

“The future ain’t what it used to be”

Yogi Berra

Welcome! If one can believe the news, Covid numbers are dropping and several analysts suggest that inflation may be slowing. In July, Fortune magazine reported that the majority of CEOs (67% in their poll) believe a recession is coming, but only a small minority (15%) are pessimistic about prospects for their own companies and industries.

According to The Wall Street Journal, “If the economy is in a recession, it’s a very strange one”.

And in an interesting and probably permanent change reflecting where we work, Accor Hotels reports that pre-pandemic, Sunday nights were usually the quietest. Now they can be the busiest, as people are staying four-five nights, not just two over the weekend.

Congratulations to one of my US-based clients, [Phylum](#), on winning the Innovation Spotlight competition, held at the 25th Black Hat USA conference in Las Vegas. [LINK](#)

This month, we contrast the financial results from nbn and Telstra, show how AI is accelerating and democratising software development and consider the MSP opportunity for cybersecurity in the SMB market in 2022.

Previous Newsletters, including this one, are available on our site in pdf [HERE](#)

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Telstra EBITDA drops 5% while nbn skyrockets 130%

[LINK1](#) [LINK2](#)

Within two days this month, both Telstra and nbn announced their FY22 financial results. The numbers further reinforce the ‘changing of the guard’ from one monopoly to another and mark a completely different regulatory and technology framework in Australian telecommunications that began over 15 years ago.

The numbers highlight several significant changing characteristics in the market including:

Nbn:

- 76 percent of subscribers are now on 50/20 Mbps or above
- Increasing success in the business market with revenue up \$1 billion



Telstra:

- Data & Connectivity declined a hefty 13.3 percent – attributed by Vicky Brady, the incoming CEO, to the effects of competition and increasing use of SD-WAN - *I know of one large enterprise that brought down their WAN expense by a factor of 10 (!) due to exactly this*
- Brady singled out mobile EBITDA as the telco’s key long-term growth driver. Mobile EBITDA grew 21.2 percent. *Is Telstra now just a mobile operator?*
- Managed Services and maintenance grew 10% to \$738 million
- Professional Services grew 16.7 percent to \$439 million.

FY22	Telstra		nbn	
Revenue	\$22.0B	-4.7%	\$5.1B	10%
EBITDA	\$7.3B	-5%	\$3.1B	130%

With stellar nbn results, what a good opportunity for Australian broadband services and prices to be made more globally competitive! Hopefully we will see this reflected in the new Special Access Undertaking (SAU) currently under negotiation.

Gmail tries to finish sentences, Copilot tries to finish code

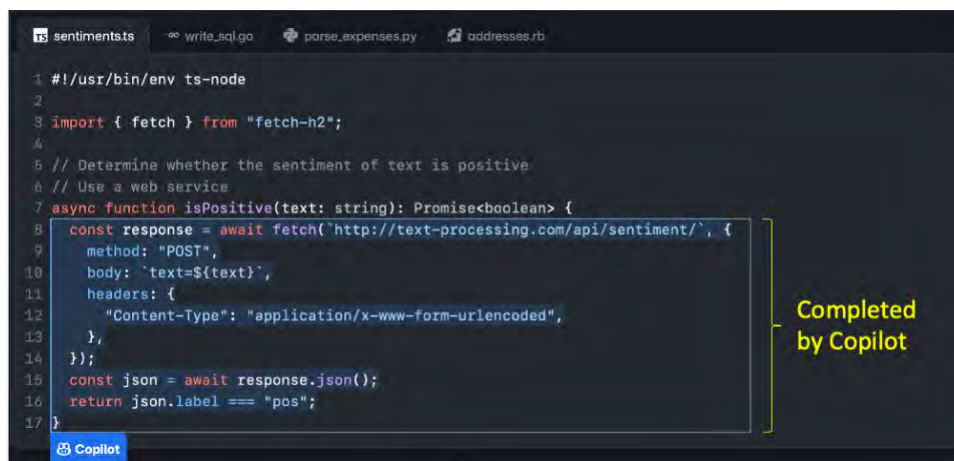
“AI writes a remarkable 35 percent of its users’ newly posted code” [LINK](#)

A relatively new tool called Copilot provides a glimpse into a revolution in software development.



Built by OpenAI, the private research lab, and GitHub, the Microsoft--owned website where programmers share code, the tool is essentially autocomplete for software development.

Nine months after Copilot’s launch, tens of thousands of programmers have tried out the software. Many found that it dramatically accelerates their pace — even as they were sometimes freaked out by how good it is. They also however noticed it making errors ranging from obvious to subtle.



```

1 #!/usr/bin/env ts-node
2
3 import { fetch } from "fetch-h2";
4
5 // Determine whether the sentiment of text is positive
6 // Use a web service
7 async function isPositive(text: string): Promise<boolean> {
8   const response = await fetch('http://text-processing.com/api/sentiment/', {
9     method: "POST",
10    body: `text=${text}`,
11    headers: {
12      "Content-Type": "application/x-www-form-urlencoded",
13    },
14  });
15  const json = await response.json();
16  return json.label === "pos";
17 }
    
```

Example shows initial input of 3 lines of code. The rest is generated automatically by Copilot [LINK](#)

The simple example above shows Copilot generating code to determine whether the sentiment of text is positive using a web service.

But this is just a start. Engineers at OpenAI have already built demos that let a layperson write simple apps just by describing what they want: “Make me a personal website with PayPal embedded for payments,” or “Write an app that finds travel expenses in my bank statements and puts them in a spreadsheet.”

However, Copilot and other similar AI tools, raise concern too. Writing malicious code just became much easier. Introducing bugs into operational software is another consideration. One professor found that Copilot produced software that was vulnerable – in particular, to SQL injection – 40 percent of the time.

As a result of these concerns, OpenAI’s entire business model is deeply centralised, running through a Microsoft server with access that OpenAI can revoke at any instant.

Like many innovations, there are going to be side-effects and unforeseen consequences that will need attention. However, Copilot provides insight today into a world in which anyone could develop software or a specific function by simply asking for it.

State of SMB Cybersecurity in 2022 – MSP Opportunity

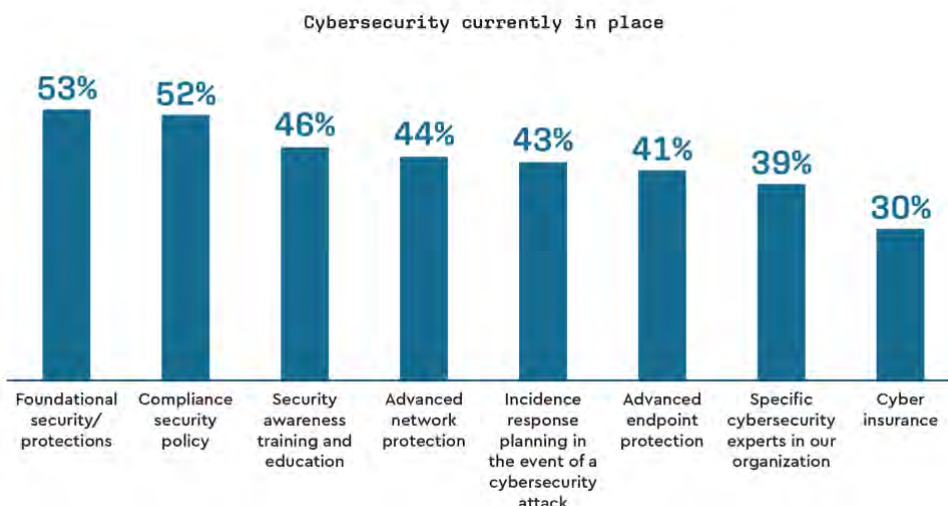
“Over two in three (69%) respondents admit that they are concerned a serious cybersecurity attack could be enough to put them out of business entirely”, Connectwise August 2022 [LINK](#)

As a hacker, it would be logical to target large organisations with the most to lose and the most cash (or bitcoin) to pay up.



But it is precisely these characteristics that compel and enable the top end of town to invest in the best cyber resources. A softer, easier target may be the thousands of Small to Medium Businesses (SMBs), who may not have nearly the same level of resources but have lower cyber defence and relatively more to lose. Targeting the larger numbers of SMBs will compensate their lower individual funding capacity.

The graph below highlights the results of a survey showing what SMBs are doing or have in place already as a means of strengthening their cybersecurity position. The most common implementations are foundation security (such as firewall or anti-virus) (53%), compliance security policies (52%) and security awareness training and education (46%), but alarmingly, it is only around half that have each.



Shows the proportion of respondents from organisations that currently have/do each of the above [700]

MSP opportunity: As cybersecurity attacks continue to increase, SMBs will find it increasingly more difficult to address their business risk, given increasing complexity and sophistication of attack and the global skills shortage. Therefore this is a significant opportunity for MSPs to highlight their value, by educating SMBs on why

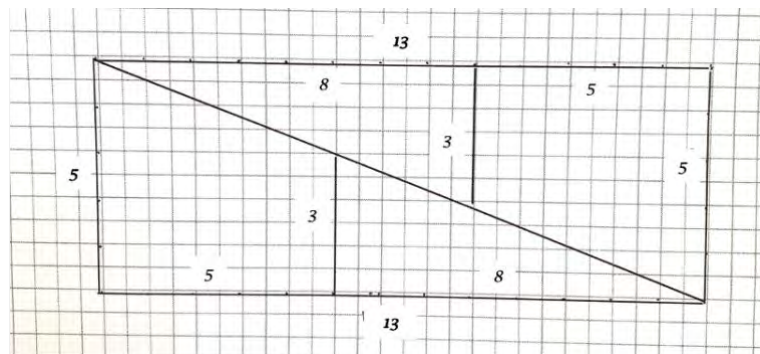
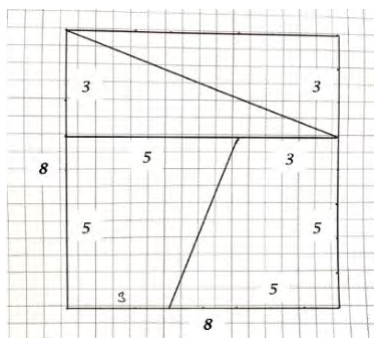
each of these cybersecurity elements are important and then supporting them in implementation. This is reflected in the survey showing that in 2020, 74 percent of SMBs used an MSP, rising to 89% in 2022.

But do it right. In 2022, 84 percent of SMB respondents said their organisation would consider taking legal action against their MSP in the event of a cybersecurity attack (up from 61 percent in 2020).

How can this be?

A carpet dealer has come up with a great idea on how to increase his profit. He buys 64m^2 of carpet $8 \times 8\text{m}$ and cuts it as below (left picture) and creates a new carpet that is $13 \times 5\text{m}$ (right picture) and thus 65m^2 . This extra 1m^2 is pure profit!

How does he do it? Feel free to draw it on a piece of paper cut it out and put the puzzle together, it actually works!!



Thanks to my friend Hakan for this great find!

The Man Who Solved the Market

-Gregory Zuckerman, [LINK](#)

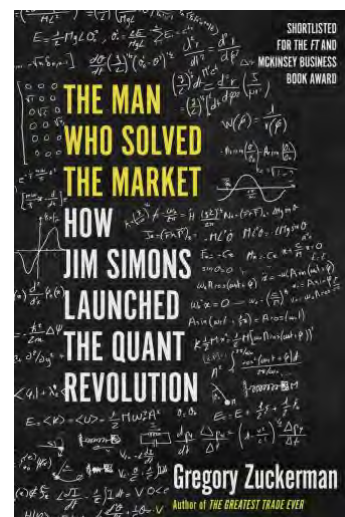
“As of early 2019, they [quant investors] represented close to a third of all stock-market trades, a share that had more than doubled since 2013”

This is the unbelievable story of a secretive mathematician who pioneered the era of the algorithm - and made \$23 billion doing it.

Jim Simons is the greatest money maker in modern financial history. No other investor - Warren Buffett, Ray Dalio or George Soros - can touch his record. Since 1988, Renaissance's signature Medallion fund has generated average annual returns of 66 percent. The firm has earned profits of more than \$100 billion; Simons is worth twenty-three billion dollars.

Zuckerman, a veteran Wall Street Journal investigative reporter, tells the gripping story of how a world-class mathematician and former code breaker mastered the market. Simons pioneered a data-driven, algorithmic approach that's sweeping the world.

As Renaissance became a market force, its executives began influencing the world beyond finance. Simons became a major figure in scientific research, education, and liberal politics. Senior executive Robert Mercer is more responsible than anyone else for the Trump presidency, placing Steve Bannon in the campaign and funding Trump's victorious 2016 effort. Mercer also impacted the campaign behind Brexit.



The Man Who Solved the Market is a portrait of a modern-day Midas who remade markets in his own image but failed to anticipate how his success would impact his firm and his country. It's also a story of what Simons's revolution means for the rest of us.

“What you’re really modelling is human behaviour. Humans are most predictable in times of high stress—they act instinctively and panic. Our entire premise was that human actors will react the way humans did in the past ... we learned to take advantage.”

As an investor, this book will make you question the traditional rationale behind equity market movements.

Stay connected

Kevin