

TalkingPoints

Capturing the Growth of the Australian Technology Industry



Michael Orzano, CFA

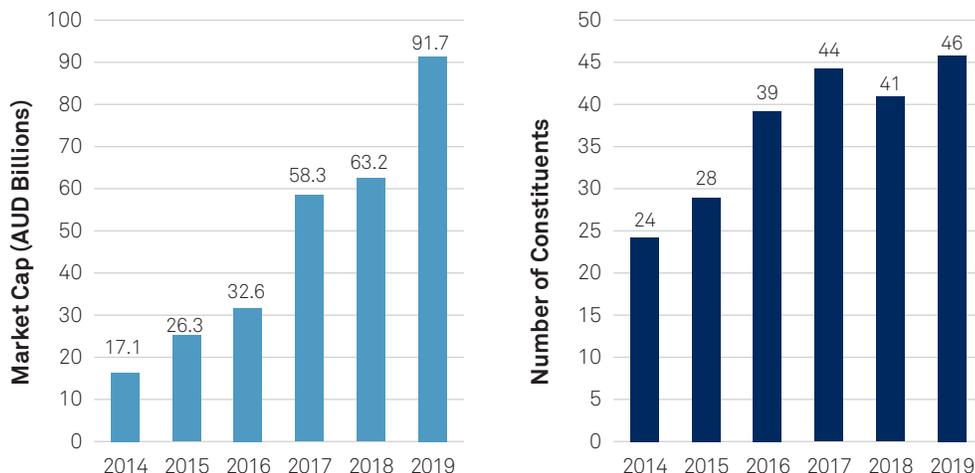
Senior Director
Global Equity Indices
S&P Dow Jones Indices

The new S&P/ASX All Technology Index highlights a unique and innovative segment of the Australian market.

1. Why is this index being introduced now?

In recent years, ASX-listed technology companies have experienced substantial growth in terms of both number of companies and market capitalization. In the past five years, the number of S&P/ASX All Technology Index constituents nearly doubled from 24 to 46, while the total market capitalization of these companies increased more than fivefold from AUD 17 billion to nearly AUD 92 billion.

Exhibit 1: Growth of the Australian Technology Industry



Source: S&P Dow Jones Indices LLC. Data based on the S&P/ASX All Technology Index and is as of the last day of each year from 2014 to 2019. Charts are provided for illustrative purposes.

In a market heavily concentrated in banks and natural resource companies, there is significant demand for an index that captures the Australian technology sector in a comprehensive yet precise way. Importantly, the technology segment measures a unique, innovative part of the market that remains a small portion of the broader Australian share universe. We also expect the index to increase the visibility of technology-related businesses listed on the ASX, which should support further growth of the sector over time.

Register to receive our latest research, education, and commentary at on.spdji.com/SignUp.

2. How does the index work?

The eligible universe is defined as all ASX-listed equity securities meeting minimum float-adjusted market cap and liquidity thresholds that are designed to capture companies beyond the S&P/ASX 300. All companies meeting these requirements and classified under the following GICS® groupings are selected for inclusion:

- Information Technology sector (45)
- Consumer Electronics subindustry (25201010)
- Internet & Direct Marketing Retail subindustry (25502020)
- Interactive Media & Services subindustry (50203010)
- Health Care Technology subindustry (35103010)

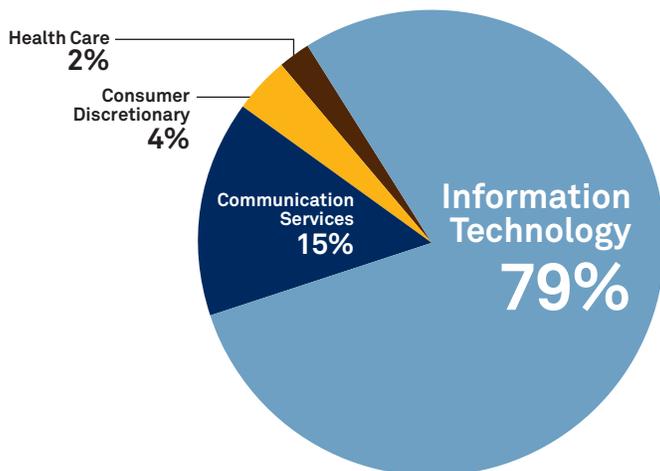
The index is weighted by float-adjusted market cap, subject to a 25% single stock cap, and is rebalanced quarterly.

3. What was the rationale for this index design?

In order to fully capture technology-driven businesses in Australia, we felt it was important to expand the scope beyond the GICS Information Technology sector. This allows the index to include other innovative technology-related industries such as health care technology and companies operating online marketplaces that are classified in other GICS sectors. Exhibits 2 and 3 illustrate the index weight exposure by GICS sector and subindustry as well as the largest index constituents.

Extending the universe beyond the S&P/ASX 300 while still incorporating meaningful investability constraints facilitates broad coverage of the sector and makes the index viable to support index-based financial products. We also chose to make IPOs eligible for addition on a quarterly basis to enable quick access to these businesses.

Exhibit 2: GICS Sector Composition



Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2019. Chart is provided for illustrative purposes.

Exhibit 3: Top 10 Constituents

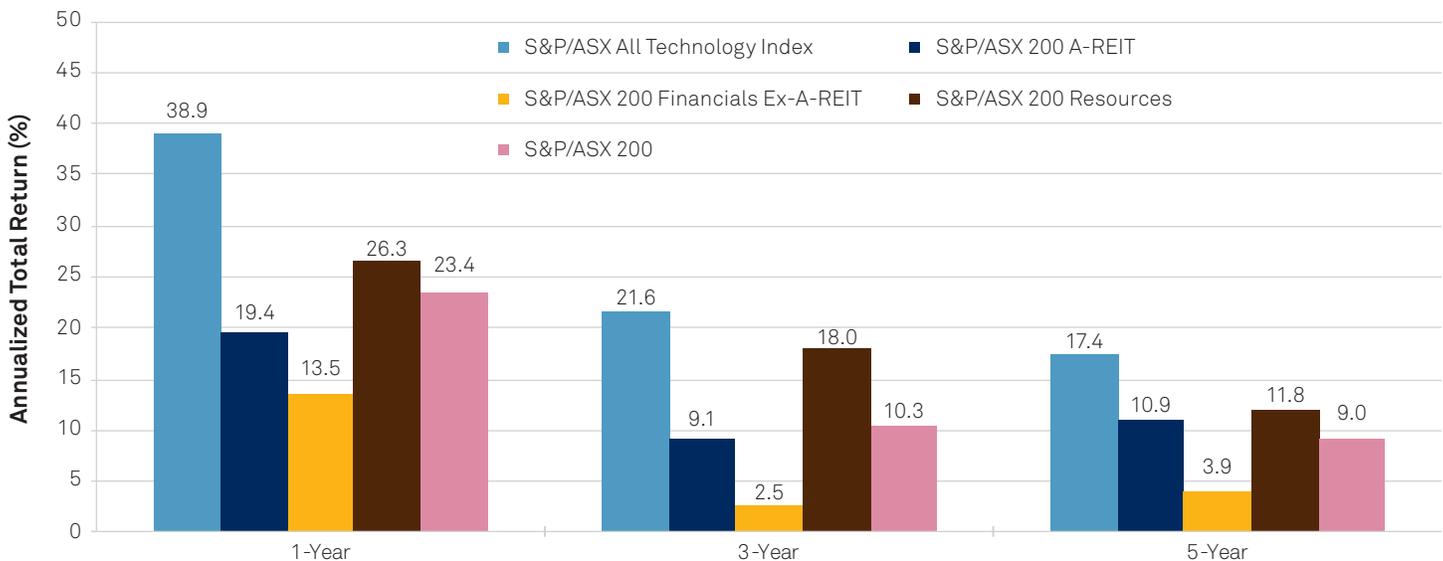
No.	Constituent	GICS Sector	Weight (%)
1	Xero Limited	Information Technology	12.8
2	Computershare	Information Technology	12.7
3	Afterpay	Information Technology	7.8
4	REA Group	Communication Services	7.6
5	Altium Limited	Information Technology	6.1
6	Carsales.com Ltd	Communication Services	6.0
7	Wisetech Global Limited	Information Technology	5.1
8	Link Administration Hldgs	Information Technology	4.6
9	NEXTDC Ltd	Information Technology	3.4
10	Appen Limited	Information Technology	3.4

Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2019. Table is provided for illustrative purposes.

4. How has the index performed historically compared with other major sectors of the Australian market?

As illustrated in Exhibit 4, the S&P/ASX All Technology Index substantially outperformed other major Australian equity sectors as well as the broader S&P/ASX 200 over the trailing one-, three-, and five-year periods ending Dec. 31, 2019.

Exhibit 4: Outperformance of the S&P/ASX All Technology Index versus Other Major Australian Sector Indices and the S&P/ASX 200



Source: S&P Dow Jones Indices LLC. Data as of Dec. 31, 2019. Index performance based on total return in AUD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

5. How can the index be used?

The index is designed to be a broad representation of technology-related businesses listed on the ASX, while also incorporating investability requirements sufficient to support index-based financial products. As a result, it defines the investable universe of technology-related companies listed on the ASX and can be used to support index-linked investment products.

6. What are the key benefits of the index?

Comprehensive Coverage of Technology Growth Theme

By reaching beyond the GICS Information Technology sector, the index includes other innovative technology-related industries such as health care technology and companies operating online marketplaces. Likewise, by including companies that have not yet graduated to the S&P/ASX 300, it offers earlier access to these smaller businesses that may have greater room for growth.

Precision

The index targets a unique, underrepresented segment of the Australian equity market. It exhibits distinct investment characteristics compared with major Australian equity sectors such as financials, real estate, and natural resources.

Liquidity

Although broad in nature, the index incorporates investability constraints designed to make it appropriate for use as an underlying benchmark for index-based investment products.

Performance Disclosure

The S&P/ASX All Technology Index was launched February 21, 2020. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. Complete index methodology details are available at www.spdji.com. Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the Index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at www.spdji.com for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

The Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices LLC maintains the Index and calculates the Index levels and performance shown or discussed, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

General Disclaimer

Copyright © 2020 S&P Dow Jones Indices LLC. All rights reserved. STANDARD & POOR'S, S&P, S&P 500, S&P 500 LOW VOLATILITY INDEX, S&P 100, S&P COMPOSITE 1500, S&P MIDCAP 400, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, S&P TARGET DATE INDICES, GICS, SPIVA, SPDR and INDEXOLOGY are registered trademarks of Standard & Poor's Financial Services LLC, a division of S&P Global ("S&P"). DOW JONES, DJ, DJIA and DOW JONES INDUSTRIAL AVERAGE are registered trademarks of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices") do not have the necessary licenses. Except for certain custom index calculation services, all information provided by S&P Dow Jones Indices is impersonal and not tailored to the needs of any person, entity or group of persons. S&P Dow Jones Indices receives compensation in connection with licensing its indices to third parties and providing custom calculation services. Past performance of an index is not an indication or guarantee of future results.

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index.

S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment product or vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public and from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, research, valuations, model, software or other application or output therefrom) or any part thereof ("Content") may be modified, reverse-engineered, reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

S&P Global keeps certain activities of its various divisions and business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions and business units of S&P Global may have information that is not available to other business units. S&P Global has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.

The Global Industry Classification Standard (GICS®) was developed by and is the exclusive property and a trademark of S&P and MSCI. Neither MSCI, S&P nor any other party involved in making or compiling any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

ASX, ALL ORDINARIES are trademarks of ASX Operations Pty Ltd. and have been licensed for use by S&P Dow Jones Indices.