



Technology &  
Business Model Innovation  
[the 4th Industrial Revolution]

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Andrew Leunig : Leunig Advisory Pty Ltd : e [andrew@leunig.net.au](mailto:andrew@leunig.net.au) :  
m 041 8833 751 : w leunig.net.au

History doesn't repeat  
itself, but it does rhyme.

-- Mark Twain

You've got to love Mark Twain.

If more people had a greater knowledge of our history - we might not make the same mistakes over and over again...

One of my areas of interest is "ancient wisdom". This is not some nostalgic nod to the past but a hard-arsed thought process about human knowledge and practices refined (tested) over tens of thousands of years that we look down our noses at.

In many cases we've only recently tossed these ideas and practices out.

We have much to learn the from the past as a practical guide to the future. Humans have always been clever at adapting to local materials and foodstuffs to create a sustainable life.

# Disruption is not new !



Spot the car ?



Spot the horse ?

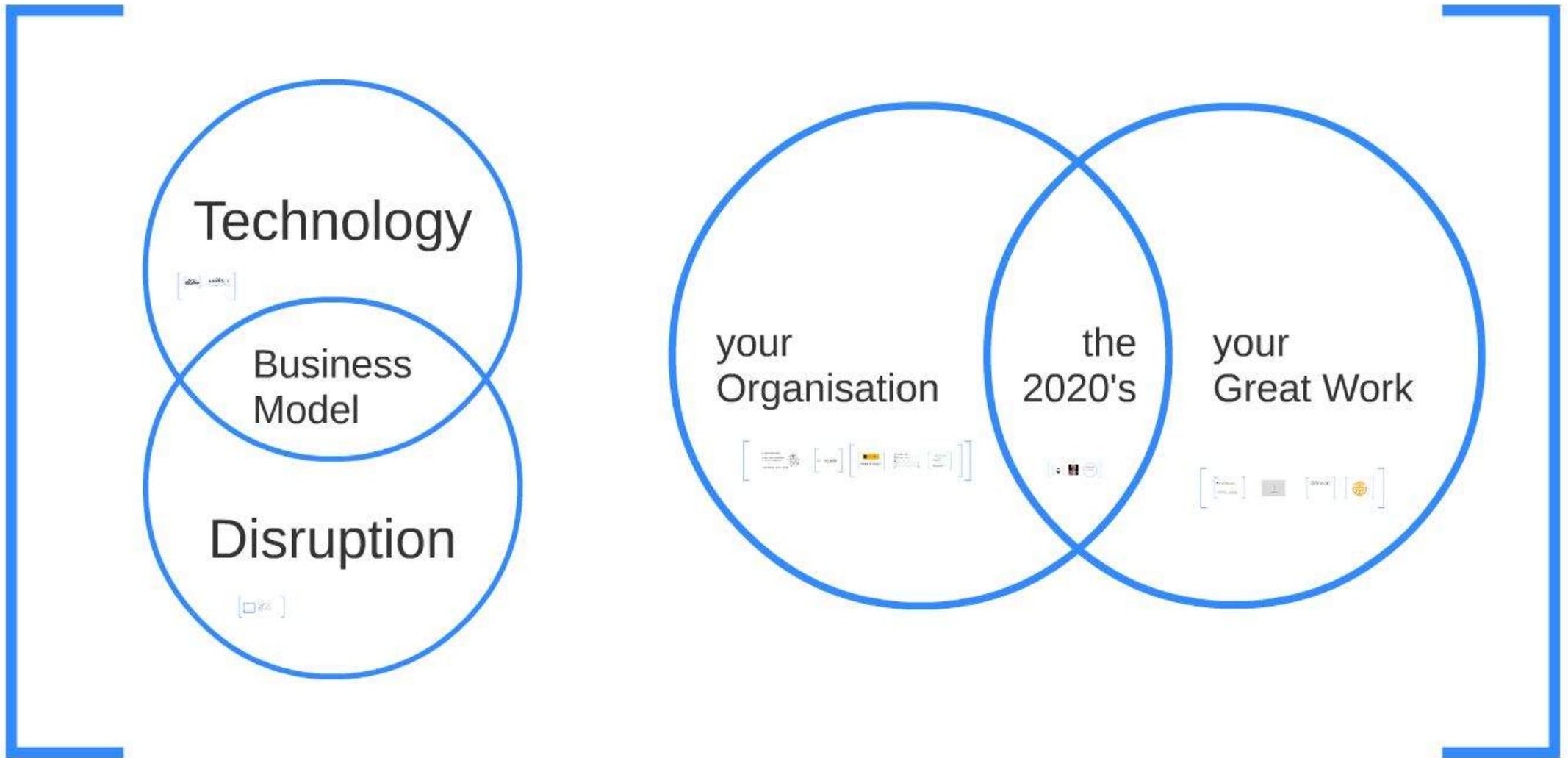
# Disruption 2



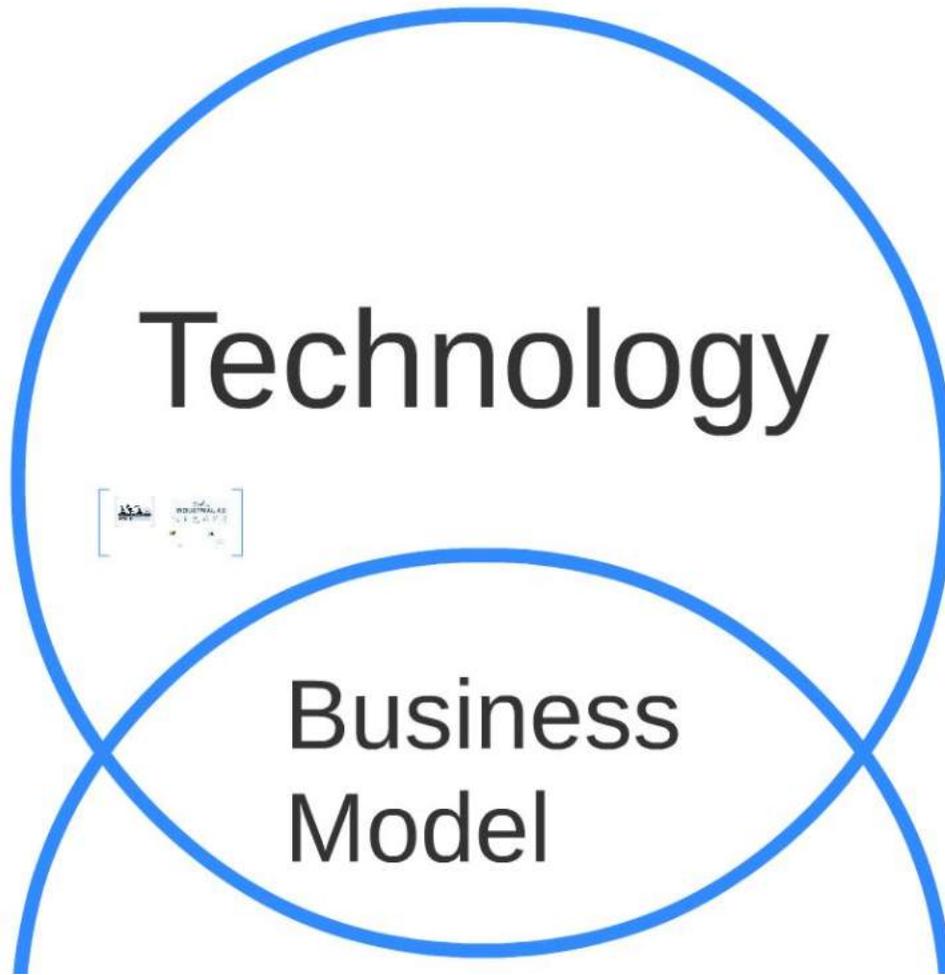
1440 - 3,600 pages per day

Johannes Gutenberg was the Steve Jobs of his day. The German blacksmith & goldsmith is credited with introducing mechanical printing to Europe. Like Jobs, Gutenberg was very good at combining the innovations of others into an easy to use system. His system enabled the economical mass production of books to the benefit of publishers and readers alike. Until that time books were hand-written (often by Benedictine Monks) who could produce 3 pages on a good day. One Gutenberg press could produce 3,600 pages equalling the production of 1,200 men! Gutenberg's innovation played a key role in the development of the Renaissance, Reformation, the Age of Enlightenment, the scientific revolution and laid the material basis for the modern knowledge-based economy and the spread of learning to the masses.

Imagine that you are the Abbott of a Bible producing Monastery in 1440. How do you compete ?  
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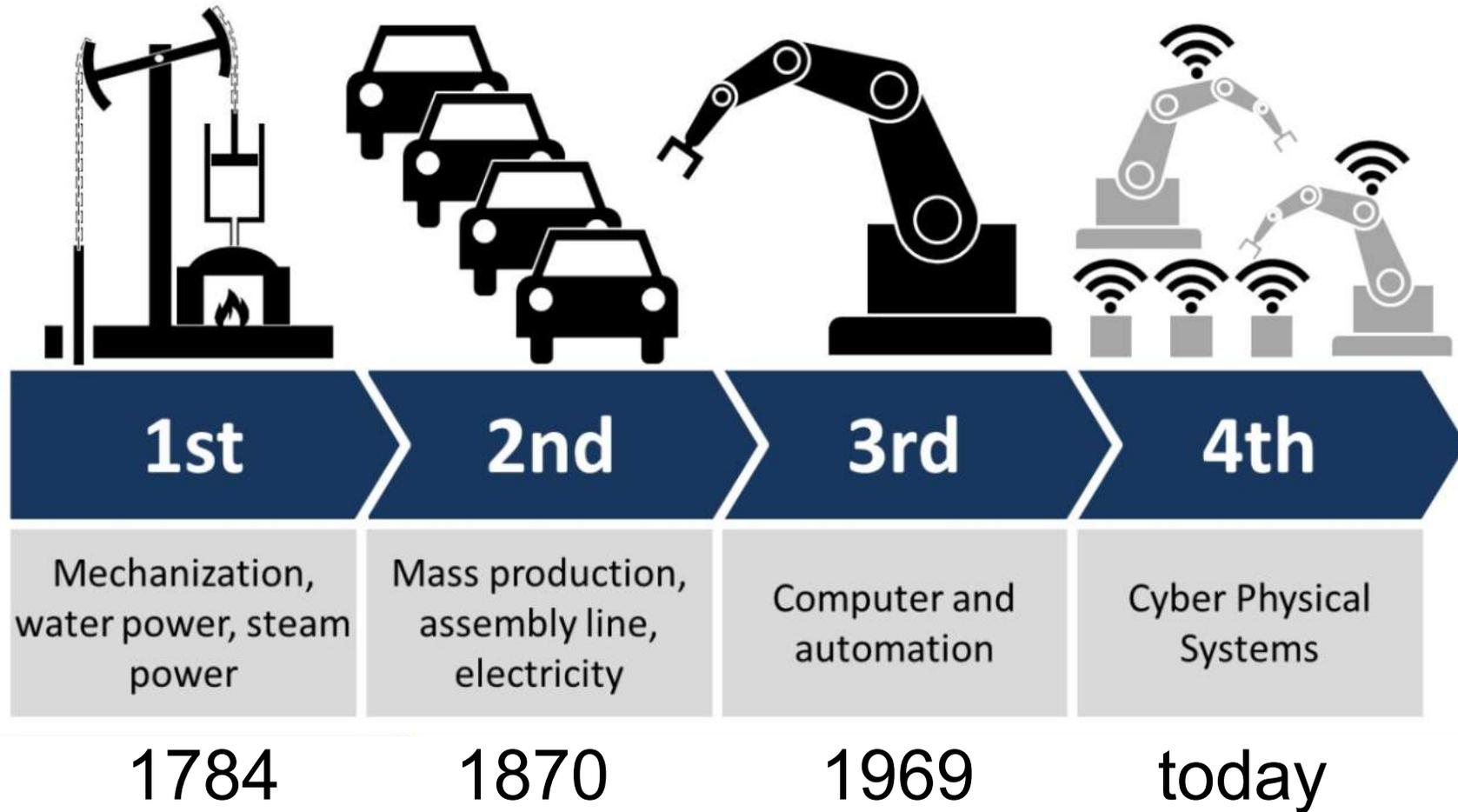


This is the presentation overview....



It's not just the technology...

It's the combination of technology + the Business Model that matters...

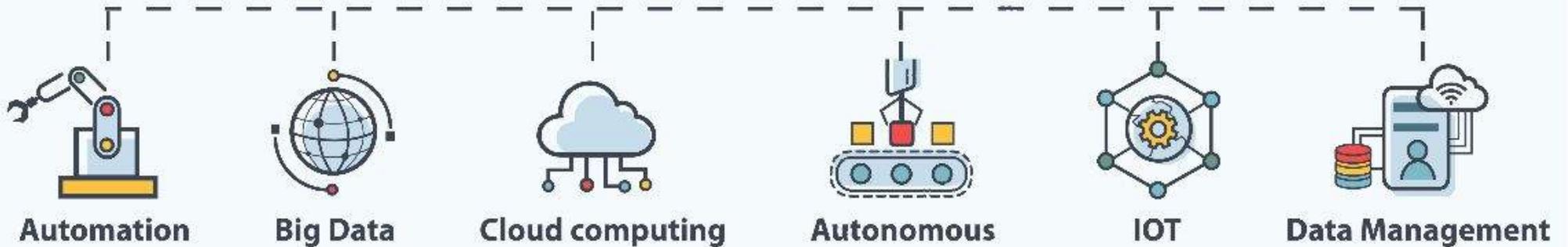


Industry 4.0 is commonly referred to as the fourth industrial revolution.

Industry 4.0 fosters what has been called a "smart factory". Within modular structured smart factories, cyber-physical systems monitor physical processes, create a virtual copy of the physical world and make decentralized decisions. Over the Internet of Things, cyber-physical systems communicate and cooperate with each other and with humans in real-time both internally and across organizational services offered and used by participants of the value chain. [{Wikipdeia}](#)



# INDUSTRIAL 4.0



These are the elements or building blocks of Industry 4.0

I could talk about technology and its impact for days...

But here are a few interesting examples that I believe are important.



Meet Baxter the robot.

Baxter is designed to be a social robot, safely working alongside people without the need for safety cages. Baxter is affordable - starting at about USD 25,000.

AND the thing that really impresses me is that Baxter is trainable rather than programmable.

Basically you just “show” Baxter what to do by moving him around to demonstrate the task, then you “record” and “play”.

They’ve made Baxter easy to buy and easy to use..

This Bloomberg article explains more :

[Cheap Robots Are Helping Small Businesses Survive](#)

Nest Thermostat is an example of the Internet of Things. It's USD \$190 and can be easily retrofitted to most traditional thermostats. You can daisy-chain them around the house.

It's smart - you can control it remotely from your phone - and it learns.

It learns about the behaviour of your family and controls the temperature accordingly.

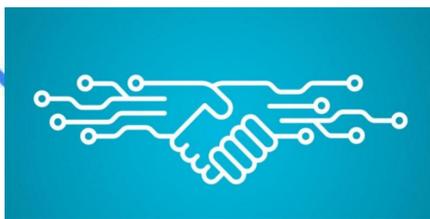
“On average the **Nest Learning Thermostat** saved US customers about 10-12% on their heating bills and about 15% on their cooling bills.”

It's a great example of “bolting-on” a smart device to existing infrastructure to make it work more efficiently and / or “soak up” spare capacity.

In January 2014 Google acquired Nest Labs for USD \$3.2 Billion.



## Distributed, Automated Collaboration & Coordination



Imagine an array of people and / or machines operating in complete coordination (in different locations).

Low cost technology now enables this.

“Smart Contracts” using Blockchain technology enable many transactions to occur (and continue to occur) with almost zero administration cost.

Think of a “smart” property lease linked to a smart bank account. Rental increases get processed automatically. Lease renewals and extensions processed with a click..untouched by human hands.

## Access not ownership

If I can access something when I need it - why do I need to own it ?

In fact it's better if I don't own it.

Why own just one holiday house with all of the hassles...when I could access different ones - all over the world. The kids are all over this....their phone becomes a remote control to the physical world.

Re-imagine your business (or your life) around this concept..

What do you currently own that it would be better to access ?

# Just in time Just for you

The future is not “mass production” it’s “mass customisation”.

Whether that be products or services.

Whether that be a car or a Rotarian news feed....Just in time, just for you.

What you want, when you want it.

These “Smart Factories” with their “Cyber Physical Systems” will enable this to be done efficiently.

I predict that we’ll see more manufacturing come back “on-shore”.

There’s a lot of “hidden” costs with overseas mass-production.

Six weeks on the boat, transport, warehousing etc...

# Coming soon : 3 D Printed Houses



If there's anything that's overdue for a technical revolution it's residential homebuilding - not much has changed in the past 150 years or so.

3D Printing is looking like it will be part of a revolution.

This Russian technology claims to be able to print a house on site for \$10,000.

Of course existing building regulations will serve to protect the incumbent methods and players but eventually they will change.

And what if we 3D printed with "earth" found on site ?



I also think of “Software Robots”.

Software that automates business processes.

Xero, the cloud based accounting software is an example of that.

Every night the previous day’s transactions are automatically downloaded from the Bank.

Previously set-up “rules” are applied.

Book-keeping is largely automated.

Multiple people can access the system, with access restricted depending upon their role.

The “virtual bookkeeper” based in the Philippines has restricted access compared to the accountant who can do everything.

And no more “sending the file” off to the accountant and waiting for the final file to come back....everyone works on the same “live” version.

Xero designed their system so that other companies can build “Add-ons” that seamlessly plug-in to the Xero system.

For only a few hundred dollars a month (rent not buy) small enterprises (for profit or not for profit) can build a tailored business system that would have cost \$200,000 only 8 or 10 years ago.



This is Melivea.

She lives in the Philippines.

She was my Virtual Assistant for over 3 years.

The technology made it easy.

We could work together as easily as if she was in the next room.

I paid Melivea the same amount of money that she earned as a nurse in the Philippines.

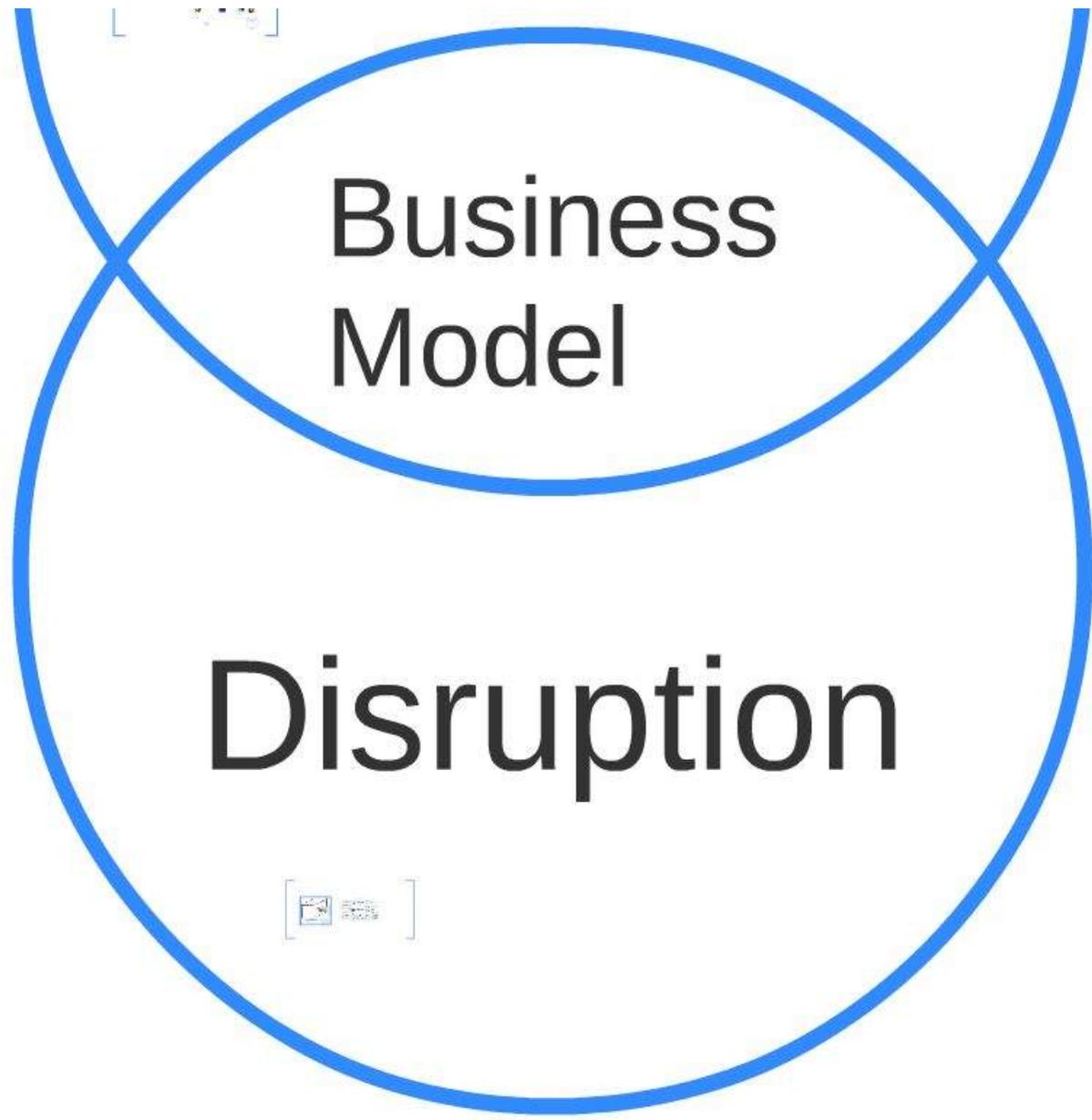
Her job with me enabled her to study at University. Everyone was a winner.

Here's [a link to My Virtual Assistant Recruitment process](#).

Many Australian businesses have Virtual Assistants or offshore workers.

Increasingly Clubs and Societies are using Virtual Assistants to help them do the work that volunteers don't want to do.

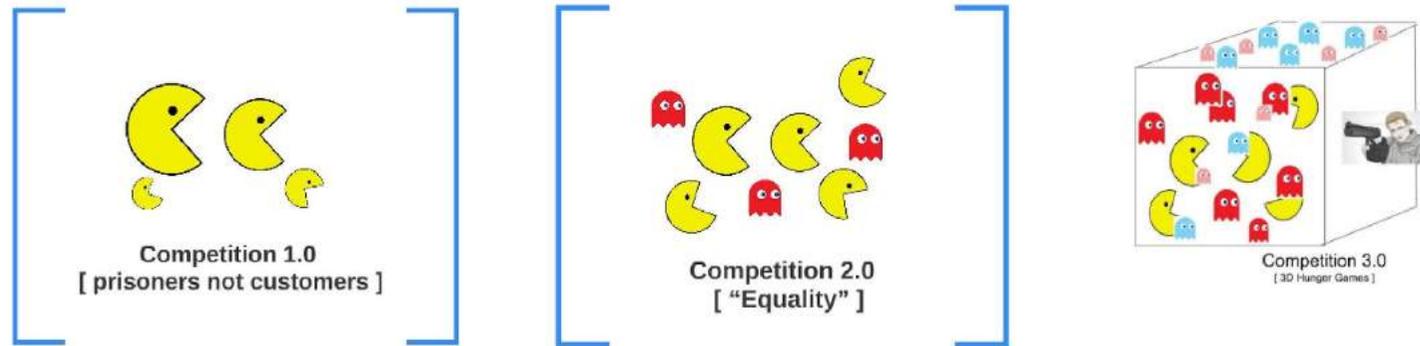
Think about it.....



Business  
Model

Disruption

# General theory of Disruption.....



## ***Competition 1.0***

Back in the day there weren't many competitors but in any case you could see them, they were relatively slow moving and attacked head-on. Customers didn't have a lot of power.

## ***Competition 2.0***

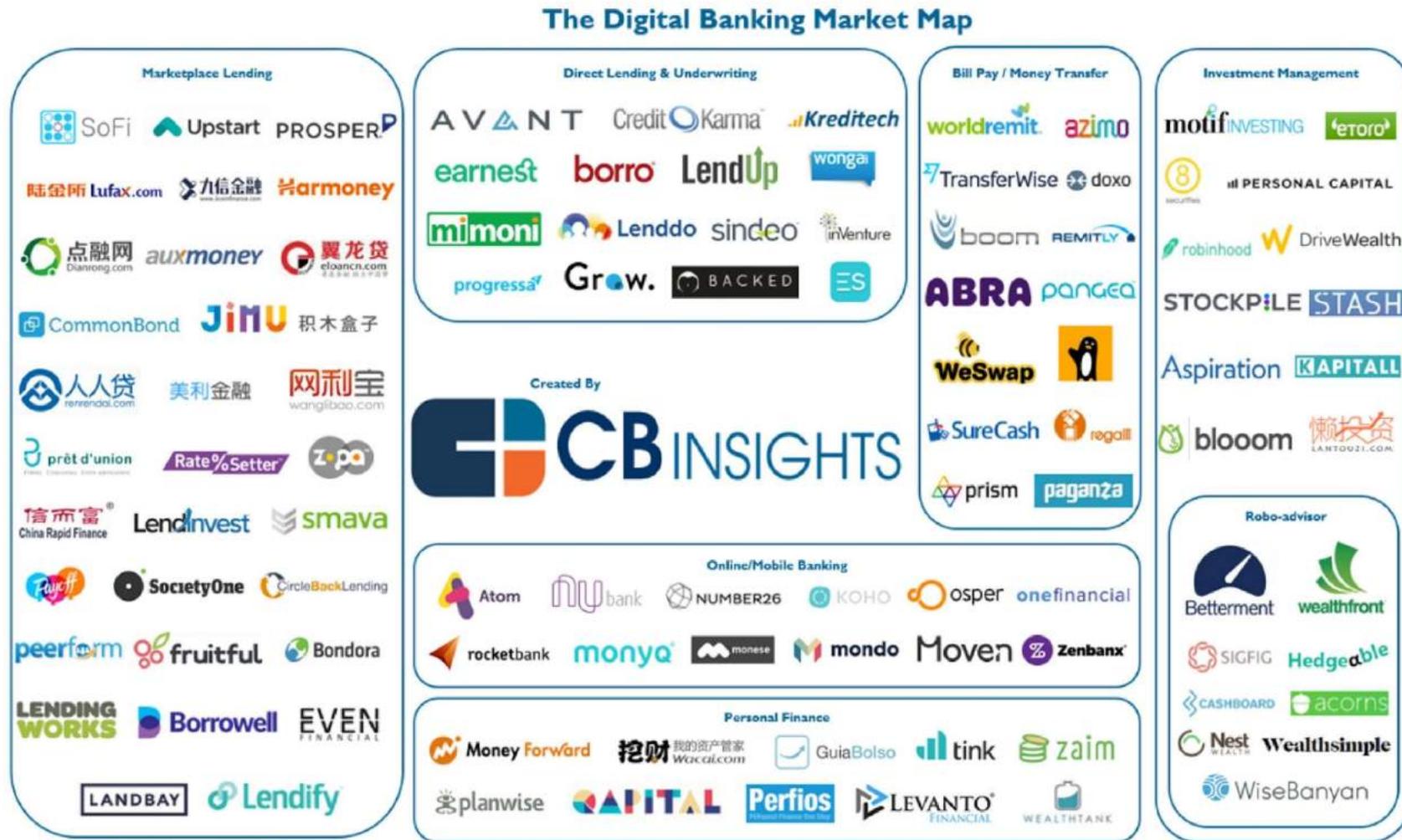
As globalisation gathered pace in the 1980's and 1990's things got more complicated with new entrants and a greater pace. Customers got greater power and competitive pressure on prices increased.

## ***Competition 3.0***

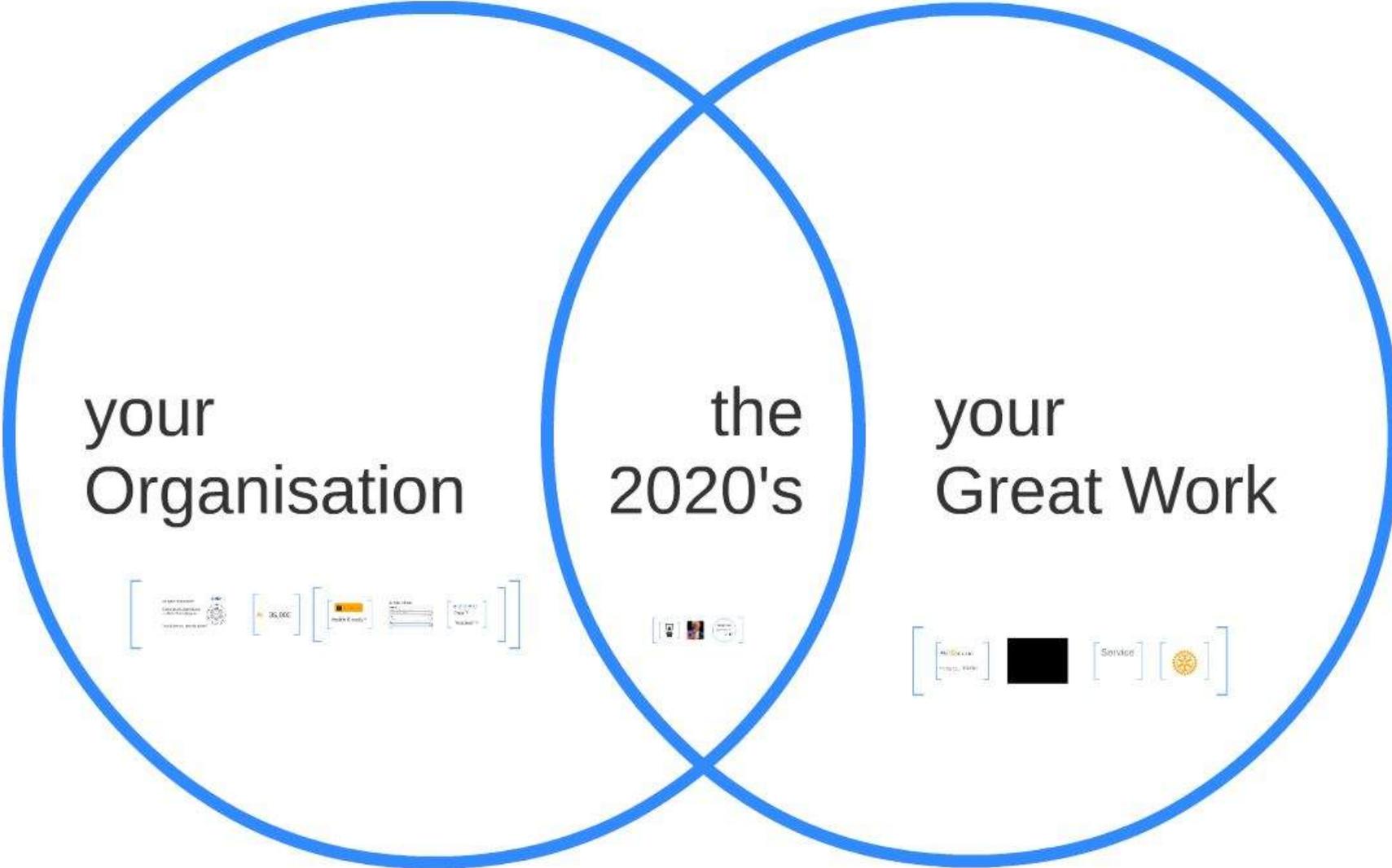
Now it is really complicated. An increasing array of StartUps with different Business Models are attacking different parts of your customer base. It's like a school of piranhas. Someone's nibbling on your toe, another trying to take your wrist off. Attacking different parts of your customer base with different models, different offers, different business propositions.

And customers now have much more power - they are using buying tools and comparison sites to drive very hard bargains.

# Disruption 2 - Fintech....



“Fintech” has attracted a flock of StartUp competitors with vastly different offers and models. Most will fail (or at least struggle) but the potential rewards are so enormous that there will be a continuous stream of StartUps coming over the horizon. Everyone is learning - from success *and* failure.



# your Organisation

Some observations.....

The Haier logo is displayed in a large, bold, blue sans-serif font. The word "Haier" is followed by a registered trademark symbol (®). The logo is set against a light blue background that is part of a larger graphic element.

Qingdao, China

75,000 employees globally

Over past 10 years

gross profits grown by 23% pa

revenue up by 18% pa

\$2 billion value from new ventures

Haier is a super interesting company.

Well - it's not actually a company - it's more of a constellation.

A rainforest of sorts.

This great HBR article by Gary Hamel & Michele Zanini explains all...

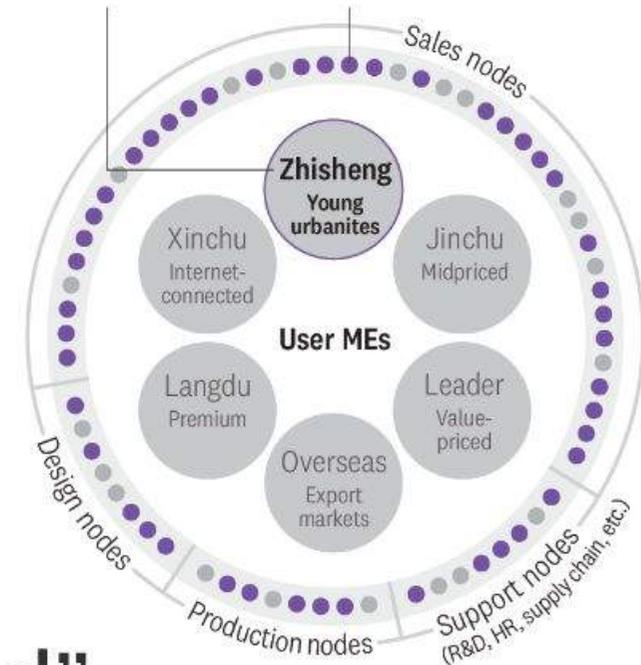
Here's the link [\*\*The End of Bureaucracy\*\*](#) Nov - Dec 2018

*an open ecosystem*

4,000 Micro-enterprises  
~ 10 to 15 employees

“small pieces, loosely joined”

Haier





# 35,000

Rotary has about 35,000 clubs globally..

These clubs have a fair bit of autonomy in their structure and focus. This is a big strength.

New models of club & membership are being developed. Clubs are already free to innovate.

In this way Rotary is already “small pieces, loosely joined”.

Whenever I’m looking for change in an organisation or ecosystem of some scale, I go looking for the “Bright Spots”....the innovation that is already happening.

Assume for the sake of the discussion that 1% of Rotary clubs that are doing truly innovative things - that’s 350 clubs.

What is the future of Rotary ?

It already exists...it’s already happening in these innovative clubs.

Identify them, understand the innovation, shine a light on it, ignite it, pour some petrol on it.

Scale it.

What is not like Haier ?

The Rotary bureaucracy. Head Office. They’ve got a monopoly. Unbundle that.

Maybe the District & Zone structure. Consider different alignment methods & collaboration methods. Maybe it could be more organic.

Unleash competing nodes that provide services to clubs. If those services are not attractive to clubs, let them fail. Create a rainforest. Occasionally a big old tree will come down. But there’s 3 new saplings already growing. The rainforest is constantly changing. Trees come and trees go but overall the forest remains healthy.



Buy Now with 1-Click

# make it easy !

Amazon patented “one-click” buying.

We are inspired by best practice.

If “1-click” is possible, 2 clicks are annoying and if your process is 3-clicks - I’m going somewhere else.

If “easy” is possible, why make it “hard” ?

Too often we don’t put enough effort into the customer journey.

Just make it easy for people to do business with you.

## Club Meeting Preferences

**Location \***  
Example: "Chicago, USA" or "Tokyo, Japan"

powered by 

**Day**  
- Select -

**Time**  
- Select -

So - I became a "Secret Shopper".

I tested the Rotary "sign-up" process via your global website.

Disappointingly I didn't get any matches for my preference of Sunday morning meetings.

BUT.....I'm not even asked what frequency I would prefer.

Personally I'd prefer "No meetings ever" but at a pinch..quarterly.

You tell me you're a global organisation of business people & professionals.

You tell me you're desperate for new members.

Why are you making it hard for me ?

You are a well-resourced global organisation.

Everything I see or touch should be slick, global best practice.

This is not.....



# Price ?

# "Matched" ?

AND....

You expect me to beg to join and you don't tell me what the price is ???

Not even a guide ?

And I'm going to be "matched" ?

"Matched" with who ?

I'm feeling like my Mum is going to organise a blind date for me.

I want some control over this process...

Make it easy for me !!!!!



your  
Great Work



\$1.1 bn is a serious amount of coin !

It is quite extraordinary and inspiring that the Rotary Foundation has these resources.

An also relevant piece of information is that the Bill and Melinda Gates Foundation has \$52 bn.

You'll be aware that the majority of Warren Buffett's wealth will be added to this sum....

So - it's likely that this foundation will top \$100bn sometime in the not too distant future.

Beyond the Gates foundation there are many other foundations, charities, corporates & high-net worth families with philanthropic objectives. There is a lot of money out there looking for the right home.

I'll oversimplify things...just to make the point.

What does the Bill & Melinda Gates Foundation want to do ?

They want to achieve maximum bang for buck. They are like Social Venture Capitalists.

They want to turbocharge organisations and programs that are already demonstrating the capacity to achieve substantial positive outcomes. Fund the "scaling up" of the activity to have greater reach. They want to maximise the leverage of their money.

The Kahn Academy is a great story of a social venture...click on [this link to watch the video](#)..

In fact the Gates Foundation do have a part of the organisation that acts very much like a venture capital firm.

It's called their Strategic Investment Fund - visit [the website here](#) - it's worth a look.

A small, highly skilled team looking to make strategic, high impact investments.

## OUR CRITERIA



<https://sif.gatesfoundation.org/our-strategy/>

I've done a lot of work with StartUps and young companies to help them get ready to raise money to fund their growth. Money from Venture Capitalists or other Investors or Government Grants.

We call this making a Venture, "Investor Ready".

Every Venture Capitalist I've ever spoken to says something like "there's no shortage of money - but there is a shortage of "Investor Ready" deals.

Rotary International has something that the Bill and Melinda Gates Foundation hasn't got.

An army of 1.2 million Rotarians tucked away on pretty much every country on the planet, deeply embedded in their communities. They understand the local issues, the local nuances. They know how to get things done on the ground. They can see the local problems. Rotary International via the clubs and Rotarians should be a big data enterprise.

Observing and identifying the problems, the opportunities and measuring the relative impact of different interventions.

What if Rotary International became the biggest & best organisation (ecosystem) on the planet for identifying and nurturing Social Ventures ?

What if the Rotarian Army was given tools & skills to do this better ?

What if the most promising of these Social Ventures could be supported to rapidly grow ?

What if the Rotary International Fund was used to provide “seed funding “ (together with other collaborators) & other professional help to empower these organisations grow and get over the inevitable teething problems ?

What if Rotary became the most trusted group to make Social Ventures “Investor Ready” for other organisations that will gladly fund high calibre social initiatives ?

Imagine the impact that might have....

These funding organisations can't do that....

Rotary can....play to your strengths....do what nobody else can do....and be the best in the world at it.

Rotary lights the fire, others pour on the petrol.

But won't this detract from “local programs”...?

I'd argue no. Rather than millions of Rotarians “re-inventing the wheel” - figuring out how to solve local problems....we upskill you with “Design-thinking” skills. Rather than “do”, you “enable” ....in many cases working with other (existing) local organisations.

What if every Rotary club became experts at accessing government grants to fund these local organisations ? [Bizarrely governments often struggle to give away grants !!!]

I'd rather spend a Sunday afternoon helping a good local organisation access a \$100,000 government grant than clean a BBQ.

What if Rotary could recruit an army of local helpers who can help occasionally but infrequently.....?  
What if Rotary International developed the best IT platform on the planet to make it easy to recruit, induct, train & deploy “on-demand” volunteers.

They haven't got the time or the money to become Rotary members but they want to help their community.

Make it easy for them to do that !

Rotary becomes the conduit, the facilitator.

The Uber of volunteers.

Rotary's 1.2 million Rotarians could mobilise a volunteer “on demand” army of 12 million +

Everywhere, organisation become ...*powered by Rotary*.

Play to your strengths, do what nobody else can.

Less doing, more enabling.

More brain, less brawn.

Rotary International needs to build the processes and tools to make it easy for clubs and Rotarians to do this....you turbocharge those other local organisations with your Uber volunteers.

Make everything freaking easy for everybody !!!!

Use your collective brainpower (sprinkled with a little bit of money) to do this.

Ask me to clean the BBQ every Sunday...sorry, I'm not interested.

Ask me to help you change the world.....when do we start ?

[and BTW....everyone I know thinks this way !]



A few comments on the Rotary brand strength...

I grew up in a Lions family. Back in the 70's Dad was founding member of the Lions Club of Clare. Not long after, he was President, then Zone Chairman (the Lions equivalent of a Rotary district.).

I went to Zone Picnics - so I'm familiar with the idea of "Service Clubs".

But I could never really figure out the difference between Lions & Rotary.

After about 4 days researching for this presentation - to be honest I'm none the wiser.

Slightly different words....but fundamentally the same values. Same basic Business Model best I can tell.

I've presented in the last 5 years, 3 times to Rotary Clubs...so, of course I'm aware of Rotary.....they're the group like Lions ! Dad was in Lions.....

But here's the thing. I read widely. I'm active on social media. I interact with all sorts of business people - young and old. I have friends who are on the boards of foundations with lots of money.

But to me and my friends....Rotary is basically invisible.

You don't cross my radar screen (and I've got pretty good radar).  
I'm often talking with my friends about "how to change the world".  
Rotary just doesn't get discussed in any of those conversations.

40 years ago Rotary (or Lions) would have been on our radar screens.  
I reckon me and most of my friends would probably have been members of one or the other.  
You'd come up in our conversations.

You've got such great stories.

But there's a lot of noise. It's too complicated...

Talk about BBQ's on Club websites. Talk about turbocharging Social Ventures on the RI global site.

It has taken me days to get to the level of understanding that I now have.

It shouldn't be that hard. Simplify everything.

Make it easy. Make it modern. Tell your great stories in a way that is easily accessible.

Tell your "global stories" in The Wall Street Journal, The Economist or The Australian.

Tell your BBQ stories in the local paper OR even better, leave the BBQ business to Bunnings.

Create something that will attract a global tv audience.

And just to be clear - I'm not too "up-myself" to cook a BBQ. Happy to do it when it's strategically important. The BBQ on Sunday at Hahndorf was wonderful, perfectly appropriate.

But don't ask me to cook a BBQ at Bunnings as a "fund-raiser.

That's the domain of the local trampoline Club.

It's not the best use of time or "brand positioning" of the organisation that helped to initiate the United Nations. The local trampoline club can't do that great work. Rotary could.

What if Rotary was really different. It was a collection of Professionals and business people that used their professional skills to help other organisations.?

Don't ask the best HR Lawyer in town to clean the BBQ. Ask her to help solve a thorny problem for an important Not for Profit (Social Venture) that badly needs pro-bono help.

Rotary has global reach and substantial resources.

Rotary (at a global level) designs the best in breed processes, systems & platforms to make everything easy.

Substantial automation, one-click everything. Service nodes that do the work that it's hard to get volunteers to do - and because they do it at scale - it's very affordable.

Initially Rotary implements these systems internally. Make your own life easier.

Then - you make these platforms and systems open and available for any other Social Venture to use. Because it's all done on a global scale - it's ridiculously cheap per user.

Rotary then becomes integral in making every other "Not for Profit" on the planet more effective by providing them with global best practice tools & platforms at a very modest cost.

Less doing. more enabling.

They've got the brawn, you've got the brains.  
You bring the skill, they bring the sweat.

Less doing, more enabling.

The world's "Not for Profits" and "Social Ventures" tell everybody that they're "Powered by Rotary".

Is that a radical notion ?

I don't think so.

It seems to me that for the first 70 years or so Rotary was the standout global organisation of it's type. Modern, innovative, an applicator of best global practice.

In my honest opinion....since, then it's lost it's way.....

So - seems to me - all of this is what the early Rotary would be doing...not radical, just normal.

And seriously if you can't be notably different from Lions - merge with them globally - otherwise you're just muddying each other's water.

The differences should ( and need to be) stark !

Different brand position, different Business Model, easily explainable.

And be careful with the words you choose.

I want more “meetings” in my life - said no one ever in the past 20 years.

“Meetings” is now, actually, a toxic word in my opinion.

And “service” ? ...maybe it’s just me....but I immediately default to the image of cleaning the BBQ.....

Figure out how to make Rotary the “no-brainer” conduit for someone who wants to change their world...whether that be local or global. Make it easy.

And nobody needs to be a member to work with you to help you.

Give them a “test drive” in an easy way...by volunteering or providing some pro-bono professional help.

Again - words....I don’t think of myself as a volunteer.....pro-bono is closer...

So - why don’t you harness the substantial untapped, uncoordinated, professional pro-bono capability to empower all the well-doing organisations of the world.

Make it easy for the best HR lawyer in town to help a range of organisations.

But make it easy...and help her maximise her impact...

Then she’ll be telling everyone...

“I’m doing the most amazing pro-bono work. Rotary make it so easy for me.

My pro-bono work is powered by Rotary.”

the  
2020's

# the 2020's



To pull together all of my thoughts about what is possible for Rotary in the 2020's I wrote a speech to be delivered by the Rotary International President in 3 year's time.

Click on [this link to access the speech.](#)

You'll need to use your imagination.

Everything I've described is doable...in fact most of it is pretty straight forward for a modern, agile, global organisation with \$1.3 bn in the bank.

O.K..... 3 years is moving at a fair clip. Be conservative...give yourselves 5 years.



I used to love listening to Malcolm Blight commentate AFL. At some point - usually in the last quarter, if a game was slipping away from one team...he'd just say "time to roll the dice".

And by that he meant that "business as usual" wasn't going to get the job done.

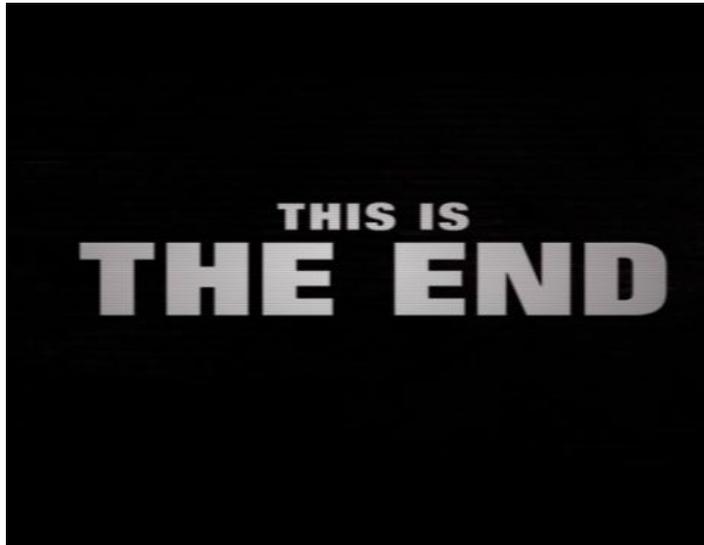
Swing the centre-half back to centre half-forward. Mix up the centre rotations. Whatever.

The risks of doing nothing exceeded the risks of doing something.

So my closing message to you is....

**Time to roll the dice....**

Good luck !



Please connect with me

.....

**Linked** 

[Andrew Leunig](#)

**twitter** 

@aleunig

[Andrew Leunig](#) is a :  
**Business Model Innovation Expert**  
**Strategy Facilitator**  
**Keynote Speaker**  
**Non Executive Director**

e [andrew@leunig.net.au](mailto:andrew@leunig.net.au)  
m 041 8833 751  
w [leunig.net.au](http://leunig.net.au)