



## Let's Talk Retail

What is changing in Customer Experience?

How does that impact technology strategy in 2021 and 2022?

What will be the burning strategy conversations of the next 2 years?

## CX and IT Strategy Agenda – 2021/2



By Morris Pentel

[www.pentel.me](http://www.pentel.me)

## Sponsors



# Table of Contents

<b>Executive Summary .....</b>	<b>3</b>
<b>Part 1 - Introduction .....</b>	<b>6</b>
Insight Upscaling .....	7
<b>Part 2 - The IT Challenges .....</b>	<b>7</b>
“More” .....	7
The second word is ... “Change” .....	8
Change 1 – More data processing .....	8
Change 2 - Customer Experience (CX and X2) .....	8
Try this .....	9
Change 3 – Active Customer Journey Maps.....	9
“Self Service IT” .....	10
Change 4 – Security Cameras.....	10
Change 5 - Surveys.....	10
Change 6 - AI/ML/RPA .....	11
Try this .....	11
Change 7 – Contact Centres.....	11
Change 8 – Conversation Analysis.....	12
Change 9 – Experience Efficiency .....	12
<b>Part 3 – Retail Market Leaders Agenda .....</b>	<b>12</b>
Try this .....	13
<b>Part 4 - Super Retailers - What business are you in?.....</b>	<b>14</b>
Change 9 - Amazon .....	15
Bottom Line .....	15
<b>Part 5 - Mobile first? Is this how you should think about it?.....</b>	<b>15</b>
<b>Part 6 - Omni v Opti Channel .....</b>	<b>16</b>
Change 10 – The shopping basket – “People like you looked at this!” .....	16
<b>Part 7 - Instore experience .....</b>	<b>17</b>
Change 11 - Disney .....	19
Try this: .....	19
<b>Part 8 - Insight Upscaling and Wisdom .....</b>	<b>19</b>
<b>Part 9 - Can I trust you? .....</b>	<b>20</b>
Change 12 – Google trends Greta Thunberg v Kim Kardashian .....	21
<b>Part 10 - Conclusions.....</b>	<b>22</b>
So, what is all this to you? .....	22
<b>Appendix .....</b>	<b>24</b>
Author - Morris Pentel - Innovator .....	24

# Executive Summary

Customer Experience is changing the role of IT over the next two years – so what that means to IT Strategy in 2021 and 2022?



Advancements in *how* we connect and *what* we connect are combining with an explosion in applications to create a different picture of organisations. Strands of information combining to produce clearer insights in more parts of the business are creating the opportunities to change outcomes. This created a new way of thinking about Customer Experience.

These insights are changing “Understanding” for organisations. Information is joining together around experiences and processes from more and more sources to create this new level of insight. This provides both challenges and opportunities. Understanding requires effort, and all parts of the organisation will need support from IT to create this new layer of insight, and, of course to exploit it.



The report highlights some key indicators of this changing set of priorities and explores their impacts on Strategy over the short term. We do not overlook the real-world issues of store closures and supply chain uncertainty. We monitor current trends and innovations continuously for clients.

This is not meant to present the whole story but give a large enough amount of information to start your quest to understand the overall pattern of current changes for your organisation.

## We draw 10 conclusions from the CIO's point of view

1. **Customer Experience** – There are big changes. X2 (the next gen of CX) is about managing much more insight and delivering better experiences. Better for the customer, but also better for the employees and for the Retailer. This is about changing to a microscopic approach to customer and employee experience leveraging behaviour and systems to deliver more efficient outcomes.
2. **More data to be processed** – We highlight the trends that lead us to conclude that the data per process and per customer will dramatically increase. Large (and difficult to quantify) increases in data types, volumes, connections, and information to process and protect within an unclear road map of testing and learning on a journey of continuous innovation. Expect your goal to be processing petabytes of data to produce terabytes of insight in as close to real-time as you can.
3. **More Applications *in* More clouds** – AI has created the ability to find so many different efficiencies across every aspect of the operation available as SaaS plug-ins. The retail landscape continues to suffer innovation shocks. They are forced to continuously reinvent retail, so the pressure to act on these shocks will be a factor. They come from a plethora of new users focused cloud-based applications that produce new slices of insight.
4. **Available Scalable with ubiquitous security in its DNA** – In many ways this is the key insight of the report. The right foundations deliver 4 of the key elements of trust. There will be so much change that you will need to operate a virtual series of layers of internal data and external data processing to survive. If you are on that journey you need to speed up and, if you haven't started yet, read the whole report.
5. **Insight Upscaling** – The amount of actionable insights you will have available to improve experience will dramatically increase over 2 years. Insight will change to the microsecond level. This starts to make sense of the huge streams of data that has been more increasingly available. Insight Upscaling is about a clearer understanding of operations across retail organisations in much more depth as disparate systems connect more information together. It will fundamentally change CX completely. By 2021 it will also be at the top of the agenda for retailers.
6. **Details and Context** – The business will be able to understand from pasture to behaviour: From growing conditions and carbon cost of a banana to its impact on the health of a specific customer, their social life and weaknesses, their behaviours and feelings. And, if you can do that to your customers, then why not your staff? By 2021 you will be in a conversation about privacy and the use of behavioural weapons on platforms like Facebook and in the workplace that will make GDPR seem like a good night out.

7. **New internal and external experience** – The result of all of the above is the ability to provide dramatically different experiences. Your customer journey map will be a series of dashboards and intelligent maps delivered by IT. The business is like start a Customer 2 programme. This will recognise that the business has a much worse experience than the customers and that this will create great measurable returns if improved.
8. **Trust** – Trust is the most expensive business governance failure by far. Fines for failures are huge and the cost to brand is always large. But trust is now more complicated than ever. Cambridge Analytica was a weapons grade technology according to the UK Army so you couldn't export it...like nukes? Weapons grade algorithms are now available to your marketing and sales teams, who in most cases are *not* qualified to use them. Algorithms delivered through your systems. You are giving guns to colleagues to point at customers and you will have to learn about that. The excuse that you didn't know will not protect you from the court of public opinion.
9. **Continuous Improvement** – Although this insight upscaling is a step change, it will lay the foundations for a new approach to continuous improvements like habit-based business transformation - using behaviour change. It's much cheaper than technology. Business cases will start to look very different. You will become more focused on quality of metric in the overall picture. Experience will be measured by the microsecond and from both upstream and downstream sources. So, more demands on IT.
10. **Experience Efficiency** – You will need to focus concentrating on efficiency from multiple viewpoints to build a manageable dashboard of outcomes. Understanding emotions, conversations, behavioural interference as well as other moment-by-moment micro-indicators such as micro-expressions or milli-second latency. Making more effort to redefine what efficient means. Connecting other sources of efficiency in context. Overall efficiency will become the core of a new way of thinking about business performance.

## Author's conclusion

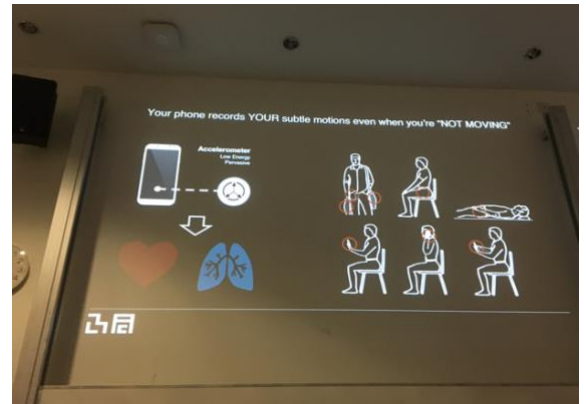
Having worked with them over the last 6 months, I strongly recommend you talk to VMware about *your* future of retail as they lead in this field. They have one of the clearest understandings of what it takes to innovate safely fast and with zero friction. These changes I have described are so fundamental you need to think about digital foundations first. With the size of their base and partnerships with the largest innovative organisations globally...they do know about what's going on. I think knowledge is a useful asset.

# Part 1 - Introduction

**This report is about how the IT agenda will change over the next 2 years.**

It may seem odd to ask the [Customer Experience Foundation](https://cxfo.org) about the IT Agenda. But IT has been part of delivering everyone's CX for more than 30 years. We are now going through a major step change in Customer Experience that will depend on IT deliverables

Experiences (or outcomes) are fundamental to IT's role. That wasn't always true, but it is now. IT helps deliver every experience. Organisations can use your accessible mobile data to understand your preferences, mood, health and habits. Who owns the data? Where is that data? How does it traverse a network safely and securely? Protection of the organisation from legislative challenges such as GDPR is key. But change extends far more widely than just into brand and customer trust.



*Phones monitoring heartbeats and other info from your phone etc – patients, customers and staff*

In **every experience of any relationship**, whether you are a member of staff, supplier, stakeholder or customer with any large organisation, that **experience is delivered in part by IT**. Now that experience is changing, IT's role will change too!

Historically, CX science comes partly from IT, with retail innovation setting the agenda driven by the expectations of both users and customers. CX is rooted in measuring IT deliverables as outcomes and designing project efficiency. Since the 1980s and the arrival of consumer facing technology, IT has played a pivotal role in retail experience. The first e-commerce, call centres, electronic tills, RFID devices, and supply chain experiences have been delivered through IT as a principal actor. Today organisations must focus on “**experience efficiency**”. Customer Experience insights unpick the outcomes of IT, Culture, HR, Marketing, Sales, Service, Finance, and every other part of the things that make up moments of each experiences.

So, the perspective of some leading customer experience professionals came from the same roots (with some of us former IT innovators and leaders) but we use a slightly different set of rules, processes and equations - the same project management approaches, but CX has adapted them to include experience data models and their impacts.

Customer Experience turns the technologies and behaviours deliverables into actionable outcomes.

**IT's agenda is about the delivery of experiences and outcomes.**

So, the exam question for us is....

**What experiences and outcomes must *you* be thinking about over the next 2 years?**

Relax - this is *still* about servers, clouds, shadow IT and applications; Zettabytes of insight with Teraflop processing. There is mobile first omni channel. There is AI/ML/RPA, security, and silos. It's also about project management because an experience is a project. An experience is a series of many micro-projects ranging from “availability”, “security”, or “effortless” to “understanding customer emotions” or “impact on the environment”. Currently, in CX terms, the average experience such as form filling, buying or getting a retail delivery, is maybe 130 micro-projects for arguments sake - 130 technology elements working efficiently, but that number of micro-projects is growing massively quickly and unpredictably.

The other reason for asking us is that what we highlight in this report is the impact of all these changes on customer experience leading to these new demands on IT.

## Insight Upscaling

**The is a major change to Customer Experience (CX) and other parts of the organisation that will impact IT.** This comes from our new abilities to analyse in microseconds and micro expressions within the whole (or circumference) of an experience or process. Technology performance and behaviour patterns of every stakeholder, like the structure of emotional affect or changes in spending habits are being connected in a single journey. The organisation will be creating and consuming much more data to deliver understanding and outcomes. In every area that IT supports we are seeing massive increases in data, tools, creating more insights than ever before. This is fundamental change not incremental. It impacts the management and outcome of experiences from IT's point of view as CX becomes more and more about algorithms.

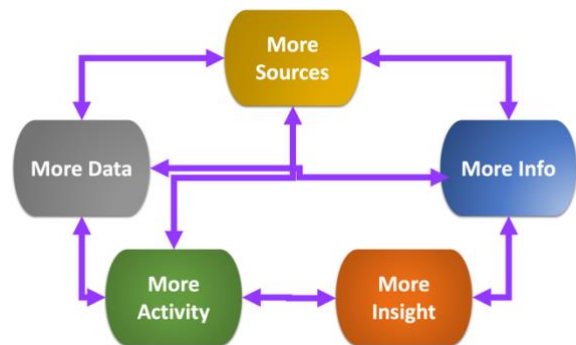
If you think back a few years, we were in the early stages on new things like Mobile UX design, predictive algorithms, post interaction surveys, Bots etc. Changes to the employee experience have also introduced another level of complexity through elements such as Shadow IT. Security of data is a moving target. The number of elements you will connect together in each experience is increasing at a rate that is a strategic issue by 2021 for the CIO. It is the impact of this increase that we focus on here.

## Part 2 - The IT Challenges

There are some very clear trends that will drive the agenda for IT in retail over the next few years. This is about some of the key highlights seen from the strategic level. It is in sections that cover the key subjects of discussion we see as vital focus areas for 2021.

However, before you start, there are a couple of important words and phrases to think about. These underpin everything you are about to read, relating to trends.

The first word to think about is....



### “More”

- Applications
- Clouds (internal and external)
- Complexity
- Connections (internal and external)
- Data (by factors not per centages)
- Emotions
- Information
- Insight Upscaling
- Innovation
- Interactions
- IOT
- Security and Compliance Risks
- Touchpoints
- Use of AI/ML/RPA

For the Retail CIO this word “more” is a key piece of any strategy puzzle; more technology elements connecting to more stuff, collecting infinitely more data, across the enterprise and to the edge (customers). This means we are now able to provide more *perspectives* which allow us to change valueless data into extremely valuable contextual information. For the business, it is like having a new expert service that can connect and explain the importance of the data across the enterprise - but the bad news is that expert service is IT.

One clearly identified trend that is creating this impact is easier connectivity. In conversations with Subject Matter Experts, CIO's, and other C-Suite members we found that there was a significant difference between best practice and their competition.

## The second word is ... “Change”

Fact - There is more change going on in retail than at any time in its history. Its impact will be bigger than the internet and look how *that* changed retail.

Fact – To meet human expectation we will need to deploy more applications in the next 5 years than in the previous 40.

A key **change** to IT deliverables is this new layer of insight. It is about everything that started merging over the last 3 years. More information is turning into more actionable insight across everywhere from the supply chain to the delivery van through to the micro-expressions and health of your customers in real-time.



## Change 1 – More data processing

**Process petabytes of data to produce terabytes of insight with zettaflop processing in as close to real-time as soon as you can?**

The standard sizing equations and processes will be impacted by this idea of “**more**”. Maybe it might end up as Yottabytes over zettaflops or the quantum computers that both IBM and Google are focused on. However, there is no way to credibly predict that rate at the current time. Once you think of customer experiences in microseconds you can understand the issue. As experience becomes monitored in more detail, and outcomes change live, this increase will continue. You must expect more of everything connecting together, more easily. But of course, it will be less easy to manage from your point of view. More insight will drive the outcome of events in real-time: more opportunity, if you can leverage it, with your customers with the associated risks.

<https://www.cnet.com/news/google-quantum-computer-leaves-old-school-supercomputer-in-dust/>

We are seeing these “**insight upscaling**” patterns happening in almost every activity, across the entire retail experience from supply chain to customer service - not just in CX. It has been called wisdom-driven operation – rather than insight driven. Within 3 years market leaders will have built this approach into every aspect of their operations.

It will create significant change quickly, because, by its very nature, cross connecting silos is the only way to make those connections more relevant and viable as a source of information.

## Change 2 - Customer Experience (CX and X2)

**Let's talk about understanding CX or maybe just X. If we can understand how to organise the information that impacts X (an experience) your organisation is efficient.**

15 years ago, many folks thought customer experience was about the “ultimate question” .... would you recommend me? This became a best practice focus of CX. It was sold on the idea that a single question could unlock the complexity of our feelings and emotions. Then there was another magic question... then another. The siloed nature of organisations meant that this cycle continued for years and is still a highly dominant trait of laggards.

In reality, there are 2 branches of CX currently. There are the CX general practitioners who operate in most organisations and consultancies in the surveys-based approach, and then there are the X2 practitioners who work at a very different level in leading experience organisations bringing together

micro-details of moments of experience. X2 is the management of the physics of experience through data. Leaders chart the micro-moments of aspects of X2 and many more data points. In simple terms, it means that experience is not a single ping searching in the dark through a single dimension. X2 is the ability to organise layers of insight into changes to outcomes to make them better in real-time.

Leaders chart the micro moments of all these aspects of X and many more:



The ability to micro-manage the supply chain insight is now being outgrown by the ability to change customer behaviour. Many of these feeds come from external providers, technologies, and sciences where information and patterns are coming together to form increasingly pictures of what is going on. There are literally thousands of elements you can examine in any customer experience and so you can measure any experience of any stakeholder financially. X2 will be the logical channel that delivers insight. **Reminder – It may be petabytes of data to produce terabytes of insight in as close to real-time as you can!**

### Try this

Let's look at just one of the new elements that will turn into a metric over the next 2 years – Plastic. Unilever has pledged to reduce their single plastic usage by half and Ben & Jerry's plan to reduce their use of new plastic by 400,000 tons per annum. According to the Guardian UK newspaper, other major retail organisations regard this as a customer relationship issue. <https://www.theguardian.com/business/2019/oct/07/unilever-pledges-to-halve-use-of-new-plastics>.

Think of the plastic usage or any other good example of the speed at which customer feelings impact strategy. Every retailer is under the microscope. Social behaviour of organisations is part of the core values of the customer relationship. It is no longer good enough understand just their shopping habits but you must also take account of their social views. Organisations are already listening to customers as part as brand values but there will be more issues to manage. Every so often ask colleagues about what they think people care about today and talk about how well you are responding to the issues in comparison to market leaders. Look at leaders like Amazon with their positions carefully crafted on facial recognition, climate change, biodiversity, minimum wages, etc. because they have to. So, do you!

### Change 3 – Active Customer Journey Maps

**Customer Journey Maps** are changing from presentations **into a digital layer of insight**, outputting a more accurate view. Connecting all the data sources will produce more detailed patterns of insights of stages and states of all the detail that makes up the Active Customer Journey Map. The “As Is” microsecond model, straight from live metrics. This will be owned by CX and delivered by IT. The map will become the central nervous system of the enterprise and will produce a whole range of support tools

and be connected to each employee device with the relevant data to define efficiency. This efficiency metric directly correlates to the bottom line of your P&L dynamically live.

The algorithms that drive experience combine project management to behavioural efficiencies through live improvements changing outcomes. Consider the hypothesis that the during the next stage in evolution all the data collected delivering a completely new level of insight.

So, this is the challenge for IT departments. You are the central hub of a change engine. The scale of continuous change is difficult to understand until you step back and view it strategically.

Continuous improvement is merely table stakes - a standard business strategy. However, continuous change means there may be a system of insight available which could completely disrupt current processes (across the enterprise) for the better. What's important in the changing role of the CIO (as identified by Forbes in their 2025 research paper) is this new responsibility of IT to be looking out for and facilitate adoption of new trends, to drive a cohesive IT plan. The same is most certainly true of new functions which are added to existing systems. Every type of technology is improving in terms of speed, connections and functions. This is creating an unprecedented speed of adoption for retail leaders and laggards.

### **“Self Service IT”**

This idea of using services from the cloud cutting out IT has been welcomed by all levels, but not everyone also sees all the risks. The use of SaaS delivering data/insights is commonplace. Everything from google analytics to the weather are external services with practical impacts on your decision making. Of course, getting users involved seems to reduce costs and improve go to market speed. Driven much more by IT's clients, this has become common place. It's a good thing but insight comes at a price. That price is risk. There are good and bad self-service IT options and sometimes we make bad choices.

### **Change 4 – Security Cameras**

Think about one of IT's roles - as security guard. For years, you watch black and white monitors from low grade cameras. It's the equivalent of switching to 4K High Def and having that Joystick means you can zoom in or see in the dark, anywhere in the enterprise.



You can see everything from micro-expressions to latency and bring all of that data together to define secure at a completely different level. You can tell when people are lying or depressed. It is as dramatic as that, in terms of impact. There will be change everywhere for you to support. But if you can see everywhere maybe there have to be controls? Or rules about privacy? IT will have a role in the management of many **moral** issues it has never faced before. This “Emotion Detection” software is available now through your in-store cameras from a number of SaaS suppliers including Amazon. This video gives you an idea of what is currently out there.

[https://youtu.be/5sc7\\_dseGqs](https://youtu.be/5sc7_dseGqs)

### **Change 5 - Surveys**

Think about marketing and its later misuse of tools like “surveymonkey.com”. Marketing surveys is a multi-billion-dollar industry and the latest innovations from this industry are now delivering bots which are sold on a SaaS basis to retailers as well. This started as a great short cut to market and a win/win for all. However, over history it has created a new term - *Survey Fatigue*.




This concept of billions of surveys every year matches unsolicited junk mail or annoying cold calls into the list of things consumers don't like about us. What started out as a very quick win is now producing such poor insight at too high a price. It is also now seen as a bad customer experience more often than not, leaving to vast attrition in customer loyalty.

*Note - We expect most retail leaders to completely change the role of surveys to focus on conversations with customers over the next 2 years in their importance to the insight of the business.*

## Change 6 - AI/ML/RPA

The same access profile as surveys is true of other more dangerous technologies such as AI/ML/RPA. They are typically Cloud-based, user driven, easy to get going, etc for everything from storage, to unimaginable scale of processing. The insight side of things is really likely to have exploded by 2021, as more and more elements start to turn information into **much more** actionable insights. But their impact will be more far reaching and is discussed later. They provide the ability to use the equivalent of an electron microscope on behaviour in the real world. This capability is starting to form a new information layer changing financial priorities in the management information pack because it changes the way we think about detail.



**Capital One** stated there was AI/ML/RPA elements across every part of their retail operation in 2017.

30+ Artificial Intelligence Statistics for 2019

<https://learn.g2.com/artificial-intelligence-statistics>

## Try this

Look across each step of every stakeholder's journey and AI/ML/RPA will have an impact or already does. Think in terms of data per experience 5 years ago, now and with AI/ML/RPA revolution we are going through.

## Change 7 – Contact Centres



The role of the contact centre is continuously changing to keep up the pace of change. Omni/Opti channel support, connection with RPA, the adoption of conversation analysis, Emotion Detection will be commonplace in the call centre over the next 2 – 5 years.

Less than one contact centre in 1000 uses Conversation Analysis which produces up to a 1,000 or more data points per second of conversation than is currently collected. Leaders started using normal conversational patterns to convert conversation into insights. Other roles for the contact centres based on delivering higher value contact are proving successful.

An instore mobile concierge service delivered by the contact centre looks financially promising, especially in specialist high-value retail. Of course, there are a large series of technologies to take basic work away from the contact centre as well, like BOTs and Virtual Assistants. These will lead to a higher value of human intervention. This takes us into designing solutions that help deliver the human qualities we value. The most valuable insights around Contact Centre trends come from several sources. I strongly recommend the [Annual Contact Babel Report](#). This year's UK highlights include - UK contact centres waste £5.8bn per year on the time that agents spend navigating between multiple desktop applications. You should also read [Call Centre Helper Survey Report: What Contact Centres Are Doing Right Now \(2019 Edition\)](#). These are 2 sources that have proved to be highly accurate over many years.

## What does “more and change” mean for the role of IT in retail?

When so much *change* is digital and user driven, we think about doing "more with less". But this is not that situation - this is about *more* change and *more* things to change as the organisation steps up a level. But this is not a situation where simply replacing one application with another will produce an ROI and a nice clean business case. This is where your business cases are going to become more complicated and cross more silos - where some of your major expenditure will connect services to develop better actionable insight to keep up with the market leaders. Changes to the processes, metrics and finance will be linked to the daily behaviour of the organisation.

## Change 8 – Conversation Analysis

Conversation is one of the richest and most highly available sources of insight, and most laggards completely undervalue the actual contact opportunity by thinking of it in only 2 dimensions. Leaders are already adding conversation efficiency into the balanced scorecard.

One of the biggest changes over the next 2 years is the importance of moving to a more scientific approach to CX. This implies a stronger focus on observation of behaviour as a guide to managing what essentially is a clearer picture. Conversation provides massive amounts of processable insights.

	People	Customers Agents Training, Other Stakeholders
	Process	Identify process issues where there is an opportunity to improve
	Technology	What role does technology play and is it helping or making things worse?
	Culture	Conversation provides clear insight into your culture
	Emotions	How your experience makes them feel
	Experience	Conversation is the best way to analyse experience it uses observation

## Change 9 – Experience Efficiency



Efficiency will change dramatically in meaning and importance. It will start by collecting more elements into a single metric. This is most likely to provide the bridge between insights which have been the company's traditional financials and the micro-details that impact of the whole operation as part of a new view of the P&L. It will completely change the balanced score card and deliver more complex business cases as the need for investment becomes more clearly aligned to efficiency savings and gains.

Ultimately Customer Experience is about delivering efficient and connected human experiences – in whatever sense your organisation chooses to understand that metric. What is clear is that the measurements are no longer limited to the tired TCO and ROI models of the past.

# Part 3 – Retail Market Leaders Agenda

Leaders are:



Built on an application and mobile first model



Customer Centric - *built with and around the customer*



Built on the use of mass data to shape and measure behaviour and experience outcomes



Connected to the real world and enhancing the real world experience



They are Omnipresent + Omnichannel



They use good tech and they are great at using it



Adaptive, Scalable and Secure



Have the right digital foundations

## Try this

The difference between leaders and laggards is widening day by day. It is clear from market leaders that their general thinking around strategy is advanced. Have a meeting at which your team try to think of what the practical best strategy would be if you were at one of those experiences you admire - in single session.

Here is are things to discuss – they may be relevant or not. The question is not are these the right but what is right for your organisation?

1. We must have a digital foundation. Its scalable and has security in its DNA so as we focus on continuous innovation across a complex landscape of clouds and applications we can adapt.
2. Our IT plans are strategically aligned with delivering more efficient customer, employee and other stakeholder experiences which are more engaging so improving outcomes.
3. Operationally we want to become an opti-channel (AI/ML/RPA) predictively driven organisation able to understand behaviour and experience. To use that understanding to become more efficient, as soon as possible.
4. Maximise store floor space revenues through being more productive by reducing the effort of processes like payment with “shop and go” options through to the delivery of community experiences. Providing extra customer and community engagement through strategies like retail entertainment. Improve stock control, empower front line staff, reduce risks and increased engagement.

We see an explosion in applied behavioural science that is leading to a new understanding of efficiency cost and outcomes. To exploit predictive behavioural analytics across all channels and every part of each experience.

5. To understand manage and improve the emotional outcome of our experiences through User Driven engagement.
6. We are increasing investment in innovation. We expect the cost of what we are trying to do will increase dramatically over the next few years but that cost will be offset by new benefits that will impact the bottom line by factors rather than per centages. They will positively add to, change, and optimise revenue streams and exploiting customer powered cost savings.
7. We see our role as part of the larger community as an investment in brand values. Less plastic, lower carbon footprint, more efficient use of natural resources is important to our customers and us.

## Part 4 - Super Retailers - What business are you in?

Are you a retailer or are you a behaviour and experience provider? There is a difference - are you selling and creating a habit or a feeling?



*Retail Entertainment in-store experience in Singapore at the Marina Bay Sands Shopping Centre*

Google, Facebook, Instagram, and others in the behaviour and habit business have monetarized the first stage of your retail customer experience. They now control the “discover” part of your customer journey. In many cases the first step in a purchase is some kind of social media activity or a simple Google search.

Their business is understanding patterns of behaviour by microseconds, including emotional outcomes. They make it their business to understand the people and the behaviour *not the data*. They operate at a behaviourally sophisticated level. Like Facebook, like Google, Instagram and like you, behaviour is the key to unlocking retail. If you look at the most successful operations in retail, they have a series of common traits that mark them out. Thinking like these organisations is vital, because they have changed your business model in less than just 5 years. What is next is up to you....

Howard Schultz the founder of Starbucks said:

***We are not in the coffee business we are in the people business***

That's a nice way of saying Starbucks is a behaviour and experience provider business.

## Change 9 - Amazon

Although Amazon's overall global impact on retail markets is relatively small. They are in about 50% in US homes for ecommerce or something else. They set benchmarks in On-line and In-Store experiences and their scale and focus on innovation means they are a threat to any retailer or supplier where they see an opportunity. Amazon is trusted by Americans more than their government. Amazon is a complex business but, in retail terms, they control the whole of the market for their customers. They have disrupted a number of vertical markets globally by creating a better model from the customers' point of view. Understanding how they do this is useful to understand.

### Bottom Line

About 11 years ago, a VP from Amazon said: Every 100ms of latency cost them 1% in sales. Google found an extra .5 seconds in search page generation time dropped traffic by 20%. A broker could lose \$4 million in revenues per millisecond if their electronic trading platform is 5 milliseconds behind the competition.

Amazon, like Disney, operate in milliseconds. A super-retailer operates in milliseconds and micro expressions. In 2019 on Cyber Monday 2019 Amazon reported the largest single day of sales ever.









## Part 5 - Mobile first? Is this how you should think about it?

Mobile first is a strategy that has increased in importance over the last 5 years. But actually, the name is a little misleading - it is really application first then mobile execution second. We have gone from realising that the mobile experience is important, to executing complex mobile strategies over the past 5 years. This started with SMS/Text messages and mobile optimised websites.

Today it means payment, NFC (near field communication) in stores, in app order delivery information and a range of other services and processes all available through the mobile device, including augmented reality or video-based support. The mobile is now a central part of every aspect of the retail experience. In fact, today, it would be more appropriate to talk about smart device first rather than mobile first. The range of things that technology is capable of delivering as a human ecosystem of hypoconnectivity.

In behavioural terms, the trend towards everyone's reliance on smart devices as a way of connecting across social and work platforms is no longer a debate. Looking forward, mobile integration is a mandatory focus for IT. However, it comes with a number of clear risks that IT will have to manage.

Questions around the abuse of privacy - applications listening in to calls, accessing contacts and other data are now frequent. We can do everything or anything with a phone. What will be a surprise is just how much behavioural information comes from our smartphones? This creates another new challenge for IT. (See Can I trust you?)

-  Application
-  Channel
-  Experience
-  Product
-  Device
-  Touchpoint
-  Relationship
-  Management

# Part 6 - Omni v Opti Channel

Over the last 10 years we have gone from the idea of Multi-Channel Retail to the idea of Omni-Channel. Now that idea has developed into Opti-Channel (AI/ML/RPA driven). This is a form of insight upscaling.

Omni-Channel can be thought of:

1. Many channels to deliver a single experience connected through them
2. Choice of channel more available to customers and other stakeholders in the business

Opti-Channel - is an AI/ML/RPA driven experience across those omni-channels. There is much more data and processing required and the outcome is delivered to the customer or employee.

Many organisations are already partially opti-channel. They may use AI/ML/RPA to assist with delivery by using Google maps and other tools to optimise delivery routes and traffic conditions as part of a call reduction plan from the contact centre. Online retail also uses the same sort of tools but in different ways. They are able to use tools to highlight abandoned shopping baskets or to provide additional suggestions.

**Bottom Line** – You are, or will be, opti-channel delivering X2 at some point. Having the right digital foundations is vital.

## Change 10 – The shopping basket – “People like you looked at this!”

One of the most famous examples of this must be the “also looked at” experience/algorithm as well as the “people who brought this also...”. It is now commonplace. When shopping on the website, personalised suggestions appear and this is as a result of algorithms that have been at the core of the Amazon experience since the early days.



There are many examples of opti-channel leaders. Disney, Timberland and many others have had a consistent focus on opti-channel for the past 5 years.

## Part 7 - Instore experience



*Brent Cross in London with a QR Augmented wall*

Since the arrival of e-commerce there has been a question - Is there still a role for the store? It is the wrong question. It should be "how will the role of the store change as a profit centre, in the omnichannel world?". The store is part of an omni experience and financial models must recognise their role in exploiting customer behaviour.

In CXM there are 24 basic patterns of behaviour that drive people in store. Those patterns combine together uniquely for each retailer and each experience. Some of those patterns are less or more important at different times in different experiences. A simple example - Sometimes I am in a hurry: sometimes I want to take my time.

Understanding those behavioural patterns will be part of the IT new layer of insight delivered to customer-facing employees to help improve outcomes. When we say "more" in the in-store experience it covers such a broad scope of activity. Connecting that to a profitable relationship is another one of those changes we have focused on here. Augmented Reality, connected to location services, connected to Emotion Detection, software so we can find unhappy customers in-store and change the outcome.

Leaders in instore experience Apple, Disney, Nike and the latest iteration of Amazon's Instore Offerings are years ahead of most retailers and the gap is getting wider, faster than in recent time. By the way if there wasn't a future in the Instore experience, I don't think Amazon would be investing so much in instore innovation. They know there is a role for the store and they are increasing their phygital footprint.

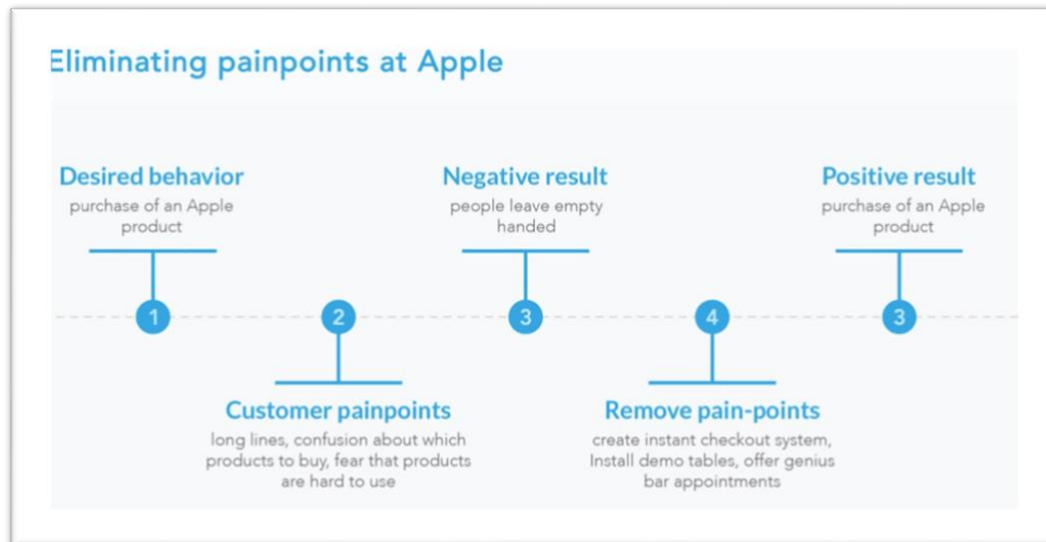
Examples of retail engagement include the [Eddie Bauer Ice Box](#) where you can go in store and feel how warm a coat is inside a freezer room, or virtual reality experiences, or any number of thousands of examples like banks becoming community centres. The instore experience is changing at the same time

your business models are changing. All of that must be connected together on every device and always working.

<https://www.insider-trends.com/the-worlds-50-most-innovative-retailers/>

So, the store is going to stay as a store but also change into a place where you deliver experiences that you can't have digitally. However, it is vital that digital plays a role.

*Apples published thought process several years around improvement – by now it will be much more advanced.*



## 24 behaviour patterns in-store today

Touch, dance, smell, AV, feelings, social warmth, convenience, confidence, or the chance to complain face to face are just some of the things that you get when maybe you go visiting or maybe you just want to get in and out quickly.

You are delivering something between Disneyland and an Amazon Fulfilment Centre and all points in between. 24 *patterns* of behaviour can be easily understood and applied with the right knowledge and experience. The key is to connect the business strategy to business objectives, such as customer happiness, and then connect it to IT Imperatives, arguably a role of the new CIO.

From IOT and supply chain, to CX and the instore experience, everything is changing and everything is connecting together. Devices, Employee and Customer “efficiency of experience” are IT issues as are new ways of connecting information together using AI/ML/RPA and new threats to service delivery security and compliance. You will need to develop new business models (with different ways of making revenues from customers) or handling relationships. In a mobile first, blended retail-tainment.\*\*

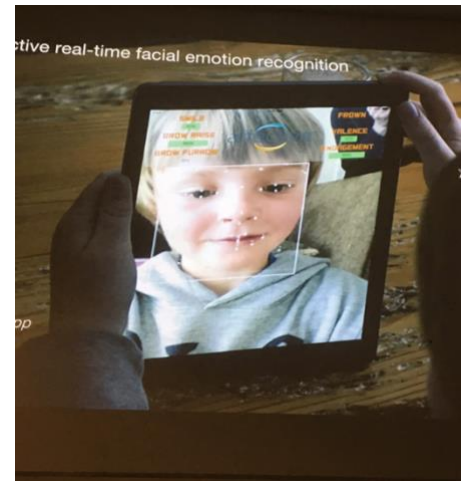


\*\*Retail Entertainment - Stores providing more complex in store experiences driven by a mobile first. Entertainment has always been a part of the retail experience: From Father Christmas at Macy's to the stall roper offering free samples or “2 for a shilling!”. Doing cooking and make up demos etc. and having famous people engage with stores happen routinely.

Now we have to recognise the in-store behavioural patterns and emotional needs of our customers and connect them digitally to their smart devices and communities.

## Change 11 - Disney

Disney is the definition of an experience building organisation. From movies to theme parks to the Opti-Channel experiences, they probably represent part of the leading edge of thinking today. Experience design is in their DNA. Think about their history. They started with cartoons which they built frame by frame. Now they build every experience with the same philosophy. From movies to theme parks every second of every experience is designed and then analysed before its delivery into production. One of the first organisations to use Emotion Detection on customers watching their movies, they have brought that focus into their retail business.



**Try this:** Once a month have a chat with appropriate stakeholders about innovations they have seen. Hold a discussion about the different stories you find by typing “Retail Innovation” into your favourite search engine. It’s a chance for the whole team to think about change and to turn it into a habit. Everyone shares what they have found and take some notes and try a few things.

# Part 8 - Insight Upscaling and Wisdom

We focused on new waves of insight so let’s talk about that. More and more strands of information are becoming connected together. Imagine a pyramid of wisdom that starts with information and moves next to insight. Insight is becoming much more advanced very quickly. **Emotional Insight** is an example. It comes from several types of Emotion Detection SaaS platforms. As does the expected increase in **RPA** / employee insight on the workings of tasks. In short, we are about halfway up the pyramid. There is no real top of the pyramid because wisdom isn’t static but we are moving up several levels in one go.

There are new waves of different information to manage deliver and secure. This is an area where most retailers are not ready for the scale of change of connecting data sources together creating new information and new types of insight. Insights ranging from your welfare from your mobile, predictions on your sales patterns, channels of choice your interests on Facebook and how much rain fell on the banana that you sold provides a clear picture of who you are.

More and more bits of information are being connected together, creating new facts that we can use (or not use) to build insights creating predictions and make decisions. These facts can be easily linked to key financial metrics as they help increase efficiency and impact cost. New ways of refining efficiency become possible and therefore will start to drive customer experience. There is a key role of AI/ML/RPA in this explosion of facts. These facts take insight to a new level.

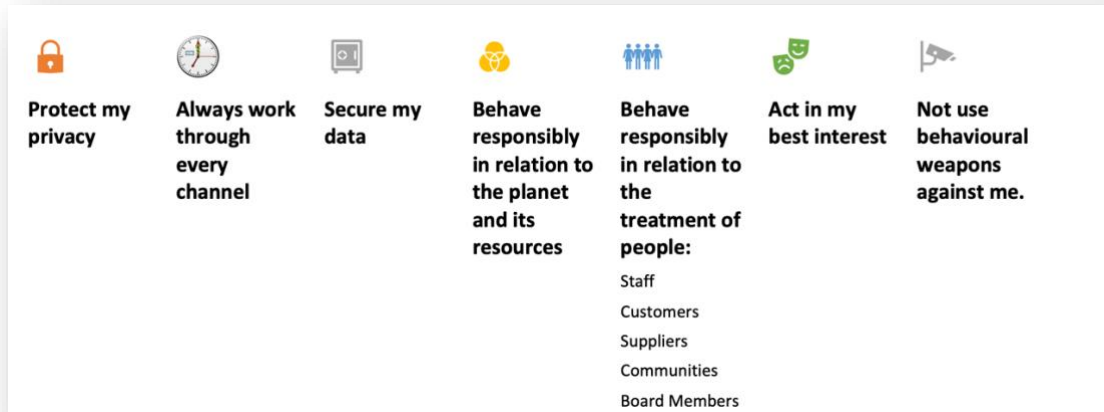
Global Emotion Analytics  
Market size is expected to grow  
from USD +2 Billion in 2019 to  
USD +4 Billion by 2025, at a  
Compound Annual Growth Rate  
(CAGR) of +15% during 2019–  
2025.

**QYREPORTS 2019**

# Part 9 - Can I trust you?

**“Trust is your licence to operate a business”. Takeshi Niinami CEO Suntory**

The insight upscaling around different types of trust ranges from the protection of data, through the use of carbon and plastic to, always being there securely, safely. This is now BAU and needs to be measured for efficiency and cost. What does all that mean? More systems, more data, more insight driven outcomes, to manage new levels of security challenges. You have trust issues.



## Trust is the most expensive business governance failure by far!

Fines for failures are huge and the cost to brand is always large. But trust is now more complicated than ever. Cambridge Analytica was a weapons-grade technology according to the UK Army so you can't export it...like nukes? Weapons grade algorithms are now available to your marketing and sales teams, who in most cases are not qualified to use them. Algorithms delivered through your systems. You are giving guns to colleagues to point at customers and you will have to learn about that. The excuse that you didn't know will not protect you from the court of public opinion.

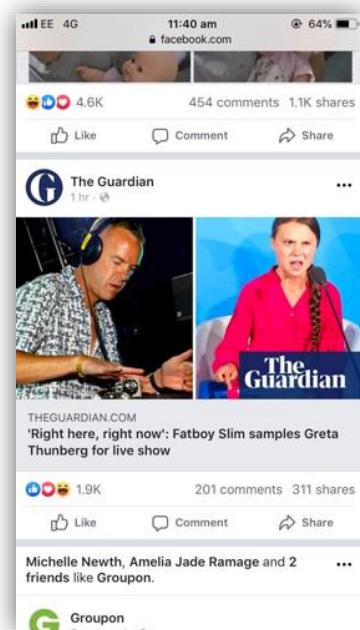
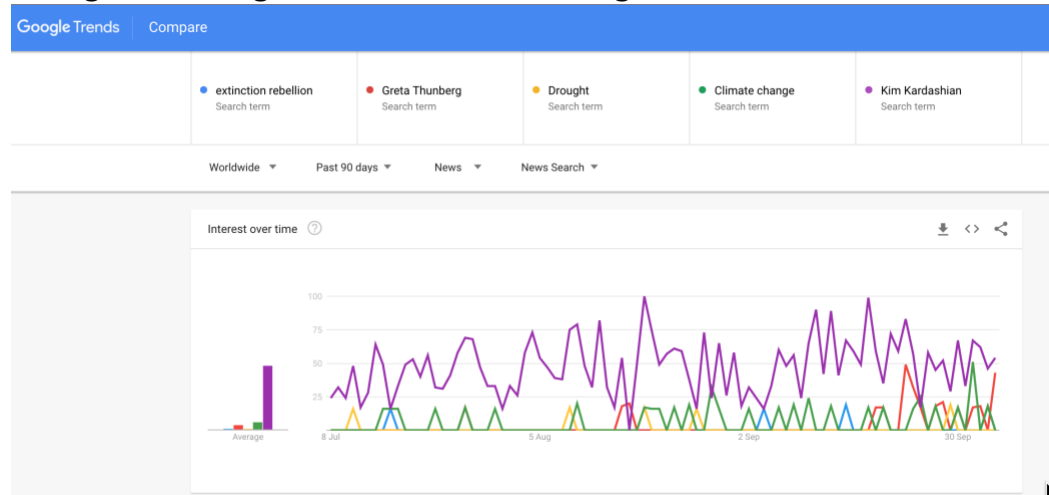
In the [verge tech](#) survey in America in 2018 about trust Amazon was the second most trusted thing in the USA after the Army and Google (also top 5) but Facebook fared really bad on a par with Congress. So, another real challenge that you need to manage is that it is more expensive to be a business that is not trusted. Think about how much your brand is trusted and how do you measure that?

**It is strongly recommended** that you should have a trust model or list to more clearly understand the different types of trust your business provides. Confidence in a range of areas that evolving all the time is some form of risk register. Consider it just an addition programme management task.

Finally, on the day I completed the final draft Uber was stripped of its licence to operate in London. I don't know the full details but I would remind you again about the value of trust with all of your stakeholders within every type of experience you deliver..... is the most expensive thing to lose.

**Trust is a part of your experience delivery....or it should be.**

## Change 12 – Google trends Greta Thunberg v Kim Kardashian



*Fat Boy Slim samples  
Greta Thunberg*

Things move quickly - Google Trends shows that young climate change activist Greta Thunberg actually made more news than Kim Kardashian on several days over the three months to 1<sup>st</sup> October 2019.

The closeness between these two very different media machines is interesting. Kim Kardashian has been a global brand most of her life. She is part of a large number of co-branding alliances. Her team and resources are well funded and have represented the some of the best practice in social media for since the start of the social media age. On the other hand, you have teenager who is capturing the zeitgeist of a moment in history. She represents in commonly understood truth that we are messing up the environment and we are not prioritising sorting this out quickly enough.

# Part 10 - Conclusions

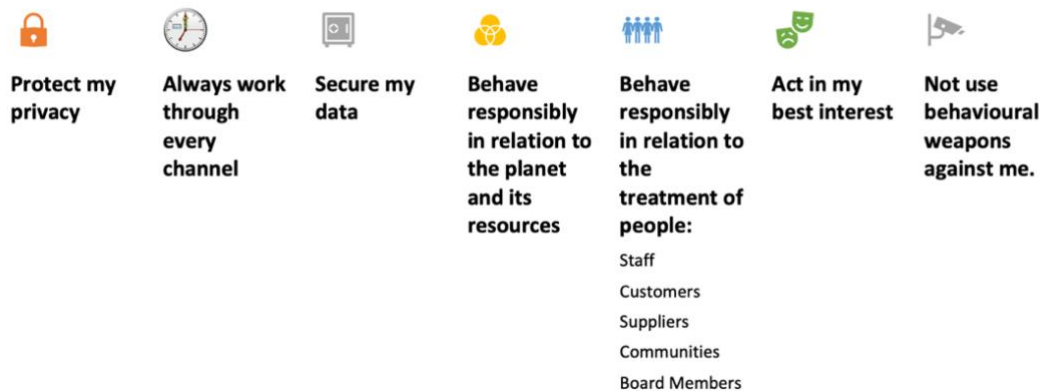
## So, what is all this to you?

You will find that more and more tactical requests that have the same common properties. Connecting more information to the single view of all insight across the enterprise. This will become strategic.

1. **Customer Experience** – X2 is about managing much more insight and delivering better experiences. Better for the customer, but also better for the employees and for the Retailer. This is about changing to a microscopic approach to customer and employee experience leveraging behaviour and systems to deliver more efficient outcomes. This is now a fundamental shift that will define competitive advantage.
2. **More data to be processed** – We have highlighted some of the trends that lead us to conclude that the data per process and per customer will dramatically increase. Large (and difficult to quantify) increases in data types, volumes, connections, and information to process and protect within an unclear road map of testing and learning on a journey of continuous innovation. Expect to process petabytes of data to produce terabytes of insight in as close to real-time as you can.
3. **More Applications in More clouds** – AI has created the ability to find so many different efficiencies across every aspect of the operation available as SaaS plug-ins. The retail landscape continues to suffer innovation shocks. They are forced to continuously reinvent retail, so the pressure to act on these shocks will be a factor. They come from a plethora of new users focused cloud-based applications that produce new slices of insight.
4. **Available Scalable with ubiquitous security in its DNA** – In many ways this is the key insight of the report. The right foundations deliver 4 of the key elements of trust. There will be so much change that you will need to operate a virtual series of layers of internal data and external data processing to survive. If you are on that journey you need to speed up and, if you haven't started yet, read the whole report.
5. **Insight Upscaling** - The amount of actionable insights you will have available to improve experience will dramatically increase over 2 years. Insight will change to the microsecond level. This starts to make sense of the huge streams of data that has been more increasingly available. Insight Upscaling is about a clearer understanding of operations across retail organisations in much more depth as disparate systems connect more information together. It will fundamentally change CX completely. By 2021 it will also be at the top of the agenda for retailers.
6. **Details and Context** - The business will be able to understand from pasture to behaviour: From growing conditions and carbon cost of a banana to its impact on the health of a specific customer, their social life and weaknesses, their behaviours and feelings. And, if you can do that to your customers, then why not your staff? By 2021 you will be in a conversation about privacy and the use of behavioural weapons on platforms like Facebook and in the workplace that will make GDPR seem like a good night out.

7. **New internal and external experience** — The result of all of the above is the ability to provide dramatically different experiences. Your customer journey map will be a series of dashboards and intelligent maps delivered by IT. The business is like start a Customer 2 programme. This will recognise that the business has a much worse experience than the customers and that this will create great measurable returns if improved.

8. **Trust** — Trust is the most expensive business governance failure by far. Fines for failures are huge and the cost to brand is always large. But trust is now more complicated than ever.



9. Cambridge Analytica was a weapons grade technology according to the UK Army so you couldn't export it...like nukes? Weapons grade algorithms are now available to your marketing and sales teams, who in most cases are *not* qualified to use them. Algorithms delivered through your systems. You are giving guns to colleagues to point at customers and you will have to learn about that. The excuse that you didn't know will not protect you from the court of public opinion.

10. **Continuous Improvement** — Although this insight upscaling is a step change, it will lay the foundations for a new approach to continuous improvements like habit-based business transformation - using behaviour change. It's much cheaper than technology. Business cases will start to look very different. You will become more focused on quality of metric in the overall picture. Experience will be measured by the microsecond and from both upstream and downstream sources. So, more demands on IT.

11. **Experience Efficiency** — You will need to focus concentrating on experience efficiency from multiple viewpoints to build a manageable dashboard of outcomes. Understanding emotions, conversations, behavioural interference as well as other moment-by-moment micro-indicators such as micro-expressions or milli-second latency. Making more effort to redefine what efficient means. Connecting other sources of efficiency in context. Efficiency will become the core of a new way of thinking about business performance.

## Author's conclusion

Having worked with them over the last 6 months, I strongly recommend you talk to VMware about *your* future of retail as they lead in this field. They have one of the clearest understandings of what it takes to innovate safely fast and with zero friction. These changes I have described are so fundamental you need to think about digital foundations first.

With the size of their base and partnerships with the largest innovative organisations globally...they do know about what's going on. I think knowledge is a useful asset.

# Appendix



## Acknowledgements

Every conclusion is based on more than 5 recognised sources and on millions of data points processed in a continuous process that operationally active for 6 years.

I want to thank everyone who helped - especially my clients who gave permission to use important insights.

Secondly, to our wonderful sponsors for this report Intel and VMware, my grateful thanks.

Thanks also to the Subject Matter Experts at VMware who helped build key strategy insights from their customers and resources.

Thanks to all the people who were so generous with their time. A year of interviews and heated discussion with some of the most extraordinary people in all disciplines of experience science, the C-Suite of major retailers, attendees our workshops and others. Professors leading practitioners, front line, and IT. Sales, marketing, operations support. HR, Behavioural science and welfare leader and of course customers and the markets.

To the providers of our continuous research and analysis tools that allow us to compare the insights from all the major research published.

Thank you if you got here. I hope this was a useful experience.

## 2021 will be different - not impossible

**Author - Morris Pentel** - Innovator

Experience Designer, Strategist, a Behavioural and Organisational Scientist and Experience Auditor for global organisations. I am also a Programme Director delivering transformation, and I get to travel the world as a public speaker. I work on all types of experience for customers employees' patient's government departments and organisations.

### What I do

If you want some advice, have a project or some training for your senior team or front-line staff - I do that sort of thing! I audit things and handle delicate issues.

### Recent work

**What is the Strategy Agenda for CIO's in**

**2021?** Report & Workshop

**Can I Trust You?** - Defining your Trust Agenda workshop

**The Physics of Experience** - E-score converts experience into algorithms.

**Successful processes to understand Customer**

**Emotions and Empathy** - Training Programme

**Conversation Analysis for Contact Centre**

**Managers** - Training Programme

Fund Raising - The Pirates Castle

### Recent Content

**Podcast - Is it time to rethink your metrics?**

**Recorded Webinar: POWERFUL New**

**Approaches to Improving Customer Journeys**

**Recorded Webinar: Measuring Customer Satisfaction**

**9 Strategies to improve customer satisfaction**

**6 ideas to improve customer journey mapping**

### Background

I have been an independent advisor and consultant solving problems for the world's largest organisations and build and run workshops and digital experiences for all levels from C-Level Mediator to front line mood changers. I have also been a contact centre designer worked at every level of project management and designed things like a store of the future since the late 1970s.

[www.pentel.me](http://www.pentel.me)



Let's talk Retail

[www.cxfo.org](http://www.cxfo.org)