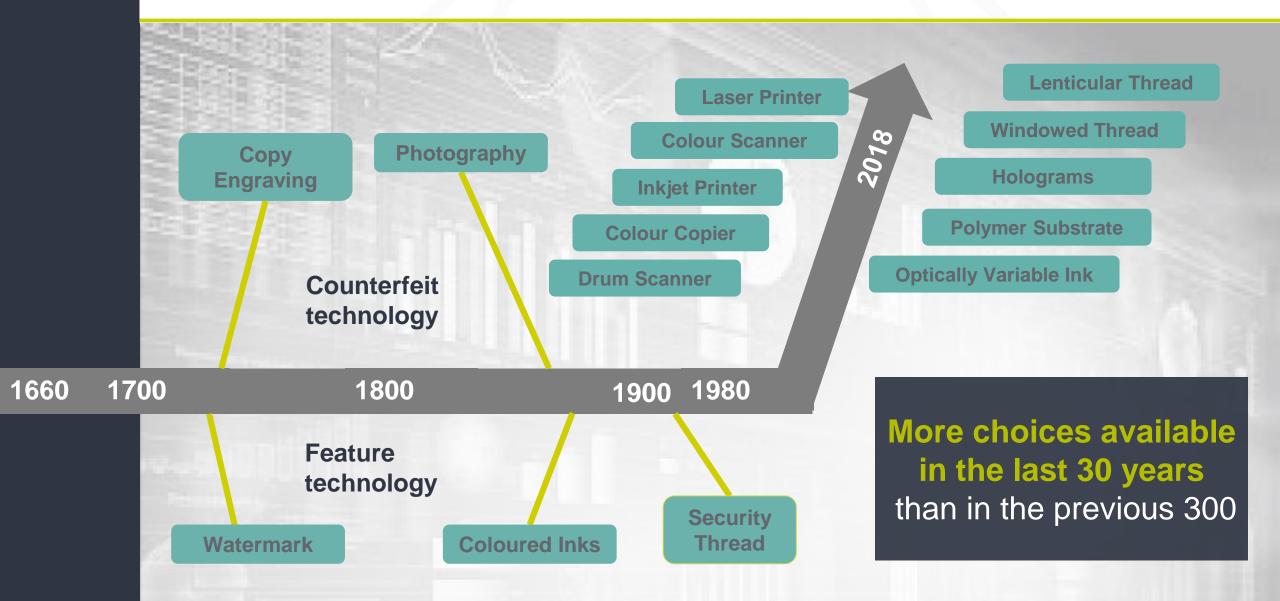


The Top 5 Changes in Banknotes in the Next 5 Years **Data Driven and Evidence Based** Decisions in Design, Security Features, **Substrate and Printing Dr Thomas Quirke Managing Director Currency** De La Rue Banknote Conference 23 May 2018, Dallas

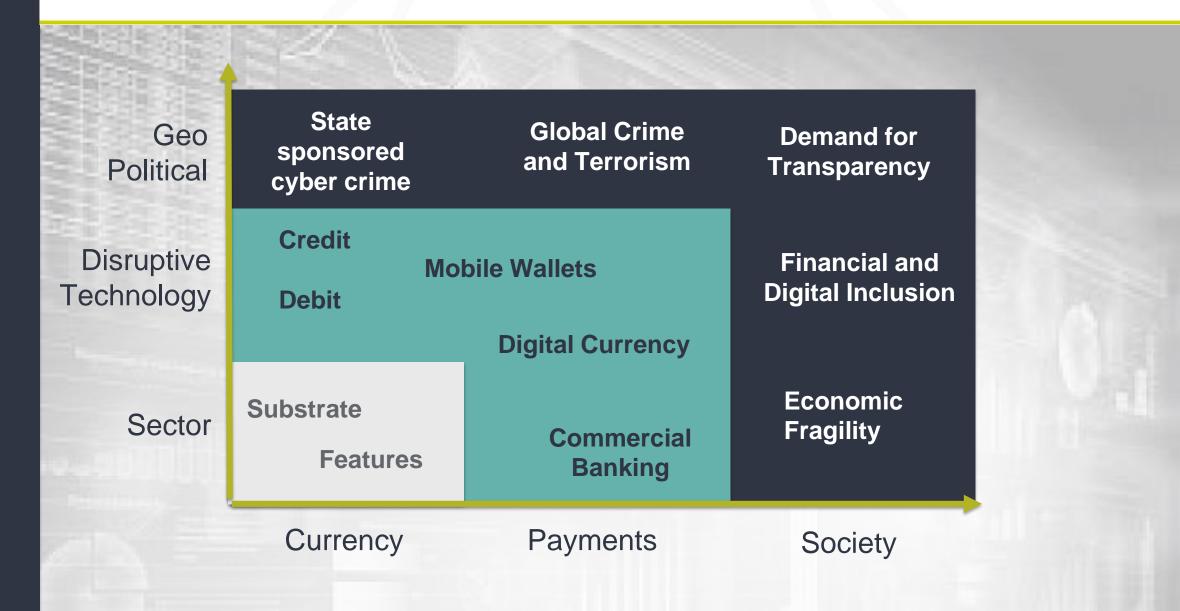


There is a Banknote Development Technology Arms Race





There Are Also Some Really Big, Complex Factors to Plan For





There Has Never Been a Greater Need for Effective Collaboration

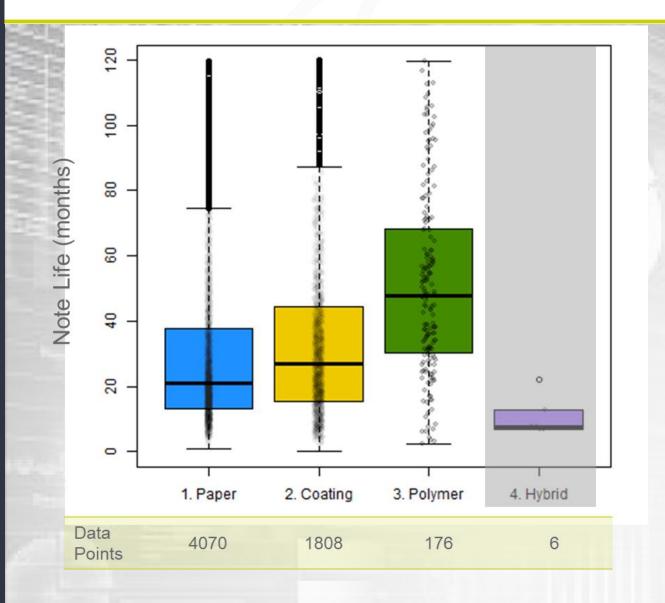


Change 1

Central Banks will increasingly share knowledge and collaborate



And Services Have Started to Support Collaboration this Year

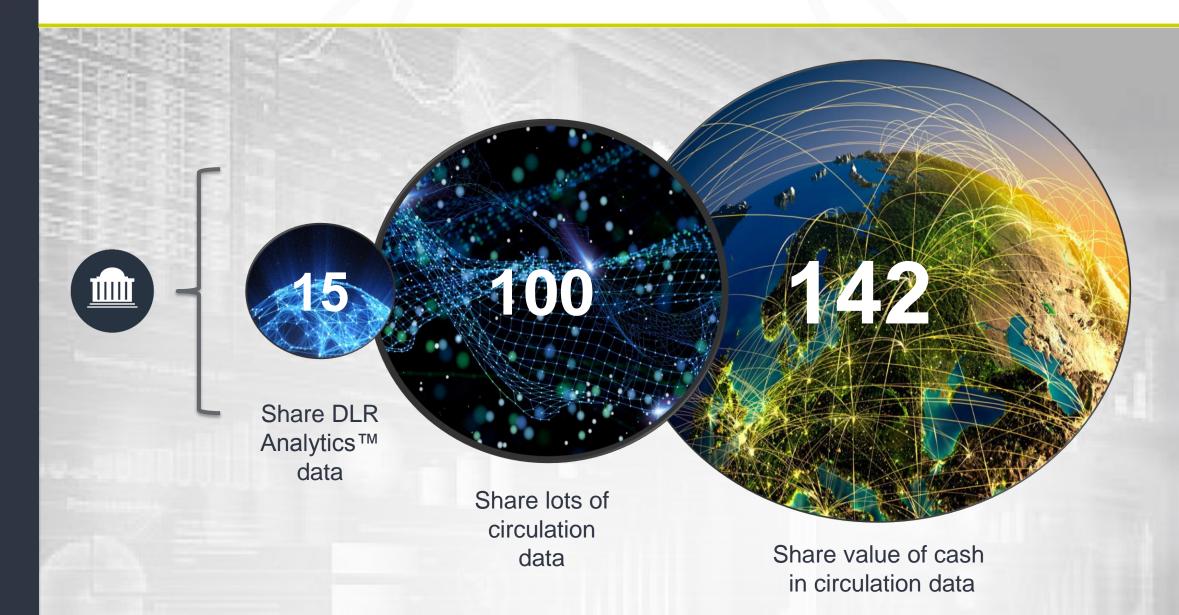


- Aggregated data provides insight
- The Cash Cycle
 Partnership provides
 deeper understanding

Change 2 Substrate decisions will be more informed

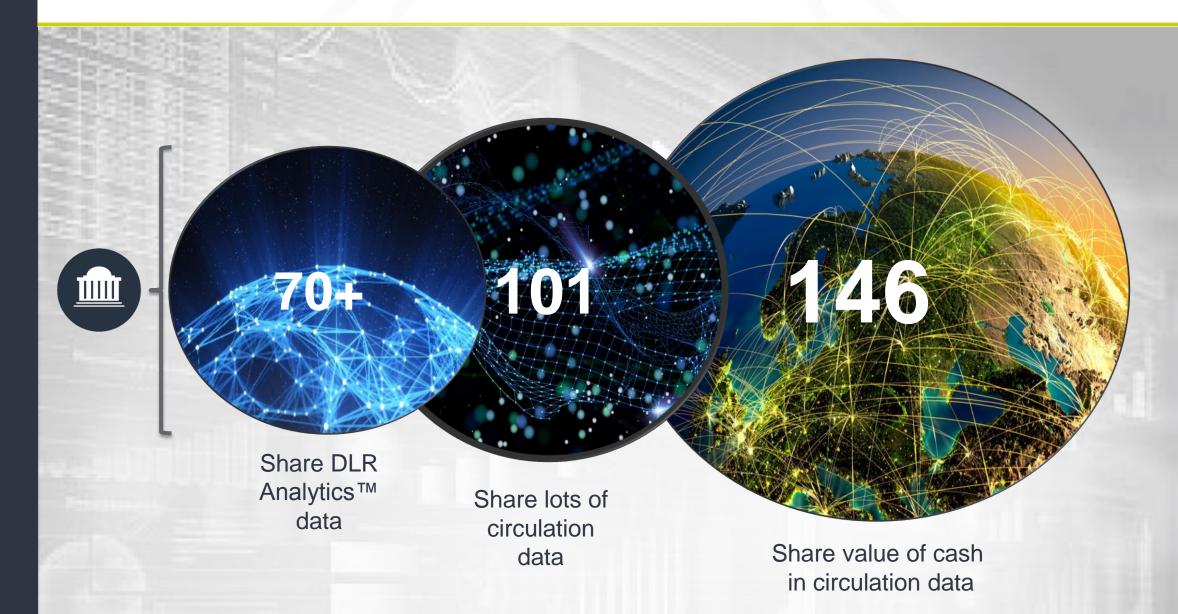


The Cash Cycle Partnership Community Started off as 15 Pilot Users





It Has Grown to Over 70 Central Banks Over the Past Year





And the Cash Cycle Analytics Service Has Evolved

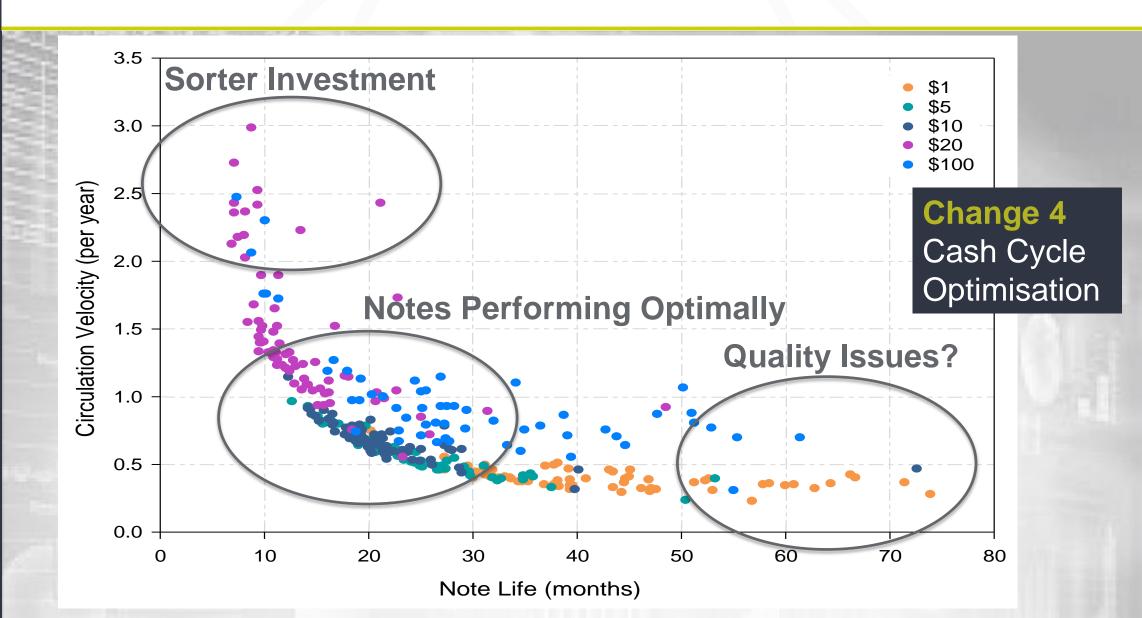


Change 3

Greater use of predictive analytics



The Insight Within Analytics Informs Your Strategy





But there is still more to do

New Announcement:







Cash Cycle
Partnership
Global fitness
standards project

Change 5
Specification
changes driven
by data



And there Are More Changes Coming in the Future

	In the Next Five Years	How We Will Support the Changes
1	Knowledge sharing and collaboration will increase	 Free Standard DLR Analytics™ Enabling you to directly access the aggregated and anonymised data
2	Substrate decisions will be more informed	 Enabling easy connections between central banks willing to collaborate Grow the aggregated and anonymised data set and the relevant case studies
3	A greater focus on predictive analytics	New statistical models and approaches
4	Cash cycles will be become more optimised	 Support and case studies to help central banks act on the actionable insight from DLR Analytics™
5	Specification changes will be driven by data	Global fitness standards projectCounterfeit analysis and data



Next Steps



- Join us to See a demonstration of Advance Forecasting in DLR Analytics™
- Sign-up (if you haven't already)
 - the standard version will continue to be free
- Talk to us about participating in the global fitness standards project
- Shape the roadmap
 We are building new mathematical models with
 Imperial College, if you want to be involved please
 contact us.