ML^2 ManagedLeverage.com

ML^2 ICO

Whitepaper

A personal note on the ML^2 ICO and the ML^2 token

The ML^2 philosophy is to create an enclosed trading platform / ecosystem that delivers, through a number of tools, the required intelligence to enable active traders to create and meet their trading objectives => this is the ML^2 platform

ML^2 token will assign perpetual access rights to the ML^2 platform = the most advanced next generation+ ***predictive analytical derivative trading platform***

- ML^2 is not just a platform, it is the active trading ecosystem

The **predictive analytics** algorithms [5 algorithms which cover different instrument profiles as well as market price structures = whether trending-momentum, mean reverting, random price structures] that create the most advanced trading program => the next generation+

- simply because **the predictive analytics can detect in advance the directional price movements for any instrument across selected time windows,** their current and forward market price structure, and when that price path will [is about to] change

For this reason, the ML^2 token will have restrictive access rights

- access to the ML^2 platform requires the ownership of 1 Core token, but access rights are perpetual
- there is also a hard cap on the number of tokens released = no more will ever be created and none will be burnt [= an enclosed ecosystem]

ML^2 platform is designed to offer the active derivative trader all the tools and intelligence necessary so they can determine – create and meet their trading objectives:

- 40+ current tools
- all the new tools in development, and enhancements to current tools
- access to third party tools and platforms
- automated, discretionary and hybrid trading programs
- execution of the trade from the ML^2 platform with your broker

The algorithms are advanced, sophisticated and cannot be replicated – such intelligence will not be made available to retail and institutional traders on an open platform other than ML^2

- there is not much else the active trader needs to know other than the fear of missing out [participate in the ML token releases [pre ICO] and ICO auctions to guarantee access
- or buy a token on the ML^2 DEX exchange after the ICO

The 5 algorithms that have been developed are around 90% efficient. There is room for improvement within the optimization programs, more clarity around categorization of the Core state, and selecting smaller price windows for price entry and exit. The recent development of the 4th and 5th algorithm improves the main Core algorithms and such is set as being the CSi raw, bringing a new pathway to understanding the forward price path

- so the process is for continuous development in what is already the most advanced predictive trading program

managedleverage.com = at every time window, the active trader will always be ahead of the price curve

ML^2 ICO

ML^2 tokens will be available through an ICO release: which is outlined in this document

This white paper describes the ML^2 algorithms, the ML^2 platform and the ICO token release program

Disclaimer
This document is a technical whitepaper setting out the current and future developments of the ML platform programs

This white paper is for informational purposes only

Unless otherwise expressed, at this point in time, the products and innovations set out in this White paper have been developed and in pre Beta commercialization

The ML^2 platform has been operational for 4 years, and is undergoing enhancements to both the current suite of tools to incorporate intraday price signals and the addition of several new tools [RADAR, automated platform, heatmap]

Beta release will be given to selected active traders within the partner brokers to test, as well as an open demonstration model for general review

ML^2 derivative trading platform

Whitepaper

ICO program

ML^2 platform:

Next generation+ trading platform: **the most advanced predictive analytical platform** available to retail and institutional derivative traders

- offering a series of trading algorithms that detect price anomalies through and ahead in time [advanced warning of directional changes in the price of any financial instrument]
- that enable the active trader to map the forward price path of any financial instrument within a series of time windows [1 minute, 15 minutes, 30 minutes, 60 minutes to 24 hours]

These algorithms would normally not be available or accessed on an open platform to retail and institutional traders

- and therefore access to the ML^2 platform will be restricted to small minority through the purchase of ML^2 tokens

- 5 advanced algorithms [each algorithm is suited to the profile of the instrument]: log return or volatility based CSi
[a] single instrument [FX, commodities, stocks]
[b] portfolio of instruments [stock index, ETFs, complex stocks]
[c] instruments whose price moves in volatility clusters or spikes
[d] Volatility based CSi

- access to the ML^2 platform is through a restricted number of ML^2 tokens – so there is a bounded universe of users within the ML ecosystem

- ownership confers perpetual access rights to the ML^2 platform, its current and future trading tools and intelligence programs

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ML^2 proprietary trading algorithms:

ML trading platforms – range of platforms and their targeted user base

ML^2 is designed as the next generation+ trading platform for derivative traders – offering all the tools necessary to / for active traders to achieve their trading objectives within an enclosed [ecosystem / platform]
=> ML series of tools includes:
5 unique algorithms that can detect price anomalies ahead in time [advanced warning on directional price changes in financial instruments] – that map the forward price and the price path through a series of time windows

- time windows [ranging from 1 minute => 15 minute, 30 minute, 60 minute through to the 24 hour] which present the forward price path and volatility states

- determines the current 'Core state' for each instrument :
  {'Core states' = trending-momentum +/-, mean reverting +/-, random}

- ability to detect price anomalies [advanced warning on directional price changes] that lead to changes in the price path = ['phase transition'] ahead in time
  the change in the current Core state, the new Core state and the duration period for the Core state
  example: the current Core state may be 'persistent long trending' – when a phase transition occurs, this Core state will change to a new Core state, such as 'persistent short trending' or 'mean reverting long' – both these states are detected in advance

- determines the next 'Core state' in the current time window: 'phase transition'

- the time windows : 1 minute, 15 minutes, 30 minutes, 60 minutes, 24 hours out to 10 time blocks in the future [high, low, close, extreme prices and worst price]

Each financial instrument prices move in a 'wave' or sine-wave pattern through any time period.
The ML^2 algorithms can detect what the current directional price trend is [mean reverting, momentum, random Core state], the time left in that state [duration], project the forward price path of each state, and when that state is about to change [phase transition] the new Core state => ahead in time

ML^2 solution to trader's pain point:

"If the trader is to know where the forward price will be at any future point in time, what else do they need to know = they know all that there is, as is required in order to achieve their trading objectives"

ML trading platforms: range of platforms and their targeted user base

ML^2 platform has currently 40+ unique proprietary tools: all historical, current and future tools that are developed will be made available on the ML^2 platform – as well as selected tools to the ML^3 and ML^4 platforms

ML^2 platform

- trading platform for active derivative retail traders through ML^ selected broker partners

ML^3 platform

- automated trading platform for active institutional traders – broker agnostic [institutions can use their current broker]

ML^4 platform

- trading platform for longer term active traders in financial instruments and digital assets: similar to a digital adviser platform

ML business model:

ML^2 platform: will be offered free to active traders [who need to own 1 ML^2 Core token, to gain access rights in perpetuity]

- ML will receive rebate dollars from the partner broker on the turnover of derivatives offered through their platform

ML^3 platform: will be offered to selected institutional traders [1 ML^3 token confers access to the CSi analysis on 1 instrument listed on the ML^3 platform]

- ML will receive a pre-set percentage of the returns above an agreed benchmark with each institutional trader

ML^4 platform: will be offered free to active longer term investors [1 Core ML^4 token, to gain access rights in perpetuity]

ML^2 algorithms – restricted access

Given the nature of the algorithms and the CSi intelligence, access to the ML^2 platform will be restricted to a maximum number of global active traders

- **access will be through the ownership of an ML^2 Core token, that can either be purchased through the ML token releases / auctions or purchased on the ML^ DEX exchange where the tokens are listed**

ML^2 will run an extended auction program whereby buyers and sellers of the ML token can exchange ETHUSD for any number of ML tokens

Platform product strategy

What is the ML^2 platform to the users

ML^2 platform is designed to provide all the tools necessary for the active derivative trader through to long term investor in financial instruments to:

- develop their trading and investment objectives [investment risk profile, portfolio and instrument returns, drawdown, leverage, portfolio weights, rebalancing, hedging => capital protection]

- create their own active trading programs [discretionary and automated]

- create and manage – monitor their trading / investment portfolio through time

- unique series of risk and price profiling algorithms that can detect price anomalies ahead in time [advanced warning on directional price movements]

- project the forward price path for each instrument and therefore the projected forward value of each instrument / portfolio [know when the portfolio's value will peak or trough]

- Tools and programs designed for discretionary and automated traders
- Tools designed for experienced traders through to the new to trading

Platform description summary

Next generation+ platform that provides ML proprietary intelligence within a range of 40+ tools, and includes

- ***unique algorithms that detect directional price movements ahead in time***
- [standard] charting to support the predictive algorithms
- standard technical analysis tools
- ability to execute the trade
  => all within the ML^2 and ML^3 platform

Next generation+ suggests what the ML^ programs can achieve are currently theoretically impossible

- not only that price movements on financial instruments and their derivatives can be detected in advance, but the forward price path can be mapped with a high degree of accuracy [also that the price path will follow one of 3 Core states: momentum-trending state, mean reverting state or random state]; and
- then have these algorithms available on a platform open to the active retail trader, when it would normally not be made available on a public platform => that's the next generation+

Current market pressures

FX-CFD margin brokers face regulatory winds impacting their business that limit client reach, as well in a very competitive environment, higher Client Acquisition Costs [client on-boarding and retention] and lower spreads reducing the MM books ability to create $ per Lot traded

- now there is a new breed of brokerless margin brokers [Trade.io] funded by ICO and adopting the Blockchain technologies to offer the same products and rewarding token holders by profit distributions

Asset managers face pressure to lower fees given poor performance v passive investment funds [ETFs]

Passive investment v {active investment => high costs with poor performance} debate in a historical period of low interest rates, high correlation between all asset classes, and low volatility: where passive is winning – active management cannot create enough alpha to beat the index, which can in part be attributed to active management being constrained by their mandated benchmarks

HFT trading firms annual profits have been declining for multiple years as the industry consolidates - their trading edge [which is dependent on both volume turnover and price volatility] has been dampened and firms are looking at either at cryptocurrency trading [follow the volatility] and trading outside the microsecond – seconds time windows to mid tiered time periods

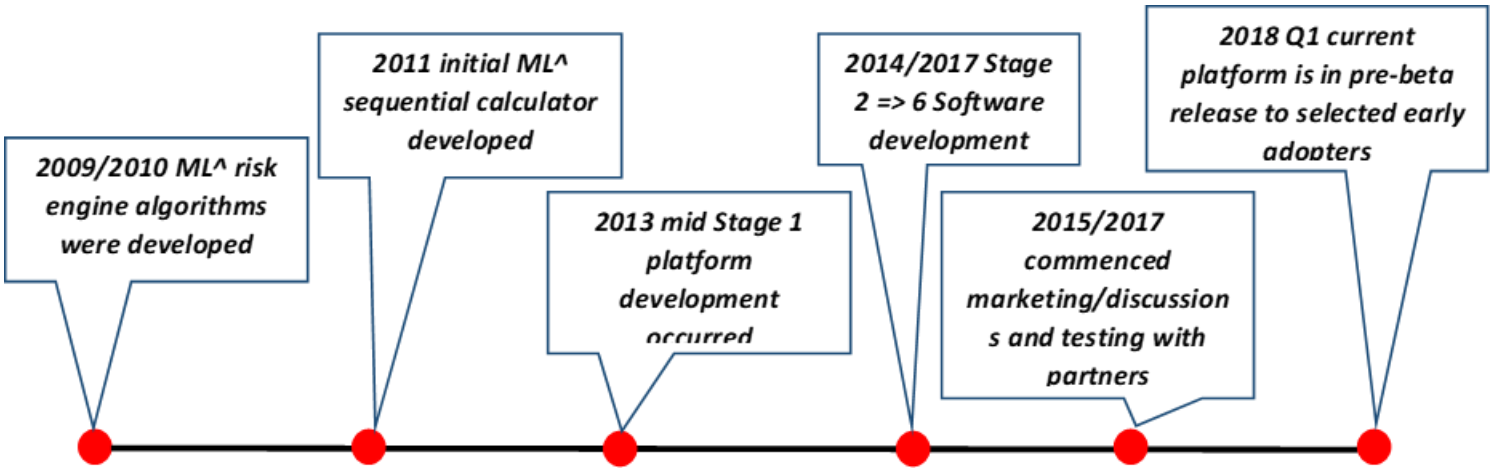
Machine learning, and sentiment analysis [crowd forecasting] appear the next phase in trading analysis for generating alpha, but given the level and nature of interest in this field, early gains may eventually follow the HFT trend as more and more institutions use this machine learning to try and gain alpha and limit the return horizon

- Cindicator, Augur and Numer.ai are interesting business models that incentivize the crowd to forecast accurately, are worth watching but target a different trader base than ML active individual trader/ investor
- Trade.io is the next generation derivative trading platform adopting the trading platform but using Blockchain technologies as the edge and they reward token holders from their trading pool
- Spectre.ai is another business model based around Blockchain technology in the margin broker space

  NOTE: *both Trade.io and Spectre.ai adopt the natural hedge risk management program current CFD-FX margin brokers use to capture active trader losses – that 80%+ of their active trader base will lose their money in trading, and so not meet their trade objectives, and so this assumption forms the basis of their business model*
- ML^ platform is the opposite – each trader will be enabled to create their own trading programs and meet their trading objectives

5 unique algorithms that can detect price anomalies ahead in time [advanced warning on directional price changes in financial instruments] – that map the forward price and the price path through a series of time windows

Summary ML^2 history:



Platform product development:

2013: there was a limited range of developed tools, focused more on the individual active derivative trader over a limited selection of financial instruments

- through time the range of tools increased to accommodate traders in CFD and physical stocks, automated trading programs, portfolio construction and monitoring [digital adviser platforms], statistical arbitrage [PAIRs] and intraday trading

- the time unit-window moved from predominately the 24 hour [EoD] analysis to 60 30 15 minutes and shorter [over time the spreads offered by margin brokers decreased towards zero, allowing shorter time windows in the analysis and so afforded the development and migration from 24 hour EoD pricing to intraday trading tools]

ML^2 now has around 40 tools [none are based on technical analysis, machine learning or sentiment forecast] that allow the active trader to select their own tools to support their primary trade analysis [technical analysis] or a series of tools to create a primary trading rule based program [either discretionary, automated or hybrid combination]

- portfolio monitoring supports active mindset investors who have a longer term investment horizon with portfolio construction, downside risk protection, hedging strategies and rebalancing programs
- ML^2 program offers an alternative to digital advice platforms with its focus on concentrated active-dynamic trading, capital protection and risk management
- ML^ will partner with ChartIQ.com to enable active traders to execute the trade with the partner broker on the ML^2 platform

ML^2 intelligence risk engine / algorithms

4 specific algorithms // risk engine that analyses the 'Core state' {price structure} of over 10,000 + financial instruments

Defines:

- financial instruments 5 'Core states':
  (i) persistent trending + / - (ii) mean reversion + / - (iii) random
  'Core states' duration is the [time left in the state-trend]

- 'phase transition': the point in time over which the current Core state is about to change into a new Core state = the Core state price path changes are detected ahead in time [usually 2 time units]
  [*ML^2 algorithms detect price anomalies ahead in time, which signals the change in the 'Core state' = change in the instruments price path*]

- projected price path out to 10 time units [high, low, close, worst high - low, extreme] = so if analysing the 15 minute price path, the forward time windows are 15 x 10 = 150 minutes in 15 minute windows

Summary:

ML^2 algorithms detect the current 'Core state' of the financial instrument, the trend duration, the directional nature of the forward price [Core state] and 'phase transition' changes in the Core state down to minutes, hours, days in advance

- analysis covers 10,000 + financial instruments
- tool analysis time units : 1 minute, 15 minute, 30 minute, 60 minute, 24 hours

The universal trading problem = solved

- Most trading programs fail eventually, simply because the market regime changes [Core state] be that from a momentum trending state to a mean reverting or random state: as the trading program is optimised or designed for only 1 state or another. In effect, the trading programs are very fragile / not robust to incorporate any change in the underlying mechanics of the market [Core structure state]

ML^2 algorithms not only know the current state [Core state] but know when that state is about to change in advance [phase transition] and the new state – the active trader can ride the price waves all the way to their trading objectives

- a sustainable and robust trading program through all market scenarios

ML^2 algorithms detect price anomalies ahead in time, which signals the change in the 'Core state' = change in the instruments price path

ML^2 partners

Partner brokers who have agreed to test ML^2 platforms

- global active derivative trader base 130,000
- foreign exchange, stock index, commodities
- turnover rebate

- global active trader base
- global stocks, CFD stocks 10,000+ instruments
- turnover rebate

- regional active trader base
- CFD stocks, foreign exchange, stock index, commodities
- STP broker ECN broker

- proprietary trading house
- focused on Asian equity markets and commodities
- percentage profit on trades 50:50

Further discussions with a range of alternative institutions will be undertaken through 2018: the main issue is to find a broker whose business model is aligned with their active trader clients meeting their trading [$]

- most CFD-FX margin broker models are market makers [MM] in which the broker takes the other side of the trade
- given that 80–90%+ of active traders lose their trading equity, the simple B Book model is profitable - their business model weakness is both high acquisition costs per new trader and low earnings tail per active retail trader

ML ecosystem creates longer trading cycles per active trader, higher turnover and lower on-boarding costs = marketing edge for the partner broker

ML^2 trading intelligence can also be applied to the B Book model – an increase the dollar return per Lot traded in managing active trader B Book exposure

ML^2 web platform [current version]

ML^2 Beta platform

ML^2 Beta platform is in pre commercialization:

the platform is to go through active user testing period to redefine user experience and interfaces through feedback [selected active traders are to test the Beta version platform and critic its features with focus on the ability of the interfaces to deliver the signal intelligence that can be understood across a wide range of experienced active traders]

ML^2 platform follows the lean principle of 'minimum viable product' in test stage, and through targeted user testing, feedback is received to suggest the required changes to meet user experience – the feedback will define changes in the ML^ platform

- continuous development of existing tools [refinement], new algorithms [version 2 has been developed = CSi raw algorithm] and new tools will be an ongoing part of the ML development cycle

Time to Beta release guideline:

4-6 weeks development time in the Beta version for active trading	•***Testing of tools conducted during software development*** •***Handover to preferred broker partners for testing***
2 + weeks partner and selected user testing on Beta platform	•***Feedback: Determines required changes to tools and user interface***
1-2 weeks developer time on specified testing changes	•***Change to platform UI based on selected user testing feedback***
Commercialisation with preferred broker partners	•***Glosbal reach in about => 5-10 weeks***

Dependencies will be in the active user testing and from that, the required changes to the platform timelines

The ML^2 algorithms can detect what the current directional price trend is [mean reverting, momentum, random Core state], the time left in that state [duration], project the forward price path of each state, and when that state is about to change [phase transition] the new Core state => ahead in time

Strategic philosophy

Range of derivative trading platforms

Retail broking platform

Preferred partners: ML is actively working with several global and regional CFD-FX margin brokers

- selected partner brokers to exclusively offer the ML^2 platform to current and new active traders
- ML^2 has access to the brokers active retail traders [experienced traders]
- ML^2 focus is on B2B 2c services = product development
- broker business model in CFD-FX preferred as STP / ECN
- broker business model in global stocks preferred
- turnover rebate : standard monetization program
- earnings model assumes per 1,000 active retail traders: rebate = estimated at ~$2,000,000 USD per annum given turnover assumptions
- instrument universe is limited to the partner brokers listed instruments

Constraints:

- small number preferred partner brokers with suitable business model
- broker partner needs to be incentivized to market ML^2 platform
- achieving global reach with adequate instrument universe
- regulatory constraints in global reach

Institutional platform [ML^3 platform]

Institutional partners: ML will be offering, as a separate trading platform [ML^3] targeting institutional traders such as hedge funds / proprietary trading houses based on algorithmic trading programs

- ML^3 platform offers tools available on the ML^2 platform, but as broker agnostic [no selected partner brokers]
- ML^3 has access to high turnover trading houses
- ML^3 focus is on B2B
- ML^3 token creates access to the ML^3 platform and instrument coverage – broker platform agnostic – the instrument universe is selected by the token owner
- license fee or profit share // combination

Constraints:

- leakage in ML^3 not capturing all the trades or profit earnings

Digital asset crypto-currency platform

ML^2 and ML^3 platforms will offer digital assets in cryptocurrencies / tokens through both a CFD-FX margin broker [leverage and short selling] and OTC BTC exchange [physical trading] along with the standard instruments

- specific CFD-FX margin broker that has adopted crypto-currency trading [usually limited to the top 20 digital assets given liquidity constraints] – like coinspot.com.au
- CFD-FX margin broker to allow leverage and short selling
- OTC exchange for physical trading that offers a larger range of digital assets than the CFD brokers [combined with derivatives to hedge physical exposures – requires higher level risk management in defining correlated digital assets to short against the physical digital asset = ETH hedges EOS]
- large universe of liquid cryptocurrencies [and growing as tokens mature in terms of trading liquidity = survivors]
- high volatility
- new risk management tools required in instrument and portfolio management [in development]
- new futures and option contracts on ET exchanges
- crypto currency funds
- MDA in digital assets [LONG – SHORT fund]

Competitors [predictive analytics] and the market space

Algodynamix.com
One of the top 100 fintech companies in Europe

Detects price anomalies in a limited range of instruments through the use of unsupervised machine learning based on traded volume data from profiled segmented traders [the smart traders => to the dumb and dumber]

- the methodology segments traders into clusters that are monitored for each clusters directional traded volumes, to then detect when prices of the financial instrument will rise or fall

- detection is usually several days in advance, but can be shorter to minutes, with 2 – 3 signals per trade required

- average trade signal is every 10 – 20 days = 1 - 2 trade signals per month [at this point in time]

- at this point, limited to between one / two price anomalies per month with no projected price path [they offer a target price within a confidence level]
- monthly cost $1,250 USD per instrument

ML^2 **managedlevereage.com**
Detects continuous price anomalies in the 1 minute out to 15 minute, 30 minute, 60 minute and 24 hour time windows price data, with an average signal every 2 – 8 time units

- 2 time units warning of a change in the Core state and price path
  [where the time unit is 15 minutes: the warning will be for the next 30 minute period = 2 x 15 minutes: => to exit the current trade and enter the new trade – the price will continue to move in the current trend state, but will change direction/ Core state within the 30 minute window]
- analysis on the current 'Core state' and the new 'Core state'
- calculation of the forward price path [high. low. close.] including extreme prices
- the above analysis applies equally to the volatility path [volatility increasing or decreasing] in the forward price path

Essentially ML^2 analysis detects all the price wave patterns in the price of any financial instrument [10,000 + instruments] with a > 90% accuracy
- ensuring the active traders can achieve a target percentage of between 70% <=> 99% total basis points of the price move in the 'Core state'

ML^2 analysis ensuring the active traders can achieve a target percentage of between 70% <=> 99% total basis points of the price move in the 'Core state'

Technical paper

Summary detail on ML^2 intellectual property {algorithms}

ML^2 has developed 5 algorithms that can detect the current and future 'Core state' of any financial instrument

- The Core states are presented as:
  - (i) persistent [momentum-trending] LONG and SHORT
  - (ii) mean reverting LONG and SHORT
  - (iii) random

- The Core state duration = the time left in the current Core state

- Detects price anomalies ahead in time and the new 'Core state' – anomalies occur in the 'phase transition' period when the current 'Core state' is changing to a new 'Core state'
  - 'phase transition' alerts the trader in advance that the current 'Core state' is about to change and the nature of the new 'Core state'

- ML^2 algorithms work from the 5 minute, 15 minute, 30 minute, 60 minute and 24 hour [as well as weekly, monthly] price data
  - *although the programs can detect the Core state and anomalies to the 1 minute time unit, the main issue is around the bid offer spread and the 60 second window price high-low range limiting the total return at in this time period [cryptocurrencies have high bid-offer spread in this space]*
  - there is a pivot point by which the user can select a time period that suits their trading style but at the moment we limit the analysis to 15 minutes onwards in the projected price path - 1 minute analysis is set for such search tools as 'price entry' and 'moments to stress'

CSi index [Core Structure index]

- the 5 algorithms produce a CSi index = 'Core Structure index'

- 2 algorithms focuses on single one dimensional instruments such as AUDUSD, EURUSD, OIL, COPPER etc.

- 1 algorithm focuses on financial instruments that represent a portfolio of different instruments such as stock indices, ETFs, BHP, Amazon

- 1 algorithm is fine tuned to pick up sensitive price anomalies in any instrument and is used to set price entry/ exit signals within each time window = more frequent trade signals

- 1 algorithm creates the CSi based on the instruments volatility measurement [multiple standard deviation methodologies]

CSi index

- CSi index moves between 0.50 and 3.00, and is normalized to a range between 0.00 and 1.00

- CSi will move between 0.00 and 1.00 in sequential steps, higher or lower – and depending on both the direction and level of the index at any point, will determine the 'Core state'
  Example: if the CSi is moving from 1.00 towards 0.50, the 'Core state' is 'persistent' LONG

  CSi moves in the opposite direction to the price of the financial instrument – in order to avoid confusion, in the graphical presentations we convert the CSi to a FDi that shows the CSi index moving in the same direction as the price of any financial instrument

- When the CSi changes direction, and is validated [rule based], then the 'Core state' is about to change – this is 'phase transition' – and at this point, the level of the CSi level and the new direction = the new 'Core state'

Price path

- the CSi algorithms can project the forward CSi, and so the forward price path [high, low, close, extreme high / low, and worst price]
  The forward CSi are input into the following tools: price path, enhanced price path, moments to stress, price entry, cash buffer / FX cash buffer, portfolio monitoring forward valuations

- CSi index input is the log return and the standard deviation of the financial instrument price

- CSi index can use the standard deviation of the log return and with that create both the standard CSi and the CSi volatility index – [how volatility will change] – this is used in option arbitrage and as a directional price movement indicator in itself

PAIRs

- CSi index can be used to compare two instruments – in a statistical arbitrage trading program in order to determine how the directional price spread [basis points] will

change through the selected time window, either in moving closer together or moving further apart

Risk engine

Continuous exposure

- HFT trading firms adopt an continuous exposure trade, with no stop loss – an 'equilibrium price' is calculated and trades are entered as long or short based on where the spot price is to the projected 'equilibrium price' [***up to a maximum limit exposure – so if the spot price is below the equilibrium price then the instrument is bought, if above, the instrument is sold [to the maximum limit***] = on a continuous time scale [risk management would have the exposures closed at the end of the day unless the instruments is 24/7]

- ML^2 algorithms and logic are well suited to this trading program, which is by nature more institutional than retail in framework, and more for automated than discretionary trading programs given high time resources

Crypto-currencies

- Due to the unique structure of BTC, ETH, XRP and up to the other 1000+ crypto-currencies – their volatility, lack of correlation to most asset classes, the nature of the traders, and the business model backing the token
- the ML^2 algorithms are particularly suited to trading these instruments given their persistent momentum nature
  So in the development of both the ML^2 and the ML^3 platform, a crypto-currency automated trading program will be offered, as well as the discretionary trading program

Optimization

- In the calculation of the CSi for each instrument in each of the 5 algorithms, a selection of 10 - 12 historic time periods are used – this produces around 60 different CSi for each instrument

- the optimised CSi algorithm and time period chosen is the algorithm chosen that produces the 'phase transition' [the change in the CSi that is 1-2 units in time closest to the price peak [high] or trough [low]

- the CSi will change direction before the price changes direction [Core state], so the price will keep on rising in a 'phase transition' when the CSi is falling – creating a program where the traders sells into a rising price that is about to turn down and buys into a falling price that is about to rise [short term contrarian trading mindset]

- optimization in ‘phase transition’ sets a stable time window in which the trader can manage the price exit and entry – that is exit the long exposure nearest the highest price, or buy near the lowest price

- all CSi algorithms and historical time periods detect the price anomalies in the ‘Core state’ at ‘phase transition’, but with varying time lags – an optimizer algorithm is chosen to select the algorithm and historic price time period that is benchmarked time window at two time units
- or the trader can select their own CSi algorithm and time period through graphical interpretation

Portfolio monitoring program

- program that is built around the digital advice platforms offering automated portfolio investment, rebalancing and monitoring through time

- ML^2 programs are designed for longer term investors but with an active management overlay program that allows rebalancing [new financial instruments replacing existing financial instruments in the portfolio], downside capital protection and hedging [using derivatives to hedge the physical financial instruments], and risk profiled leverage [maximum safe leverage]

- ML^2 programs can also present the forward value of each financial instrument and the portfolio value [time windows out to 10 time units] so the peak $value of the portfolio is presented in advance as well as the forward point in time
    - action then can be taken to protect the forward value of the portfolio via hedging the stressed instrument, rebalancing the portfolio towards cash or replacing the stressors

ML^2 platform tools

ML^2 platform is targeting active retail and institutional traders in derivatives through selected partner brokers

- within an enclosed platform that offers all the tools necessary for traders to create and meet their trading objectives

ML^2 is the next generation+ platform with advanced predictive analytical tools [Core structure, phase transition, price path]

The following is a list of the tools available on the ML^2 platform
[Read managedleverage.com main webpage and the insights blog for a detailed description for each tool]

Mi portfolio

- Mi portfolio
- Mi watchlist
- Instrument Scorecard
- Mi ETF portfolio
- Asset Allocation

Leverage intelligence

- cash buffer
- FX cash buffer
- Core structure – price strength signal
- moments to stress

Market intelligence

- Core structure – standard CSi^
- Core structure – raw CSi^
- phase transition
- portfolio ROI directional
- price path – forward price path
- entry point – execution price
- directional volatility
- option arbitrage
- derivative trendiness

Intelligence modules

- RADAR
- entry level module

- self-directed investor module
- introducing broker module
- heat map

Portfolio monitoring modules

- portfolio monitoring
- sleep@nightLVR
- ETF portfolio monitoring
- APA portfolio monitoring
- portfolio LVR margin
- portfolio construction

Intra trading modules

- extreme LONG<5
- intra signals
- PAIRs
- co-integration
- automation trading program

Benchmark

- OTS benchmark
- CSi^ simulation tool

Tool shed

- leverage calculator
- option calculator
- MT4 application module
- ML^2 access – Core structure index

ML^3 platform [automated trading] ML^3

Automated trading platform that adopts the ML^2 risk engine – {python version} with open API to user preferred brokers [capital allocation / larger universe of instruments such as crypto-currencies]

managedleverage3.com

- Mi portfolio
- Mi watchlist

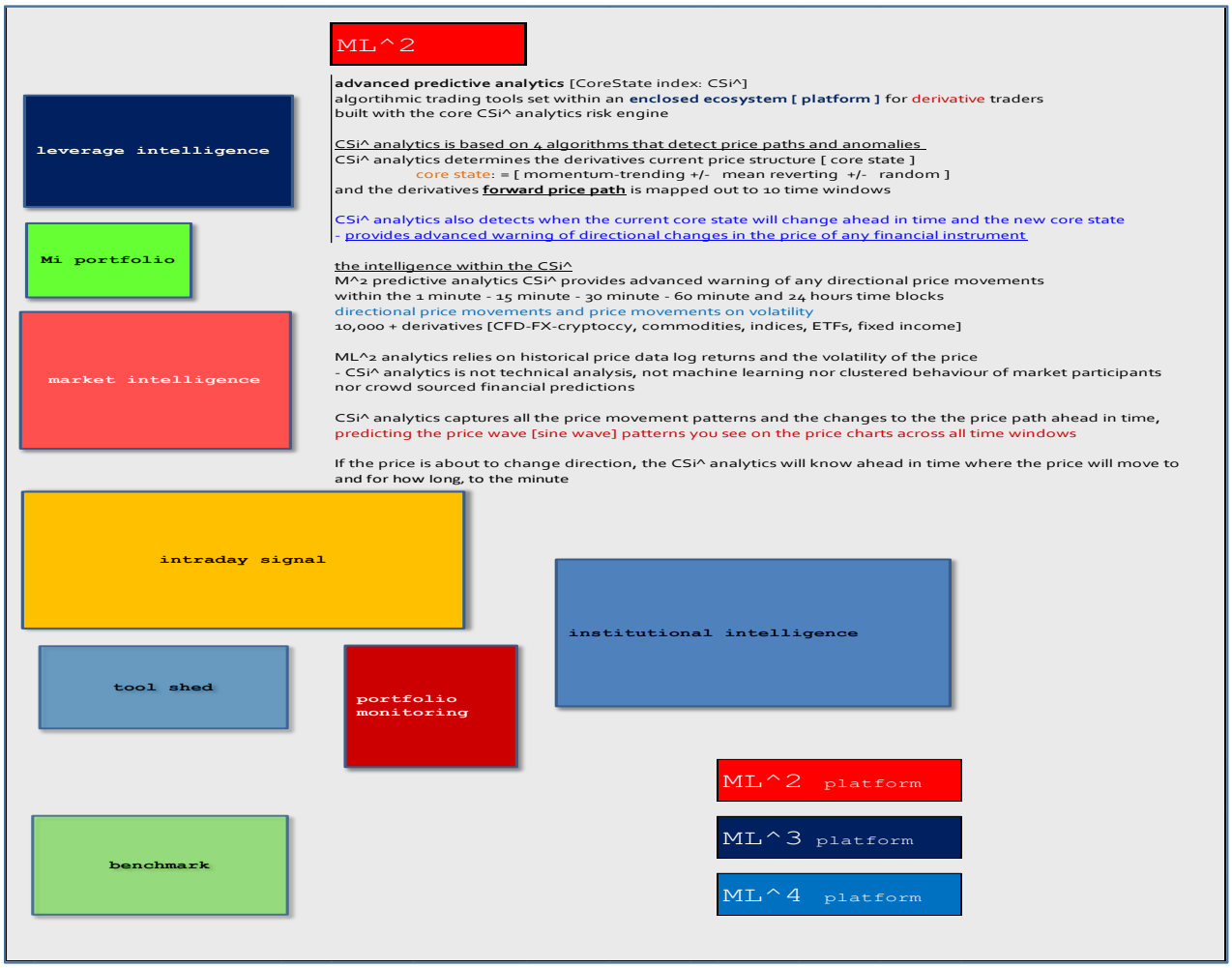
- RADAR
- Core structure index – standard CSi^
- Core structure index – raw CSi^
- phase transition

- price path
- price entry
- directional volatility
- heat map
- cash buffer / FX cash buffer
- moments to stress

- portfolio monitoring
- portfolio LVR margin
- portfolio construction

- intra signals
- PAIRs
- CSI simulation tool
- CSi access

Platform Landing Page



“The best way to predict the future is to create it”

Managedleverage.com

ML^2 tokens

Initial Coin Offering

Ethereum smart contracts

managedleverage will undertake a token sale to raise funds for the continual development of the ML series of platforms [see ML Master Plan report at the end of this paper] – the capital raised will fund current and future operational expenditures [staff, servers, office etc.], strengthen the balance sheet, research and development, and marketing

- and the development of the ML^ DEX exchange

ML^2 ICO token:

the ML^2 ecosystem is a closed end platform in which a ML token represent proof of ownership in exchange for exclusive access to the ML^2 platform

(i) **creates access to the ML^2 platform** through the ownership [of at least 1 Core token] – in perpetuity

(ii) **Bonus tokens will be offered in all selected stages [at various ratios to each Core token]** of the token release and auctions [Bonus tokens confer no access rights until they are sold to a new owner]

(iii) **ML^2 tokens will be able to be traded on the ML^ DEX exchange.**
Bonus tokens can be sold on the ML^ DEX exchange – tokens sold on any exchange will confer access rights to the ML^2 platform in perpetuity, where the buyer is a new owner

Token structure:

ML^2 platform
Is designed for retail active derivative traders – linked to preferred broker partners only

ML^3 platform
Is designed for institutional and professional traders to access the automated platform that is broker agnostic – allows the trader to select their own broker and hybrid platforms via API - based on the python coded language

ML^2 Tokens
ML^2 tokens will allow perpetual access to all the ML platform tools

URL: managedleverage.com

- the instrument universe will be limited to what the preferred broker partners offer [but we will ensure this universe is 10,000+ instruments]
- the buyer must own 1 ML^2 token [the owner can own multiple tokens but must own at least 1 ML token to get access]

Framework:

- **maximum capped number tokens in total** – no more tokens will be created nor burnt on the full release of the tokens through the ICO auctions
- maximum capped number Core tokens that create access rights to the ML^2 platform [tokens available for release and auction sale]
- **maximum number of Bonus tokens** [to early state release and auction sale buyers]
- **maximum number tokens held by managedleverage** [used to create liquidity in the on market exchange – tokens can be bought and sold as well as offered to current shareholders / management]

Ethereum standard: ERC20 token

Ethereum is a decentralized platform that runs smart contracts: applications that run exactly as programmed without any possibility of downtime, censorship, fraud or third party interference

- Ethereum Blockchain [standard ERC20] is designed for exchanging cryptocurrencies – in allowing tokens to be created and traded on the Ethereum Blockchain infrastructure

- the ML^2tokens will be traded on the ML^ DEX exchange after the token releases and auction sales have been completed [or at a time designated by the token sale road map]

ML^2 will create a tradable digital token as:

(i) **proof of membership** [creating access rights to the ML^2 platform]

(ii) create **perpetual access rights** based on token ownership

(iii) digital asset whose value is derived from the access rights to the ML^2 platform

(iv) **maximum capped number of tokens** [smart contract specifications – no more tokens will be created: period]

ML^2 trading program is restricted to a maximum number of active traders on selected preferred broker platforms = the instrument universe will be determined by the broker partners instrument coverage

- the ML^2 risk engine and algorithms were designed to create the CSi for any instrument listed on an OTC or stock exchange which can number in excess of 15,000 individual instruments

- ML will seek out partner brokers that cover as much of this total instrument universe as possible

- the main limitation is that most OTC brokers business model relies on client losses for revenue

Roadmap: token sale

ML^2 platform:

1 Core token purchased in the following programs:

(i) Core token releases = the sale of the 'Core' token is at a preset price

(ii) Core token auctions = the sale of the 'Core' token is through an auction that determines the price of each token

(iii) Bonus tokens assigned to 1 Core token will be offered in selected token releases and auction sales – these tokens confer no access rights to the ML^2 platform until they are sold on an exchange to a new buyer [not an existing holder of a Core token]

(iv) managedleverage will hold a pre-determined percentage of Core tokens – that are available to be sold on the OTC exchange and so conferring access rights to new owners

The sum total of the maximum number of tokens that confer access right to the ML^2 platform will be the sum of the Core tokens sold in the token releases/ auctions and the number of tokens sold on the ML^ DEX exchange to new buyers [which consists of Bonus tokens [new ownership] and ML inventory tokens]

ML^2 tokens

Pre ICO and ICO

ML^2 tokens

– maximum capped amount [total]	**344,000**
– Core token release	100,000
– Bonus token number	144,000
– ML^2 inventory	100,000

Initial launch:

To selected active traders within the initial preferred brokers

Total release of 100,000 'Core' tokens over 5+ stages

First stage will be the pre ICO release of 10,000 Core tokens [in 2 stages] at a preset fixed price of 0.125 ETHUSD [the first 2,000] and 0.300 ETHUSD [the remaining 8,000] with each token release attracting Bonus tokens

The third to fifth token auctions [30,000 tokens in each stage with Bonus tokens at a 1 Core token: 2 Bonus token ratio [auction1] and 1 Core token: 1 Bonus token ratio auctions 4 and 5] will be released via an auction methodology based on the following protocols:

- bidders set the maximum price they are willing to pay and can change or remove their bids through a preset time window until the bids must be committed in the final time window

The bid for each token will be based on ETHUSD price [0.3456 ETHUSD per token]

A sixth token auction will occur where there are any unsold tokens carried over from the 3 – 5 token auctions

- ML has the option to place any surplus tokens into inventory from nay auction, increase the number of auctions as required to circulate the inventory of tokens, open a continuous auction
- ML will develop the ML^ DEX exchange to list the tokens after the ICo has been completed
- the platform will also offer the pathway to create the ML^ decentralised platform
- another option is that ML becomes a CFD-FX margin broker built around the decentralised node ecosystem

Staged release ML tokens:

Tokens are released in stages: 100,000 Core tokens will be sold in stages on a global scale to existing active traders of partner brokers and through an open auction [anyone can buy the tokens]

- create demand at the time of the release where the users know there is a limited number of tokens in total [each token creates access rights in perpetuity, but the purchase of a token is required for access]

- tokens are created for trading = 1 Core token allows universal access rights, ownership of tokens in excess of 1 token are for trading on an exchange [these are the Bonus tokens]

- the potential token owner will appreciate that they can recoup the cost of the token purchase, as well as profit if the tokens prove valuable – the tokens value is based on the access rights it creates to the ML^2 platform

- on release of the ML tokens in the TC platforms that list them, there is ML^ DEX exchange allows unrestricted number of tokens that can be bought by any 1 buyer

- token purchases will be open to existing active traders of broker partners, to active traders not linked to the broker partners, and the broker partners who want to buy the tokens

- regional IB's or affiliates of brokers simply need to acquire 1 ML^2 Core token [as they trade for their client base in MDA type structures]

Who will sell ML tokens?

The overriding issue, as evidenced by several ICO token releases, is in the post token trading on an exchange – will there be sufficient volume of tokens to trade and create a liquid market?

- early adopter active traders will keep their Core token to provide access to the ML^2 platform

- subsequent Bonus tokens owned or bought can be sold into the ML^ DEX exchange at the prevailing market price

- ML^2 can sell tokens from its inventory or offer them to the preferred brokers to market to existing or new active traders

- with a limited token supply [capped token amount] that creates access rights should enhance an active bid – for unless the trader has a token that have no access rights to the

ML platforms – the fear of missing out will keep the bid active with the universe of Bonus tokens creating supply – as with ML^2 inventory

- this is predicated on the assumption that the ML^2 platform and in particular the CSi program has value to active traders

ML^2 token prices will be determined by the demand for access to the ML platform – which enjoys the advantage of offering unique intelligence not available on any other platform:

- ML^2 tokens are utility tokens whose value is derived from the exclusive access to the ML^2 platform, in perpetuity

- product development for both ML^2, ML^3 and the new general platform ML^4 will continue to create value in the ML platforms and so, indirectly to the ML^2 token value

Operational risks:

ML^2 tokens become illiquid or with limited trading volume on the ML^ DEX exchange - due to limited to non-existent supply being offered:

(i) this can kill interest in the ML^2 token

(ii) ML^ can bid and offer tokens from inventory, so can balance equilibrium to supply or demand volume

(iii) ML^ will need to continue to enhance the platform to meet user product demands

Option: *release a token that has a limited time period [no value] before expiration [burnt or destroyed] allowing the trader to have access to the ML^2 platform but for a limited time [multiple expiry time periods: 1 month out to 6 months] – ML can release the tokens that expire in staged auctions*

Tokens are bought and the bidder does not traded on the ML^2 platform or with partner brokers

- option: tokens that are offered to existing active traders of the partner brokers [example of FXCM = where each active trader can be profiled as a suitable candidate]

- ML^2 platform access requires a partner broker identity tag

Once the token auctions have been finalised, subsequent token prices are determined through an auction program on the OTC platforms supporting ML^2 tokens **= *illiquidity, lack of supply, whales buying all the available supply, pump and dump exploits could occur***

B2B 2c marketing framework, whereby partner brokers market the tokens to their existing client base or to attract new clients – broker partners may need to be incentivized to market the ML^2 tokens given perceived reputation concerns or perceived legal risks

ML tokens are purchased by ETHUSD which is transferred to the ML wallet – which means that ML receives operational funds as ETHUSD and must sell ETH to convert to USD then to AUD

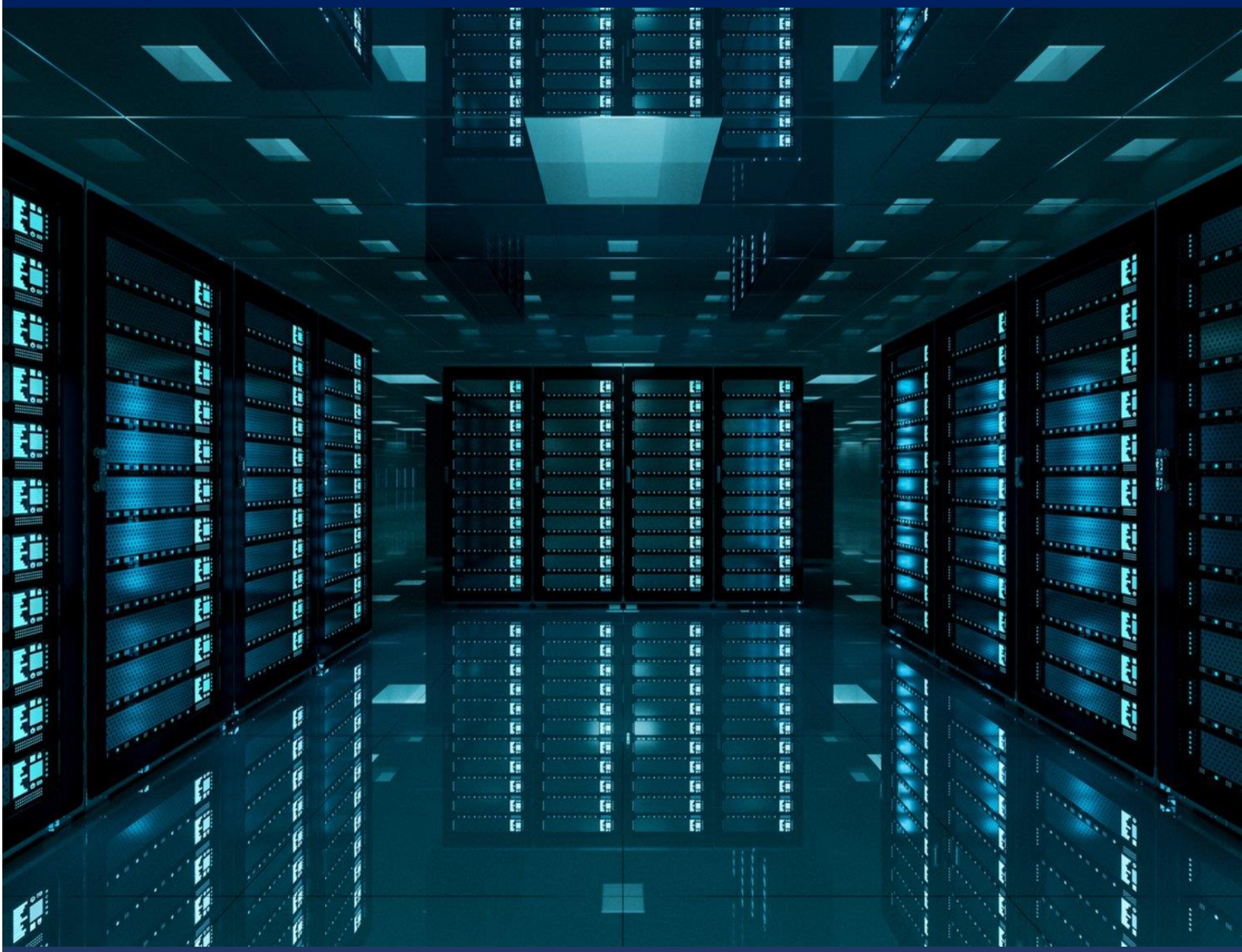
- there is a risk in the market price for ETH fluctuates, sometimes violently

Issues to be addressed in the smart contract:

RULE: ***active traders buying more than 1 token but in different names in the ML^2 platform*** – earnings on trader activity are based on the 1 token equivalent of 100,000 [trader activity profiles will be unknown] – and some may be dormant, and as such this reduces the total potential ML^ earnings - selecting active traders is not totally controllable and it should be expected that some traders simply buy the tokens to speculate

RULE: ***active traders who own a token but become inactive***

RULE: ***release of new tokens above the capped maximum level*** => basically increasing the maximum number of tokens in circulation is prohibited [smart contract specifications]



Marketing

ML^2 platform

Preferred broker(s) would be incentivized to market the ML^2 tokens to their existing active trader base to soak up as much of the bonus tokens on offer as possible [in percentage terms]

(i) this process would ensure a higher probability that ML^2 gets a Core active trading base of higher turnover traders to create a sustainable robust earnings cycle

(ii) minimizes marketing costs for partner brokers and ML

(iii) preferred traders get early adopter access that creates demand from other active traders in the pool for subsequent token releases

(iv) ML^2 can create tokens that have restricted instrument universe [say FX only, stock indices] to a section of their active trader base

(v) existing active traders would create a 'word of mouth' network and so attract similar traders to the ML^2 platform

Active traders, as existing users of preferred broker partners are the target market – giving the highest earning capacity per user in a rebate based monetizing framework [$ based on turnover]:

(i) new traders are high risk to failing, even with the ML^2 framework

(ii) institutional traders could create high leakage – they buy the 1 token but offer the service to other traders on their internal network

Each selected broker partners will be approached to determine the token auction program – the number of tokens they require in the initial release stage [the preset prices], and then through the auction processes staged over 3 – 4 further auctions:

- the broker selects the active traders that will be offered the ML^2 demo platform and the ML^2 token

ML^2 will engage with a marketing profiling firm to undertake targeted social media marketing in the pre ICO and ICO – creating 'anticipated' demand

Maximize demand on limited / restricted supply => global market reach

Road Map to Beta release and ICO

Platform development and status path

January 2018 – end February 2018

Software development – pre Beta platform development:

the current platform is 80% completed with any further work to enhance the existing tools so as to incorporate intra-day pricing programs [main development work has been around the EoD price feeds, as well as enhancing graphical interfaces]
ML^2 Beta platform as the minimum product: released to selected active traders within several partner brokers to test – give feedback = changes to User Interfaces based on the considered feedback]

Select the ML^2 token and smart contract developer based on the Ethereum / ERC20 standards [approx. 3 week development time]

Create ML^2 social media campaign
[Reddit, Facebook, LinkedIn, blog, YouTube videos] – create awareness of the ML^2 platform to a broader audience outside of the selected broker partners

- word of mouth advertising [from within the early adopters to their network]

Selection of broker partners:

ML^ has been in discussion with 6+ institutions across the CFD-FX margin space and trading houses to test the ML platform

The profile of testers in the broker partners will consist of

- selected active retail traders
- sales : execution dealers
- algorithmic traders [testing the CSi program in validate and set their own trading rules [or how customizable the CSi index is to their current trading programs]

Testing period of time: will depend on the active testers but it would generally be along the 2 – 3 week period covering all time sequences on a limited number of [favorite] financial instruments

Token pre-Sale:

Early active traders [testers] will be given an allocation of tokens [1 Core token and 4 Bonus tokens]

- they will have the first opportunity to market the ML platform to their 'network' as the pre-Sale ICO tokens [token releases are at set prices}

The ML program is targeted at active retail traders providing benefits to the partner broker in terms of: higher Lot turnover/ longer trade life cycle/ lower on-boarding new client costs:

- the active trader [client] will be meeting their trading objectives = consistently making money trading]

    - the ML 'Core state' tools can be used in B Book risk management to Market-Maker brokers [this is an option as the benefits to the B Book broker are higher $ per Lot exposure [FX]]

Within this time period, it is imperative that the ML^2 platform MVP is fully functional for testing – the 90% solution awaiting feedback on user experiences

Starting in January 2018, would seem an appropriate time to demonstrate the ML^2 platform as trading winds down into the end year holiday period - testing can occur without so many distractions / and development work can be managed in a true testing frame

Pre ICO token releases:

ICO token releases will occur from February 2018

stage1: release of 2,000 Core tokens [@ 0.125 ETHUSD each] with 8,000 Bonus tokens

stage2: release of 8,000 Core tokens [@ 0.300 ETHUSD each] with 16,000 Bonus tokens

The tokens will be available to the early adopters [testers] and their network, as well as be available to an open network [given the social media marketing] – so a mixture of existing active traders of the broker partners and new traders

- the ML^2 tokens provide perpetual access rights to the ML platform [all the tools/ systems, programs]

- ML^2 tokens will be listed on the ML^ DEX exchange to allow both Core and Bonus tokens to be bought and sold

It is expected that the development work on the ML platform software based around pre Beta release feedback will occur over the January 2018 period, and in conjunction with testing

Once the stage1 token release sale is completed the ML^2 platform will be released as the Beta version

- only token holders can access for trading, but also active traders can demonstrate the ML platform [pre stage2 token release]

Broker partners will be a combination of:

(i) regional: mid tiered broker in a regulated country that sources active traders from both their residence country and regional countries [such as Australia and the Asian region] with a limited range of instruments [FX-stock indices-commodities] to stock trading + equity CFDs

(ii) global brokers who offer a broader range [asset class and number] of instruments [FX-stock indices-commodities] to equity CFDs and physical stock trading [so instrument universe of around 10,000]

The selection of broker partners will be formulated around the derivative instrument universe, global and regional reach and business model [STP, ECN] – so the instruments offered through the ML^2 platform partner brokers are suitable to attract new traders to the platforms [existing traders are presumably satisfied with the broker offerings]

ML^2 will consider the addition of new brokers to the platform [more difficult to remove existing partner brokers] – new brokers in cryptocurrency and FX-CFDs are in development that offer brokerless trading [Spectre.ai] on the Ethereum Blockchain

ML^2 token sales – Beta release of ML^2 platform:

Stage3 token auction:

ML^2 platform will be in Beta release [fully functional / tested for bugs]

- in the Beta release new external vendor software will be added which includes (a) ChartIQ software = ML^2 platform will migrate from a 'calculator' to a fully functional platform to allow trade execution and show live price graphics for all instruments [similar to the MT4 – MT5 platforms] and (b) trader profiling tools designed to provide feedback to traders on the trading risk profile - psyquation

Stage3 ML^2 token auction:

The token auctions will be made 'open' to both broker partner active traders and non-broker partner active traders [the option lies with a preset number of tokens being offered to the broker partners in preference to open]

The auction will be set over a specific time period but undertaken within a framework that allows bids to be made, changed or withdrawn until a period of time where all bids submitted cannot be changed [say the auction occurs over 12 days, the first 10 days bid submissions can change as to the range of prices: price discovery [for 1 token] and for the final 2 days the bids cannot be changed

ML^2 platform should be fully functional that incorporates the ChartIQ and trading profiling programs

Stage 4 - 5 ML^ token auctions:

The token auctions will be made 'open' to both broker partner active traders and non-broker partner active traders – no preference token allocations

Unsold tokens from the final auction will be made available in a 6 stage auction that will remain open until all tokens are sold – this will impact the timing of allowing ML^2 tokens to be traded on the ML^ DEX exchange

- an option would be to limit the stage6 auction to a set time period and unsold tokens at the end of the stage6 auction become tokens in the ML inventory that can be sold latter

The auctions will be set over a specific time period but undertaken within a framework that allows bids to be made, changed or withdrawn until a locked period of time where all bids submitted cannot be changed [say the auction occurs over 10 days, the first 8 days bid submissions can change as to the range of prices [for 1 token] and for the final 2 days the bids cannot be changed

ML^2 listed on an exchange

ML^2 tokens will be listed on the ML^ DEX exchange

Summary:

The ML token ecosystem incorporates the release of the tokens to active traders which creates access rights to the ML^2 platform / capped maximum number of traders / value in the token created by the access rights in perpetuity to the ML^2 platform [current and future tools]

- An important component to the ML ecosystem is to maintain a liquid market that allows the transfer of Bonus tokens to new owners

- Bonus tokens allocated in the token release do not provide any access rights to the ML^2 platform until they are sold on the exchange to a new owner [who as yet has no ML token]

- ML^ token inventory will be managed to balance the supply and demand for the exchange to maintain adequate liquidity

- Core and Bonus tokens price set in exchanges will be based on the value placed on accessing the ML^2 platform

- ML^2 platform will be provided free to active trader users [outside of the cost to acquire the token] in perpetuity

ML^2 ICO release Table

Pre ICO Release

PreICO Token Release (Number 1)

Core Tokens	*2,000*	*0.125 ETHUSD (~$125 USD) per Core token*
Bonus Tokens	*8,000*	*FREE*
		Bonus Tokens Released at Ratio 1 Core : 4 Bonus

PreICO Token Release (Number 2)

Core Tokens	*8,000*	*0.300 ETHUSD (~$250 USD) per Core token*
Bonus Tokens	*16,000*	*FREE*
		Bonus Tokens Released at Ratio 1 Core : 2 Bonus

ICO Release

ICO Token Auction (Number 1)

Core Tokens	*30,000*	*($) Price Set by Auction ETHUSD Per Core Token*
Bonus Tokens	*60,000*	*FREE*
		Bonus Tokens Released at Ratio 1 Core : 2 Bonus

ICO Token Auction (Number 2)

Core Tokens	*30,000*	*($) Price Set by Auction ETHUSD Per Core Token*
Bonus Tokens	*30,000*	*FREE*
		Bonus Tokens Released at Ratio 1 Core : 1 Bonus

ICO Token Auction (Number 3)

Core Tokens	*30,000*	*($) Price Set by Auction ETHUSD Per Core Token*
Bonus Tokens	*30,000*	*FREE*
		Bonus Tokens Released at Ratio 1 Core : 1 Bonus

ICO Token Auction (Number 4)

Core Tokens	*Remainder < 100,000 Not Sold*	*($) Price Set by Auction ETHUSD Per Core Token*
Bonus Tokens	*Zero*	

ML^2 DEX exchange

ML^2 tokens will be listed and traded on an ML^ DEX exchange build and managed by ML [managedleverage]

- as well as listing the planned ML^3, ML^4 tokens and ML^fund tokens
- the planned exchange that will list the ML tokens will also offer the option to create a decentralised ecosystem, whereby ML tokens owners become the exchange
- this will allow ML token holders to use the value in those tokens to trade on the ML^ DEX exchange

The trading engine for the DEX exchange will be developed and implemented during the ML^2 ICO auctions as part of the development program within the ICO roadmaps

ML^ has the option to become a margin broker – exchange: which will require regulatory license from various countries

- this will be considered in due course, the immediate model is to offer the ML platform to active traders working with preferred partners

ML^2 current platform is focused on active derivative traders with selected partner brokers – all current tools re-developed and new future tools will be made available in the ML^2 platform

ML^2 current platform is focused on active derivative traders with selected partner brokers – all current tools re-developed and new future tools will be made available in the ML^2 platform

ManagedLeverage [owner of ML^2 platform] is in the business to develop a suite of platforms targeting active traders in both derivatives [margin-leverage] and non-leverage financial instruments across all asset classes

Creating an ecosystem for traders / investors to think about their trading objectives, create their portfolio = monitored and rebalanced through time to meet their trading objectives [which are dynamic through time]

In development:

ML^3 platform:
automated platform / broker agnostic / wider universe of financial instruments / target market institutional and professional traders

- the ML^3 token will create perpetual access rights to the ML^3 platform and analysis on 1 instrument
- a maximum of 500,000 tokens will be released

ML^4 platform:
long term investors in physical assets / similar to the current digital [robo] platforms but the tools offered will allow the investor to create their own portfolio and allow tools to create, monitor and hedge [capital protection] of the portfolio to meet their own financial goals

ML^2 and ML^3 platform {cryptoccy – digital assets}:
automated platform for cryptocurrencies that would incorporate arbitrage and directional trading tools as well as new blockchain exchanges

ML^2 Managed Discretionary Accounts [wholesale and retail]
similar to an active fund but the investment account is owned by the investor = account holder – each instrument in the account is owned by the investor but managed by ML^2

- funded through ML^fund tokens

ML mobile platforms – android and iOS operating systems in smart phones and tablets

Material Risks

Regulatory Compliance

ML^2 utility tokens are not considered a financial instrument and therefore the token is not governed by ASIC as managedleverage is incorporated under Australian Law

Managed Leverage Pty Ltd will adhere to all regulatory requirements I each country it sources its active traders from, such as AML /CTF requirements, Corporations Act and Fair Trading and will be provide an avenue for dispute resolution

Token value

ML^2 tokens create access rights to the ML^2 platform – it does not create any equity or ownership rights to managedleverage

ML^2 tokens will be listed on an nominated exchange and the price will fluctuate based on current supply / demand profiles and the perceptions around the value of accessing the ML platform [current and future iterations of the Core state intelligence and tools]

ML^2 tokens will be capped at 344,000 – no further ML^2 tokens will be created and none will be burnt [these are the rules set within the smart contract]

Liquidity of the token

ML^2 will build its own ML^ DEX exchange to list the ML^2 tokens for secondary market trading in the tokens – this is considered an essential component of the ML^2 ecosystem

The value of the token is directly attributable to the value placed on the access rights to the ML^2 platform and its suite of tools / products and any future enhancements

ML^2 platform offers tools that create unique insights into the future price of a financial instrument

These tools create a signal which can either be interpreted or acted through a discretionary trading program or an automated trading program – either approach requires the active user to make an interpretation of the intelligence in the signal

ML^2 platform is dependent on the internet and cloud based servers – both of which can decay in service levels at a point in time

- also ML^2 platform can be subject to DoS attacks or other forms of cyber attacks

Legal disclaimer

ML^2 token is not a financial instrument, currency or gaming product

ML^2 tokens solely create access rights to the ML^2 platform and its suite of tools / products and does not confer any rights in Managed Leverage Pty Ltd [not a share, or a financial instrument] or its earnings / profit

ML^2 tokens are bought through the exchange of Ethereum tokens [ETHUSD] for ML^2 tokens and may be sold on an exchange that listed the ML^2 token

- the ML^2 tokens are the sole responsibility of the holder

“Great things in business are never done by one person. They’re done by a team of people.” – Steve Jobs

Richard Goers

Gavin Loduwick

The people

Richard Goers
Founder ML intellectual property [algorithms]
Co-Founder ML^2

20 years active trading experience/ institutional derivative proprietary trader:
CitiBank, ANZ Banking Group, BP Petroleum, Industrial Bank Japan

17 years Head of Risk for CFD-FX margin broker/ margin equity platforms:
CMCmarkets, KVB Kunlun Group, BT Financial Group, Fiducian Group, foreign ADI

8 years development and testing of the ML^2 algorithms and 4 development of the ML^2 and ML^3 platforms

Gavin Loduwick
Co-Founder ML^2

Gavin is currently a Director of Corporate Finance and Commodities at First Guardian Capital performing and end-to-end small to largescale commercial transaction and managing all aspects corporate and capital structuring requirements. Prior to this, Gavin served as the Chief Executive Officer and Executive Director of Victorian Iron Pty Ltd with a combined tenure of almost 5 years. Gavin was responsible for leading the development and execution of the Company's long-term strategy of been a small-scale iron ore producer with a view to creating shareholder value.

Furthermore, Gavin is a highly accomplished and experienced finance and risk management professional with combined experience of over 14 years and specialising in advising and structuring Financial Markets and Treasury Management products, including Structured Products at an institutional and proprietary level as well as, Risk Management at an enterprise level and business specific level including prudential risk. Gavin attained further experience in advising companies both listed and private in structuring their business goals and objectives to achieve the desired commercial outcomes and seek funding in various forms to meet those requirements. Furthermore, over the course of Gavin's illustrious career he has gained over 11 years of leadership experience.

ICO proposed roadmap [more detailed]

The timelines listed are subject to change given dependencies, but the following roadmap timelines should be considered as the benchmark

Proposed roadmap to ICO [detailed operational processes]

Components to the ICO framework

(i) **Beta software development of the ML^2 platform:** – focused on MVM for release to partner broker testers and selected active trader clients: this work will be undertaken by the current software developer who has built the platform since 2013

- the current ML^2 platform is the 80% solution: specific tools must be updated for enhanced analysis, such as price path with new formulas and an enhancement to the CSi algorithm and this will be done pre-release to Beta testers

- Beta release is to allow selected active traders with appropriate trading profiles to test the ML platform and give critical feedback – so there will be a set period for feedback development work to fix the user interfaces

- Broker partners will test the ML^2 platform in-house as well as selecting a group of active clients [social marketing can create a teaser to get excitement on the ML^2 platform for testing given privileges for testers in the ML^2 token pre ICO stage]

(ii) **Ethereum smart contract development:** a developer has been selected to build the ML^2 utility tokens on the Ethereum Blockchain – to ERC20 standards

- the smart contract rules have been detailed and settled

- the main risk with the smart contract is to test for bugs and to ensure it does what it is designed to do, as once set on the Blockchain it is immutable – so errors require a new smart contract

- need to create a ML^2 wallet // method to allow the users to send ETH to the ML^2 wallet and ML to send ML^2 token to the users wallet addresses

- a web page needs to be created for the token auctions setting out the continuous results of any release or auction

- build the ML^2 DEX exchange for the ML^2 tokens to be exchanged [traded]

(iii) **<u>marketing program to incorporate main stakeholders</u>**: [existing partner broker active traders, partner broker testers, open active traders, institutions, network of equity holders 'mates' etc.] for both Beta stage release, pre ICO, ICO and post ICO

- the marketing program will focus on social media and 'word of mouth' through LinkedIn, Facebook, reedit, financemagnates, ICOshow, YouTube and a special blogs [on M^2 platform]

- a percentage of exiting partner broker active traders and 'open' active traders [other broker active traders] on a global scale = so Asian, and European active CFD-FX margin traders

(iv) preICO token release // ICO token auctions

(v) ML^2 token listing on the ML^ DEX exchange

ICO Roadmap timelines and dependencies

(i) **<u>ML^2 Beta release platform development</u>**

- 4 week development time on the ML^2 Beta tools functionality and stable data feeds

  Material risk: datafeeds unstable and fail during platform demonstration period

  Mitigated through working with the broker developers to ensure the data feeds are stable, functional and robust [as they are expected to be]

- the data feeds will create a instrument universe of around 10,000+ [so this may be filtered to around 500 for demonstration testing]

  Assumed start date for Beta development: mid-January 2018

  Assumed finish date for software development *to required standards for Beta release*: mid-February 2018

(ii) **<u>Release of Beta version for demonstration to active users</u>** [given to broker partners active traders as well as 'open' to anyone interested active trader to test]

Release of ML^2 platform for Beta testers: from ***1st week February till late February and onwards [late February is a given end time to set up the time for feedback and pre ICO token release]***

Selected testers in broker partners would have been made aware of the release dates we give them enough time to test the platform [not to trade on the platform] no ability to execute the trade until ChartIQ [chartIQ.com] software is engaged

Once the ML^2 platform is released in Beta testing it remains in release

Software development work will not interfere with the uptime on the platform as backend development can be uploaded without interfering with the platform uptime

Beta tester's feedback: we will receive feedback over the course of February, but the main feedback will be targeted over the latter weeks February – so we can make required changes [if any] over March 2018

(iii) **Pre ICO token release** [2 stages at preset prices: stage1 for 2,000 tokens at 0.125 ETHUSD and stage2 for 8,000 tokens at 0.300 ETHUSD]

Stage1 token release: 1st week February => 1 day
Stage2 token release: 4th week February => 10 days

Capital raised: ~$2,650,000 USD = ~ 2,650 ETH

ML^2 tokens are purchased though the exchange of ETH for ML^2 – so ML^2 receives ETH tokens which must be sold to create AUD or USD – so there is a market risk in that ETH price may decline from the average spot price received when converting to fiat money USD or AUD

Ethereum turnover varies but a range between $750 million to $1 billion face value is standard

(iv) **ICO token auctions** [multiple stages where each token is bid through an auction program based on demand to supply]

Over a series of stage auctions that last 10 continuous calendar days – given the structure of the auctions where the bidders can bid, change their price or withdraw in the first set time block to then have to submit bid prices that are static [cannot change]

With the number of tokens auctioned [90,000] we plan to release through a series of staged auctions in order to capitalize on both the restricted number in each auction [to a global trading community] and after each auction there are less total tokens available for sale – given the active trader need a token for access to the ML^2 platform – maximize the $ value of each token bid in each auction looking for a higher bid through each consecutive auction

Capital raised: ~ $45,000,000 USD = ~ 30,000 ETH

The ICO token 'auctions' can commence from March 2018 and run for 1 – 3 months

Most ICO auctions release all the tokens over a preset time period, standard time of around 30 calendar days

- there is a pre ICO to raise the minimum capital and then the ICO to raise the maximum targeted capital
- so pre ICO is to get the minimum capital and then if that is achieved the ICO occurs

ML^ is essentially monetizing the membership to the ML^2 platform through a release of tokens, and using the Ethereum smart contract to verify the membership rules: maximum capped number of tokens can only be created, no more, and perpetual access to the ML^2 platform

ML^2 has chosen to run the token auctions based on maximizing the price at each auction based on a global restricted supply to access the platforms tools – buy one token or miss out perhaps forever [the token value is based on the access rights to the ML^2 platform and its advanced predictive analytics]

- a large 1 auction release of 90,000 tokens with the need to buy 1 token for access requires 90,000 buyers – which is a stretch if the auction occurs over 1 month as is standard timeline in most ICO auctions [but the number of tokens that can be bought is unlimited or there is a minimum number] – and there will be a 'global' auction

ML^2 platform release to broker partners

The decision to release the ML^2 platform to broker partners can occur anytime from the end of the first token release so token holders can get access to and trade through the ML^2 platform

- The actual ML^2 tokens do not need to be listed on any exchange or the actual token minted at the time of the auctions.

It is generally expected that the ML^2 tokens will be released shortly after the token release or auctions have been completed, and will be set as a smart contract rule: at this time, 10 days is the expected timeline from token release/ auction completion [all tokens sold] to ML^2 delivery to the purchaser

ML^2B tokens

ML^2 tokens that offer a limited expiry time – the tokens will be released in regular auctions with fixed amount for sale: access rights to the ML^2 platform for a set period of time [access then denied on expiry]

- Each token will have a preset period of time of 3 months based on 30 x 3 = 90 calendar days

- On expiry the ML^2B tokens are burnt and a new token is released for sale/ auction

- ML^2B tokens will have a capped maximum number of tokens: 5,000

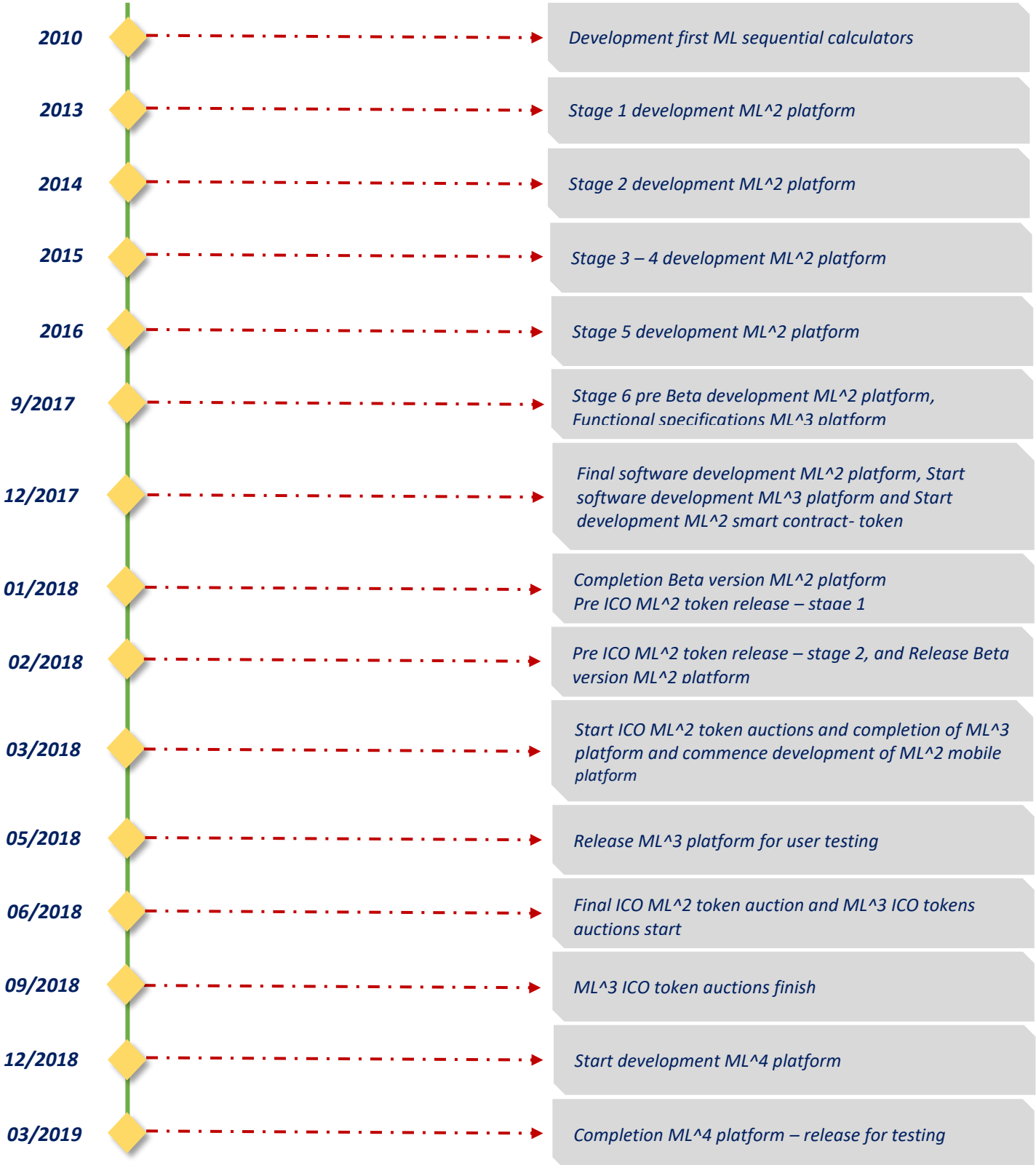
ML^2 is a product and platform developer: it will outsource all non-Core operations to specific providers [software developers, marketing, hosting] in the initial stages of ML^2 platform deployment
– the capital raised through the ICO can bring internal software developers in-house

NOTE: the ML^2 business model is to offer the ML platforms to current CFD-FX margin brokers client bases:

- *the option for ML^2 to become a CFD-FX margin broker will be considered in due course, but we will always operate within the smart contract rules of the ICO token confers = access rights to the ML^ platforms*

- *if this were to happen, ML^2 would rival the largest European, UK and American CFD-FX margin brokers*

Roadmap – ML^ platform development



Some definitions:

Managedleverage: Managed Leverage Pty Ltd – the legal company who owns ML^2 platform intellectual property

ML^2 Core token: token that confers perpetual rights to access the ML^2 platform when trading with the selected ML broker partner [access won't be given if the token owner does not have an account with the broker partner]

ML^2 Bonus token: token that confers no access rights unless sold on the OTC exchange to a new owner

ML^2 platform: URL: managedleverage.com

ML^3 platform: URL: managedleverage3.com

Token release: tokens sold in pre ICO at specific prices

Token auction: tokens sold through the token auction where bidders set their price

CSi: Core State index

ERC20: Ethereum smart contract standard

Open: tokens will be open to any person who is not currently an active trader within one of the broker partners

Broker partner: ML^2 will list the broker partners selected that link to the ML^2 platform for trade execution – these brokers are the only brokers that ML^2 will allow trading within the ML^2 platform