

DataCompliance LLC

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# INDISTINGUISHABLE FROM MAGIC, or 'How Exchanges Make Money Out of Data'

DataCompliance LLC



How did that  
Exchange's data  
spell work again?

I am telling you, it was  
more eye of newt, *less*  
toe of frog

# INDISTINGUISHABLE FROM MAGIC

## The Exchange's Witch's Brew

Why is making money out of data magic? Simple, because the exchanges, and other data sources can re-sell (actually, licence) exactly the same items of data over and over again, infinitely, for infinite purposes, to the same client, as well as to other clients, all at the same time.

This paper provides an insight into how exchanges charge for data currently the issues faced, and ideas for the future.

Simply put, a client can take the same datasets, say Cash Equities, and pay for it multiple times because exchanges, and other data sources charge by the various ways it is, or can be, used. It is all about data elasticity, or what I term, '*The Snickers Effect*'. Please [click here](#) to read more.

Data Sources achieve this is by magicking up a witch's brew of licences, policies, usage rights, backed by compliance.

The whole market data and information services revolves around Intellectual Property Rights (IPRs) and the ability to successfully apply those IPRs.



Unfortunately for exchanges, their business and policy strategies are reactive to new processes, applications and access channels the data consumers find to use data, and data acts like water, if it finds a leak it will flow. With financial institutions at data saturation point, this presents challenges to leading 22 exchanges whose data revenues growth at 14% (2016 to 2018) is identical to overall revenue growth, albeit with higher margins.



1 MISSION  
1 TIME ONLY  
1 SALE ONLY

By Keiren Harris



MULTIPLE MISSIONS  
1 AT A TIME ONLY  
1 SALE AT A TIME



INFINITE MISSIONS  
ALL THE TIME  
INFINITE SALES

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## The Exchange's Witch's Poison

Exchange's have data and information services businesses. Those exchanges that made forays into the infrastructure world with data centres and co-location quickly learnt their very expensive lessons. Others can do it more efficiently and cheaper.

Exchanges are not Technology businesses, technology provides the tools that allow data businesses to be the money machine side-effect of trading.

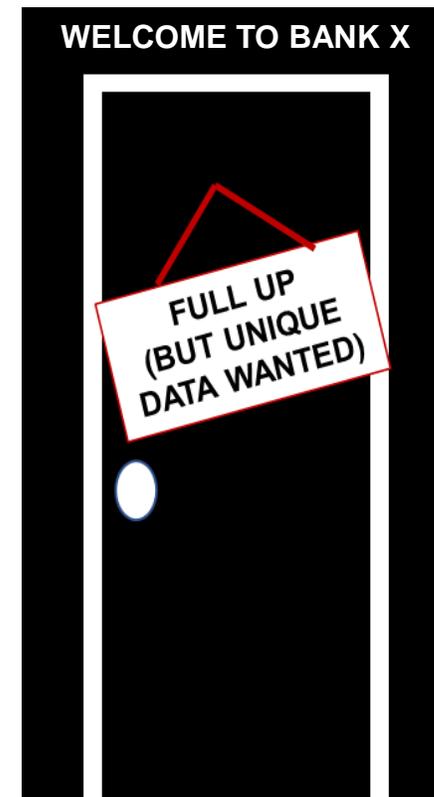
Back in the information world, the institutional marketplace for data has become saturated. Many Banks are paying for information that comes contained within packages providing more than they need or can consume. For instance, how many people even use 5% of the information available on a Bloomberg Terminal? These consumers are becoming more discerning, seeking out data that gives them a competitive advantage, hence, the interest in 'Alternative Data'.

In contrast the lower margin wealth management and retail markets remain underserved. The growth in Personal Electronic Devices, websites providing personal investment advice is enabling individuals to access data and services once the preserve of professionals, thanks to cheap technology.

Additionally there is the remorseless rise of new types of data consumers, third party data processors, value added analytics and innovative financial benchmarks. These are smaller organisations, harder to reach, and, require resources to support. They can also be less aware of, even less inclined to respect a data source's IPRs.

However there are always constants, the keys to the growth in market data is, data quality, its' uniqueness along with distribution and accessibility.

The exchanges need to radically alter their pre-conceptions.



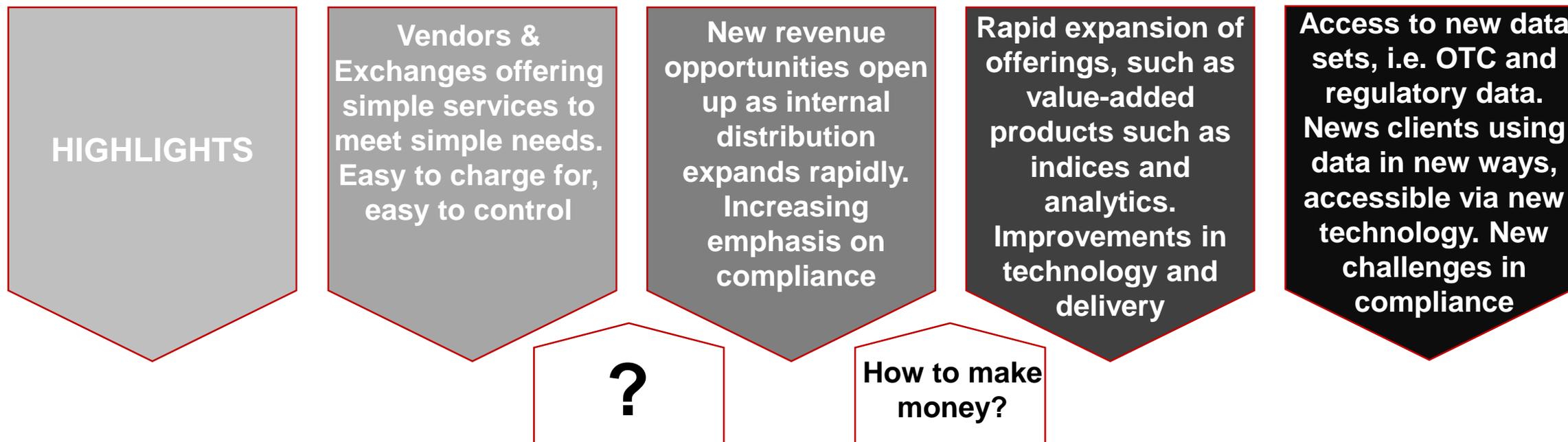
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## Data Accessibility: Openness Drives Growth. A Timeline

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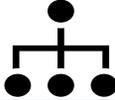
The growth in market data usage from the 1990s has been driven by increased interaction between the data sources and the end user, not physically, but electronically. For businesses inter-connectivity has grown internally, driving overall enterprise usage.

The future is growth in third party inter-connectivity on a global scale.



Just imagine someone from the 9<sup>th</sup> Century seeing a X-Box game, for the first time, surely to that person it would be 'indistinguishable from magic'. Well current exchange data pricing models tends to have the same effect.

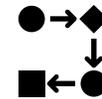
The magic wand exchanges use is how they charge for data, and the issues these create, especially as data sources develop pricing and licence models reactively as responses to usage rather than future proofing. The first, traditional models applied were basic and effective, just not that profitable.

	 <b>BY DATASET</b>	 <b>TERMINAL FEES</b>	 <b>DATAFEEDS &amp; RE-DISTRIBUTION</b>
<b>FEE TYPE</b>			
<b>WHAT?</b>	Creating individual chargeable datasets on a structured basis, i.e. by market, asset class, & depth (Levels) of market	Per screen levy charged on a monthly basis, usually without a contract	Fee charged to vendors for re-distribution to sub-vendors, and end users. End users also are liable for their re-distribution
<b>ISSUES</b>	Some exchanges divided their datasets up to force revenue growth. Instead they created environments that are too complex to administer with cannibalisation of existing products	The number of terminals on the desk is in overall decline, except for Bloomberg. Increased online access is harder to control, and pro/non-pro user definitions can be enforced arbitrarily	For the large exchanges re-distribution has reached saturation point. Onwards re-distribution can be inadequately controlled, monitored or reported. Rise of third party facilitators poorly addressed

*Arthur C Clarke's Third Law 'Any sufficiently advanced technology is indistinguishable from magic'*

The growth of internal re-distribution has resulted in an explosion in data usage by financial institutions, and this is proving the main driver for revenue for exchanges and other data sources. Here lies the secret ability to charge for the same data multiple times.

However, problems lie in the ability to track and police usage in complex environments, exacerbated by licences and policies which are poorly defined, lack transparency, and lack of accurate reporting. Exchanges are addressing these issues but still over-reliant upon vendors



FEE TYPE	NON-DISPLAY USAGE (NDU)	DERIVED DATA	ORIGINAL WORKS CREATION
WHAT?	Accessing, processing, or consumption of Information for a purpose other than in support of its display or distribution, i.e. in applications such as risk, trading and for reporting	Pricing data or other information that is created in whole or in part from the Information and that cannot be re-engineered to the original, i.e. structured products	Creation of new original data with new IPRs for commercial use, such as financial benchmarks, indices, & CfDs
ISSUES	Can have complex and hard to enforce/report charging models, i.e. per application. Poor reporting of NDU usage does lead to exchanges leaving monies on the table. Policies can be less than transparent	Hard to enforce, and policies can be poorly defined. End users of data are often unaware of usage rights. Derived data usage is often lumped together with NDU usage which causes confusion	Increasing source of revenue for exchanges and other data sources. Usage is growing but index creators find better ways to monetise the exchange's data than the exchanges themselves

In a world where inter-connectivity is global and cannot be self-contained, the fundamental question any exchange's management must address is *'How to increase data related revenue in an environment undergoing radical change?'* According to DataCompliance's recent article, information service-related revenue remains at 19% of overall revenue, on growth of 14% unchanged from 2016 to 2018. With an exchange targeting 25% or more, what are the challenges faced when the raw data market hits saturation point? The 6 challenges are:



1. **New Data.** Monetising existing data such as Historic Tick, integrating data from other asset classes, as well as from new acquisitions. Exchanges have been active in buying MTFs (ATS) in the FX and Bond markets



2. **Value Added Services.** Developing proprietary analytics based on underlying data. Creating exchanges own benchmarks, or considering offering evaluated pricing



3. **Partnerships.** Often it may not be possible to develop services internally, or there are providers in the space at lower cost, therefore partnerships offer reach and expertise



4. **IPR Protection.** Exchanges need to future proof agreements, licences, and policies for new ways of using data by new types of consumer which behave outside traditional models. Definitely improve reporting procedures and usage accuracy



5. **Client Base Expansion**  
Working with the new consumers, understanding how they use data and interact with their own clients. Create business models for personal wealth management data and the growing industry supplying related solutions



6. **New Technologies**  
offer new business opportunities, the ability to reach new clients in new locations, and reduce costs of delivery. 'The Cloud' brings demand and supply closer together, but requires innovative models to be effective

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Find out more about us

DataCompliance LLC

David Toomey-Wilson and Keiren Harris inaugurated **DataCompliance LLC** as an innovative advisory and management consultancy focusing on the ever complex world of licensing data usage.

DataCompliance advises participants across all financial markets on how to effectively validate, change and profit from data resources, leverage information and market data benefiting their businesses direct to the bottom line through the effective use of their IPRs and ensure ongoing compliance and risk mitigation.

Expert innovation is the key driver in approach and delivery, all built on continuously proven track records.

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