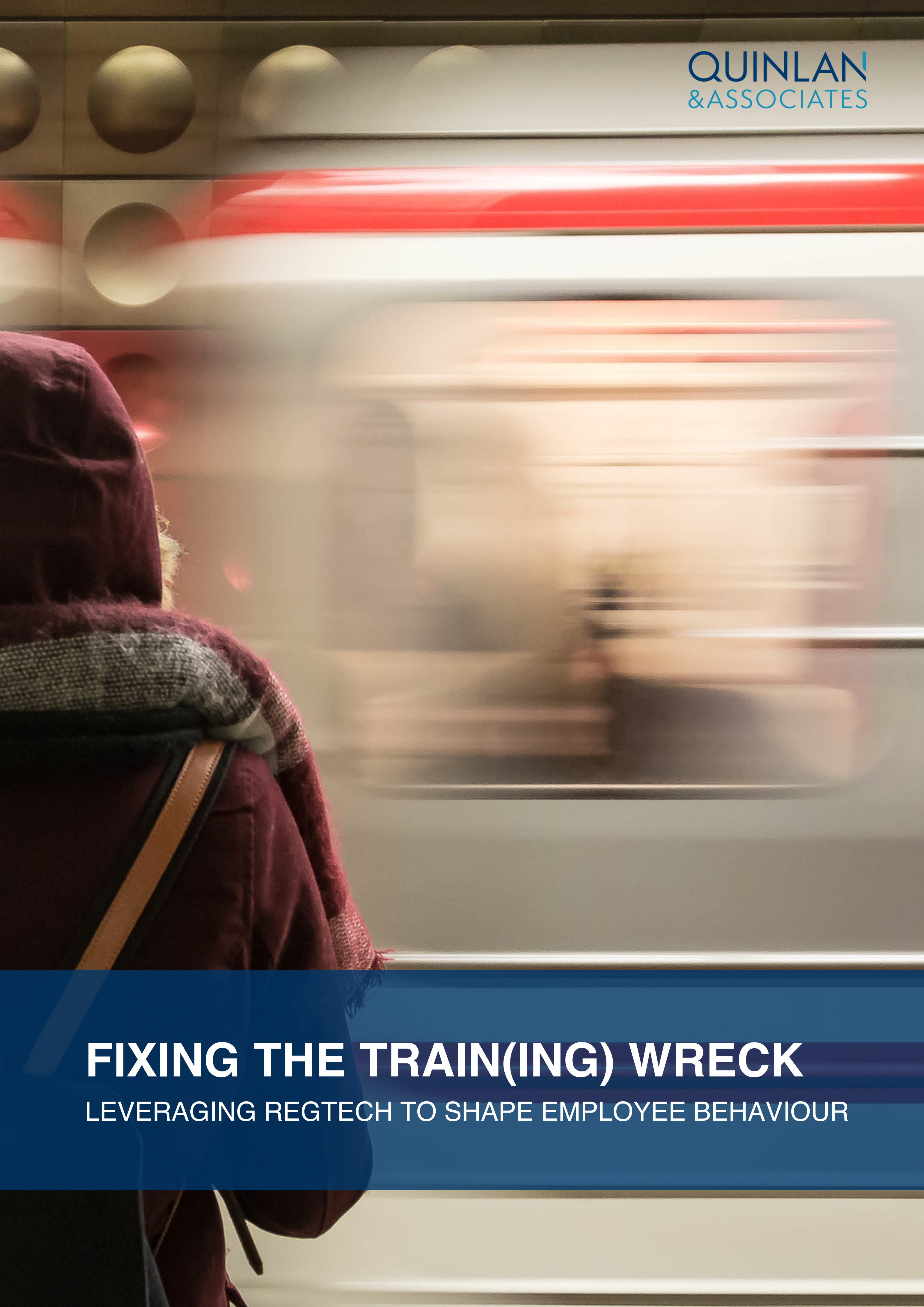

# FIXING THE TRAIN(ING) WRECK

## LEVERAGING REGTECH TO SHAPE EMPLOYEE BEHAVIOUR

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# EXECUTIVE SUMMARY

The global financial crisis exposed widespread misconduct in the financial services industry, with poor risk culture being identified as a key contributing factor to the endless scandals that beset almost every major financial institution over the last decade. In the banking industry alone, we estimate USD 1.06 trillion in industry profits have been wiped out as a result of this bad behaviour.

In response to heightened regulatory scrutiny, and to defend themselves against an onslaught of fines and penalties, financial institutions across the world worked around the clock to bolster their risk and compliance efforts across their three lines of defence. In more recent years, most of these efforts have focused on enhancing their first line of defence (i.e. the business units) to drive greater individual ownership and accountability in an effort to encourage a movement from rule-based to value-based behaviour. In particular, employee education has been a key focus for most institutions, with the industry spending USD 10 billion on compliance training alone in 2018 (with approximately three quarters directed at online delivery). However, ongoing scandals provide a clear indication that a decade's worth of compliance training has failed to shape industry risk culture in a meaningful way.

We see three fundamental issues associated with online compliance training that render it ineffective in driving cultural change: (1) employees loathe compliance training, and view training obligations as a tedious, box-ticking exercise that detracts from their daily responsibilities; (2) eLearning is not taken seriously, with no repercussions for ignoring or failing training modules; and (3) a lack of employee alignment and support, resulting in low information retention. As a result, the endless list of eLearning modules that employees are forced to complete every year has failed to shape their behaviour.

Financial institutions need to take a more strategic approach across the entire training value chain – including employee identification, material selection, employee incentivisation, and performance supervision – in order to properly augment employee mindsets. In particular, greater attention should be paid to employee engagement levels through improved monitoring of their eLearning activities, incorporating these insights into reviews and compensation / promotion decisions. We see the appropriate use of such solutions as critical in driving behavioural outcomes.

While most employees in the financial services industry maintain high ethical standards, there will always be a handful of bad eggs that can set the wrong tone for their organisations. And the battle against this unethical behaviour should always start with effective training. The fact is, a fundamental overhaul of employee mindsets is crucial in tackling the root cause of misconduct. With the financial services industry racking up an average of USD 30 billion p.a. in fines since the financial crisis, we believe this new breed of "CultureTech" has the potential to save the industry USD 10-15 billion p.a. in misconduct-related penalties.

While more effective compliance training serves as the fundamental catalyst to shaping employee attitudes to risk, it cannot operate in isolation. For organisational risk culture to evolve in a more meaningful way, a holistic strategy focused on driving employee ownership and accountability to encourage value-based behaviour is needed.

However, we see RegTech solutions as a critical next step in fixing the train(ing) wreck that has failed to shape the financial services industry's attitudes towards risk and compliance training, exacerbated by the widespread "box-ticking" culture of front-line employees.

# SECTION 1
# UPDATE ON INDUSTRY MISCONDUCT

## THE COST OF BAD BEHAVIOUR

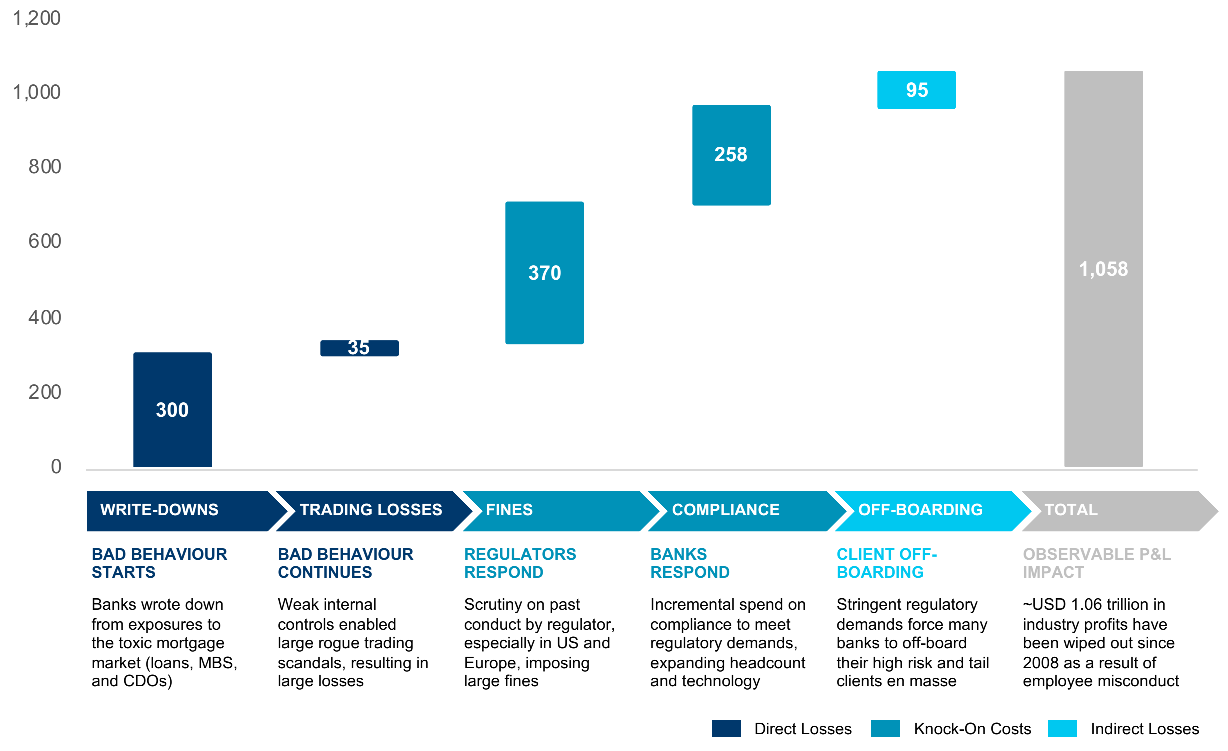
As highlighted in Quinlan & Associates' 2017 thought leadership report, *Value at Risk*,[1] the global financial crisis ("GFC") uncovered widespread misconduct in the financial services industry, with poor culture being a significant contributor to the plethora of scandals that plagued almost every bank, both large and small, over the last decade.

What's worse, the USD 850 billion in banking P&L that was destroyed as a result of this misconduct by the end of 2017 has only moved in one direction: up.

As of H1 2019, we estimate that ~USD 1.06 trillion of industry profits have been wiped out by bad behaviour since the GFC (see Figure 1), including:

- USD 300 billion in subprime write-downs;
- USD 35 billion in rogue trading losses;
- USD 370 billion in fines and penalties;
- USD 258 billion in incremental compliance spend; and
- USD 95 billion in lost revenue from widespread client offboarding efforts by global banks as a result of aggressive de-risking.

### FIGURE 1: P&L IMPACT OF EMPLOYEE MISCONDUCT (USD billion)




Source: company reports, press releases, Quinlan & Associates analysis

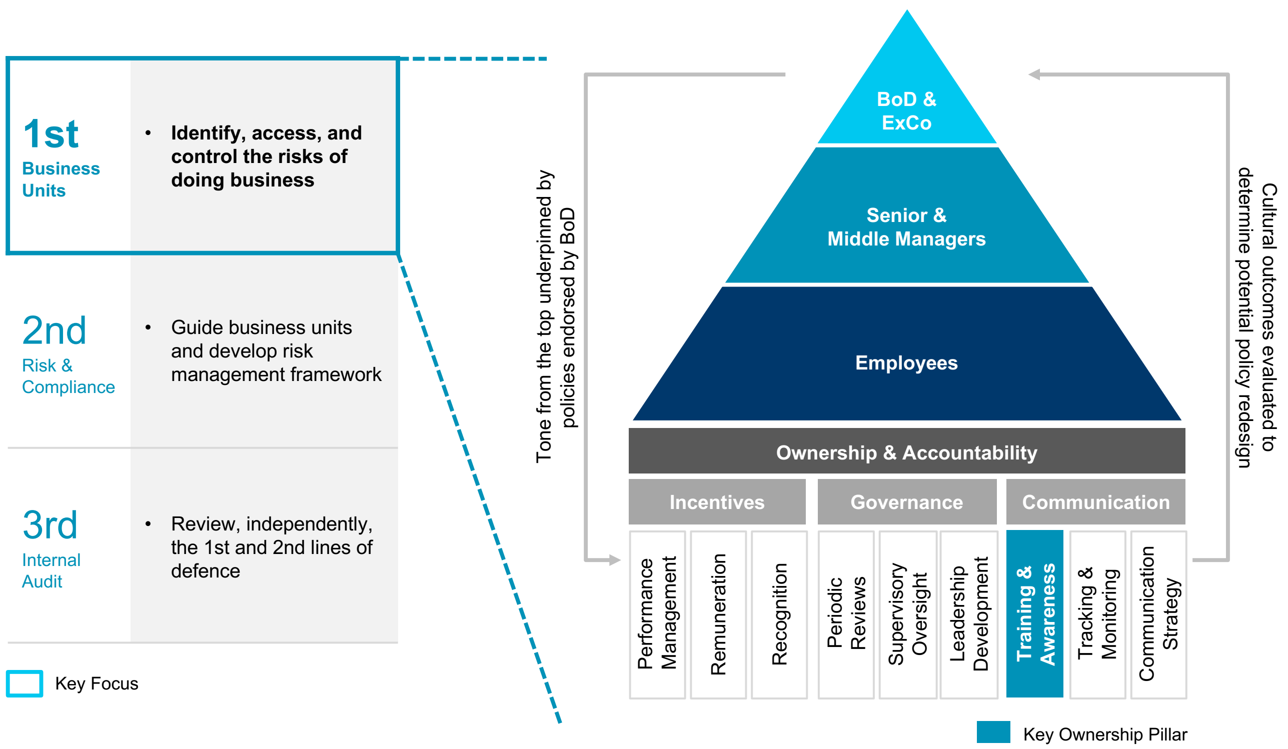
[1] Quinlan & Associates, 'Value At Risk: A Look At Banking's USD 850 Billion Behavioural Problem', September 2017, available at: https://www.quinlanandassociates.com/insights-value-at-risk/

## ADDRESSING CULTURAL WEAKNESSES

In response to heightened regulatory scrutiny around questionable cultural practices, financial institutions across the world worked around the clock to bolster their three lines of defence ("3LOD"), with particular emphasis being placed on 1LOD (i.e. the business units) in an effort to weed out bad behaviour at its source.

At its core, many of the efforts around 1LOD were designed to encourage employees to do the right thing by driving greater individual ownership and accountability through adaptations to incentives, governance structures, and communication strategies, as outlined in our Cultural Evolution Pyramid (see Figure 2).[2]

### FIGURE 2: THREE LINES OF DEFENCE AND CULTURAL EVOLUTION PYRAMID




Source: Quinlan & Associates proprietary framework

While nearly every global financial institution has undertaken a raft of measures to better manage their risks at the front line, many are still remedial and rule-based in nature, and seek to drive behavioural change through a fear of being caught (i.e. enforcing accountability) rather than engendering a more fundamental evolution in risk culture where employees do the right thing simply because it is the right thing to do (i.e. driving ownership). For example, *Performance Management*, *Remuneration*, *Periodic Reviews*, and *Tracking & Monitoring* all

[2] See our report, 'Value At Risk', for more detail

aim, at their core, to ensure employees are held responsible for their actions. However, these mechanisms operate on an *ex post* basis – in other words, when employees are caught and held accountable for their bad behaviour, the misconduct has already occurred.

A shift from a rule-based approach to a value-based approach is an essential part of shaping employee behaviour. Nevertheless, moving from a “what can I do?” to “what should I do?” mentality requires employees to take full ownership of their actions – a direct function of their intrinsic values and mindsets. This is where education and training come into play.

A SHIFT FROM A RULE-BASED APPROACH TO A VALUE-BASED APPROACH IS AN ESSENTIAL PART OF SHAPING EMPLOYEE BEHAVIOUR

# SECTION 2
# EMPHASIS ON COMPLIANCE TRAINING

### EMPHASIS ON COMPLIANCE TRAINING

Recent years have seen financial institutions become acutely aware of the need to shape the mindsets of their employees through a renewed focus on education and training (i.e. *Training & Awareness* per our cultural evolution pyramid).

For example, Goldman Sachs conducted the Chairman's Forum in 2017, a mandatory training programme for the firm's partners and managing directors, to emphasise the importance of the bank's culture and reputation.[3] Most other banks also regularly run various types of cultural and compliance training programmes for their employees across all ranks and departments, with the majority of focus being placed on compliance in recent years.

The scale of investment into employee training is far from trivial. In 2018, we estimate the financial services industry spent USD 10 billion on compliance training alone, with approximately three quarters directed at online delivery (i.e. eLearning) (see Figure 3).

**FIGURE 3: FINANCIAL SERVICES COMPLIANCE TRAINING SPEND, 2018 (USD billion)**


Source: country / region census departments, IMF, Quinlan & Associates estimates

The move to online training delivery has been underpinned by several factors, including cost-effectiveness, convenience, and quality standardisation. However, due to the sheer volume of compliance training that financial services employees need to undertake every year, scalability and trackability have been the primary drivers for most financial institutions (see Figure 4).

[3] Reuters, 'EXCLUSIVE: Goldman's Blankfein enlists senior management in conduct, culture initiative', 17 May 2018, available at: https://www.reuters.com/article/bc-finreg-goldman-conduct-culture-initia/exclusive-goldmans-blankfein-enlists-senior-management-in-conduct-culture-initiative-idUSKCN1IH210

## FIGURE 4: DRIVERS FOR ONLINE TRAINING DELIVERY

| Driver | Description |
|---|---|
| Scalable | • Online delivery is scalable and less expensive than in-person training, especially for larger organisations |
| Trackable | • Online training provides employers with an effective way to monitor and track employee training completion rates |
| Convenient | • Individuals can complete online training modules at their preferred times / locations, improving time management |
| Catered | • Employees can complete online training modules at their own pace and preferred style of learning |
| Quality | • Standardisation means the quality of online training is consistent when compared to in-person training |
| Updated | • Online material can be refreshed at regular intervals, ensuring content is always up-to-date and relevant |

Company Employee Training

Source: Quinlan & Associates analysis

## TRAINING FAILS TO SHAPE CULTURE

Despite the significant investments being made, many individuals we spoke to working in the financial services industry believe the deluge of online compliance training they are forced to complete every year acts as no more than a mechanism for institutions to shift the regulatory burden from the organisation to the individual – as opposed to materially changing the underlying mindset of the company as a whole.

More importantly, ongoing cases of misconduct highlight the largely negligible impact that compliance training has had on tackling misconduct at its source. Among the more notable examples in recent years were Wells Fargo's USD 1 billion fine in April 2018 to settle abuses related to its auto loans practice (which was terminated in September 2016, four years after senior executives were informed that the programme was flawed),[4] as well as the *Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry* ("Royal Commission"), which reported ongoing widespread unethical behaviour and misconduct in Australia's financial services industry, with the potential for over 20 prosecutions.[5]

[4] Reuters, 'Wells Fargo Executives knew auto insurance program was flawed: lawsuit', 7 November 2018, available at: https://www.reuters.com/article/us-wells-fargo-autos-lawsuit/wells-fargo-executives-knew-auto-insurance-program-was-flawed-lawsuit-idUSKCN1NB2WV
[5] The Guardian, 'Key points and recommendations of the banking royal commission report', 4 February 2019, available at: https://www.theguardian.com/australia-news/2019/feb/04/key-points-and-recommendations-of-the-banking-royal-commission-report

In fact, ‘Changing culture and governance’ is one of the recommendations listed by the Royal Commission,[6] urging financial institutions to assess their culture, including identifying and addressing any potential issues. Furthermore, the Royal Commission recommends the Australian Prudential Regulation Authority (“APRA”) to create a supervisory programme that builds appropriate culture to mitigate misconduct.

These incidents, as well as countless other scandals that continue to plague financial institutions on an almost daily basis, point to the fact that a decade’s worth of compliance training has largely failed to shape industry culture in a meaningful way.

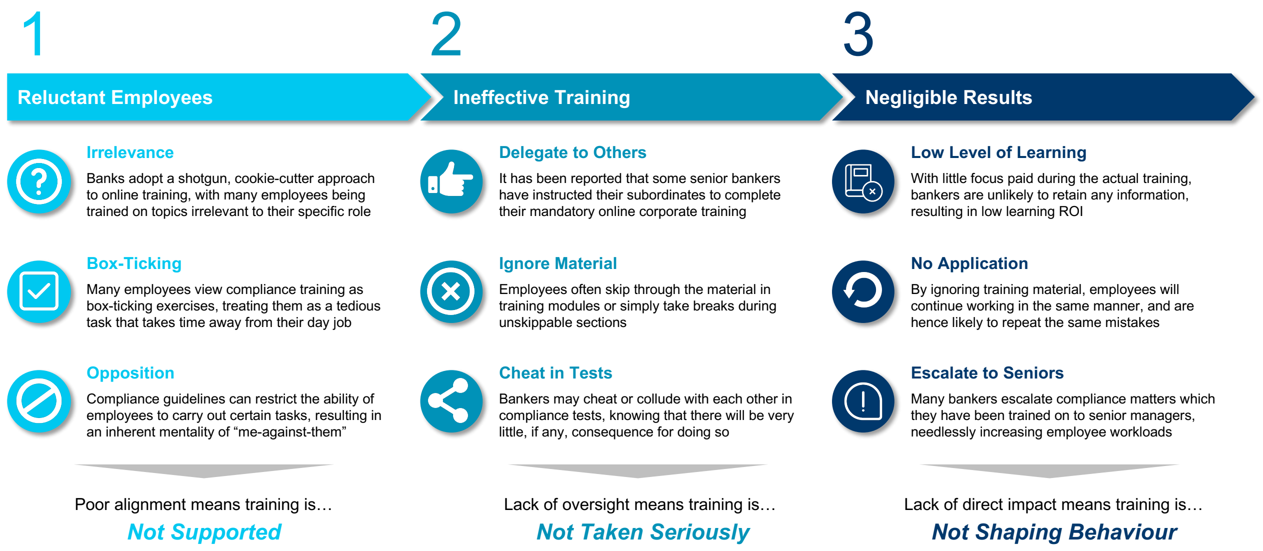
## A DECADE’S WORTH OF COMPLIANCE TRAINING HAS LARGELY FAILED TO SHAPE INDUSTRY CULTURE IN A MEANINGFUL WAY

[6] Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry, ‘Final Report’, 1 February 2019, available at: https://financialservices.royalcommission.gov.au/Pages/reports.aspx#final

## PROBLEMS WITH COMPLIANCE TRAINING

There are a number of fundamental issues associated with online compliance training that have rendered it largely ineffective in augmenting cultural practices within the financial services industry. We will explore three of these issues below (see Figure 5).

### FIGURE 5: INEFFECTIVE COMPLIANCE TRAINING




Source: Quinlan & Associates analysis

### 1. NOT SUPPORTED

It's no big secret that most employees loathe compliance training. First and foremost, compliance teams often restrict employees from conducting certain activities, many of which may be revenue-generating in nature. This often results in frustration and an inherent "us vs. them" mentality between businesses and compliance departments.

In addition, many institutions adopt a cookie-cutter approach to their training programmes, where every employee, regardless of their function or seniority, is required to complete the same laundry list of training modules. As a result, large portions of mandatory training material end up being irrelevant to many employees, who view their training obligations as a tedious, box-ticking exercise that only detracts from their daily responsibilities.

## 2. NOT TAKEN SERIOUSLY

Our discussions with a wide range of financial services employees revealed that most pay very little attention, if any, to compliance training; the vast majority of people we spoke to skip through eLearning modules or simply walk away during unskippable sections. In fact, in 2015, three senior bankers at Credit Suisse were disciplined for instructing their secretaries to complete their compliance training for them.[7]

By and large, most employees also face no repercussions from failing their online compliance tests and are simply required to redo multiple choice questions until they stumble upon the correct options. Moreover, with no direct supervision, many employees also regularly collude with each other and cheat on their compliance tests, with some notable examples capturing media headlines in both the banking and professional services industries (see Figure 6).

### FIGURE 6: COMPLIANCE TRAINING BREACHES

Credit Suisse: Three senior executives delegated their compliance eLearning tasks to secretaries from 2013 to 2015 and, as a result, were forced to return a portion of their 2015 bonuses

Goldman Sachs / J.P.Morgan: Goldman Sachs and J.P. Morgan fired 30 analysts in London and New York for cheating on internal training tests, which include basic finance concepts and compliance-related material

KPMG: KPMG was fined USD 50 million by the US SEC after it found out several audit professionals cheated on internal training exams by improperly sharing answers and manipulating test results

Financial Services | Professional Services

Source: Bloomberg, SEC, TheStreet, Quinlan & Associates analysis

[7] TheStreet, 'Credit Suisse Bankers Got Secretaries to Do Their Compliance Training', 14 February 2019, available at: https://www.thestreet.com/story/14488740/1/credit-suisse-bankers-pawned-off-compliance-training-on-secretaries.html

### 3. NOT SHAPING BEHAVIOUR

Given the lack of employee support, as well as the fact that most online compliance training is not taken seriously, it's no surprise that information retention – and hence the ROI of eLearning investment – is extremely low. Consequently, much of the training that is forced upon financial services employees is failing to shape their behaviour.

Furthermore, due to an incomplete understanding of many regulatory and compliance issues, the majority of employees we interviewed said they escalated most of their compliance matters to their managers – who, in turn, often escalated them to respective compliance teams – because they were uncertain of the appropriate action to take, even though they had been specifically trained for it. This sends a clear signal that training is not translating into learned knowledge.

Taken together, the above issues point to the fact that the USD 10 billion being spent on compliance training every year appears to be, for the most part, an expensive gesture to appease regulators as opposed to an investment in shaping organisational risk culture and employee behaviour at its core. We believe this must change.

THE USD 10 BILLION BEING SPENT ON COMPLIANCE TRAINING EVERY YEAR APPEARS TO BE, FOR THE MOST PART, AN EXPENSIVE GESTURE TO APPEASE REGULATORS AS OPPOSED TO AN INVESTMENT IN SHAPING RISK CULTURE AND EMPLOYEE BEHAVIOUR AT ITS CORE

## REGULATORY FOCUS ON TRAINING

Recognising some of the limitations outlined above, regulators across the world are increasingly looking to strengthen requirements relating to employee education and development in order to enhance the overall effectiveness of compliance training programmes being rolled out by financial institutions (see Figure 7).

## FIGURE 7: REGULATORY GUIDELINES ON COMPLIANCE TRAINING

| Trend / Theme | Description | Regulator | Policy Stance |
|---|---|---|---|
| Training Guidelines | • Most regulators stress the importance of compliance training, emphasising the need for financial institutions to provide their employees with training opportunities on an ongoing basis | | • The Hong Kong Insurance Authority is considering developing a Code of Conduct that states an obligation for insurance firms to provide continuous training on compliance practice for relevant employees |
| | | | • The European Securities and Markets Association ("ESMA") expects firms to ensure that staff providing relevant services possess the necessary knowledge and competence to meet relevant regulatory and legal requirements and business ethics standards under MiFID II |
| Training Reporting | • Most regulators require financial institutions or employees to log their training (e.g. topic / area and time spent) to properly evaluate the adequacy of training and to identify potential awareness gaps | | • The Hong Kong Insurance Authority is considering developing a Code of Conduct that requires insurance sales agents to maintain proper training records to ensure adequate training |
| Required Training Hours | • Many regulators implement minimum training requirements (e.g. hours), particularly for new regulations; these training requirements may differ based on employees' functions | | • The Comisión Nacional del Mercado de Valores ("CNMV") of Spain implemented a minimum requirement for classroom hours on MiFID II (80 hours for all staff and 150 hours for staff that provide clients with advice) |

Source: regulator websites, Quinlan & Associates analysis

For example, with respect to MiFID II, the European Securities and Markets Authority ("ESMA") expects firms to ensure that staff providing relevant services possess the necessary knowledge and competence to meet relevant regulatory and legal requirements and business ethics standards.[8] The National Securities Market Commission in Spain has made employee training requirements even more specific, mandating a minimum of 80 hours of MiFID II training for banking employees in 2017.[9]

In Hong Kong, the Insurance Authority is considering taking training reporting requirements a step further, especially around eLearning. This includes the implementation of a proper login and identity-checking system, continual verification and assessment, and an audit trail which keeps track of the login time, idle time, and activities undertaken.[10]

Such requirements indicate that regulators are increasingly expecting financial institutions to not only provide compliance training, but also be responsible for incentivising and supervising the appropriate completion of training programmes.

[8] European Securities and Markets Authority, 'Guidelines', 3 January 2017, available at: https://www.esma.europa.eu/sites/default/files/library/esma71-1154262120153_guidelines_for_the_assessment_of_knowledge_and_competence_corrigendum.pdf
[9] CincoDías, 'La CNMV exige un mínimo de 80 horas de formación a los empleados de banca', 24 April 2017, available at: https://cincodias.elpais.com/cincodias/2017/04/24/mercados/1493035308_365101.html
[10] Hong Kong Insurance Authority, 'Consultation Paper on Draft Guidelines', available at: https://www.ia.org.hk/en/infocenter/files/Consultation_Paper_on_Draft_Guidelines_on_FPC_and_CPD_ENG.pdf

# SECTION 3
# TECHNOLOGY TRAINING SOLUTIONS

Witnessing the need for more effective compliance training in the financial services industry, various technology solutions have been developed in recent years to improve employee engagement levels with respect to eLearning content.

A number of regulators are also actively encouraging financial institutions to adopt such solutions. For example, the Financial industry Regulatory Authority ("FINRA") published a report in September 2018 highlighting opportunities to leverage RegTech applications in compliance training as a prevention mechanism for potential regulatory breaches. More recently, the Australian Securities and Investments Commission ("ASIC") announced it would be adopting an 'if not, why not' approach – in other words, financial institutions that are not adopting and implementing the latest technologies will be required to explain why they are not doing so.[11]

With the financial services industry exhibiting strong demand for FinTech solutions to enhance their training processes, various companies are offering solutions across the entire compliance training value chain: from employee identification, to material selection, to employee incentivisation, and to performance supervision (see Figure 8).

## FIGURE 8: FINTECH IN COMPLIANCE TRAINING

| | 1 Employee Identification | 2 Material Selection | 3 Employee Incentivisation | 4 Performance Supervision |
|---|---|---|---|---|
| **Description** | *Identify suitable group of employees to undergo compliance training* | *Select relevant training material based on employees* | *Incentivise and encourage employees to engage with the compliance training* | *Supervise employee performance throughout the training session* |
| **Focus** | Separate employees based on functions and seniority to ensure only relevant compliance training is administered to employees | Evaluate employee experience to tailor training material, focusing on addressing and testing potential knowledge gaps | Enhance the compliance training experience via provision of convenient access and unique / novel delivery methods | Track employees' engagement level throughout the training and review their performance post-training |
| **FinTech Areas** | • LMS<br>• A.I. | • LMS<br>• A.I. | • Cloud<br>• Gamification | • Identity verification<br>• Expression analytics |
| **Functions** | • LMS helps manage training records and A.I. can be leveraged to appropriately group employees | • LMS provides data to A.I. algorithms to identify key knowledge gaps and select relevant materials | • Cloud technology enables flexible and remote access and gamification makes training more engaging | • Identity verification ensures training is undertaken and expression analytics measures engagement |
| **Examples** | SABA<br>SAP Litmos | Skillsoft<br>Elucidat | TESSERACT<br>PulseLearning | Emotics |

Source: company websites, Quinlan & Associates analysis

[11] Australian Financial Review, 'ASIC gets tough on 'regtech'', 27 March 2019, available at: https://www.afr.com/business/banking-and-finance/asic-gets-tough-on-regtech-20190327-p5182j

## 1. EMPLOYEE IDENTIFICATION

The first step in any effective training process should involve categorising employees into training groups based on their specific role and decision-making authority.

However, most financial institutions adopt a relatively cookie-cutter approach to their training programmes, and often require every employee to be trained on wide range of compliance topics that are irrelevant to the individual. For example, back office employees may be trained on compliance issues specific to front-line staff (e.g. market manipulation by traders).

By separating employees based on their roles and identifying key risk areas using learning management systems ("LMSs"), financial institutions can administer the most critical and relevant training to their employees. For example, SAP Litmos operates a library of over 1,000 pre-built courses, which can be tailored and indexed based on the clients' needs, with reporting function to track effectiveness.

## 2. MATERIAL SELECTION

Even within the same training group, there are employees with different levels of experience and expertise.

Leveraging records of previous training session and A.I. analysis on an individual employees' experience, banks / LMSs can identify the most appropriate training areas and administer content (including both training material and tests) that is focused on addressing specific compliance gaps. For example, Elucidat implements an assessment on compliance to test existing knowledge, after which known material is reduced / can be skipped to ensure maximum relevance for each individual.

Through such technology, banks can deliver fewer training programmes, leading to cost savings, while employees undergo only practical training sessions, reducing time spent on unnecessary training (and hence improving productivity).

## 3. EMPLOYEE INCENTIVISATION

A typical online compliance training module includes many pages of reading and videos, interspersed with short tests that outline specific scenarios, together with multiple-choice questions.

Unsurprisingly, a significant proportion of employees find compliance training boring and tedious. In response, financial institutions are actively exploring different ways to enhance training content to make the eLearning experience more interactive and engaging. This includes gamification, in which training material is incorporated into a video game environment. There are even examples where physical prizes may be awarded at the end of the game.

While more time-consuming to develop, such formats are noticeably more appealing to younger employees, especially millennials. For example, Tesseract created an online interactive training course, with the main character facing real-life compliance dilemmas to be navigated through by the user. PulseLearning also developed award-winning eLearning material, Quest of Honour, a medieval game embedded with compliance training material.

Moreover, cloud technology has enabled convenient access to eLearning modules, allowing employees to complete their training sessions remotely, and at their own time and pace. For example, Skillsoft provides a cloud-based learning experience, enabling user access via all web-enabled devices to enable remote learning at all times.

## 4. PERFORMANCE SUPERVISION

Given past incidents of employees delegating training sessions to subordinates and cheating during compliance tests, identity verification is critical. Some institutions are turning towards biometric verification, such as facial recognition, not just at the login stage, but throughout the entire eLearning module, to ensure employees remain at their desks for the duration of the training course.

However, because most employees skip material and are allowed to retake multiple-choice questions / tests for as many times as needed to pass, identity verification alone is not enough to ensure engagement and knowledge that drives real behavioural change. We believe financial institutions need to monitor engagement levels throughout the training process. It is here that expression analytics can be leveraged to evaluate how focused an employee is during their training module, providing an indication of the level of knowledge retention. For example, RegTech software company Emotics analyses emotional engagement with online content using browser analytics, together with facial recognition and micro-expression analysis, to provide unique insights into employee behaviour during compliance training.

Actions taken by the firm subsequent to performance supervision are also crucial in driving knowledge retention. Training sessions that are flagged should be reviewed and evaluated, and employees that perform poorly during compliance training should be warned and / or mentored to better shape their mindset. Repeated offenders can also be placed on high-risk lists, which compliance teams can monitor more closely (or take specific action against). In fact, Stephen Cutler, the ex-director of SEC's Division of Enforcement, stated that 'integrity, ethics, and compliance [should be] part of the promotion, compensation, and evaluation processes.'[12]

Furthermore, information related to the training feedback process (including employee performance records, follow-up actions undertaken, subsequent employee performance, etc.) can be documented and provided to regulators for compliance-related inquiries. Proper disclosure of the training feedback can allow regulators to establish better guidance frameworks, which can go a long way in helping to restore public trust in the industry.

In reality, most financial institutions have failed to genuinely incorporate employee values and attitudes towards risk into promotion and compensation decisions beyond mere "red flags" (i.e. specific punitive actions for employee non-compliance). As such, their ability to truly promote value-based behaviour though existing training programmes on matters pertaining to organisational risk culture remains far from ideal. We see a very real opportunity for this to change.

[12] SEC, 'Second Annual General Counsel Roundtable: Tone at the Top: Getting it Right', 3 December 2004, available at: https://www.sec.gov/news/speech/spch120304smc.htm

# Q&A SAY…

## POLICING BY CONSENT

It is understandable that some may view performance feedback as a policing mechanism, which drives a mindset of "what can I do?" rather than "what should I do?", contrary to the core philosophy of improving ethical behaviour. However, one should note that this policing mechanism is only used to enhance the *Training & Awareness* pillar, which in turn should work with other pillars to shape employee behaviour and drive cultural change.

The policing mechanism itself is not meant to influence end behaviour; instead, it should be aimed at driving cultural (and mindset) change. Once the employee has adopted the "what should I do?" mindset through education (and the implemented policing mechanism), financial institutions may not need to continue policing behaviours.

An interesting parallel can be drawn to the philosophy of British policing – policing by consent. Policing is 'derived not from fear but almost exclusively from public co-operation with the police.'[13] Furthermore, consent does not refer to the consent of a single individual, and 'no individual can choose to withdraw his or her consent from the police.'[14]

When a company decides on a cultural overhaul, it is similar to the employees providing consent to the company to work within certain standards of behaviour, including aligning with the firm's culture. This provides the right and responsibility for the company to leverage compliance teams (equivalent to the country leveraging a police force) and any suitable tools to identify potential wrongdoings and administer corrective actions.

Furthermore, this monitoring tool should not be treated as a tool by the company to constantly supervise employees, akin to how the police force should not be monitoring each and every action of the public. The police force only acts when there is a warning sign or when they receive a specific request. Similarly, compliance teams should not be reading through every single performance supervision report. Instead, a suitable solution should be adopted to flag warning signs when an employee is not fully fulfilling his or her training responsibilities.

Nonetheless, employee supervision is not the end, but simply a means to an end. Given the current negative perspective of the banking industry, institutions can actively explore a temporary initiative to demonstrate commitment to changing behaviour. However, they should also communicate explicitly that such an initiative is simply leveraged to catalyse true cultural change, which can be ceased when specific cultural objectives have been met, in order to avoid a "Big Brother is always watching" situation. This is all, of course, contingent upon the employees actively trying to change their behaviour.

[13] UK Home Office, 'Definition of policing by consent', 10 December 2012, available at: https://www.gov.uk/government/publications/policing-by-consent/definition-of-policing-by-consent
[14] Ibid

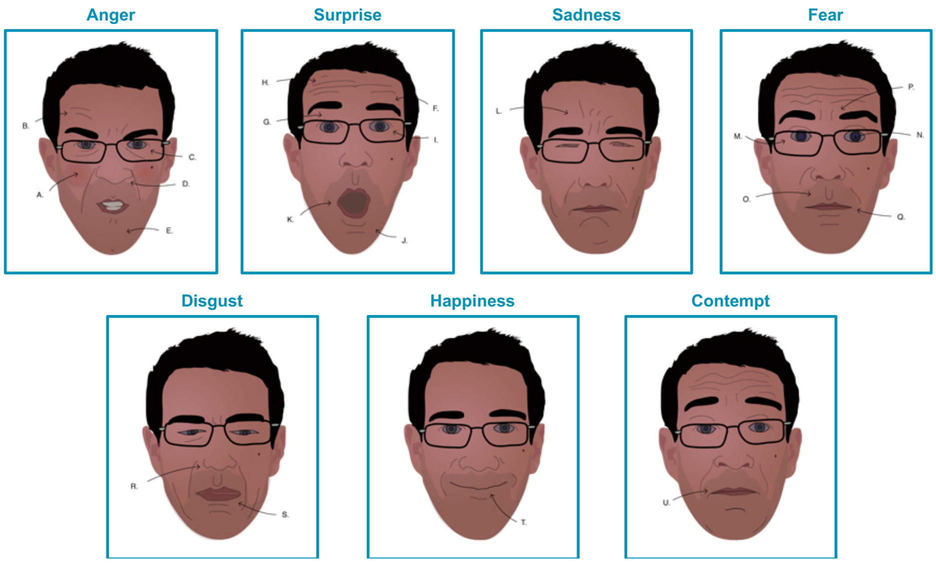
# SECTION 4
# CASE STUDY – EMOTICS

## OVERVIEW

Emotics is a Hong Kong-headquartered RegTech company that analyses emotional engagement with online content. The company combines browser analytics with facial recognition and micro-expression analysis to provide unique insights into employee behaviour, with use cases ranging from compliance training to surveillance. With a focus on driving cultural change, Emotics is positioned as a next generation RegTech service, an emerging category of solutions we would define as "CultureTech".

Emotics uses micro-expression / emotional analysis, underpinned by Dr. Paul Ekman's Seven Core Emotions (see Figure 9), to verify the identity of and measure engagement level of employees during compliance training sessions.

### FIGURE 9: DR. PAUL EKMAN'S SEVEN CORE EMOTIONS




**Description**

| | |
|---|---|
| A | • Flushed face |
| B | • Inward and downward brow movement |
| C | • Hard stare |
| D | • Flared nostrils |
| E | • Clenched jaw |
| F | • Raised and curved eyebrows |
| G | • Stretched skin below eyebrows |
| H | • Horizontal wrinkles across forehead |
| I | • Open eyelids |
| J | • Dropped jaw |
| K | • Parted lips |
| L | • Primarily a frown / furrowed brow |
| M | • Widening eyes |
| N | • Dilated pupils |
| O | • Risen upper lip |
| P | • Drawn brows |
| Q | • Horizontally-stretched lips |
| R | • Clenched nostrils |
| S | • Pursed lips |
| T | • Primarily a smile |
| U | • Tight lips, raised slightly on one side |

Source: Emotics

## PRODUCT OFFERING

Emotics' core offering is *Emotics Attention*, which launches automatically as employees start training applications on their desktops, tracking engagement levels throughout training sessions (see Figure 10).

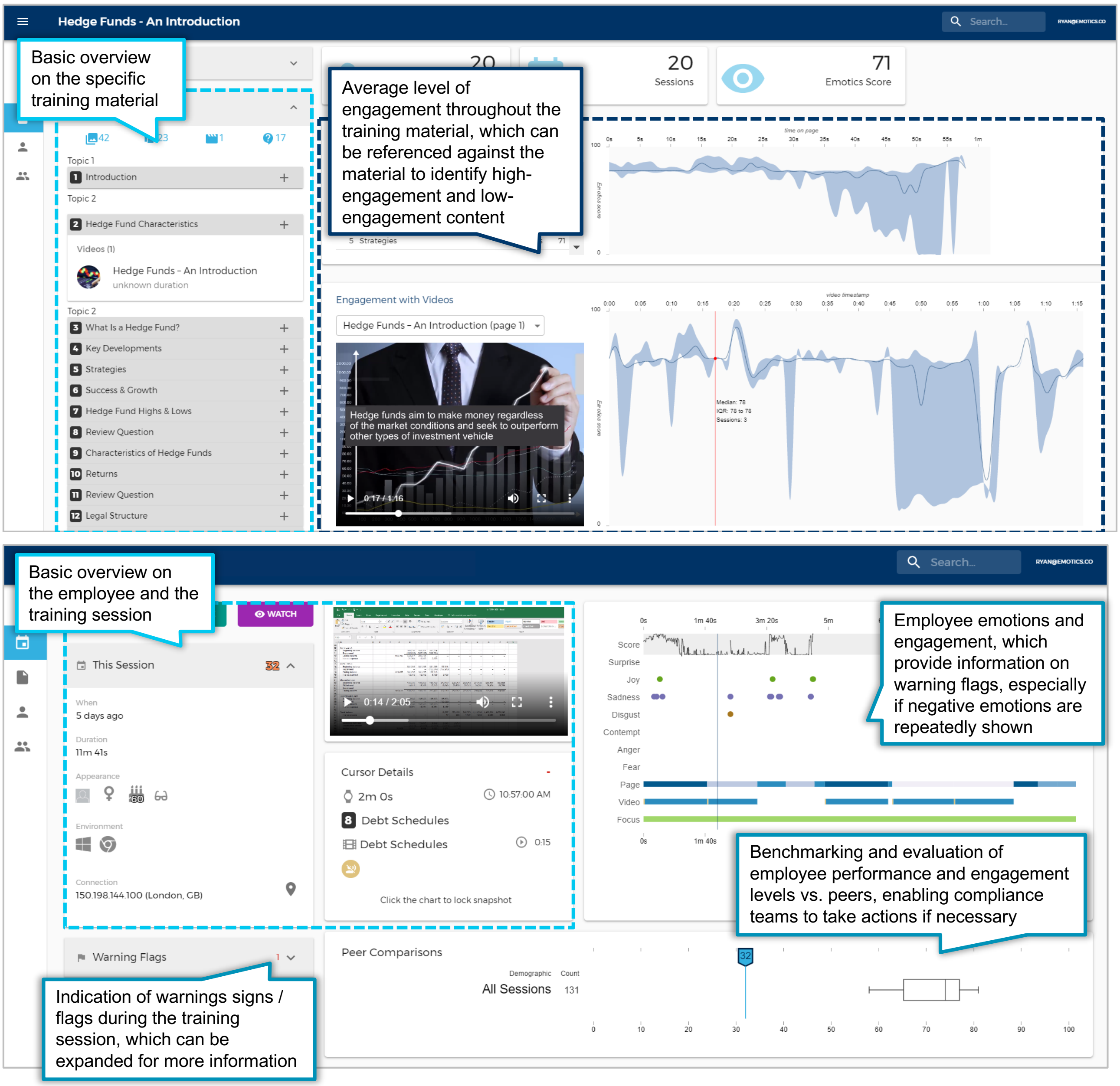
### FIGURE 10: EMOTICS ATTENTION

| | Emotics | Implications |
|---|---|---|
| LAUNCH | • Emotics scripts begin running automatically, without requiring additional user actions | • Emotics can be adopted, implemented, and rolled-out by the company, without the need for training employees on the application |
| TRACK | • Emotics monitors and analyses employee behaviour throughout the training | • Emotics collects a number of datasets, including webcam data, browser data, and session data, to monitor employee engagement levels |
| ANALYSE | • Emotics displays relevant insights for the compliance team on a dashboard | • Based on Emotics' analyses, companies can monitor employee performance and continuously improve training programmes |
| OPTIMISE | • Emotics highlights key training gaps, allowing for more detailed employee risk profiling | • Compliance teams can identify employees who may pose additional risks, allowing for pre-emptive action (e.g. additional training) |

Source: Emotics, Quinlan & Associates analysis

Emotics collects over 840,000 data points during a 1-hour training session, including employee identity, webcam data, browser data, and session data. Analysing this information, it is able to present and highlight training-related insights, including interest in training material, employee engagement levels, and potential warning signs (see Figure 11).

## FIGURE 11: EMOTICS DASHBOARD




Source: Emotics, Quinlan & Associates analysis

The Emotics dashboard provides three main categories of information to the learning & development or compliance team: (1) company-wide performance; (2) content performance; and (3) user performance.

## 1. COMPANY-WIDE PERFORMANCE

The company overview dashboard provides high-level information on the amount of training (and training sessions) taken on a specific subject, along with potential flags. Using the insights provided, companies can benefit from enhanced risk detection via identification of high-risk personnel, as well as a streamlined compliance reporting process for ongoing education efforts. In addition, the company can evaluate business units and / or cohorts of employees, to identify any systemic problems across teams.

## 2. CONTENT PERFORMANCE

The content performance dashboard looks at employee engagement levels throughout training sessions, enabling both the companies and content developers to evaluate the respective merits of different training material. This can help organisations with their vendor selection process, enabling them to identify the most captivating content. It can also be used to help content providers better understand (and subsequently refine) less captivating material.

## 3. USER PERFORMANCE

The user performance dashboard highlights an individual employee's engagement levels throughout a training session, as well as any warning flags for follow-up. The evaluation acts as an incentive mechanism for employees to better engage with their training content and, ultimately, shape their behaviours and mindsets to drive firm-wide cultural change.

## SERVICE BENEFITS

There are a number of benefits an organisation can potentially experience through the effective use and application of *Emotics Attention*, especially in the fourth step of the compliance training value chain – performance supervision (see Figure 12).

**FIGURE 12: BENEFITS OF EMOTICS**

### 1 Employee

**A Behavioural Change**

Emotics acts as an incentive mechanism for employees to engage with content and ultimately adapt their behaviour

**B Stronger Engagement**

Employees receive more tailored content as training is improved, enhancing overall engagement levels

### 2 Training

**A Vendor Selection**

The average employee engagement level can act as an objective metric to evaluate and select training vendors

**B Content Optimisation**

Evaluating employee reaction to specific content areas, companies can tailor training content to enhance engagement

### 3 Company

**A Risk Detection**

By analysing employees' level of engagement with compliance, companies can identify high-risk personnel for further training

**B Compliance Reporting**

Leveraging the insights from the Emotics dashboard, companies can enhance reporting on their training efforts to regulators

Source: Emotics, Quinlan & Associates analysis

By appropriately tying incentives with performance, companies should be able to encourage higher levels of employee engagement with online training material, driving behavioural change. Furthermore, the company can enhance their training vendor selection (and content optimisation) processes by analysing training performance across the entire firm, identifying areas where employees are least and / or most engaged. Regulatory compliance can also be made easier through the early identification of potential high-risk employees (i.e. those who are "flagged" for poor training performance) and incorporation of insights / analysis in regulatory disclosures to demonstrate progress around cultural change.

## PRICING MODEL

Emotics charges users a one-off implementation and customisation fee, and offers its service on a subscription basis for as low as USD 25 per user per annum, enabling cost-effective scaling for financial institutions to roll the solution out on a global basis.

## PRODUCT EXPANSION

Emotics has plans to diversify and adapt its solution for different situations.

The firm has recently developed *Emotics Context*, using expression analysis on corporate communications. Emotics has integrated this offering with Prattle,[15] an alternative data firm that analyses corporate communications; Prattle evaluates the verbal element of the investor communications, while Emotics analyses facial expressions. The combined service offering seeks to provide asset managers with more unique and nuanced insights that are currently unavailable to institutional investors.

Emotics is also exploring the adaptation of its solutions for onboarding processes, analysing potential clients' expression during the display / presentation of disclaimers and terms & conditions, streamlining the digital onboarding process. In addition, Emotics is considering expanding its service line to evaluate the credit rating of clients for digital lenders, as the clients' level of stress during online questionnaires may provide an indication of creditworthiness.

[15] For more information on Prattle, please refer to our report, 'Alternative Alpha', available at: https://www.quinlanandassociates.com/insights-alternative-alpha/

# SECTION 5
## ANTICIPATED RESULTS

Whilst most employees in the financial services industry maintain high ethical standards, there will always be a handful of bad eggs that can set the wrong tone for the wider organisation. To combat misconduct at its core, financial institutions need to continuously develop and shape employee mindsets to reduce unethical behaviour. And we believe this starts, first and foremost, with effective training.

The USD 1.06 trillion in banking industry P&L that has been destroyed since the GFC as a consequence of employee misconduct is no trivial matter. And with total fines and penalties projected to reach USD 400 billion by the end of 2020, the financial impact of bad behaviour cannot continue to be ignored.[16] More importantly, it is clear that the "robust and comprehensive" compliance programmes currently in place at many organisations are nothing more than a box-ticking exercise that barely scratches the surface of the finance industry's broader behavioural and cultural identity crisis.

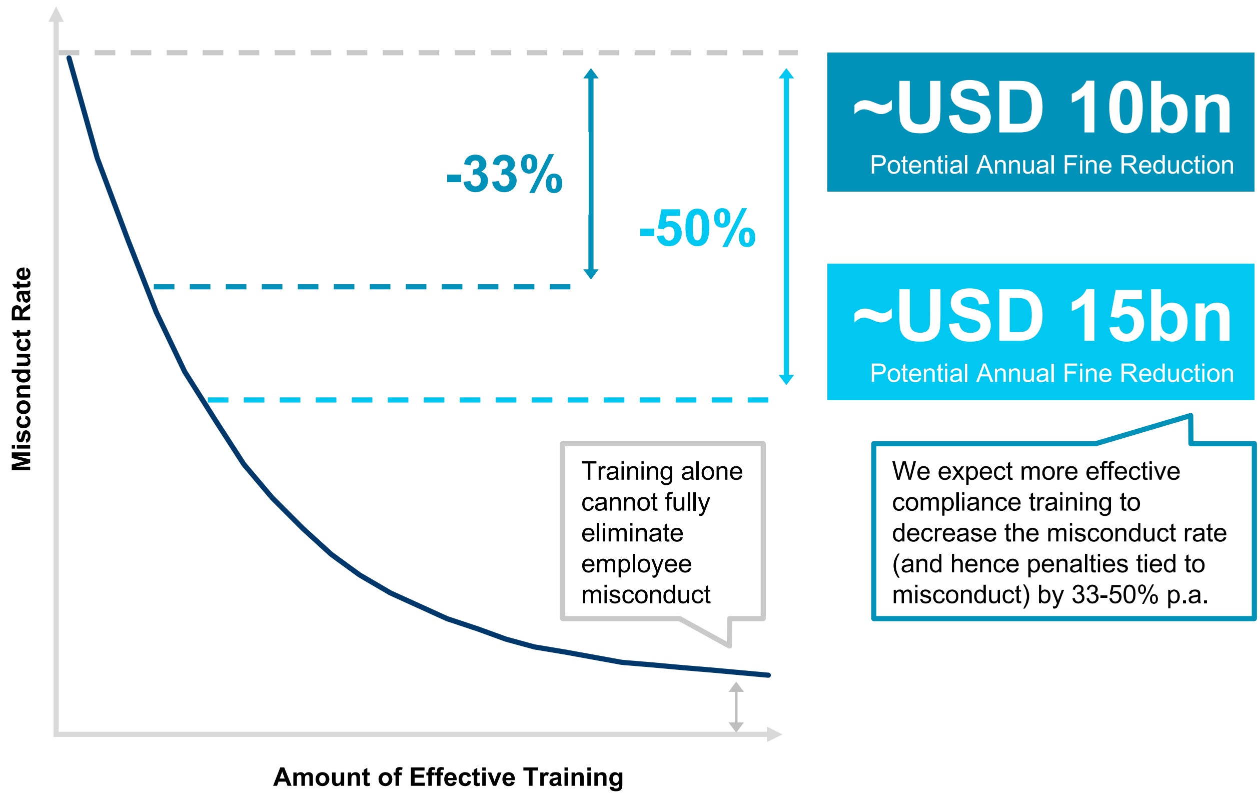
In our view, a fundamental overhaul of employee mindsets (and hence behaviours) is crucial in tackling the root cause of misconduct. In fact, effective coaching and training have been proven to drive change in individuals that are typically resistant to change. For example, Spark Inside, a London-based charity, held life-coaching programmes and workshops for inmates between October 2014 and March 2015. While the sample size may be too small to indicate statistical significance, a ~33% decrease in reconviction rate was recorded, with a ~10% reconviction rate for workshop attendees (for two to three workshops) compared to ~15% for those that did not attend any workshops.[17]

Through the implementation of more engaging training programmes leveraging performance supervision technology, we believe financial institutions will be able to better identify "high risk" employees and encourage individuals to take their compliance obligations more seriously. We see this as a meaningful next step in weeding out bad behaviour at its source.

In addition to enhancing the vendor selection process and saving time (and money) on unnecessary training programmes, we believe the most tangible impact of more effective training will be a reduction in regulatory penalties. With annual industry fines clocking in at USD 30 billion+ since the GFC, a comparable 33% reduction in employee misconduct rates (per the Spark Inside example above) could translate to industry-wide cost savings of USD 10 billion+ per annum (and up to USD 15 billion if misconduct rate halves), excluding indirect cost savings associated with decreased compliance spend (see Figure 13). We see such figures as realistic targets for the financial services industry.

[16] Quinlan & Associates, 'Value at Risk', September 2017, available at: https://www.quinlanandassociates.com/insights-value-at-risk/
[17] Spark Inside, 'Analytical Summary', 2016, available at: https://www.sparkinside.org/sites/default/files/documents/2018-08/Spark%20Inside%20Hero%27s%20Journey%20Violence%20Reduction%20Evaluation.pdf

## FIGURE 13: MISCONDUCT AND FINE REDUCTION




Source: Spark Inside, Quinlan & Associates estimates

While we believe more effective compliance training lies at the heart of shaping employee attitudes to risk, we recognise *Training & Awareness* is just one of nine pillars in our Cultural Evolution Pyramid (see Figure 2). For organisational risk culture to evolve in a more meaningful way, financial institutions need to develop a holistic strategy that seeks to simultaneously address all pillars. Only when there is a more concerted effort to drive employee ownership and accountability through all available channels will the finance industry's current "box-ticking" attitude to risk and compliance evolve into an industry-wide mindset that promotes true value-based behaviour.

We recognise that it is impossible to weed out all forms of bad behaviour in any walk of life. However, we see the growing use of RegTech going a long way in fixing the train(ing) wreck that has failed to address the finance industry's ongoing battle with the severe reputational and financial impacts of employee misconduct.

# SECTION 6
# HOW CAN WE HELP?

Our consultants have worked with various financial institutions on their cultural change programmes to drive improvements in employee behaviour. Our project work involves a number of key services, including:

## 1. RISK CULTURE EVALUATION

Evaluate the organisation's overall risk culture – as well as associated employee mindsets and behaviours – to identify key area for improvement, with recommendations on cultural change initiatives, including:

- Review and evaluate the current organisational culture, including key values and mindset drivers, to identify critical gaps / shortfalls on employee behaviour
- Benchmark organisational culture against industry best practice based on our Cultural Evolution Pyramid (e.g. tone from the top, incentives, governance, communication, and systems and processes) to pinpoint notable areas for attention
- Formulate appropriate programmes and initiatives to address gaps and help shape desired employee behaviours

## 2. SOLUTION IMPLEMENTATION

Guide the organisation through the adoption and implementation of suitable technological solutions to enhance cultural change, including:

- Evaluate and identify most appropriate areas where technological solutions can address current operational shortfalls
- Determine the optimal approach for implementation (i.e. buy, partner, or build), considering the organisation's capabilities and specific circumstances
- Develop overall execution plan, helping the organisation outline workstreams, define rollout prioritisation, and establish project deliverables with supporting milestones

## 3. COMPLIANCE E-LEARNING

Design and produce eLearning material (for a comprehensive range of topics, including compliance and culture), along with the sourcing, identification, and implementation of suitable FinTech solutions to enhance overall eLearning programme, including:

- Establish and communicate meaningful and quantifiable programme outcomes and behavioural change objectives
- Create engaging and relevant training material based on deficient areas determined in the evaluation phase
- Evaluate the operational shortfalls of the existing eLearning system, and identify and implement technological solutions to refine eLearning and enhance knowledge retention

## 4. CORPORATE TRAINING & COACHING

Conduct in-person corporate training and coaching programmes to equip clients' employees with the necessary knowledge and capabilities to support the overall cultural change

- Provide world-class employee training workshops (on areas including specific compliance topics and broader cultural change programmes), focusing on turning concepts into actions, and committing actions to practice
- Engage team managers in dedicated coaching programmes, creating actionable plans for them to inspire and champion for good business conduct within their teams and divisions
- Assess business performance improvements attributable to mindset and behaviour changes from training and coaching efforts, and further fine-tune the programmes

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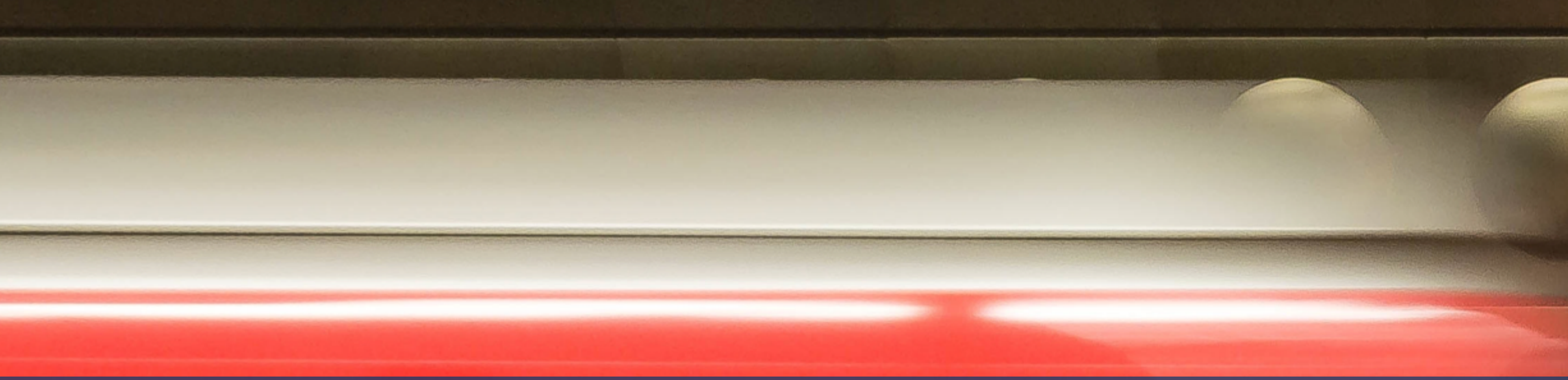
STRATEGY WITH A DIFFERENCE



## ABOUT US

Quinlan & Associates is a leading independent strategy consulting firm specialising in the financial services industry.

We are the first firm to offer end-to-end strategy consulting services. From strategy formulation to execution, to ongoing reporting, communications, and employee training, we translate cutting-edge advice into commercially executable solutions.

With our team of top-tier financial services and strategy consulting professionals and our global network of alliance partners, we give you the most up-to-date industry insights from around the world, putting you an essential step ahead of your competitors.

Quinlan & Associates. Strategy with a Difference.

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