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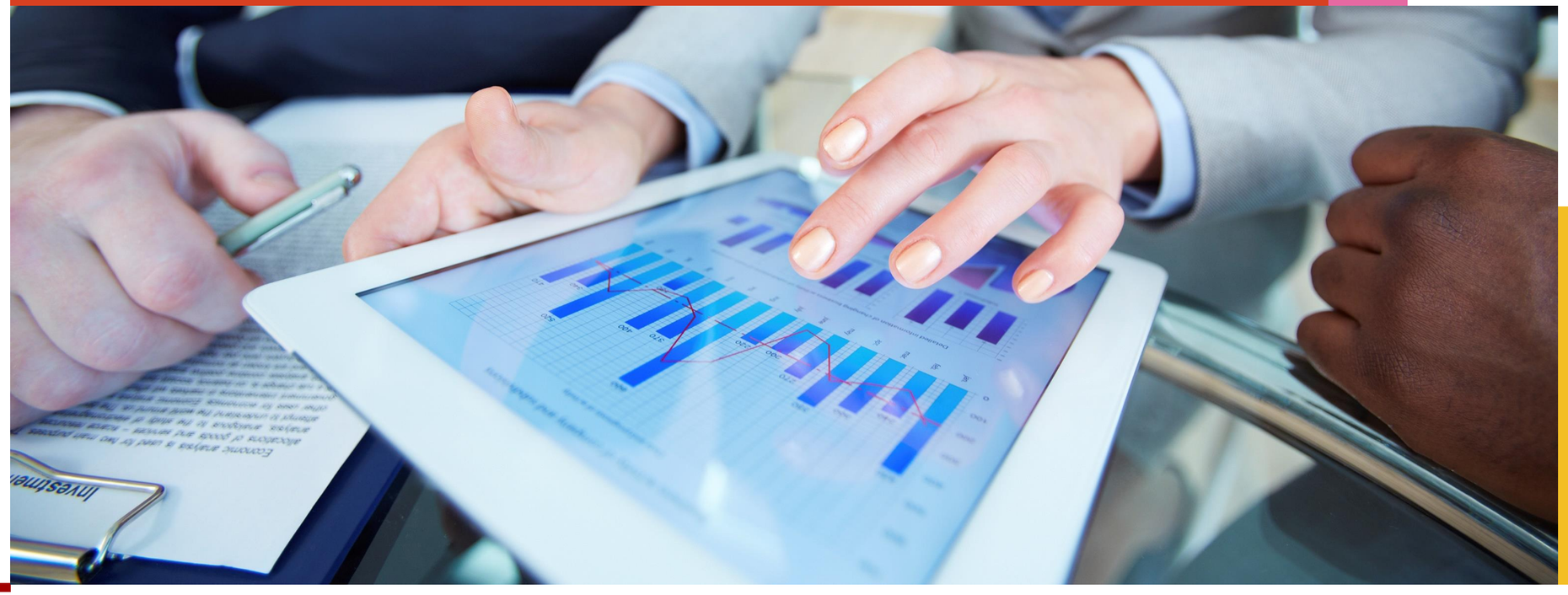
The Strategic Treasurer
Treasury Risk Management as a Strategic Value Driver – Where to From Here.

Ashley Rockman

Partner, Financial Risk Consulting

ashley.rockman@pwc.com



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The strategic treasurer

Agenda

- The evolution of treasury from GFC to today:
  - Elements of transactional versus strategic treasury
  - The path to evolution: lessons from those who have transformed
- The emerging technologies have become the technology of now
  - **Why:** Should I care / what are the benefits on offer?
  - **What:** AI including RPA and machine learning, big data and analytics, distributed ledger technology, APIs and fintechs.
  - **Who:** is actually using this stuff in the real world?
  - **How:** would I even get started?

From traditional to strategic treasury

Traditional Treasury

- Financial risk management, mostly focused on the downside.
- Often risk management policies were quite static.
- Strong focus on the business of treasury, including cash and liquidity management, funding and bank relationships.
- Technology rarely optimised.
- Time mostly spent within treasury.

Taking up the challenge

- Treasurers playing an ever increasing role in developing and driving the strategy to deliver shareholder value.
- Treasury skill set as critical as ever to the executive team and board given the environment and outlook.
- Business strategy and treasury risk management strategy developed as one.
- Risk management capability and maturity increasingly seen a direct source of shareholder value.

The value from strategic treasury

Treasurers have the opportunity to influence shareholder returns, both directly and indirectly by impacting both profit and cost of capital

Bottom line

- Margin protection
- Lower cost of funds
- Working capital efficiency
- Opportunity to attract, retain and develop talent, elevate treasury in the organization.

Business competitiveness

- Enhance price competitiveness relative to competitors via integrated planning and opportunistic risk management
- Faster execution
- Tailored customer solutions.

Cost of equity

- Lower earnings volatility
- Recognition of quality of governance and risk management framework
- Clarity and consistency of message to the market.

Capturing the opportunity

Take stock and find the things you can stop

- Clean house – under the banner of “risk management” processes seem to get added more often than they get stopped
- Daily routines may be preventing teams from getting at the strategic opportunities
- Optimal process is ideally designed before shifting or automating.

Does it belong in treasury?

- Centralising and shifting high volume, standardised processes to treasury shared services.

The right people for the job

- Conduct a talent capability assessment and gap analysis
- No one single treasury skill set
- In addition to traditional funding and risk skills, consider operations, special projects, experience in the business, transformation and business process reengineering, data & analytics

Technology strategy

- Automating in line with a comprehensive technology architecture strategy and planning for emergent technologies

Treasury activities – 3 Distinct groups

Transactional Activities

- Collections
- Payment processing
- Bank reconciliation
- Bank account management (opening & closing).

- High volume
- High level of automation
- Standardised processes (with KPI)
- Continuous process improvement to reduce costs
- Subsidiaries or centralised
- Relatively low skilled resources.

Value-Added Activities

- Dealing room activity
- Netting centre
- Cash Management – Financing, Investments & Forecasts
- Bank relationship
- IT administration.

- Medium volume
- High level of automation
- Standardised processes (with KPI)
- Skilled resources – Centralised teams.

Strategic Activities

- Strategy for liquidity management and risk management
- Policies
- Capital mgt and major projects/transactions
- Long-term financing and investments.

- Low volume
- Low level of automation
- Process not standardised
- Focus on delivering value-added versus reducing costs
- Highly skilled resources – Centralised teams.

Staying the course
Common barriers faced

	Cost constraints	***Business support***	***Board support***	***Organisational readiness***
Consider	In a climate of cost reduction and doing more with less, cost can be a major barrier • Significant investment may well be required across people, systems and the actual transformation processes itself • Be bold with the ask and the commitment. The return is likely to be compelling.	• Sleeves rolled up, delivering in the trenches is a consistent theme from those who have elevated treasury in the organisation • A customer centric mindset, engaging the business in a conversation as to what they value can reposition the relationship.	• In Treasury, the price of getting it wrong is high. Boards are right to be concerned • Too often though, this concern translates to inertia • Treasurers have an obligation to champion the right strategies for the Company • Conservative does not mean simple, communicate in numbers • One metric won't cut it. Supplement core risk metrics with scenario analysis, stress testing and reverse stress testing.	• The right strategy quickly becomes the wrong strategy if the organisation is not ready for it • Consider systems, people, processes, funding and working capital, legal credit etc.

Unleashing the power of treasury

Flawless execution of the fundamentals

Boring is beautiful
Enjoy the big wins but remember it's a journey of 1000 small steps

Earn the mandate delivering in the trenches

Become one with the business, and close the divide between the business strategy and risk management strategy

Be bold in the ask and bold in the promise – It takes investment

Tell your story in numbers

Relentlessly communicate
inside, outside, up down and sideways

Emerging and emerged technologies – WHY?

Developing the strategy for the take up of the new technologies should start with a clear view of what business problems you are trying to solve. These technologies offer a wide range of potential benefits.

Cost savings:
Through process improvement and automation

Working capital optimization:
Through enhanced cash flow forecasting, faster reconciliations and error correction and faster payments which speed up time to cash.

Increased profit and enhanced margin protection: via more effective hedging and other financial risk management techniques as a result of an improved understanding of business cash flows and the impact of FX, commodity prices, customer, supplier and creditor behaviour, credit and interest rates.

Faster execution of core business transactions:
via new payment and verification approaches.

Stronger controls and reduced operational risk: through process automation, automated error identification and correction and transaction and identity verification.

What are we actually talking about?

AI

AI incorporates machine learning RPA, and broadly refers to the ability of computers to perform complex tasks at speeds beyond human capability. Inherent in the concept of AI is an element of continuous learning from the results and patterns observed.

Machine learning

A branch of AI, Advances in ML have been catalysed by advances in computing power, ever cheaper data storage availability and access to huge amounts of data.

Machine learning involves the bringing together of domain expertise to formulate the right questions, and analytics and machine learning speciality to develop programs and access to large data sets from which to identify patterns.

In simple terms, pointed in the right direction, machine learning can find patterns that already exist in data at a much faster and deeper rate than humans ever could.

Robotic process engineering (RPA)

RPA has been widely deployed to automate simple, repetitive tasks that have previously been performed by humans and which require minimal judgement.

Typically it does not result in the implementation of new processes, but rather the completion of the same process by the machine.

As robots can configure by recordings steps, in many cases, no programing is required.

Big Data and Analytics

A widely used and often abused catch all for solving problems with data, fundamentally it is about casting the widest net as to available and relevant data and moving from traditional analytics to high powered algorithmic approaches.

Distributed ledger technology

An entirely new approach to record keeping, a distributed “crypto-ledger” is shared across and verified by a network of many parties. Despite the focus and hype around Bitcoin, there are a myriad of DLT solutions in existence and a range of real world applications.

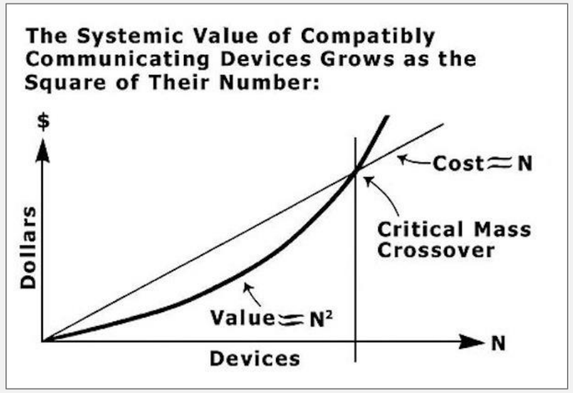
API and FinTech

APIs or application programming interfaces have been around for years, however there prevalence in connecting core systems with emergent fintech and analytics technologies is shifting mindsets and strategies from the need for holistic systems replacements, to the combining of multiple cores systems and narrow solutions applications.

Three exponential laws have enabled the exponential advancement of Deep Learning in the past ~5 years

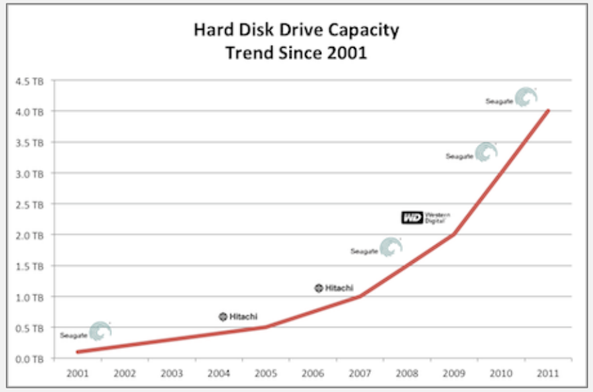
Metcalfe's Law 1

- Value of a network increases exponentially to the number of users connected



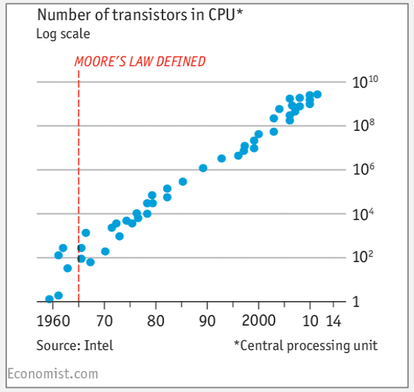
Kryder's Law 2

- Disk drive density doubles every 13 months



Moore's Law 3

- Computing power doubles every 18 months



Implications

1. We increasingly live our lives on connected devices – e.g. smart phones, Fitbits, IoT devices
2. It is increasingly cheap to store data generated from connected device
3. Stored data is increasingly able to be processed by powerful computers

So what could it do?

Treasury area	*RPA*	*Machine learning*	*Big data & analytics*	*DLT*	*APIs and Fintech*
Daily cash management	A		B		B
Cash flow forecasting	A	B	A		A
Payments	C			C	B
In house banking and netting				C	B
Exposure identification		B	B		
Exposure measurement		A	B		
Execution and settlement	C	A		B	A
Debt and financing		A	B	A	A
Trade financing				C	A
Intercompany loans				A	
Risk adjusted capital performance measurement		A	A		A

A = Enhance B = Transform C = Replace

Real world examples

The range of real world application is extensive from applications that are on the cusp of deploying at scale to those that are currently theoretical

Banking has unsurprisingly led the way with commercial deployment:

- Customer applications that provide customers information and insight in real time in response to their search and spending patterns: Moven enterprise used by Westpac NZ and TD banks. Bank of America Merrill Lynch is now providing customers with an AI driven virtual assistant.
- 15 instant payment networks in existence across the globe.
- Swift and Ripple in a race for domination of cross border payments. Ripple's blockchain payment offering used by over 100 financial institutions including Santander, UBS and Standard Charter.
- Qld Treasury and CBA collaborated on a blockchain based government bond issuance where blockchain acts as both the register and the payments platform, and coupon payments are automated. QTC acted as both the issuer and investor, so no real world bond just yet.
- SEB Sweden funded a USD bank account for a client in 9 seconds
- In Australia, PwC's Protect offering uses machine learning and has detected millions of dollars of fraudulent loan applications for local banks.
- Multiple examples of blockchain based smart contracts

Corporate treasury

- Most corporate treasuries domestically and internationally adopting increased use of analytics. Sophistication ranges widely from basic spreadsheeting through coded bespoke solutions and machine learning.
- IBM Treasury has successfully deployed it's own blockchain platform Hyperledger to speed up global cash management, reconciliation and error resolution and claims $50M of working capital savings.
- Spotify have implemented a high degree of automation of daily treasury routines with RPA, and applied machine learning to enhance strategic decision making.
- 31/10/2018 – HK central bank facilitates the launch of a blockchain based trade finance platform with 12 banks led by HSBC and Standard Chartered. Expectations are for significantly accelerated finance approvals, streamlined processes and fraud elimination in relation to LOCs etc.

Getting started

- Start small and be clear on the business problem you are looking to solve
- Across analytics, RPA and APIs in particular discreet pieces of the ecosystem can be tackled without the needs for large scale systems transformation projects
- A fresh line of thinking has emerged whereby the prevalence of APIs and Fintechs means we are no longer restricted to binary “new system / platform” choices, but rather a network of interfaced systems and applications.
- Consider whether you have the right people for the future ways of working
- Unquestionably a when not if consideration. The benefits are real and they are massive, and competition in each of our industries is not going to reduce anytime soon
- As with all things treasury, governance and the risk management framework is critical – ensuring that you are getting the right outcomes and can identify and respond when you are not

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