

The Future of Work: What will employment look like in the future?

Professor Jarrod Haar, Ngati Maniapoto, Ngati Mahuta

Professor of Human Resource Management, Dept. of Management

An abstract graphic on the left side of the image, composed of numerous triangles in various shades of blue (dark blue, medium blue, light blue) arranged in a complex, overlapping pattern that tapers off towards the right. The triangles vary in size and orientation, creating a sense of depth and movement.

The Future is Now!



Today: UBER driverless car

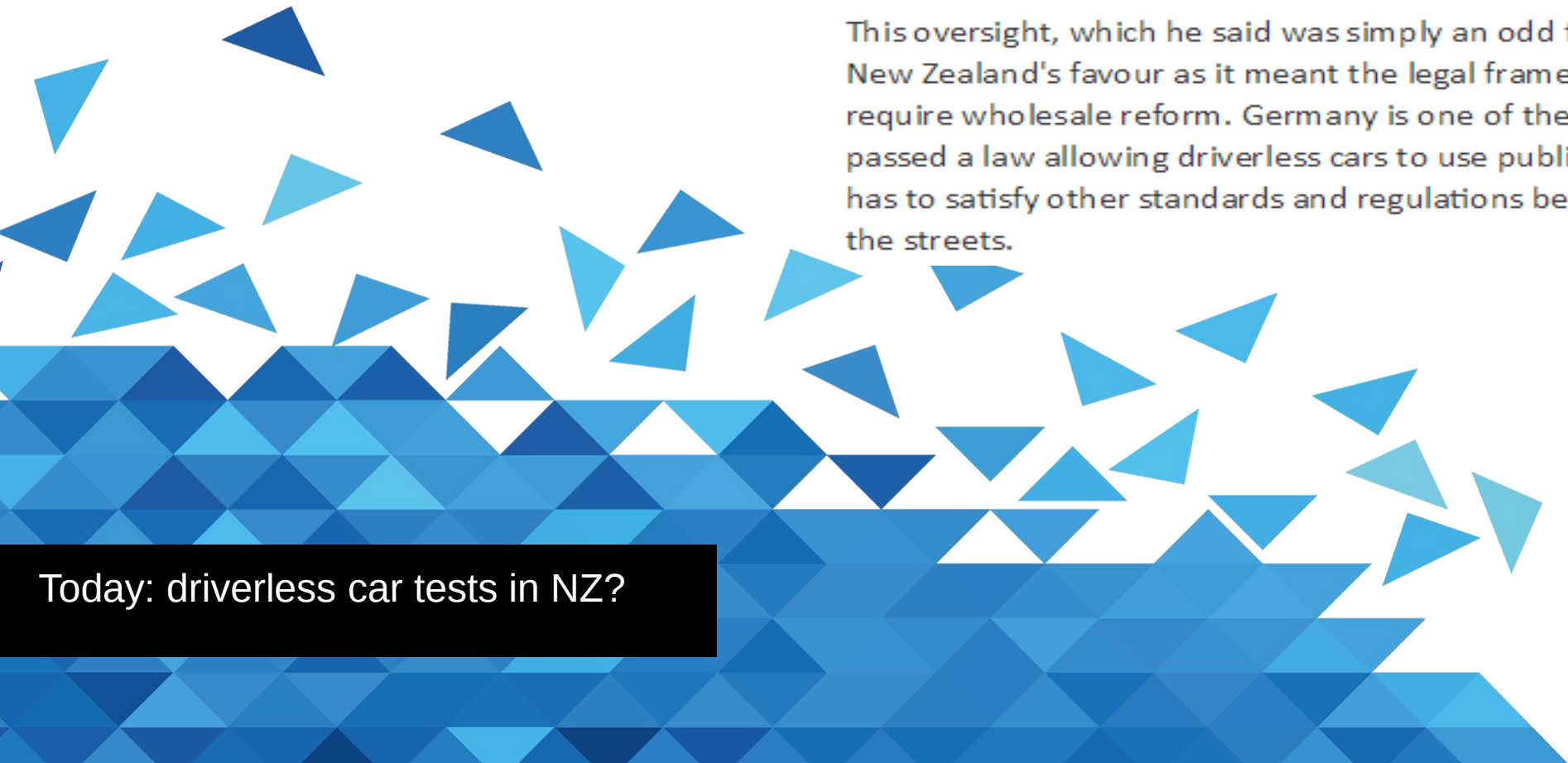
Auto industry invited to test driverless cars in New Zealand

6:19 AM Thursday Jun 1, 2017

He also revealed that the Government already was in talks with an unnamed autonomous carmaker about coming to New Zealand for a pilot project.

The minister said New Zealand had special advantages that could appeal to the industry. One he cited was a quirk in New Zealand's transport law that meant there was no requirement for vehicles to have a driver.

This oversight, which he said was simply an odd feature of the law, could work in New Zealand's favour as it meant the legal framework for driverless cars did not require wholesale reform. Germany is one of the few modern economies that has passed a law allowing driverless cars to use public roads, though the industry still has to satisfy other standards and regulations before such vehicles could take to the streets.

A decorative graphic consisting of numerous blue triangles of various sizes and shades, arranged in a pattern that resembles a stylized landscape or a cluster of abstract shapes. The triangles are primarily in the lower half of the image, with some extending upwards.

Today: driverless car tests in NZ?



Tomorrow: Minority Report Movie

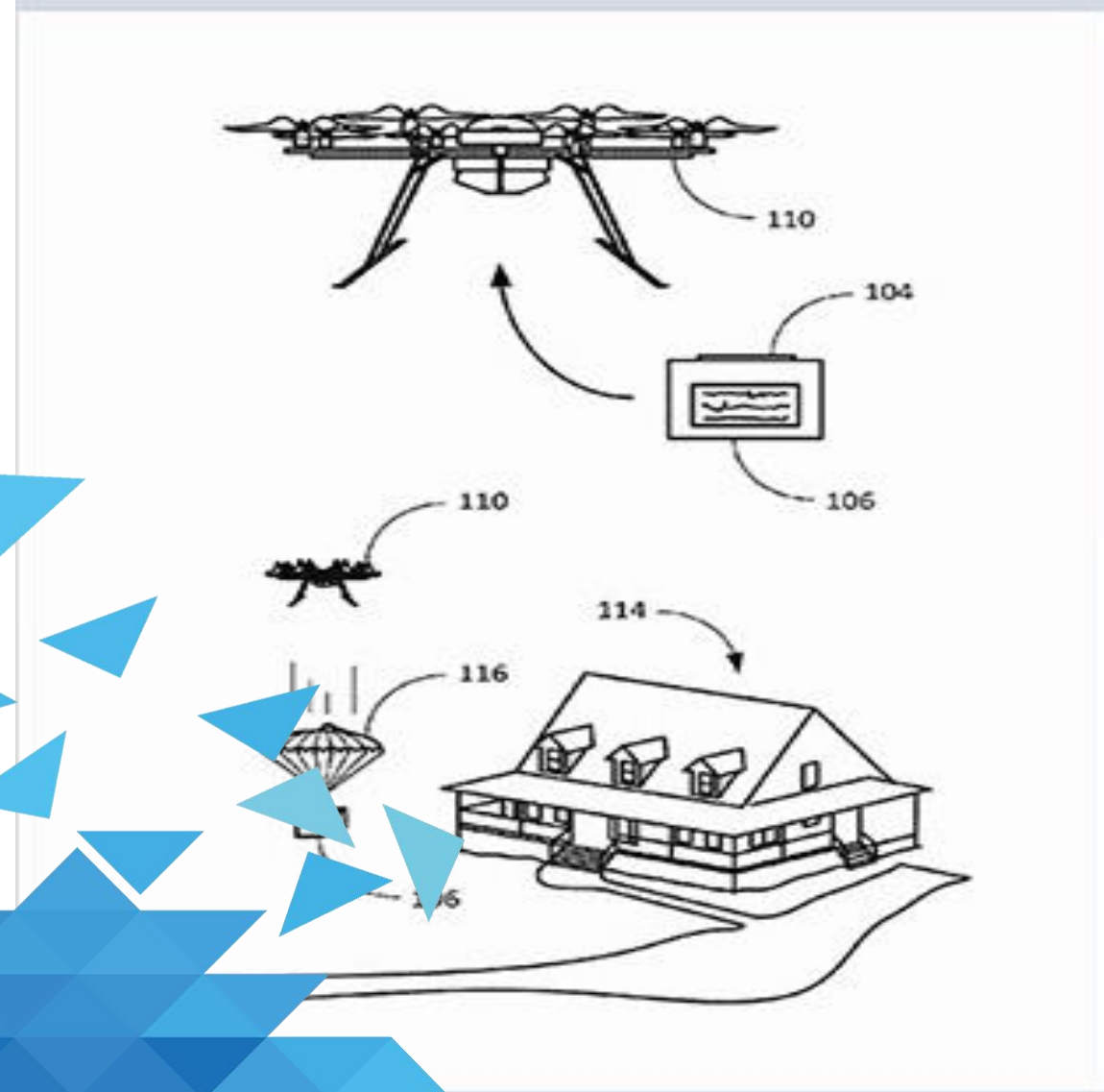


Imagine the removal of this!!



Today: Replace Courier Drivers

Amazon patents shipping label with built-in parachute for drone deliveries



Today: Replace Courier Drivers



Today: Replace Truck Drivers

An abstract graphic on the left side of the slide, composed of numerous blue triangles of varying shades (from dark navy to light sky blue) arranged in a complex, overlapping pattern that resembles a stylized, fragmented map or a mosaic. The pattern is denser on the left and tapers off towards the right.

**In the US, 10 million
Truck driver and
transportation
(taxi's, courier
driver) jobs at risk**

**2 million in
Germany...**

An abstract graphic on the left side of the slide, composed of numerous triangles in various shades of blue (dark blue, medium blue, light blue) arranged in a complex, overlapping pattern that tapers off towards the right.

**So, just
transportation,
right...?**



Today: Concrete Erasing Robot



Today: Concrete House 3D Printing (24hrs)



Today: To be printed onsite (Dubai)

An abstract graphic on the left side of the slide, composed of numerous triangles in various shades of blue (dark blue, medium blue, light blue) arranged in a complex, overlapping pattern that tapers off towards the right.

**So, its all a given
then, right?**

Tesla driver killed while using autopilot was watching Harry Potter, witness says

Driver in first known fatal self-driving car crash was also driving so fast that 'he went so fast through my trailer I didn't see him', the truck driver involved said



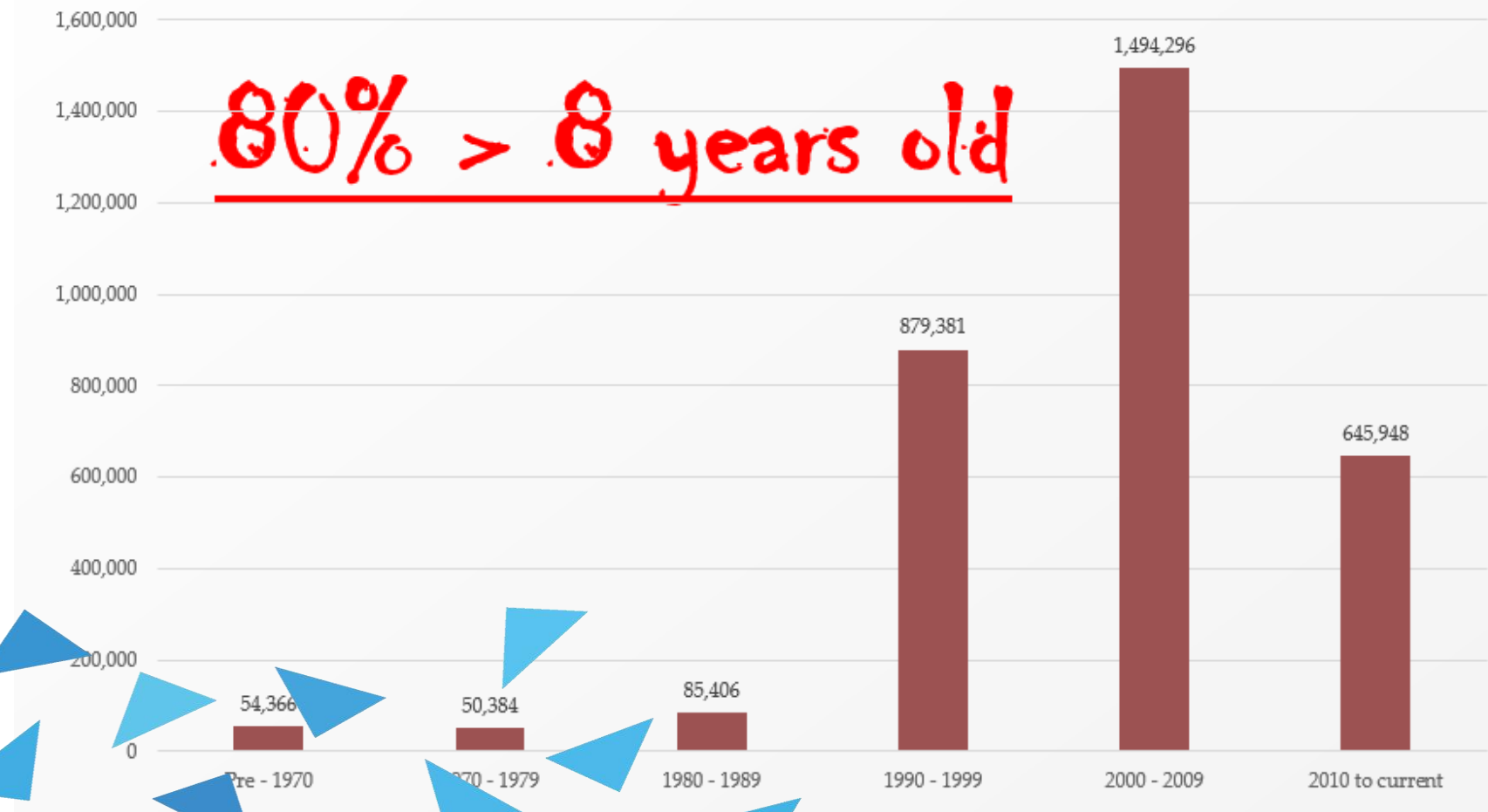
It may only take a few 'accidents; to set things back...

using autopilot



Fate of the Furious (Movie)

80% > 8 years old



NZ passenger cars and vans (3.2million) by age

Uber fires star engineer, Anthony Levandowski, at the center of self-driving car battle

By Elizabeth Dwoskin, Craig Timberg

2:48 PM Wednesday May 31, 2017

A decorative graphic at the bottom of the page consisting of a dense field of blue triangles in various shades of blue, some pointing up and some pointing down, creating a textured, geometric effect.

UBER & driverless cars stumble?

An abstract graphic on the left side of the slide, composed of numerous triangles in various shades of blue (dark blue, medium blue, light blue) arranged in a complex, overlapping pattern that resembles a mosaic or a digital texture. The pattern is denser on the left and tapers off towards the right.

**So, not so simple
then...**



Other technology changes to note...

- Robot farming – from 180km away!
- Robot milking
- Robot firefighters
- Drones with life preservers
- Robotic tractors
- Drones with plant chemical sprays for crops
- We already have self-service technology at McDonald's, Pak n Save...



Robotics in Manufacturing (60k jobs!)

A decorative background on the left side of the image, consisting of a dense, overlapping pattern of blue triangles of various shades, creating a mosaic-like effect. The triangles are arranged in a way that they seem to be breaking apart or dispersing towards the right.

47%...

**A study of
occupations and job
types suggest 47% of
jobs are 'High Risk'
of being replaced by
Technology,
Robotics, &
Algorithms etc.**



A logical response to this would be...



Take Home Points

- Technology change is already happening
- More WILL happen
- But, we don't KNOW what will happen around jobs. Definitely changes in manufacturing and food service – but other changes can be in anything from transportation, building, to law and accounting!
- These changes WILL create new opportunities – we hope! – and indeed, these new opportunities might be extensive?!



Take Home Points

- Interesting, these futurists do suggest training in the following:
 1. Adaptability and flexibility
 2. Communication skills
 3. Social intelligence (connect to others)
 4. Cross-cultural skills
 5. Problem-solving skills & novel thinking
 6. Handling incomplete and complex information



Take Home Points

- 7. Critical thinking
- 8. Trans-disciplinary skills
- 9. Team working (cooperation & collaboration)
- 10. Computational thinking (analytics)
- 11. New media literacy

Other factors? Coding experience! Future work might be your current skill/specialty AND some technology angle...