The day after tomorrow's economy

NAB's Mark Todd and a panel considered the future of fintech and the implications for investment at the KangaNews-NAB Fixed Income Beyond the Institutional Sector Summit last month.

By Corporate and Institutional Banking

The economy of the future is already here, it's just unevenly distributed

Panel participants:

- Jonathan Armitage, Chief Investment Officer, MLC
- Sally Daub, CEO, Enlitic
- Scott Farrell, Partner, King & Wood Mallesons
- Craig Scroggie, CEO, NEXTDC
- Moderator: Mark Todd, Director, Capital Finance, NAB

What's the future of blockchain in the fintech space?

Scott: Blockchain is a tremendous opportunity to engage with your service providers and leverage their knowledge to help your business. This is important because service providers can't work out all of the pain points in your business. We see this as my law firm is not always acting for the big institutions in creating these projects, sometimes we're helping the big institution's customers work out if it's the right thing for them. If it is the right thing then this can be taken back to the big institution which has the necessary technology or the access to that technology.

Tell us about your deep-learning business, Sally

Sally: Enlitic is applying deep learning to healthcare. Our unique IP is around taking medical images and patient data and analysing them. That supplements, and will ultimately replace,

what radiologists do. In one clinical study on lung cancer, our technology could both identify nodules earlier than doctors could see them and predict which ones would become cancerous. That obviously has huge implications for reducing healthcare costs and improving patient outcomes.

Aren't people anxious about using that kind of technology?

Sally: People question whether patients will be comfortable with a computer rather than a doctor looking at their data. It wasn't that long ago people would say 'I'd never get in a car with a driver I don't know' and look how ridesharing has taken off. People, especially younger people, are increasingly comfortable with using technology rather than humans to make decisions in their lives.

If they're not anxious about using the technology, are people worried about its employment implications?

Sally: This technology is creating lots of business opportunities that are going to boost the economy. We're going to see AI being used in infrastructure, insurance, financial services. It'll add a lot of new jobs. Granted, those jobs will be in specific areas. Also, we're a long way off completely replacing physicians. AI only performs better than humans in certain, very specific cases.

Scott: People often jump to the Skynet scenario of machines being in control when thinking about this technology.. When I ask scientists when will the stage will be reached where machines can do all of what I do, they tell me that this will not be in my lifetime. This is all happening incrementally. You asked about when does law and regulation need to be involved. It is often not great for regulation and the law to be a long way ahead of technological development, otherwise they might constrain development or they might not properly apply to the technology as it develops. We should be aware of the technology, we should think about the technology, we should take care with the technology but we should also move with it without being scared of it.

Craig: AI is the greatest opportunity ever to enhance human intelligence and we'll see the results of that within most of our lifetimes. [Futurist] Ray Kurzweil, drawing on Moore's Law, has predicted, if computer power continues to grow exponentially, by 2023 people will be able to buy a $1,000 computer that has the computational power of the human brain. By 2050, they'll be able to buy one that has computational power of the entire human race.

Jonathan, what are the implications of this technology for those who are making investment decisions?

Jonathan: That's the key question of the moment, especially in debates around active versus passive management. I think there'll always be a place for human decision making but it'll be augmented by information that comes from machines. The big change of the last 10-15 years is that information has become ubiquitous, it's not restricted to a privileged few anymore. But what hasn't changed is the need for insight into that huge volume of information. It's the insight that'll separate the growth returns from average ones.

Craig, why are big institutions using third-party data centres rather than building their own?

Craig: Because they can't get the leveraging power that's available in massive public clouds. Which goes back to the issue of the exponential growth of computing power and the opportunities it throws up. Look at the iPhone. It had one gigabyte when it was released 10 years ago. Then it was two, four, eight, 16, 32 and now, for around the same price, it's 256. The

same thing is happening with enterprises. More data has been created in the last two years than the entire history of humankind. The extraordinary thing is that less than half of one percent of that data has been analysed. The biggest opportunity of the next decade is applying the massive computing power now available to that data.

What could impede the take-up of the technologies we've been discussing?

Sally: I don't see many impediments. Companies such as Facebook, Google and Uber are already using these technologies and soon every business will need an AI strategy. It's similar to the internet 15-20 years ago. People don't talk about 'internet-using' companies today, the internet is an everyday part of everyone's business. That's how people should see AI.

Craig: There are issues around privacy, data sovereignty, cybersecurity. But they're challenges that can be managed. I believe the upsides are much greater than the downsides and don't focus on the downsides much.

Jonathan: The issue is how you take the type of fantastic ideas Sally and Craig have been talking about and execute them in a way that generates a return. There's no lack of imagination and at MLC we see many tech start-up investment opportunities. But where many fall down is demonstrating how investors can make a decent return. Marrying imagination with the commerciality is the Holy Grail. That's what will determine which businesses are successful, as has been the case throughout history.