

SMALL BUSINESS ONLINE

Website building
basics for Aussie
businesses

5-YEAR-OLD CODERS

AusRegistry's
Girls in ICT Day
hackathon

ONLINE PROTECTION

How to secure
your online
business

AUSTRALIAN STARTUPS

How the market
looks now & how
it's growing

SUPPORTING STARTUPS

Marisa Warren on encouraging
entrepreneurship



Protect your business from attack

Cybercrime is alive and well in today's online environment. Unauthorised access to your website could be disastrous for both your business and your clients. Protecting your .au domain name is a positive step towards peace of mind - Safeguard your .au domain today.



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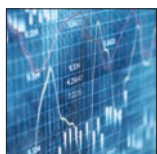
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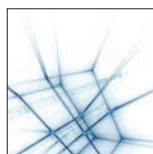
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3,132,791

.au domain names

30 June 2017



Foreword



Welcome to *Behind the Dot's* 12th edition. This quarter, we've delved into the subject of doing business online in Australia, and the variety of opportunities and challenges that presents.

Australia's startup market is growing, with increasing governmental focus and support and a wider understanding of the unique ways in which startup businesses operate. In this edition, we look deeper at the Australian startup to discover what that means in an Aussie market, and talk to some of the people and organisations supporting our country's entrepreneurs and business founders.

One such supporter is Marisa Warren, Founder and CEO of ELEVACAO Foundation which aims to empower women entrepreneurs to build successful innovation technology businesses. In this edition, Ms Warren and Michelle Bourke of Startup Victoria discuss Australia's startup community and its importance to our economy and culture as a whole.

We also explore the world of digital through the eyes of a small business, and offer some website building fundamentals for Aussie traders to move from bricks-and-mortar to online business.

In addition to this, we're excited to report on our first ever Girls in ICT Day community event. This year, to mark the international initiative, AusRegistry partnered with Girl Geek Academy to host a hackathon for 5-to-8-year-old girls at Queen of Peace Primary School in Altona Meadows. It was an incredibly successful event and a fun and engaging day, and we were thrilled to see the girls take it all on with such enthusiasm.

Finally, we bring our regular departments for *Behind the Dot* including .au Under the Microscope, .au Research and Surveys and a look at opportunities for small businesses online in .au from auDA in our Governance and Policy section.

I am pleased to present edition 12 of *Behind the Dot* magazine. As always, we welcome your feedback and input on the magazine and thank you for reading.

A handwritten signature in black ink that reads "Adrian". The signature is stylized with a large, flowing 'A' and a cursive 'drian'.

Adrian Kinderis
CEO, AusRegistry



Under the microscope

By Penelope Green – Senior Data Analyst, AusRegistry

In Australia, the requirement to provide ABNs, ACNs or similar identification for the most popular zones enhances the data available to examine business holdings of several .au namespaces. While the same entity may provide differing identification numbers or type of identification across multiple domains, it remains a reasonable proxy for distinct holders of domains. In 2017, 1,400,948 identifiable businesses hold .au domain names, accounting for many of the greater than 3.1 million domains held. (The domains not held by identifiable businesses are largely individuals in the id.au namespace, government entities in the gov.au namespace and the like.)

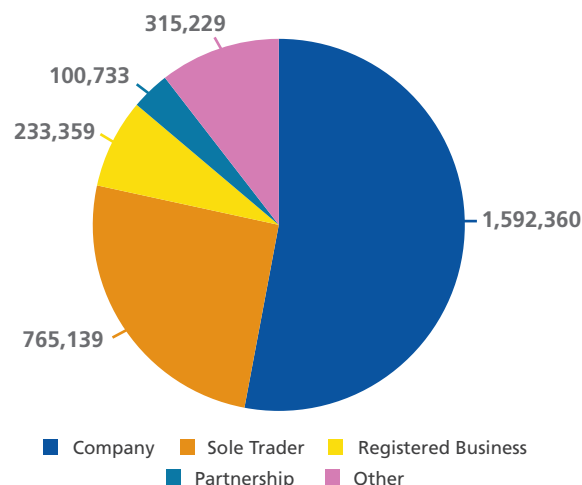
With 2,171,544¹ businesses in Australia in 2016 this suggests almost 65 percent of Australian businesses are holding a .au domain name. The vast majority of these are commercial entities holding in com.au or net.au. (However, they have not all developed their domain into a functional website with a web crawl finding that only 65.5 percent of domains resolve to a functional website² and only slightly over half of Australian businesses describe themselves as having a web presence beyond social media – see Research and Surveys on page 7.) These businesses identified as several different types of legal entity.

Registered companies represented 37 percent of operating businesses in 2016³ but held 53 percent of domains in the commercial spaces of com.au and .net.au. It is likely that as businesses grow to require the legal structures involved in company registration, they are more likely to own a domain. They are also more likely to own multiple domains as well with an average of 2.5 domains held per company with a domain name.

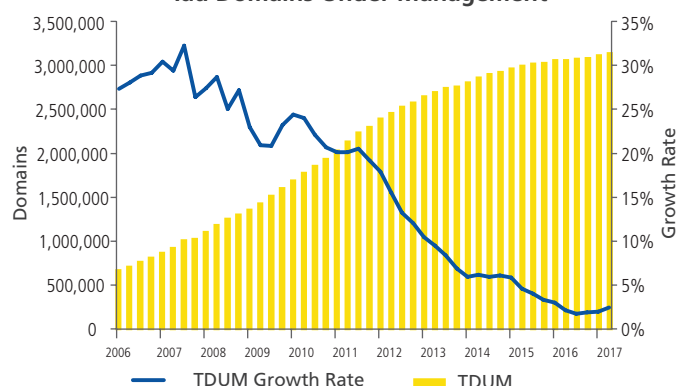
Sole traders, which represent the next biggest share of domains held in the commercial space, by nature are smaller businesses, holding about 1.7 names per business. They still held over 25 percent of domains and represent 29 percent of business domain holders, forming a considerable share of the .au community.

Businesses registered with the various states were the next largest block with partnerships forming a relatively small segment. ■

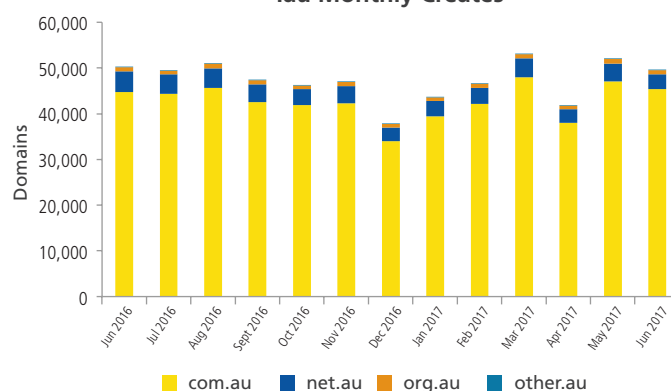
Domains by Registrant Business Type



.au Domains Under Management



.au Monthly Creates



¹ <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0>

² https://ausregistry.com.au/wp-content/uploads/2016/01/SOTD_Final_Report_Issue_5_0211_v03_lowres.pdf

³ <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8165.0>



.au research and surveys

By Penelope Green – Senior Data Analyst, AusRegistry

The ABS has conducted surveys of computer use in Australian businesses since 1987, which have developed in scope and coverage over the last 30 years. These surveys give insight into the adoption rates of information technology over time and across differing industries. Since 1998 this has included questions about businesses' web presence, with Internet-based orders and social media engagement amongst other items added along the way.

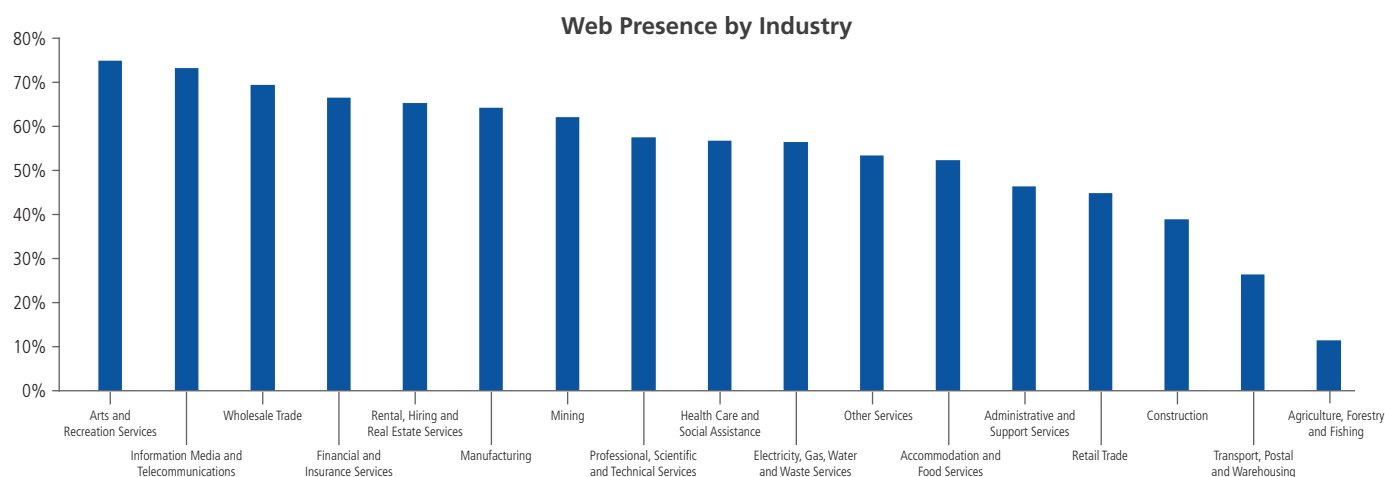
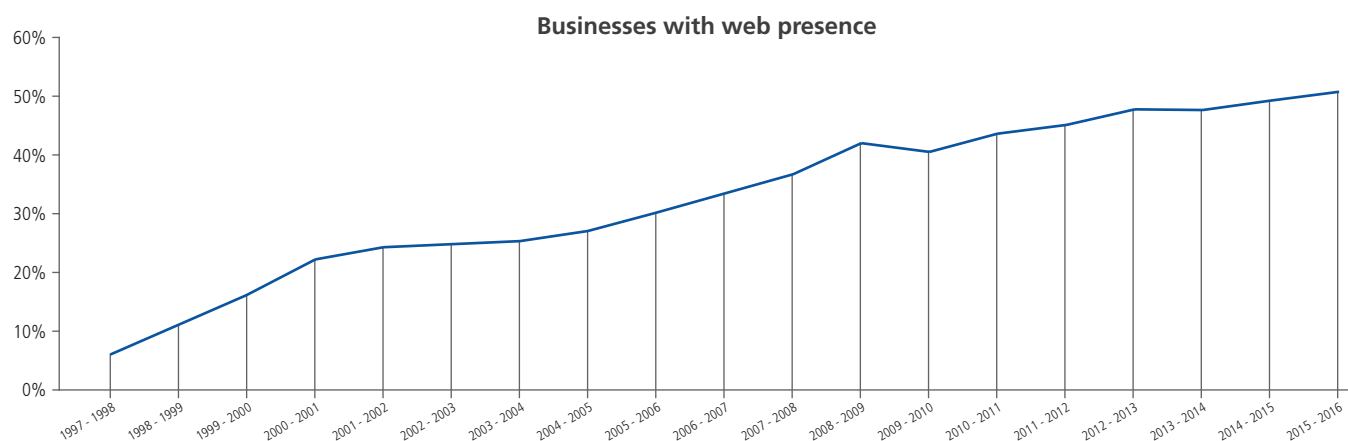
In the early years business take up of web pages and Internet-based ordering was rapid but this has now become somewhat more stable. (Social media adoption continues to rise rapidly – 38 percent of businesses reported having a social media presence in the most recent survey, up from 34 percent in the previous year and just 26.1 percent in 2013.)

The uptake of a more general web presence in particular has been relatively stable for the last three surveys and is now at just over 50 percent (the full graph is available below). This may indicate the growing maturity of the technology but a deeper examination of the data reveals that the development of a web presence is highly variable across industries.

This is partially because some industries naturally encompass a greater proportion of larger businesses – and as a business

grows its requirement and capability for its own web presence naturally increases. This seems the likely explanation for the high proportion of wholesale trade and mining companies with a web presence – neither industry has a high representation of sole traders. Other industries are highly suited to and dependent on the digital economy which seems likely to drive the high uptake by information media and telecommunications, financial and insurance services and perhaps also arts and recreation services.

The explanations of the two industries with a very low take up of web presence may be structural. With transport, postal and warehousing dominated by courier and truck drivers (often single operator businesses) sub-contracting to major firms, they may find little value in connecting their business to the wider world. Agriculture, forest and fishing likewise has a high percentage of small business operators and are likely to sell to single, large customers. It remains possible however that the largely rural nature of these businesses means they are also hampered by poorer connectivity infrastructure which would contribute to this industry having relatively low rates of internet access and broadband. ■



Data sourced from ABS publications, notably catalogues 8129 and 8166 over several years.

Getting
your
small
business
online





By Alison Coffa
Content & Communications Advisor, Neustar

Today's business landscape is no longer one dependent on bricks and mortar. More and more each day, businesses are turning their minds to digital; creating informative websites, engaging social personas and slick online stores.

In particular, setting up a business website is almost a rite of passage for today's small businesses.

But for many, taking that first step into digital business can be overwhelming. Where do I start? Is this going to cost me a fortune? How long will it take? Do I need web development skills?

While there are many options for developing a website, up to and including employing an agency to custom-build a website for you, for many small businesses the most affordable and achievable option is to use an online website builder tool.

Some of the most well-known include services like Squarespace, Wix or Weebly. However many .au Registrars also bundle website building tools alongside their hosting and domain registration services, and this helps to simplify the management of your online identity by keeping all the assets with one provider.

What to consider when building a website

Purpose

What is your website trying to achieve? Will you be hosting an online store here or do you simply want to provide information and contact details? The action you want your customer to take will greatly influence the way you structure your website. Consider what information is most important to your customers and make sure it's featured heavily.

Maintenance

How much time do you have to maintain your website? What sections will need to be updated most regularly? Consider how often your content will become outdated and if you're time-poor, think about whether elements like news or special offers can realistically be maintained. Like leaving the Christmas decorations up until February, there are few things worse for your website's image than to look out of date!

Driving traffic

When it comes to getting people to your website, a strong domain name is a good place to start. Not only does this give you a personalised, memorable call-to-action to include on all your marketing materials, but some research suggests

that keyword-rich domain names may provide a search engine optimisation (SEO) boost. On the subject of SEO, do some basic research on Google Keywords to discover what search terms people are using that relate to your industry, and make sure your site is set up well with clear headlines, meta-descriptions and SEO tags to help you stand out in search.

Analytics

To ensure your website keeps working effectively, you need to know when it's performing well and when you need to make changes. Setting up even simple analytics gives you insights into where your traffic is coming from, how long people are staying and which parts of your site are drawing the most attention. You need to know if your marketing investment is bringing customers but the site design is bouncing them away.

Social media

Many businesses start with social when they're looking to bring their operation online. A Facebook page for example can be a cost-effective way to share contact information and regular updates to your customers. However, when you're ready to build your own online presence on a platform that is uniquely yours, you can still take advantage of your previous work on social and build your website traffic further by always linking to your site in your social posts and by incorporating a social feed onto your website itself.

Design & copywriting

It can be tempting to include every bell and whistle possible when building your website, but again consider what your customers need to see. A long history of your company may be interesting, but is it vital that it's on the front page – or would that space be better used for a contact form or product catalogue? Most website builders have hundreds of attractive, versatile templates to keep your site looking clean and slick. Also, never neglect mobile! A responsive site that looks attractive and functions correctly on mobile devices is a big plus for user experience and SEO. Think about your own browsing habits and consider how you access content online – these days it's more likely to be via a smartphone or portable device.

Research has shown that small businesses in Australia have plenty of room for growth in building their online presence (see .au research & surveys on page 7). In many cases, this may be because businesses don't believe they have a need to be online, or because they don't know where to start. But with countless tools at your disposal and some basic guidelines to follow, getting your small business online doesn't have to be a challenge – and can reap some great rewards. ■

THE AUSTRALIAN START UP



By Maggie Whitnall –
Senior Client Services Manager, AusRegistry

These days a new Australian business is typically cut one of two ways, one that follows the traditional path, perhaps a hairdresser, café or motor mechanic, and then there's the startup, an enterprise that is mostly technology based, usually targeting a much larger audience, and in many instances has innovation and a desire to shake up the status quo at its core.

Startups are generally the brainchild of an entrepreneurial individual or group that combine talents, to realise their idea and achieve success; quickly. Girl Geek Academy's Sarah Moran¹ describes a startup's winning formula as a combination of hackers, hustlers and hipsters – the developer; the marketer, business development, subject matter expert, or sales expert; and the designer – each contributing to the overall product and delivery.

In Australia, the importance of startups and their contribution to the economic landscape has become very apparent in recent years. Crossroads, a 2016 report authored by StartupAUS², Australia's national non-profit startup advocacy organisation, attributes the substantial changes to the, '...result of accelerated growth in the national startup ecosystem and a notable bipartisan nationwide political shift towards innovation and entrepreneurship.'

The Federal Government's \$1.1 billion investment over four years National Innovation and Science Agenda (NISA) has recognised the drastic need to support innovation as a means to ensure economic prosperity. With respects to startups and entrepreneurs a number of schemes and initiatives³ have been developed to support innovation, removing previous road blocks and incentivising contributions from the broader community. Some of these projects include tax incentives for investors, changes to venture capital partnerships, improved insolvency laws, incubator support and a global innovation strategy.

Helping startups grow

There are a number of organisations that provide early support for startups including 'incubators' and 'accelerators'. Incubators and accelerators have become an intrinsic part of the startup landscape offering less conventional but in many ways more practical ways to get started successfully.

There are fundamental differences between incubators and accelerators. Catherine Eibner, General Manager, Start-ups at Blue Chilli Technology⁴ explains that an incubator program is more suited to startups with longer term projects, with more time to spend on the early stages of the business' development. If selected, an incubator program is likely to offer mentorship, introductions to industry, low cost office space along with a community of likeminded startups.

Accelerators on the other hand tend to speed up the growth of a business and are predominantly focused on progressing through the 'validation' stage of a business (as identified in Startup Commons' 'Startup Development Phases' communication tool shown below). Accelerator programs tend to be shorter, more structured and competitive; the mentoring is more intense; and usually there's an exchange of equity for a cash contribution.

The Australian startup under the microscope

So what does the typical Australian startup look like?

Startup Muster's annual survey of the Australian startup ecosystem measures and publishes the progress, challenges and opportunities in the startup community.

The 2016 survey⁵ found that:

- 72 percent of startups need funding to continue operating
- Financial technologies is the biggest industry for Australian startups, but not for supporters
- Government grants are unpopular
- Australian founders are not young guns and most are highly educated

¹ <http://girlgeekacademy.com>

² <https://startupaus.org/crossroads/>

³ <https://www.innovation.gov.au/audience/startups-and-entrepreneurs>

⁴ <https://www.bluechilli.com/blog/incubate-vs-accelerate>

⁵ <https://www.startupmuster.com/Startup-Muster-2016-Report.pdf>

- Startups are outsourcing to local businesses
- Australian startups are thinking global
- “Fear” is preventing would-be startup founders

The survey also found that the majority of startups in Australia are born out of New South Wales (primarily Sydney), while Queenslanders outstrip Victorian-based founders. The findings suggest that the level of support provided for startups correlates with the number of founders in that location.

The Startup community is alive and well in Australia. Government funding is playing catch up in a significant way to support the rapid growth of businesses entering the innovation space.

It can be a daunting process setting up a new enterprise. There are so many considerations that it's hard to know where to start. From the outset it's vital to seek the right advice but knowing just where to go can be half the problem.

Behind the Dot spoke with Marisa Warren from ELEVACAO Foundation and Michelle Bourke from Startup Victoria who as passionate entrepreneurs have made it their mission to help others, particularly women, on their startup journey and to support communities that foster and develop innovation and ambition.

Meet the startup supporters



MARISA WARREN
CEO, Chair and Founder,
ELEVACAO Foundation⁶

Whilst gender inequality in the tech industry is an important area of focus at present, Marisa Warren holds firm that it is women sabotaging other women that truly stops them from being equal in the workplace. Her mantra after 19 years in various tech-related roles and running her own enterprises is this – we are so much stronger when we come together, collaborate and help each other.

BtD: *So how did this successful Aussie go on to form ELEVACAO Foundation, a place that empowers women entrepreneurs to succeed in an environment firmly supported by both men and women?*

MW: I'd been working in New York City for a number of years at of prominent tech companies like Microsoft and SAP. After a chance meeting with Karen Jacobsen, the Australian voice of Siri (Apple's 'virtual assistant' technology) we discovered we both shared the same workplace frustrations and decided to film a short video entitled, 'Why Women Sabotage Each Other.' It caused quite a stir and because of that we knew we'd hit a nerve.

BtD: *Is this how ELEVACAO came into being?*

MW: Absolutely, the positive reaction to the video provided the early impetus to create ELEVACAO. ELEVACAO means 'uplift' in Portuguese which perfectly describes our philosophy. We help women to thrive and to dream big.

BtD: *How would you describe the Australian startup community?*

MW: Four years ago 'tech startup' was not in the Australian vocabulary. Now the whole startup scene has exploded.

There's a long way to go to reach the same levels of what we find in New York or Silicon Valley however ELEVACAO has had great traction in Australia.

It's so important from a cultural standpoint that we do something about nurturing this space. We have to step away from the tall poppy syndrome, and instead take a cue from the US and celebrate ambition and success, because we need startups to be successful.

BtD: *Why is the number of women in startups so low?*

MW: Some women tend to have an instinctual fear of failure. They tend to think their idea, their concept needs to be perfect - they won't think too big. There's also a fear of taking the same risks as their male counterparts.

We've also observed some of the comments that our women get from investors and noticed there is a common theme; 'is your husband involved in this?', 'when are you planning on having kids?' In fact it's even fairly common to get hit on. This is outrageous and women obviously get very flustered in that situation – and rightly so. While this is something that needs to be stamped out on a systemic level, in the meanwhile we work with women to prepare for all possible situations and how to handle yourself in challenging situations.

By way of example, I was giving pitch training to 100 people at a very high-profile blue chip company. There was a mix of men and women and you have to be very good to get into this company. At every table the women sat back and let the men be the spokesperson. It was not even acknowledged until I pointed it out. This type of behaviour has to be called out for things to change.

BtD: *Why do you think a program like ELEVACAO is necessary?*

MW: A few factors are involved. The climate is definitely shifting - it's a startup explosion. It's never been easier in history to start a business. There's a lot of funding available. However women are sick of hitting a glass ceiling and glass walls and want to take control of their lives. 95 percent of women who come to the program are already working full-time, either raising children or working in the corporate world and have started something on the side.

Our program really focuses on building the skill and capability level of these women. Even the wording we use in our communications is deliberate. So our program is for women only who can feel safe in a nurturing environment and build confidence. Even though they will ultimately be pitching to both men and women.



Startup advocate Michelle Bourke, Founder and Director of Artlivemedia⁷, Board Director of Startup Victoria⁸ and founding lead of Female Founders⁹.

BtD: *How healthy is the startup community in Australia?*

MB: Right now, the ecosystem isn't fully self-sustaining and there are still instances of startups who establish themselves internationally either because talent is

⁶ <https://www.elevacao.org>

⁷ <https://artlivemedia.com>
⁸ <https://startupvictoria.com.au>
⁹ <http://www.femalefounders.me>

scarce, money is scarce or government policy is not ideal for their sector or business model.

But I believe we are seeing the right types of support pop up where it's needed. We're also seeing many more established tech startups, from Snapchat to Zendesk, choose Australia as their APAC headquarters. Having these successful international companies nearby is critical for feeding and growing the local talent pool available to start startups.

I think we still have some work to do in terms of the image that US investors have of Australian startups. There is a perception that Australian startups don't think big enough - so when it comes to capital raising, there should be easier avenues for startups to access international capital, and for foreign investors to invest in Australian startups.

BtD: *Is there an appropriate level of support for startups in Australia?*

MB: I think startup community support has become more formal and prolific over the past three to four years. We see this as communities such as Startup Victoria have grown from a few hundred members to over 15,000, and other organisations from Startup Aus to the many accelerators, incubators, co-working spaces to the more recent government-led support including the Federal Govt Austrade Landing Pads and state based funding such as that managed by LaunchVic. These support avenues have all continued to grow in number and in sophistication.

There will always be areas where more formal support would be welcome, but it's encouraging to see that government, corporate and startup community alike, all see the concept of supporting startups as a high strategic priority at the present.

BtD: *You are a founding member of Startup Victoria's Female Founders group. Why is there a strong focus on female startups?*

MB: I think there are a number of things that are all contributing to this shift toward a focus on female-led startups including:

- » The investment community have the numbers to show that gender balanced teams perform better in IPOs and this is starting to filter back to their investment decision making process
- » Industry leaders such as Sheryl Sandberg have helped to create a platform for the conversation, especially in the tech space
- » As the share of female leaders in the corporate sector increases, the share of highly educated and experienced women available to become startup founders (who also have the networks and the money to self-fund) increases
- » Millennials see the world differently and they are showing (with their buying habits) that they want to do business with companies who care about them. So companies are realising they need not

just marketing but leadership teams that are an authentic reflection of their consumers.

- » Because of this focus across multiple areas and sectors we've seen a blossoming of support for women in high growth startups specifically, and this has given many women the confidence and the avenues to pursue their founder goals

BtD: *What is your advice to people about to begin their startup journey?*

MB: I would advise people to focus on three key elements:

1. **The team** - Be purposeful about the team you choose to bring on board and how clear your expectations of them are. Creating the right culture from the beginning is so critical - how these people are hired, how their performance is managed, and even how they leave the business will all significantly impact your ability to delegate and do the stuff that all those business books talk about: work on the business rather than in it. Even if recruitment is free, the time to train is not, so investing the time to create a strong framework around hiring, onboarding and performance management from the beginning will make it all so much easier.
2. **The financial and business model** - Most startups don't get this right the first time. You have to be prepared to pivot the business and ideally invest in financial or other reports that give you the visibility you need to actually make those decisions. Trying to find ways to generate recurring income as cash flow is what keeps every small business owner up at night, and being able to comfortably forecast revenue is like a gentle lullaby.
3. **Your niche** - The thing you're going to be better at than everyone else. Many businesses start out wanting to be a generalist, but this means you're competing with everyone. It can be tough to feel like you're giving up business, but it's an important shift to make.

BtD: *From the experience of launching your own business, are there things you would do differently or definitely do the same?*

MB: The one thing I would have done differently would have been to spend more time, earlier, learning from others in our industry. So often those who you might consider competitors are actually your colleagues. This is especially true for the highly competitive environment in which we operate. But these people are excited to share what they've learned in business, and they often have extremely sage and worthwhile advice that will save you a lot of pain!

The one thing I would do the same would be hiring a bookkeeper ASAP. We had online accounting and live bank feeds set up from the very beginning and an accounts team to ensure that everything was structured correctly. GST, BAS, IAS, P&L, forecasting - everything else became easier for that decision. ■

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5-YEAR-OLD CODERS



Women in Tech

By Alison Coffa – Marketing Comms, Neustar

AusRegistry celebrates Girls in ICT Day with 5-year-old coders

International Girls in ICT Day is a global initiative designed to inspire, empower and encourage girls and young women to improve their skills and consider careers in the fields of Information and Computer Technology.

As a future-minded technology company, AusRegistry of course sees enormous value in increasing the diversity of our industry in order to encourage a variety of opinions, experiences and skills to create better workplaces, better ideas and better outcomes for all.

In particular, as the official wholesale Registry provider for .au domain names, ensuring the future of Australia's internet and technology industry is a cause of the highest importance to AusRegistry.

To celebrate Girls in ICT Day 2017, AusRegistry partnered with Girl Geek Academy to run a '#MissMakesCode' workshop for a group of young girls at Queen of Peace Primary School in Altona Meadows.

The workshop is a first-of-its-kind 'hackathon' for girls aged between five and eight years old, created to build confidence and self-efficacy in the areas of algorithmic thinking, programming and coding.

On April 24th, 25 female students from Queen of Peace Primary attended the all-day workshop held at the school, mixing and working with other participants who ranged from Prep to Year 3.

Through a range of online and 'unplugged' activities, they were introduced to some of the basic concepts of coding, learning words such as 'algorithm', 'sequence' and 'iteration'. Using primarily drag-and-drop tools, they progressed on to creating short animations built with a series of instructions that made characters move and interact.

AusRegistry Senior Client Services Manager, Maggie Whitnall explained the event's significance to the team at AusRegistry.

"Increasing participation in technology is in perfect alignment with AusRegistry and the work we do. We are very passionate about our industry and having more women consider careers in this field so events like today are a good starting point for young girls to get a taste for coding.

"What we wanted to achieve with today's event is to be part of encouraging and inspiring young girls, letting them know they're on equal footing with the boys and just to show them how joyful, creative and inspiring technology can be."

Queen of Peace Primary teacher Josie Kirby said that the unique environment of all-girls across a range of year levels created a safe space where the students could discover something new.

"I like the way all the girls engaged in the task. The age ranges were five to eight and girls worked with each other implementing skills and information while having fun. It was non-threatening and allowed the girls to move at their own pace."

Kevin Cronin, eLearning Coach at Queen of Peace Primary said the day had inspired the girls to continue exploring technology.

"The girls were very excited when they were chosen. Now they want to learn more and more, so we've invited them to be part of an optional fortnightly code club during recess breaks. Despite only being five to eight years old, the girls were able to explain the basics of coding and further developed an appreciation for the importance of ICT."

Sarah Moran, CEO of Girl Geek Academy which recently launched its teacher training service for the #MissMakesCode program, explained that it is always rewarding to see young girls developing confidence in their technical abilities and getting involved in the activities.

"What's unique about the #MissMakesCode program is that it is an all-girl environment. That's rare in your education to have moments to just be with your girlfriends and learning together – unless you're on the netball team or another activity that is seen as more female-focused. What's really special about #MissMakesCode is that we're taking technology and creating that environment around it. We hope then that they grow up with amazing social experiences with technology."

Ms Moran explained that creating these environments of inclusion are vital not only for young girls but also more generally for women in male-dominated fields such as technology.

"Often the only difference between girls coding and boys coding is actually just the environment in which they're

exposed to it. We find that what makes a woman successful in a technology environment is just that they're happy there, and that they feel that they're welcome and included. That's something that is fundamental to being successful – that you feel like you're allowed to be."

Teacher and Girl Geek Academy projects officer Helen Sultana said that the workshop had been very successful.

"It's been fantastic. Some of them are working ahead of the class and others are just going along at their own pace. They've found it challenging at times, but once they've got it, they've got it and they can move forward."

Ms Sultana said that parents can get engaged in technology with their children in order to foster their interest in the field.

"My advice to parents would be to play with your children or work alongside them when they're using devices. Show an interest, encourage them and find out what they're doing and have a conversation with them about it."

The Girls in ICT Day event marks the 2017 major initiative for AusRegistry's Women in Technology group. Since forming in late 2016, the group has worked to develop events and programs to upskill and foster networking among AusRegistry staff as well as conducting outreach activities in the technology industry and broader community. ■

For more information on the Women in Technology group or to discuss partnership opportunities, please contact alison.coffa@ausregistry.com.au.





DNS & security

By Robin Schmitt – VP General Manager, Neustar

How to protect your business online

This article was originally written by Ruth Cooper and published on Retailbiz.com.au. It has been republished with permission.

If you're a bricks and mortar retailer, you will have systems in place to prevent theft in-store. But how can you safeguard against possible security issues with your online presence?

Retailbiz spoke to Robin Schmitt, APAC general manager of Neustar, about the best ways to protect your business when operating online.

1. Performance review

When selling online, it's vital to safeguard your website not only from a cyber-security point of view but also in terms of performance.

"Our smaller clients are interested in protecting their web presence and making sure their shop front is available," said Schmitt. "There are a number of different threats to your operation.

"Some are about performance and making sure your system is performing well, especially during peak times. We have seen retailers in the past being taken down by good marketing—they've almost been beaten by their own success."

This happened to American department store Macy's on Black Friday last year, with the retailer's site unable to handle the amount of traffic it was receiving. Rather than experiencing an easy path to purchase, customers were led to a page explaining there was 'heavier traffic than normal' with a countdown telling shoppers when they could return to the main site.

One way to handle this is to recognise when you have a major marketing campaign coming up and make sure your systems are ready. Do performance testing beforehand and put monitoring in place during the event so you know if something goes wrong.

2. In-store internet

With many retailers now offering Wi-Fi in-store, Schmitt said it is important to be aware of the associated security risks.

"Retail is becoming more experiential—you want people to come into your shopping space so you start to offer services to keep them there—and access to the internet is one of those things," he said.

"[But] it can be insecure. The last thing you want when trying to create a nice environment is to have someone surfing inappropriate sites."

To address this, Schmitt said there are services available that enable you to protect your business at the DNS (domain name server) level. This will ensure you're not allowing customers to access certain sites.

"You can set up blacklists and block out whole portions, whether that's pornography, gaming or even your competitors."

3. POS

Your point of sale (POS) system is also at risk of security breaches, which means you need to be careful about using reputable providers.

"You need to make sure you're using appropriate financial gateways," said Schmitt. "As a retailer, you need to protect yourself and ensure you are PCI [Payment Card Industry] compliant."

Making sure you can secure your financial information is extremely important. In 2015, Woolworths leaked \$1 million worth of shopping vouchers after a massive leak of customer data. While you might not be operating on the same scale, you don't want to have to inform your customers their personal data has been leaked or stolen.

"New data breach laws in Australia mean you have to announce a leak," said Schmitt. "Consider the brand impact this could have."

4. Location, location, location

Think about who you're allowing to access your (virtual) shop door. "If you have an online store, you might only provide services to a certain location," said Schmitt.

If this is the case, you can use an IP intelligence service to stop customers being able to transact based on where they are in the world.

"It depends on your business, but we see organisations use this because they have different rules and regulations they need to cater for," explained Schmitt.

"If you want to sell in Australia, there may be different restrictions to do with warnings or terms you have to show that are different in other countries. You want to sell to overseas consumers but not breach their laws—that's why you reroute the business to a local site."

5. Security threats

In November last year a large swathe of sites from Spotify to PayPal, Netflix and the New York Times were taken offline due to multiple DDoS (distributed denial-of-service) attacks. Although it's unlikely that a small retailer would be the victim of a large-scale attack, you need to understand the financial impact on your business if your site was taken offline for a period of time.

"I don't think every business needs protection [against DDoS attacks]; you really need to do an analysis of your risk," said Schmitt.

"Understand the size of your risk and then work with your DDoS mitigation partners to get the solution that matches your business.

"In bricks and mortar retail, you're going to be insured for theft based on the value of the stock you have on the floor—you're not going to pay a big premium, you're going to pay a premium based on the amount you could lose. This is the same online." ■

MEMBER BENEFITS

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Governance & policy

By Richard McKenzie – Marketing and Research Co-ordinator, auDA

Small Business Opportunities Online

It almost goes without saying that small and medium-sized businesses (SMBs) make a considerable contribution to the Australian economy. In 2014–15, SMBs generated significant activity, contributing \$608 billion to the economy, according to the Deloitte Access Economics report, *Connected Small Businesses 2016*. SMBs also employ more than 7.2 million workers, representing more than two-thirds of private sector employment. Despite their vital place in the national economy, more than 90 percent of SMBs are not taking full advantage of today's digital tools to grow their businesses. This lack of digital engagement places these SMBs at a distinct disadvantage compared to their tech-savvy competitors.

SMBs encompass a diversity of enterprises, from the local family-owned milk bar, to the national retail chain with 180 employees — and everything in between. Unsurprisingly, it's the very small businesses (of five or fewer employees) most wary of using digital tools. According to the Redshift Research *Small Business Survey 2015*, 61 percent of Australian very small businesses do not have a website, with business owners believing their businesses are too small to warrant an online presence. However, even the smallest businesses can benefit from having a .au domain name, even if the owner isn't ready to build a website.

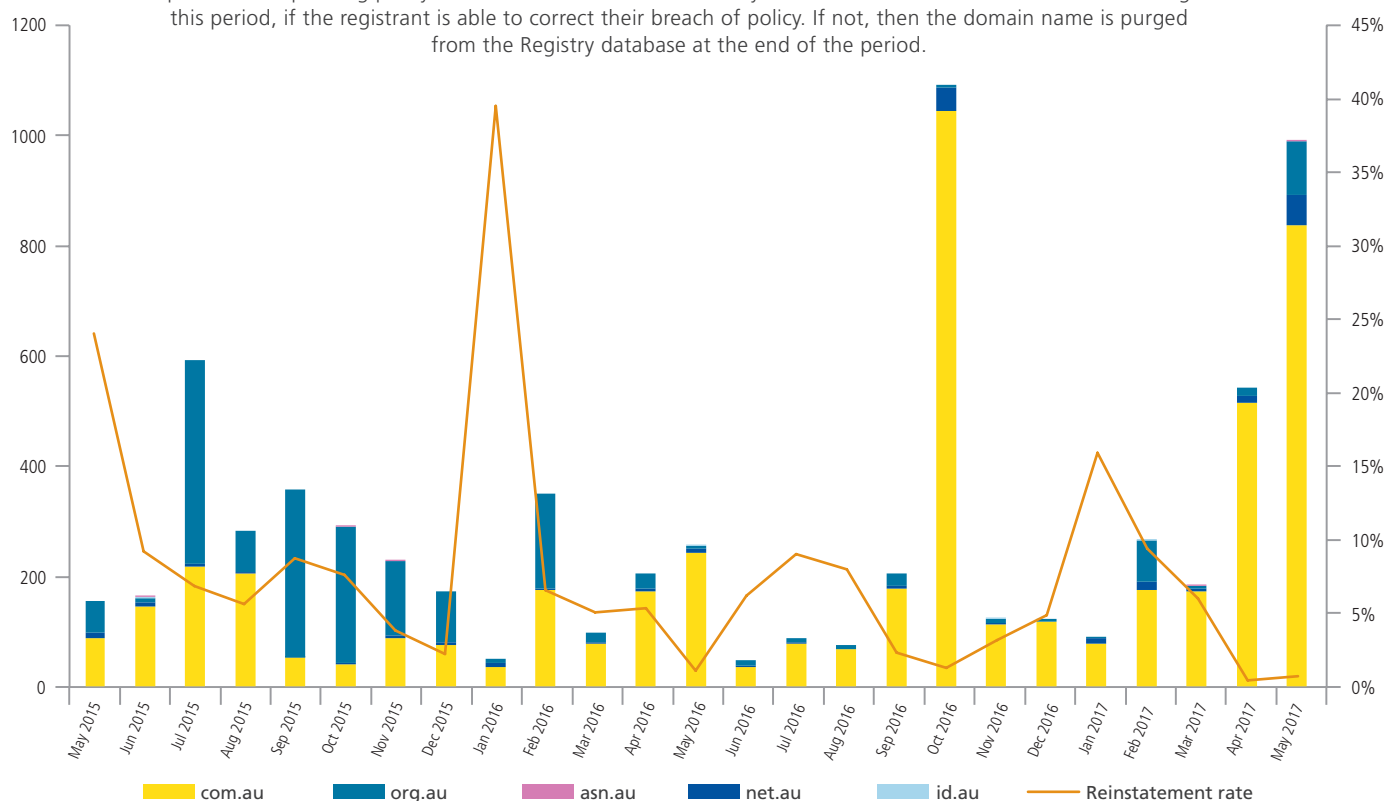
One of the most obvious non-website benefits of a domain name is the ability to create a more professional-looking

email address — bob@bobsplumbing.com.au is more likely to fill prospective clients with confidence than bobsmith_is_awesome99@hotmail.com. And when Bob is ready to build a website, he can feel safe in the knowledge that a .au domain name is more widely recognised and trusted in Australia. Website building isn't the dark art it once may have seemed. There are many cheap and easy template-driven solutions available through registrars and other providers. Even if Bob's website contains only contact details, opening hours and a brief overview of the business and customer endorsements, it puts him ahead of the many businesses without any web presence. It really is an easy way to increase exposure to your target consumer in a cost efficient way.

Convincing SMBs of the value of digital tools broadly and, more specifically, the .au domain name is a responsibility every stakeholder in the .au industry should enthusiastically support. Not only does more digitally-savvy SMBs create better customer experiences, it helps create a more innovative and diverse small business sector that can make an even greater contribution to the national economy. SMBs with advanced levels of digital engagement are 1.5 times more likely to be growing revenue, 8 times more likely to be creating jobs and have a more diversified customer base, compared to those with basic levels of digital engagement. Makes sense, doesn't it? ■

.au Policy Deletes (and Reinstatement Rate)

When auDA or the Registrar of record deletes a domain name for breach of policy, the domain name is placed into "pending policy delete" status for 14 calendar days. The domain name can be reinstated during this period, if the registrant is able to correct their breach of policy. If not, then the domain name is purged from the Registry database at the end of the period.



An aerial photograph of a city grid, likely New York City, showing a dense arrangement of buildings and streets. A large green rectangular overlay is positioned in the upper-left quadrant of the image. The text "The Connected World Is Here. How's Your Security?" is written in white, bold, sans-serif font within this green area. The left edge of the image features a white grid pattern that extends vertically.

The Connected World Is Here. How's Your Security?

Products and services. Communications and commerce. You are connected to the world and the world is connected to you. This creates unprecedented opportunities at the price of bringing new risks. As the leader in Connection Science, Neustar knows what it means and what it takes to guard your business. We can help you make the decisions that empower you to safely and confidently connect people, places, and things so you can build a smart and secure connected customer experience.

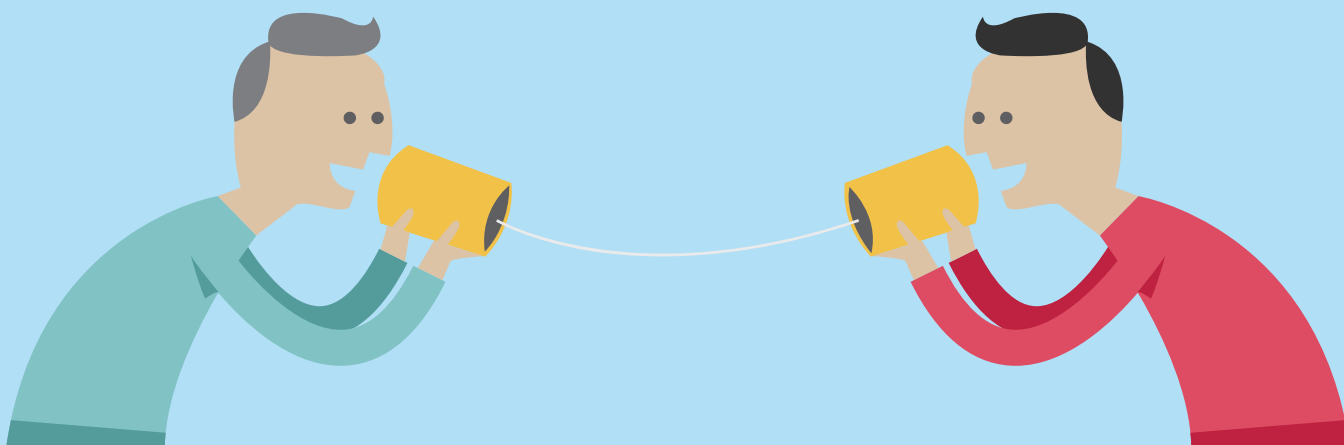
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Channel talk

“ *When do most customers decide to purchase a domain name?* ”



LIZ KEYS

cheaperdomains.com.au

In my experience, most domain registrations occur during the initial startup of a business. I've noticed this particularly with small business startups, once they have registered their ABN/ACN the next likely step is securing a domain name.

On some occasions domain registration may be delayed, generally because they have not entirely decided on the business name or model yet.

Other reasons to register domain names would be to protect the brand of trademark holders or to cover variations of their name or products to further secure their business.

JULIE DOUBINSKI

melbourneit.com.au

Your domain name is your brand identity online. It's important to choose one that fits your business and has a clear connection to your business name. I think the mistake many people make is registering a domain name without putting much thought into it.

The best time to register your domain name is as soon as possible – immediately after you register your

business name or have chosen the name for your new product. As awareness of your business and products grows, it will be easier for potential customers to find you. A good domain name protects your business from competitors and helps to leverage your brand.

Here are some tips to consider when choosing the best domain name for your business: choose easily recognisable domains over generic ones, try to keep it under 14 characters, make sure it's easy to spell and pronounce, avoid using hyphens and numbers and include keywords to assist SEO.

GAVIN GIBSON

crazydomains.com.au

I think most people decide on their domain name when they have the idea to set up their online business, personal website or email.

Personally, I think naming too early in the idea stage can lead to some pretty terrible domain names that get immortalised on business cards for years.

The best time to register a name is after you've researched the terms people are likely to consider when it comes to your line of business. Know more about your

target audience, and then brainstorm before deciding. That's how you know you've looked at the angles and seen the value of your domain!

Unfortunately, Australian domain customers cannot register a .au without a ABN, so many are forced to incorporate or register a business before they can secure their business idea or product concept. It goes against the normal start-up flow and likely pushes potential .au customers to competing TLDs to avoid this restriction. Once someone chooses a domain name and establishes their online presence it is difficult to move. The .au namespace loses out and so does the business owner by not connecting their business to Australia's online identity. ■

Want to contribute to the next 'Channel Talk' feature?

Channel Talk compiled by Courtney Fabian and Lucian Popaly. To contribute to Channel Talk, please contact behindthedot@ausregistry.com.au.

Glossary

Abbreviations

APNIC

Asia-Pacific Network Information Centre

APTLD

Asia-Pacific Top Level Domain Association

auDA

.au Domain Administration

ccTLD

Country Code Top Level Domain

DNS

Domain Name System

DNSSEC

Domain Name System Security Extensions

EPP

Extensible Provisioning Protocol

gTLD

Generic Top level Domain

IANA

Internet Assigned Numbers Authority

ICANN

Internet Corporation for Assigned Names and Numbers

ICT

Information and Communications Technology

IDN

Internationalised Domain Name

IP

Internet Protocol

TDUM

Total Domains Under Management

TLD

Top-Level Domain

WHOIS

A combined phrase to denote 'who is'

Definitions

Asia-Pacific Top Level Domain Association (APTLD)

APTLD is an organisation for ccTLD registries in Asia-Pacific region. APTLD was originally established in 1998, and in 2003 legally established in Malaysia. APTLD works as the forum of information exchange regarding technological and operational issues of domain name registries in Asia-Pacific region.

.au Domain Administration (auDA)

The policy authority and industry self-regulatory body for the .au domain space.

.auLOCKDOWN

.auLOCKDOWN a security measure for .au domain names that provides an added level of security for domain name Registrants.

Domain names are locked at the Registry level, and changes are only possible through direct communication between the Registrar authorised contact and the Registry, by following a strict authentication process.

AusRegistry

The Registry Operator for the open 2LDs (com.au, net.au, org.au, asn.au, and id.au); the community geographic 2LDs (act.au, nsw.au, nt.au, qld.au, sa.au, tas.au, vic.au and wa.au); and two closed 2LDs (edu.au and gov.au).

Country Code Top Level Domain (ccTLD)

A TLD that is used to represent a country or external territory. Some examples of ccTLDs are '.uk' for the United Kingdom, and '.au' for Australia.

Distributed Denial of Service (DDoS)

Distributed Denial of Service is an attempt to make an online service unavailable by overwhelming it with traffic from multiple sources.

Domain Name

An identification string that defines a realm of administrative autonomy, authority, or control on the Internet. Domain names are formed by the rules and procedures of the DNS. Any name registered in the DNS is a domain name.

Domain Name System (DNS)

A hierarchical distributed naming system for computers, services, or any resource connected to the Internet or a private network. It associates various information with domain names assigned to each of the participating entities. Most prominently, it translates easily memorised domain names to the numerical Internet Protocol (IP) addresses needed for the purpose of locating computer services and devices worldwide.

Domain Name System Security Extensions (DNSSEC)

Domain Name System Security Extensions (DNSSEC) is a security extension that facilitates the digital signing of Internet communications, helping to ensure the integrity and authenticity of transmitted data.

EPP

Extensible Provisioning Protocol is a flexible protocol designed for allocating objects within technical registries over the Internet.

Internationalised Domain Name (IDN)


A domain name that includes characters from scripts other than the 26 letters of the Latin alphabet (a–z). An IDN can contain Latin letters with diacritical marks, or may consist of characters from non-Latin scripts.

Internet Assigned Numbers Authority (IANA)

A department of ICANN, which oversees global Internet Protocol (IP) address allocation, autonomous system number allocation, root zone management in the DNS, media types, and other IP-related symbols and numbers.

Information and Communications Technology - ICT

ICT refers to technologies that provide access to information through telecommunications. It is similar to Information Technology (IT), but focuses primarily on communication technologies. This includes the Internet, wireless networks, cell phones, and other communication mediums.



Internet Corporation for Assigned Names and Numbers (ICANN)

The global DNS administrator, formed in 1998, is a non-profit public-benefit corporation with global participants dedicated to keeping the Internet secure, stable and interoperable. It promotes competition and develops policy on the Internet's unique identifiers.

Internet Protocol (IP) Address

An IP Address is the numerical address by which a location in the Internet is identified. Computers on the Internet use IP Addresses to route traffic and establish connections among themselves; people generally use the human-friendly names made possible by the Domain Name System.

Registrant

An entity or individual that holds a domain name licence.

Registrar

An entity that registers domain names for Registrants and in the case of the .au ccTLD, is accredited by auDA.

Registry

The registry comprises of a database of domain names registered in each 2LD and a public WHOIS service for looking up the identity of the registrant of a domain name.

Reseller

An entity appointed by accredited Registrars to increase the retail channel of .au domain names.

Second Level Domain (2LD)

The alphanumeric string before the dot and the TLD. AusRegistry is the Registry Operator for the open 2LDs (asn.au, com.au, id.au, net.au and org.au); the community geographic 2LDs (act.au, nsw.au, nt.au, qld.au, sa.au, tas.au, vic.au and wa.au); and two closed 2LDs (edu.au and gov.au).

Seed Funding

Seed Funding is a form of securities offering in which an investor invests capital in exchange for an equity stake in a startup. It generally occurs in the early stages of a company's development.

Series Funding

Series Funding is a form of securities offering in which an investor invests capital in a startup. Typically the corresponding series letter i.e. Series A, B, or C denotes the development stage of the companies that are raising capital.

Startup

A startup is a newly established business, typically an entrepreneurial enterprise that is technology based, innovation focused and usually targeting a large audience.

WHOIS

WHOIS (a combined phrase to denote 'who is') is a query and response protocol that is standard within the Domain Name Industry for querying Registry databases to determine certain information about a particular Domain Name.

Total Domains Under Management (TDUM)

Total number of domain names registered in the namespace.

Zone

A portion of the namespace in the DNS for which administrative responsibility has been delegated.

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