

The rapid rise of 'the cloud'

What is cloud computing? Simply put, cloud computing is the delivery of computing services, including computer servers, storage, databases, networking, software, analytics, and intelligence, over the Internet ('the cloud'). Users of cloud computing typically pay only for cloud services they use.

You probably use cloud computing every day, even if you do not realize it. If you use an online service to send email, edit documents, watch movies or TV, listen to music, play games, or store pictures and other files, it is likely that cloud computing is making it all possible behind the scenes.

The first cloud computing services are barely a decade old, but already a variety of organizations from tiny start-ups to global corporations and government agencies are embracing the technology.

Benefits of cloud computing

Cloud computing is a big shift from the traditional way businesses think about IT resources. Here are seven common reasons organizations are turning to cloud computing services:

Cost - Cloud computing eliminates the capital expense of buying hardware and software and setting up and running on-site datacentres with their racks of servers, electricity for power and cooling, and the IT experts for managing the infrastructure.

Speed - Most cloud services are self-service and on demand, so even vast amounts of computing resources can be provisioned in minutes, typically with just a few mouse clicks, giving businesses a lot of flexibility and taking the pressure off capacity planning.

Performance - The biggest cloud services run on world-wide networks of secure datacentres, which are regularly upgraded to the latest generation of fast and efficient computing hardware. This offers several benefits over a single corporate datacentre, including reduced network latency for applications and greater economies of scale.

Reliability - Cloud computing makes data backup, disaster recovery, and business continuity easier and less expensive because data can be mirrored at multiple redundant sites on the cloud provider's network.

Productivity - On-site datacentres typically require extensive hardware setup, software patching, and other time-consuming IT management tasks. Cloud computing removes these requirements, so IT teams can spend time on achieving more important business goals.

Global scale - Benefits of cloud services include the ability to scale elastically. This means having the flexibility to access more or less computing power, storage, bandwidth when needed.

Security - Many cloud providers offer a broad set of policies, technologies and controls that strengthen overall security for users, helping protect users' data, apps and infrastructure from potential threats.

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Types of cloud computing

There are three different ways to deploy cloud services:

Public cloud owned and operated by third-party cloud service providers such as Amazon, Microsoft and Google. Delivers computer servers and storage resources over the Internet accessed by using a web browser. All hardware, software and supporting infrastructure is owned and managed by the cloud provider.

Private cloud refers to cloud computing resources used exclusively by a single business or organization. Can be physically located on the company's on-site datacentre or hosted by a third-party service provider. Services and infrastructure are maintained on a private network.

Hybrid cloud combines public and private clouds. Data and applications can be shared across both clouds. Gives businesses greater flexibility, more deployment options and optimizes existing infrastructure, security & compliance.

There are three types of cloud services

Infrastructure as a service (IaaS) - Users rent IT infrastructure - servers, storage, networks, operating systems - from a cloud provider on a pay-as-you-go basis.

Platform as a service (PaaS) - Cloud environment with on-demand development, testing, delivery and management of software applications. Makes it easier for developers to quickly create web or mobile apps, without worrying about setting up or managing the underlying infrastructure of servers, storage and network needed for development.

Software as a service (SaaS) - Delivers software applications on demand via web browser access over the Internet usually on a subscription basis. Providers host and manage the software application and underlying infrastructure and handle maintenance, software upgrades and security patching.

The future of cloud

Within the next three years, 75 percent of existing non-cloud applications will move to the cloud.

Companies are rapidly adopting the use of cloud environments, moving beyond low-end infrastructure as a service to establishing higher business value by employing state-of-the-art but cost-effective software, analytics and artificial intelligence from the cloud to make their businesses far more productive, efficient and secure.

Email tips to keep you and your family safe from cybercrime

The internet has changed the way we live – from shopping and banking to connecting with friends and getting the news. As a result, it's easier for hackers to get access to your personal information.

Email is a fast and convenient way to receive communications – but it's also a common way for cybercriminals to target people with scams, phishing or malware, which can result in financial loss or other negative consequences. Types of cybercrime include:

Online scams - Schemes that offer you a solicitous deal, such as a free or cheap holiday, that turns out to be dishonest or non-existent.

Identity fraud - Illegally accessing your personal information to pretend to be you in order to carry out fraudulent activities, such as trying to access your bank accounts or opening a credit card in your name.

Malware & ransomware - Malicious software designed to gain unauthorised access to your computer. Typically used to steal or destroy data, or to prevent you from being able to access your files, holding them to 'ransom' and extorting you for payment.

Phishing - An email pretending to be from a legitimate, trusted company, such as a bank or other service provider, that attempts to trick you into providing personal or financial information.

Here are easy steps you can take to keep yourself and your family safe online.

Think before you click

- Your bank will never send you an email asking for your online banking details.
- Cybercriminals often use a company's name and logo. Contact the company by phone if you suspect the email is a scam.
- Phishing emails may contain bad spelling and grammar or come from a peculiar email address.
- Don't open an attachment if you can't verify who sent it to you.
- Your anti-virus software may be able to scan an attachment for viruses or spyware.
- Only click on links if you recognise and trust the web address it will take you to.

Email security checklist

- Make sure your firewall and security software are running the latest updates, and ensure your operating system is up-to-date with the latest patches.
- Check if spam filtering is activated on your email account.
- Consider setting up a separate email address for mailing lists, online shopping and marketing emails.
- Turn off the 'automatic download' function in your email settings to ensure malicious attachments aren't infiltrating your machine without your knowledge.

Six key value propositions a financial adviser provides

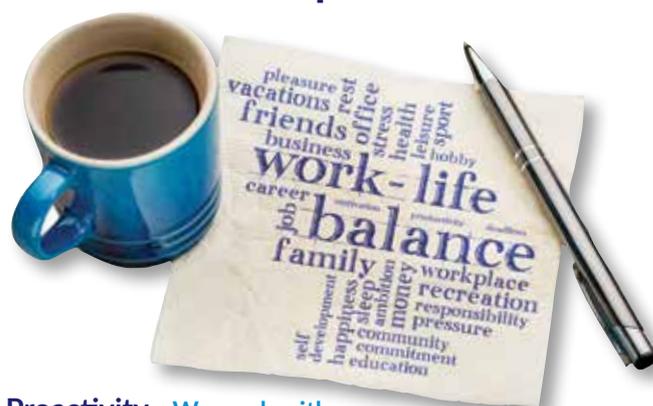
As your financial advisers there are important intangibles we strive to provide that are hard to quantify at times.

We believe Financial Life planning pioneer, Mitch Anthony, who recently articulated the true client-centric value proposition of financial planning paints a clear picture. He suggests there are six key value propositions of financial planning that are more about improving a client's 'Return On Life' rather than the traditional approach of just improving a client's portfolio ROI. These are:

Organization - We will help bring order to your financial life, by assisting you in getting your financial house in order (at both the macro level of investments, insurance, estate, taxes, etc., and also the micro level of household cash flow).

Accountability - We will help you follow through on financial commitments, by working with you to prioritize your goals, show you the steps you need to take, and regularly review your progress towards achieving them.

Objectivity - We bring insight from the outside to help you avoid emotionally driven decisions in important money matters, by being available to consult with you at key moments of decision-making, doing the research necessary to ensure you have all the information, and managing and disclosing any of our own potential conflicts of interest.



Proactivity - We work with you to anticipate your life transitions and to be financially prepared for them, by regularly assessing any potential life transitions that might be approaching and creating the action plan necessary to address and manage these ahead of time.

Education - We will explore what specific knowledge will be needed to succeed in your situation, by thoroughly understanding your situation, then providing the necessary resources to facilitate your decisions, and explaining the options and risks associated with each choice.

Partnership - We attempt to help you achieve the best life possible but will work in concert with you, not just for you, to make this possible, by taking the time to clearly understand your background, philosophy, needs and objectives, work collaboratively with you and on your behalf (with your permission), and offer transparency around our own costs and compensation.

The 'average' retiree is now self-funded

Australia has reached a major milestone, with most new retirees having enough savings to be self-funded rather than reliant on the age pension, new research shows.

More than half of 66-year-olds were not accessing the age pension at December 2018 because their assets and income were too high, while 20 per cent were on a part pension. Only 25 per cent were drawing a full age pension.

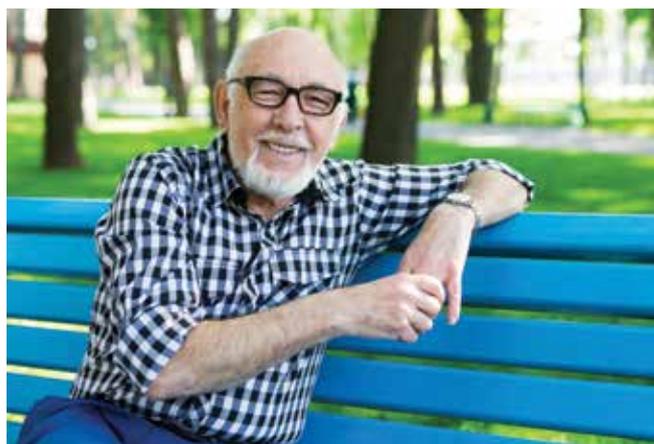
According to Jeremy Cooper, chairman of retirement income at Challenger who conducted a review of the super system for the then Labor government in 2009, the

figures are proof the superannuation system is working. "Contrary to many opinions, super is reducing reliance on the age pension for the large majority of people entering retirement," he says in a report published today. "The evidence for this is that the average newly retired Australian is not accessing the age pension at all."

The age at which people become eligible to apply for the means-tested age pension increased to 65.5 in July 2017 and will rise again to 66 on July 1. It has been 27 years since the introduction of compulsory super and the average consolidated balance for singles approaching retirement (that is, those aged 60 to 64) exceeded \$300,000 in 2016-17.

At the household level the average would be \$400,000, which Challenger estimates will rise to \$600,000 in five years (not discounted for inflation).

Debate about whether to push ahead with a legislated increase in the super guarantee from 9.5 per cent to 12 per cent is expected to form part of a pending government review of retirement incomes.



Actuarial consultancy firm Rice Warner argues the ideal rate to provide most Australians with adequate retirement income is higher than 10 per cent but less than 15 per cent.

Others, notably the Grattan Institute, insist the rate should be frozen at 9.5 per cent because tax concessions associated with an increase to 12 per cent will outweigh any savings in the age pension bill until about 2060.

The superannuation industry says single people who own their own home and are in relatively good health need \$454,000 in savings (and couples \$640,000) to achieve

a comfortable retirement. A lump sum in this vicinity would allow for annual spending of \$42,953 for singles and \$60,604 for couples. This level of spending would include access to a part Age Pension as part of this spending amount.

The Association of Superannuation Funds of Australia defines 'comfortable' as being able to pursue a range of leisure and recreational activities, as well as afford private health insurance and occasional international holidays.

Talk to your Intralink adviser if you have any concerns around your superannuation or retirement planning.

Understanding fixed income investing

At Intralink our investment strategy includes constantly reviewing the range of asset types and classes that may be most appropriate for your portfolio. With cash rates so low fixed income is an asset option that offers considerable benefits.

Fixed income is a broad asset class that includes government bonds, municipal bonds, corporate bonds, and asset-backed securities such as mortgage-backed bonds. They're called fixed income because these assets provide a return in the form of fixed periodic payments. In general terms, fixed income investing can potentially provide investors with benefits such as assets with a focus on capital preservation, income generation and diversification.

Fixed income comes in many forms

Historically investors had a limited choice of fixed income securities; most were government bonds. Over the past 20 years there has been a significant increase in the types of fixed income investments on the market.

Fixed income investments and their relative risk levels

Type	Description	Risk Profile
Government	Government bonds are also known as Sovereigns and Treasuries. Governments issue bonds to pay for government activities and pay off their debt obligations.	Low to moderate risk, depending on term length (1 year Government bonds typically have the lowest risk)
Semi Government or Agency	Government agencies issue bonds to support their mandates, typically to ensure that various constituencies have access to sufficient credit at affordable rates.	Moderate risk
Corporate	Corporate bonds are also referred to as credit. Corporations issue bonds to expand, modernise, cover expenses and finance other activities.	Moderate to high risk
Asset-backed	Banks and other lending institutions pool assets, such as mortgages, and offer them as security to investors. This raises money so the institutions can offer more mortgages.	Moderate to high risk
High-yield debt	High-yield debt (high-yield bonds), are fixed income securities that are described by investment ratings agencies as 'below investment grade'. They are usually issued by corporations, and they pay higher rates of return to compensate for their higher risk.	High risk

Understanding fixed income yields

The yield in any investment is the income return on that investment. In the case of fixed income it is usually the interest received from a security expressed as an annual percentage. The yield is generally higher for corporate

bonds compared with government bonds. This is because the perceived risk for investing in corporate bonds is higher.

Talk to your Intralink adviser about the role fixed income investments can play in your overall portfolio.