THINK & ACT DIGITAL
Digital Technology

Tuesday 30 March 2021

A BIT ABOUT ME

- Originally from Malaysia on Borneo Island

- Been in Aotearoa since 2000

- 18 years in Information Technology, Agile Project Management & Human Centered Design across tech, telcos, government agencies and consultancy

- 11 years volunteering with Doc Edge, a not-for-profit Arts/Festival organisation

- Currently
  - running a freelance consultancy - *Sinopsis*
  - studying Masters in Technological Futures with Tech Futures Lab with the focus in Environmental and Social Sustainability using emerging technology

AGENDA
technology focus

DIGITAL ECOSYSTEM
- Technology
- Channels
- Customers
- Strategy
- Culture

Background

Digital Technology Trends & Insights

Case Study

Office Productivity
Cybersecurity
Accounting
Marketing
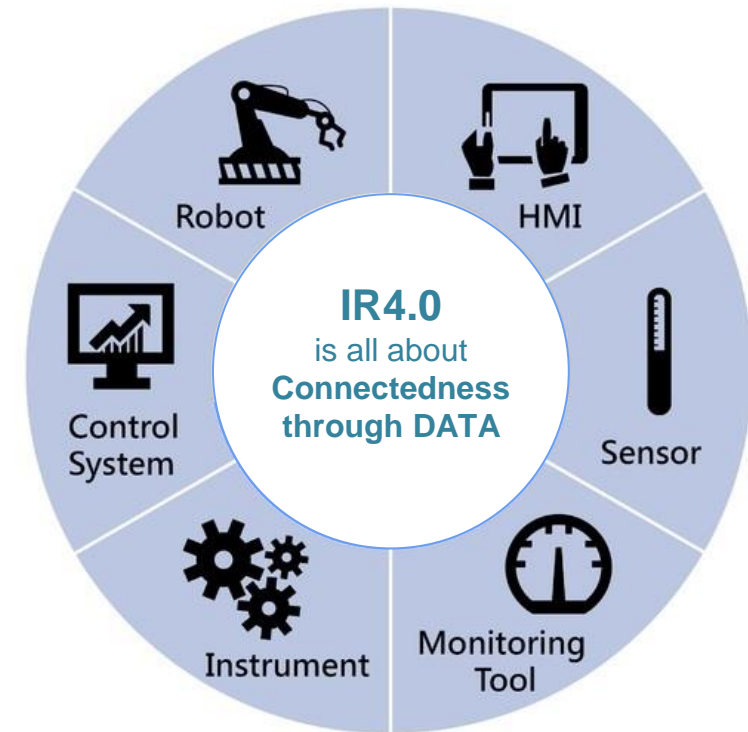Donation
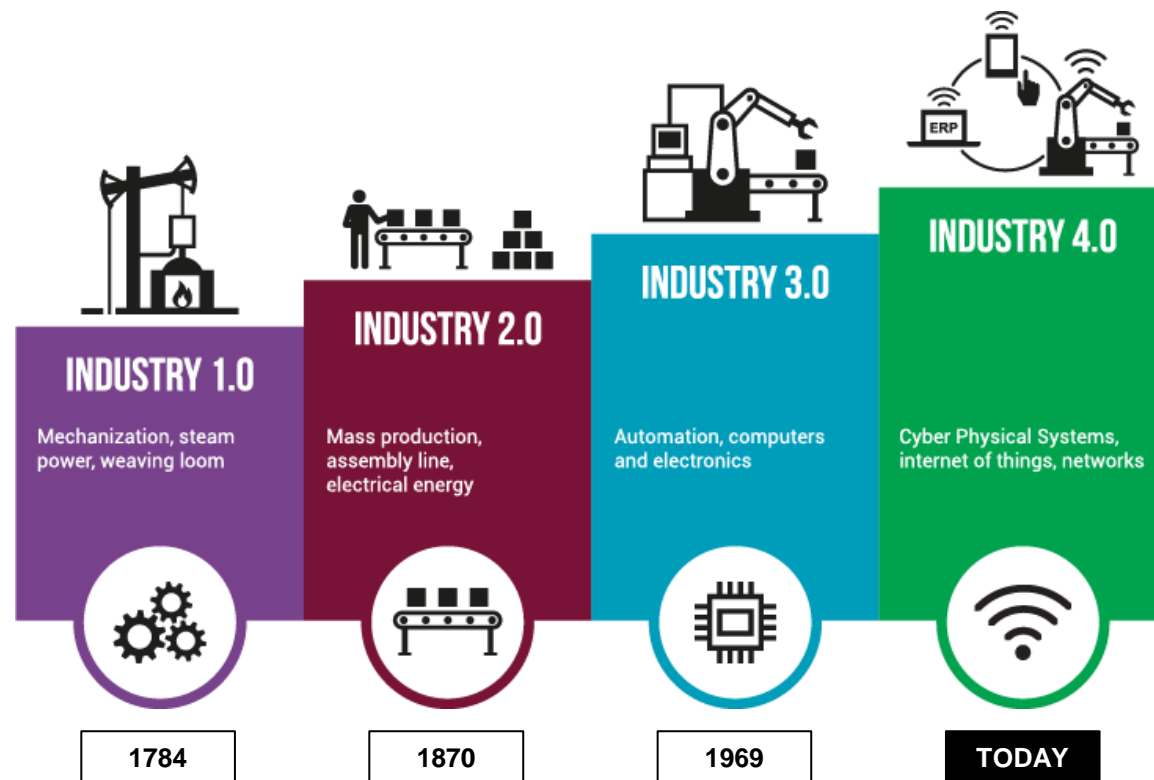
Resources

Q&A

BACKGROUND

Exercise

On Zoom chat, share with us, during 2020 Covid19 pandemic, how has your organisation shifted to using **digital technology?**
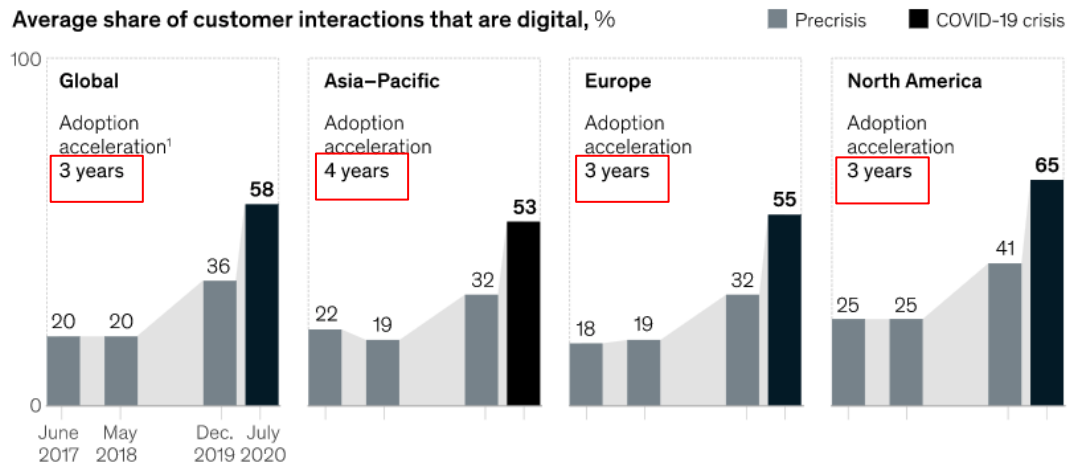
4th INDUSTRIAL REVOLUTION

the eras of industrial revolution

TRENDS & INSIGHTS
globally during 2020

The COVID-19 crisis has accelerated the digitization of customer interactions by several years.

Average share of customer interactions that are digital, %

Source: [McKinsey Report](#)

TRENDS & INSIGHTS

hybrid work is here

- Flexible work is here to stay

- High productivity is masking an exhausted workforce - digital exhaustion is real and climbing

- Teams become more silo

- Leaders who are out of touch with employees need a wake-up call

66%
of leaders say their company is considering redesigning office space for hybrid work

73%
of employees want flexible remote work options to stay

67%
of employees want more in-person work or collaboration post-pandemic

Source: Microsoft Report

TRENDS & INSIGHTS

Aotearoa/NZ Tech landscape

Outlook:
- one of fastest growing sector,
- the huge need for Digitally Skilled Workforce

Challenges:
- skills shortages locally
- digital divides/ inequality - most disadvantaged are women, Maori/Pasifika

Key initiatives (Short to Long Term):
1. National strategy:
   Digital Industry Transformation Plan

1. Tamaki Makaurau Auckland strategy:
   Go Hard On Tech

2. various other initiatives

"New Zealand has not invested in skills and innovation to nearly the same extent as high performing small advanced economies; and has not focused on developing knowledge intensive competitive advantage."

David Skilling
Report for the New Zealand Productivity Commission, May 2020

Source: **NZ Tech Alliance 2020**

TRENDS & INSIGHTS
across NZ & OZ Not-for-Profit

Some of our key findings include:

Only **30%** of not-for-profits already had all the systems and software needed for staff to work from home during COVID-19.

54% of not-for-profits are less than satisfied with the way they use technology.

49% of not-for-profit staff are less than confident using technology and information systems.

46% of not-for-profits do not have ways of actively monitoring information security and cyber risks.

41% of not-for-profits said improving their website is a top priority.

52% of not-for-profits are using at least one type of new or emerging technology.

How COVID-19 affected the way organisations delivered services

3% No change

26% Only small adjustments needed

54% Significant changes to services needed

17% Complete suspension of services

How well technology was already set up for staff working from home

30% We already had all the systems, software and infrastructure in place that we needed and were able to adapt quickly and easily

47% We were in a pretty good position technology-wise, but still had work to do so staff could work effectively from home

18% We had some things in place, but felt largely unprepared for the technology needs of staff working from home

5% We didn't have any of the right systems, software or infrastructure in place that would help staff work from home

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Technology environment aspects that need more attention or have become a bigger priority as a result of COVID-19

Setting up better video conferencing tools	53%
Building our staff members' digital skills	48%
Setting up better team collaboration tools	46%
Updating and maintaining our hardware	32%
Finding better ways of storing files and information	29%
Moving to the cloud	27%
Managing our information security and data privacy better	26%
Technology-wise, COVID-19 hasn't changed anything for us	14%
Other	10%

Source: Infoxchange Group report May 2020

TRENDS & INSIGHTS

the constraints

Historically not-for-profits have
- under-invested in digital technology,
- spending usually directed towards frontline service delivery.

Need the right technology to
- drive supporter engagement,
- enable staff to deliver services efficiently
- Measure client and community outcomes and communicate success

Government

Government is looking for ways to reduce spending

Governments want new models which devolve greater responsibility to the not-for-profit sector and reduce traditional levels of funding. They also increasingly require demonstrable outcomes from funding commitments.

This creates pressure on not-for-profits to become more efficient, competitive and sophisticated in measuring impact and outcomes.

Funding

Traditional sources of funding are shifting

Corporates now more commonly seek alignment between their operations and social outcomes. Further, crowd-sourcing through social media has made it easier to establish a social enterprise.

Not-for-profits who rely on traditional forms of funding are under threat at multiple levels. There is an increased need for not-for-profits to demonstrate alignment to corporate goals, as well as re-invent themselves to decrease dependence on traditional funding sources.

Supporter engagement

Supporters increasingly want to see the impact of their investment

The public now expects far more information about the project they're funding and will actively engage through social media to do this. Social media continues to grow as a key factor in supporter engagement strategies, particularly as the younger generation become the principal source of public investment for not-for-profits.

Not-for-profits are under pressure to maintain engagement with supporters to drive ongoing investment, and must harness the power of social media.

Source: Infoxchange Group report May 2020

TRENDS & INSIGHTS
priorities and challenges

Reflection for Post Covid 19

Social Impact:
Why Do You Do What You Do?

Economic Viability:
How Do You Fund What You Do?

Capacity to Deliver:
What Supports What You Do?

Top priorities

		2019	2020
Improve our website		50%	41%
Make better use of social media and/or digital marketing		42%	37%
Improve the digital capabilities of our staff		23%	26%
Improve our data and information security		22%	24%
Move to the cloud		20%	22%
Upgrade our IT infrastructure		27%	22%

Biggest challenges

		2019	2020
Budget/ funding		55%	49%
Staff capacity and capability		49%	38%
Access to affordable, skilled technical resources		36%	34%
Keeping abreast of technology changes & identifying where to invest our IT spend		23%	25%
Making the most of the cloud		20%	24%
Affordable staff training		17%	22%

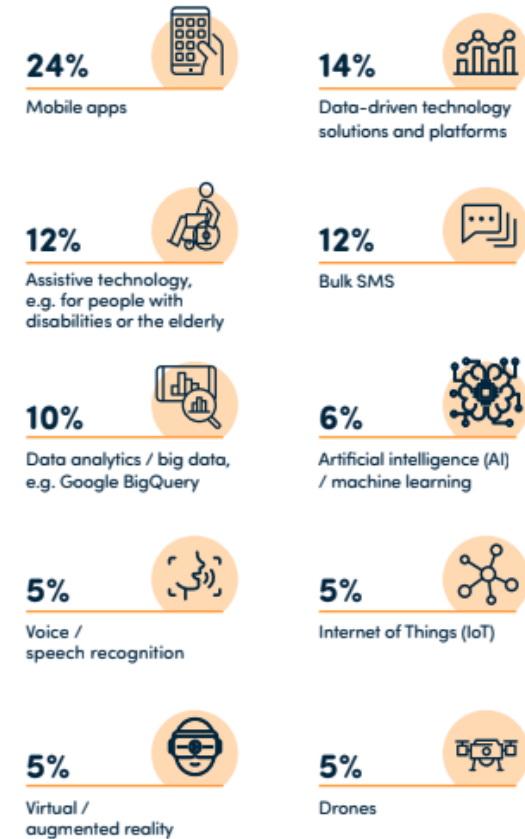Source: Infoxchange Group report May 2020

TRENDS & INSIGHTS

IT spend and emerging technologies

On average, not-for-profits spend 6% of their operating expenses on IT, or $3,841 AUD per FTE in Australia and $2,573 NZD per FTE in New Zealand per annum. This is on par with small to medium businesses across the region. However, analysis of these figures show some considerable variance across the sector.

Average spend per FTE in each area for Australia and New Zealand

Australia	New Zealand
18%	20%
13%	11%
15%	17%
12%	10%
21%	20%
2%	3%
6%	6%
10%	11%
3%	1%

$3,841 AUD per FTE/annum

$2,573 NZD per FTE/annum

Top 10 new or emerging technologies being used by not-for-profits

52% of organisations are using at least one type of new or emerging technology

24% Mobile apps

14% Data-driven technology solutions and platforms

12% Assistive technology, e.g. for people with disabilities or the elderly

12% Bulk SMS

10% Data analytics / big data, e.g. Google BigQuery

6% Artificial intelligence (AI) / machine learning

5% Voice / speech recognition

5% Internet of Things (IoT)

5% Virtual / augmented reality
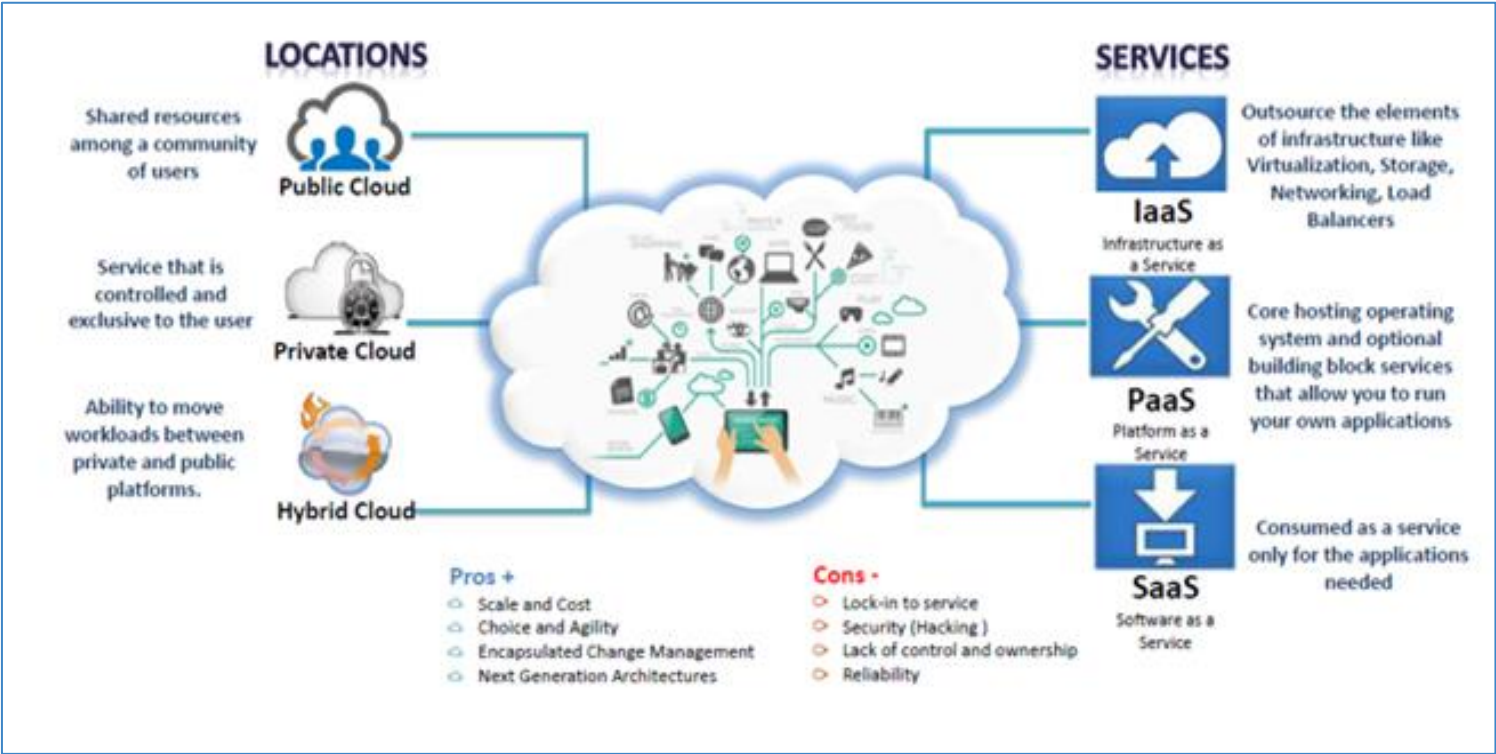
5% Drones

Source: Infoxchange Group report May 2020

THE CLOUD
where data interaction happens

Application Servers Network	
Devices	Computers, Tablets, Mobile Phone, Watches etc
Infrastructure	Broadband - 4G, 5G, Wi-fi

CASE STUDY

DOC EDGE DIGITAL JOURNEY
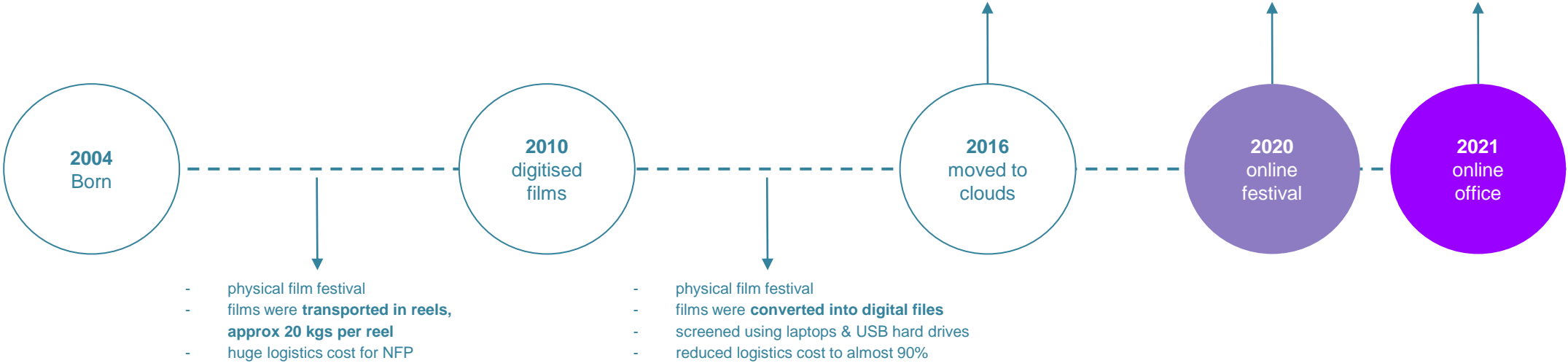
www.docedge.nz

- an arts/festival organisation
- currently in its 17th year, 16th Festival edition this June
- 2 to 8 staff consisting of full time, contractors, interns and volunteers
- biggest constraint are **funds** and **people**

- Cloud platforms were more accessible so we moved to Office 365, Zone Festival Database, mailchimp, social media marketing
- consolidated and refreshed websites

- Moved to remote ways of working - Zoom, Slack, Office 365, Dropbox
- First remote internship
- Physical festival moved to online format, nationwide access

- Moving to full Microsoft 365
- Implement CRM to as a single source of audience database Consolidating multiple platforms

2004 Born

2010 digitised films

2016 moved to clouds

2020 online festival

2021 online office

- physical film festival
- films were **transported in reels, approx 20 kgs per reel**
- huge logistics cost for NFP

- physical film festival
- films were **converted into digital files**
- screened using laptops & USB hard drives
- reduced logistics cost to almost 90%

OFFICE BASICS

Collaboration and Communication

Function	Microsoft 365 (formerly Office 365)	Others
Word	MS Word	Google Docs
Spreadsheets	MS Excel	Google Sheets
Slides	MS PowerPoint	Google Slides
Files & Folders Share/Transfer	MS Sharepoint/ OneDrive	Google Drive Dropbox
Customer Database	MS Excel	Salesforce CRM
Video & Chats	MS Teams	Zoom Google Meet BlueJeans WebEx
Chats	MS Teams	Slacks Google Chat Whatsapp
Whiteboard		Miro for NFP Mural for NFP

Tips

- Microsoft 365 for NFP - gets 10 free Business Premium licenses

- Google for NFP Google Workspace (formerly Google Suite)

Advice

- You need to **have a registered domain name** e.g *www.yourbusinessname.nz*

- Buy a **domain name** via domain provider such as Domain NZ or Freeparking

- **Get an IT Support** to help to design and setup the structure.

CYBERSECURITY

we are not serious enough about security

4 most common cyber threats are

- **Phishing (#1)** - sending emails from a trusted-seeming source to gain personal information
- **Credential Stuffing** - stealing credentials to gain unauthorized access to a user's account.
- **Brute force** - trial and error approach to guess the password
- **Malware** - malicious software downloaded in your system without you knowing e.g. adware, Trojan virus

$6.4 million
direct financial loss in NZ in Q3 2020 alone

$1 million
financial loss in email attack alone in Q3 2020

56%
Small business that are attacked, **are attacked again**

66%
Small business that are attacked, **make no changes**

30%
growth in cyber attacks in NZ each quarter year

Source: **NZ Tech Alliance 2020**

CYBERSECURITY

how do we protect to minimise risk

By simply doing the following, it could drop the risks by **85%**:

- **culture** - set IT policies e.g change password regularly, with strong password requirement, use 2 or multi factor authentication

- **backup** - 3-2-1 approach - back up 2 copies of offline data and 1 online regularly.

- **patches** - apply software/application patches

- **malware** apps - Bitdefender, Norton

Phishing

If you are suspicious, do not open emails sent from unknown sources.

Before clicking on a link, hover the mouse over it to find where it will take you.

Pay close attention to email headers, and identify whether it's genuine

Credential Stuffing

Use multi-factor authentication / multi-step login process.

Blacklist suspiciously acting IP addresses.

Discontinue using email addresses as user IDs.

Brute Force

Use complex passwords

Set a limit on the number of login attempts.

Enable captchas against automated attacks using bots

Use multi-factor authentication / multi-step login process.

Malware

Use a dedicated software e.g Norton, Bitdefender, McAfee

Keep software/applications up-to-date e.g patches

Avoid download from an untrusted source.

Ignore clicking on URLs from unknown sources.

ACCOUNTING
keeping the numbers in order

Function	Xero	MYOB
Cloud-based	Yes	Yes
Bank feeds	Yes - both of very strong bank feed platform	
Payroll	add on 'feature' pay $10 + GST p/m for the first employee and $1 + GST p/m for each additional employee	one employee is part of the standard package. Upgrade the package for > 1 employee
Inventory Management	poor - a few stock items	need to be on premium package - MYOB AccountRight
Online GST filing	direct electronic GST filing with the NZ IRD for 1, 2 and 6 monthly returns	
Mobile app	much more superior in a single app - Invoice, Quote, Create Bills, Receipts, file uploads, manage contacts/ customers & bank reconciliation.	need to use 2 apps - MYOB Invoices for Quoting & Invoicing on the go and MYOB Capture for uploading receipts and documents.
Support	have an online/email support platform, knowledge base and video tutorials.	
Pricing	starts from $27.50 + gst per month	starts from $25.00 + gst per month

MARKETING

telling your stories to the world

Traditional marketing
- posters, flyers, booklets, DLEs,
- billboards

Digital/ Online Marketing
- Websites & Mobile Apps
- Email, social media (Facebook, Linkedin, Instagram etc) and even blogging
- SEO, Adwords with Google Ads Grant for Nonprofits
- Other digital media such as digital billboards

Previous Webinar with Suzanne

- Crafting the case for support, Storytelling, Digital Marketing, Social Media, Email, Befriending the media

Upcoming Webinar with Suzanne :

Working With The Media | 29 April
- What is News?
- Good news: Pitching A Story as an NFP or Charity
- Bad News: Managing a crisis with communications
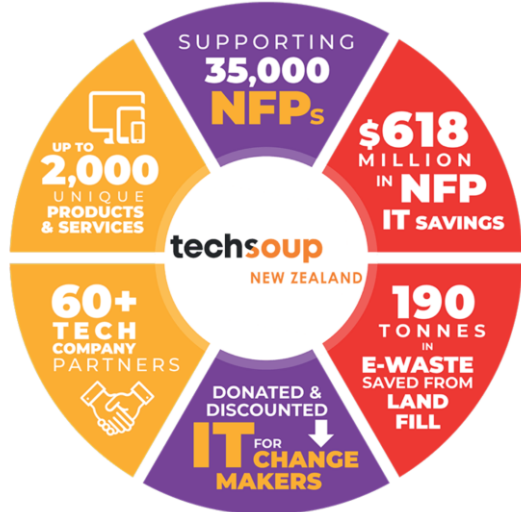- Maintaining the Relationship with Media

DONATION
how to give

Donate

Payment Gateway

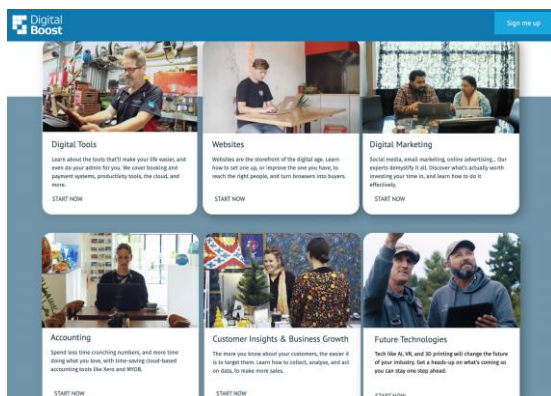Your Business Bank Account

HELPFUL RESOURCES

TECH SOUP

www.techsoup.net.nz

discounted software and hardware

education/webinar
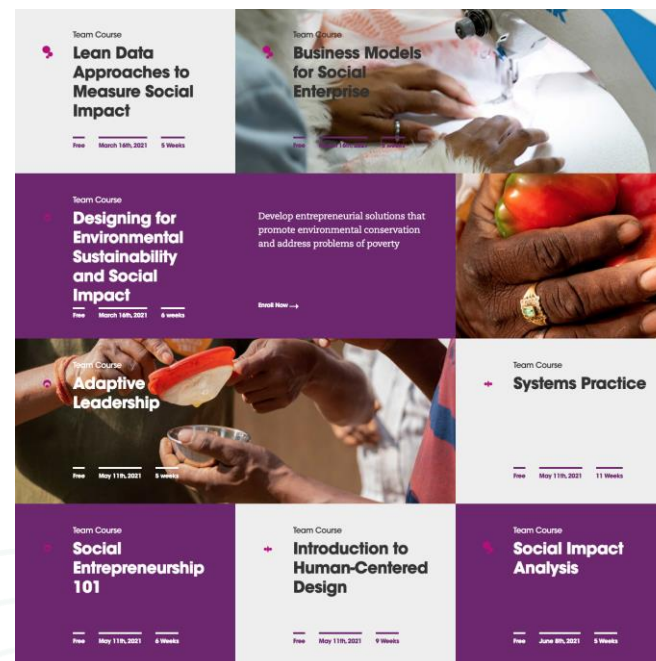
consultancy

THE IT TEAM

www.theitteam.co.nz

IT Support nationwide

understands NFP

DIGITAL BOOST

www.digitalboost.co.nz

education

ACUMEN ACADEMY

www.acumenacademy.org

social impact education

global collaboration

TAKEAWAY

know your digital readiness
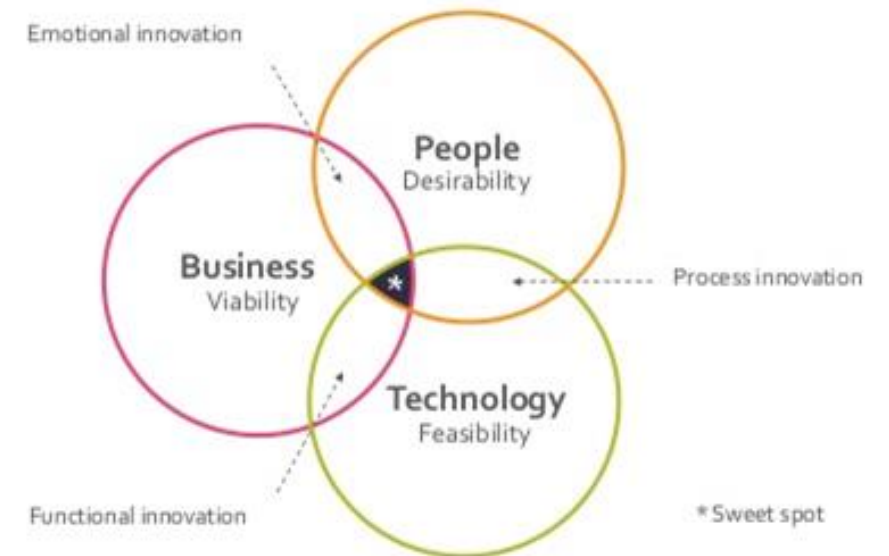
Proactively plan for Tech - budget, skills, culture

Technology does not solve everything.
Take a **digital ecosystem consideration** approach

Technology is an **enabler.** Think of the problems or the **needs of the people** to solve first!

People in your organisation are likely going to need to learn & adopt technologies

Approach a tech specialist

Merging
what people want\need
With
a viable business model
And
an accessible technology

Emotional innovation

People
Desirability

Business
Viability

Process innovation

Technology
Feasibility

Functional innovation

* Sweet spot

KETE: ASSESSMENT

know your digital readiness

Download by making a copy of the

Digital Ecosystem Scorecard

to help you assess your organisation digital readiness and decide where on the scale you would like to move towards

*Disruption by **Design** Innovation by **Necessity***

Jack Rubin, CEO of Tessitura Network

connect with me via
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