broad-based recovery from the COVID-19 pandemic. SMEs account for 99% of Australian businesses, employ 68% of Australian workers and produce 57% of Australia's Gross Domestic Product (GDP).

Patents and design rights encourage investment in innovation, which drives productivity growth. Trade marks are important tools for commercialising new products and developing a loyal customer base.

On average, SMEs that have filed for at least one of these rights in a year are 16% more likely to achieve high employment growth than their peers with no recent filings. In addition, SMEs that filed for an IP right are 10% more likely to experience high turnover growth than their peers.

SMEs face many challenges in pursuing growth. Small new businesses often lack a track record of product launches or satisfied clients to validate their potential. Investors can find it difficult to value the intangible assets on which a startup's potential is built. Prior research shows that patents and trade marks can increase a startup's likelihood of obtaining venture capital and investors' estimates of the start-up's value.

Start-ups that file for at least one IP right in their first year are twice as likely to achieve high growth than their peers that filed no rights in their first year. For policy markers and investors, IP activity is an important indicator of a start-up's future growth potential.

The SMEs most likely to achieve high growth combine patents, trade marks and designs

Sophisticated businesses often use a combination of different rights to protect different aspects of their intangible output. For a business, patents may provide the incentives needed to invest in a new technology, while trade marks protect the brands used to commercialise related products.

Compared to SMEs that file for a single type of right only, or bundles of several rights, those that file for all three types of rights – patents, trade marks and designs – are the most likely to achieve high growth. These businesses are nearly 2.5 times more likely to achieve high growth in turnover than SMEs with no recent filings and are 91% more likely to achieve high employment growth.

These results highlight the complimentary advantage of using different types of IP rights for growth. Reflecting their use in commercialisation, adding trade marks to a portfolio of rights is an especially potent signal of an SME's near-term growth potential.

SMEs that own IP rights are larger and pay a higher wage than SMEs with no IP rights

Based on economic modelling, we simulated the effect on employment of having one more of a given right, all else being equal. (Note that the greater a business's stock of a given right, the smaller the marginal benefit from obtaining an additional right.)

- For a business with 50 employees, increasing its number of trade marks from one to 2 would increase its number of employees by 6 in the 12 months after. The increase is 12 extra persons for a business with 100 initial employees.
- For a business with 50 employees, increasing its number of design rights from one to 2 would increase its number of employees by 2 in the 12 months after. The increase is 4 extra persons for a business with 100 initial employees.
- For a business with 50 employees, increasing its number of patents from one to 2 would increase its number of employees by 1 in the 12 months after. The increase is 3 extra persons for a business with 100 initial employees. The next phase of this research will assess outcomes over a longer post-filing period to better understand patent outcomes.

On average, SMEs that own IP rights are 3.5 times larger than SMEs with no IP rights (7 employees compared to 2 for SMEs with no IP rights). Rightsholders are also more remunerative, paying a higher median annual wage (\$53,755 per employee compared to \$43,304 for SMEs with no IP rights).

An increasing share of Australian SMEs use IP rights

A small share of Australian SMEs own IP rights – around 4% – but that share has doubled over 2002–2017. IP activity by SMEs is concentrated in Manufacturing and Wholesale Trade. The latter industry involves businesses that may design and develop IP in Australia that is then produced by other businesses, e.g., domestic or international manufacturers.

A key driver of growth in the use of IP by SMEs has been an upsurge in the use of trade marks. That upsurge in trade mark use is concentrated in service industries and restructured industries, such as Information Media and Telecommunications.

Conclusions

For Australian SMEs, IP rights provide an important set of tools for gaining competitive advantage in a market. They are instrumental for attracting finance, licensing and selling intellectual assets, and earning a return on intangible investment. On average, SMEs that own IP rights are larger than SMEs with no IP rights. SMEs are more likely to experience high growth than their peers after filing for new rights. Following on this research, IP Australia is investigating the drivers of SME participation in the IP system, the effect of IP activity on employee mobility, and the extent that SMEs license and sell their IP to benefit from good ideas.

IP Australia offers <u>a range of services and practical</u> <u>guidance</u> to help SMEs apply for IP rights. Our SME Case Management service will connect you with a dedicated subject matter expert to help guide you through the application and examination process. SMEs are also eligible to fast track their patent applications so they progress through examination faster. Fact sheets, case studies, online education, tools and checklists – all are <u>available at</u> <u>ipaustralia.gov.au</u>.

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