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STATE OF THE MARKET

THE BUSINESS OF FINANCIAL INFORMATION 2017

PART 2 INFORMATION PROVIDERS, PAST, PRESENT, & FUTURE?

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PART 2 INFORMATION PROVIDERS, PAST, PRESENT, & FUTURE?

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2.1   Pathways: Past Tense, Future Perfect

As we discussed in *Section 1.2 Open Skies: New Technology Horizons*, there has been a radical progression from linear delivery, through networked environments to a multi-dimensional universe of relationships.
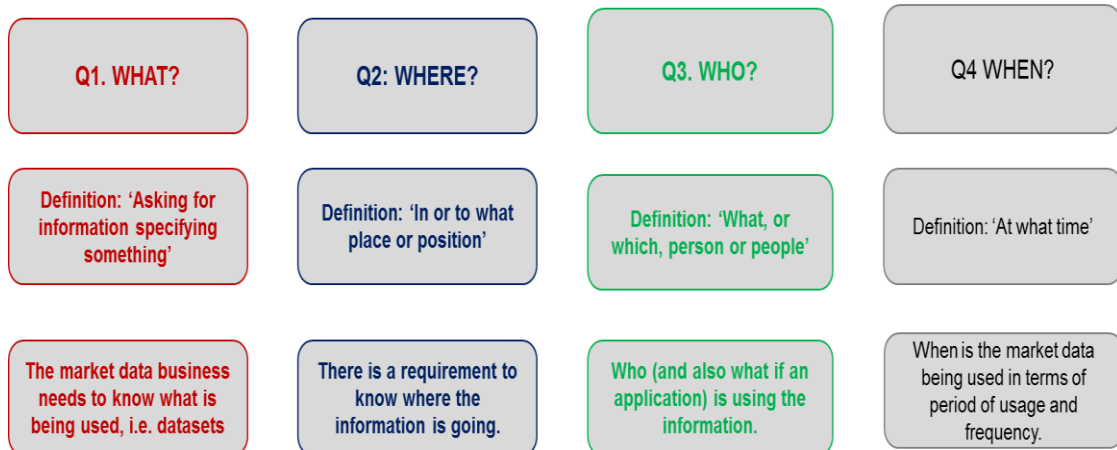
But we have also arrived at our current environment through the questions asked when defining market data in three stages, within which a question regarding usage is prefaced by one of the '5Ws+1H'.

TIMELINES

STAGE 1 FROM THE BEGINNING

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STAGE 2 2000s GOING FORWARDS

STAGE 3 2015 GOING FORWARDS

Q1. WHAT?	Q5: HOW?	Q6: WHY?
Q2: WHERE?		
Q3. WHO?		
Q4 WHEN?		

It is a measure of the parochial tendencies of the market data industry that Stage 1, a period up to the 2000s, is somewhat binary in the questions asked, i.e. "What? Where? Who? When?' These are all questions that can be answered without interpretation, they can be both countable and quantifiable, and crucially they all relate to the input of information.

They define the datasets and are descriptive in nature, and provide information regarding the flow of information from source to end user. But what is important is these are the questions that created the market data industry as it exists today in terms of fees, licences, policies, and relationships.

STAGE 1 WHAT, WHERE, WHO, WHEN

Q1. WHAT?	Q2: WHERE?	Q3. WHO?	Q4 WHEN?
Definition: 'Asking for information specifying something'	Definition: 'In or to what place or position'	Definition: 'What, or which, person or people'	Definition: 'At what time'
The market data business needs to know what is being used, i.e. datasets	There is a requirement to know where the information is going.	Who (and also what if an application) is using the information.	When is the market data being used in terms of period of usage and frequency.

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While the Stage 1 approach definitely made life simpler, as General von Moltke famously pronounced *"All plans fail on first contact with the enemy"*, in practice the ways financial markets themselves have developed, expanded, been shaped by events, and importantly how technology has been applied has meant there has always been catch up between what is happening on the frontline and how exchanges, data sources and vendors have applied their own business principles.

It is almost axiomatic that in general terms, and with honourable exceptions there is a disconnect between the suppliers of market data information and services and the people that actually use it.

This is the fault of all sides, those in the trenches want to deal with fee payers not data suppliers and want as much as possible paying for as little as possible, leading to the rise of the gatekeepers, better known as market data managers. On the other side both vendors, and exchanges, do not have the resources to understand every single user so prefer the one to one relationships market data managers provide.

What this created was Stage 2 'How', an understanding of how market data is being used. The growth in market data usage off the desk and across the enterprise generated a new information business as market data was fed into applications used in multiple ways by a completely new set of users, all of who should naturally pay fees. It has proven to be the best example yet of the same piece of data being used for countless purposes.
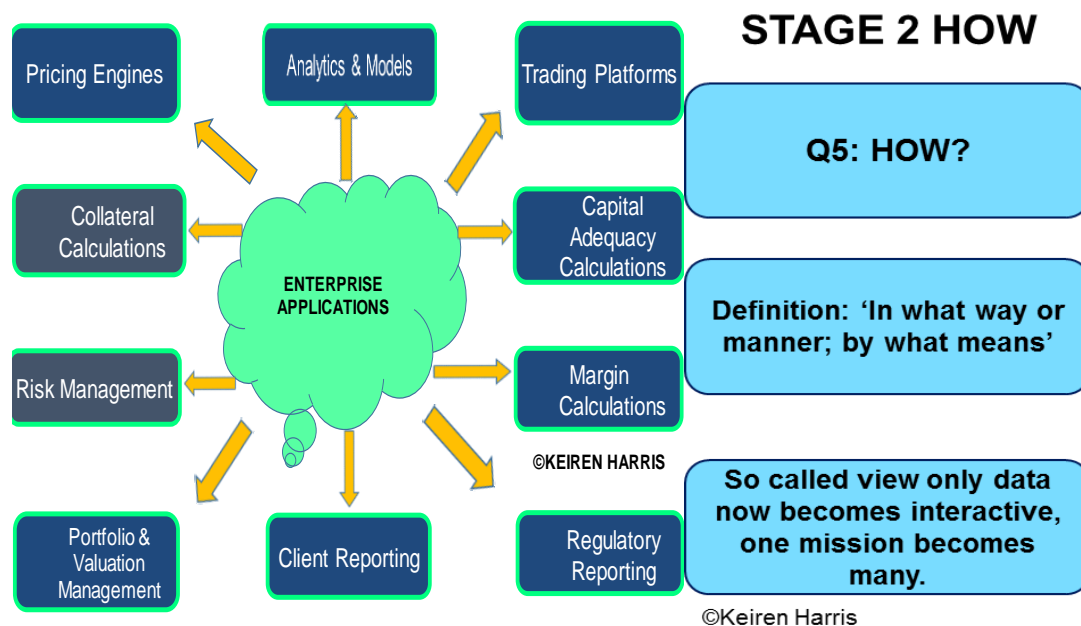
It has also been the major driver of expenditure by financial institutions on market data. The necessity to ensure the best market data is available electronically in all systems across the trading cycle, for reporting, for databasing and numerous other uses led to the era of the datafeed.

It also enabled new players to come to the market, such as Activ Financial, Tenfore (Morningstar Realtime) and Xignite. Other players without the terminal

presence of Bloomberg and Thomson Reuters such as IDC, and S&P GMI could offer feeds into a client's network without having to provide an usage infrastructure.

The ability to feed raw data, along with the right API, introduced new competition, lowered barriers to entry (at least for exchange sourced data, not OTC nor contributed data), as well as costs.

The flip side of the coin has been datafeeds have not proven to be a serious money maker as a standalone service it is too easy to enter the market and compete, so depressing yields, but for those able to leverage its added value properties, i.e. Thomson Reuters DataScope/TREP it locks in clients.

Curiously, it has seemed to me, that sources, and vendors, only cared that someone was paying for market data and information, and lacked, perhaps feigned, interest in what it was used for.

There is a certain dark humour in asking sales representatives from vendors and exchanges *"Please tell me what is my business?"* I guess sometimes ignorance is bliss. I have had Customer Relations Executives showing an equity salesman FX rates but not how to access prices for their own market. Though my personal favourite was a Reuters lady showing proprietary traders the best way to display Telerate data.
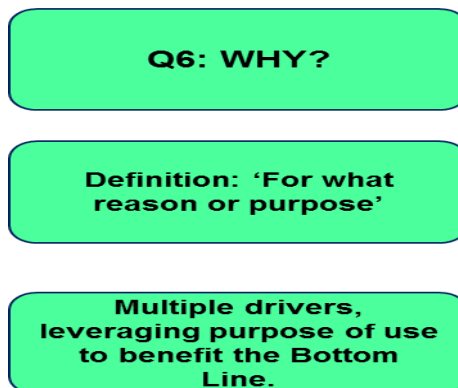
This does somewhat unfairly denigrate the competency of the many talented individuals who work in the provision of information. For example, the panellists and speakers at events such as the ones run by FISD. The sheer knowledge of their subject matter is impressive, and there are many who truly know their market. I would suggest though this is a relatively recent phenomenon, and then there is the issue of specialisation at the expense of knowledge breadth, but that is what experts are for.

So, what has changed? Unlike in the past, there is a real need to know Why market data and information is being used. It comes from regulators who have moved from what information is required to defining that data's characteristics backed by justifying why a specific data source is being used.

This changes the nature of the game, and while primarily regulatory driven, it is also client driven where reports being generated are based upon factors including preferred sources.

If one takes a funds services business, they need to subscribe to data specified by their clients, such as MSCI or FTSE Indices or prefer to use the same data sources as their clients. An example being corporate actions. Bloomberg is widely used, so funds services houses use Bloomberg for corporate actions. This is not because Bloomberg is any better as a corporate actions provider, it is because if the Funds Services administrator has the same information there will not be a conflict, even if Bloomberg gets it wrong.

STAGE 3 WHY

Q6: WHY?

Definition: 'For what reason or purpose'

Multiple drivers, leveraging purpose of use to benefit the Bottom Line.

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Until recently market data and information in general has been seen as a cost of business, when the reality is without the market data there is no ability to compete, let alone function, as a financial markets participant.

Market Data is should now be called what it is, a resource, yes it costs money, but it is also the information the creates profitability through populating the investment decision tools.
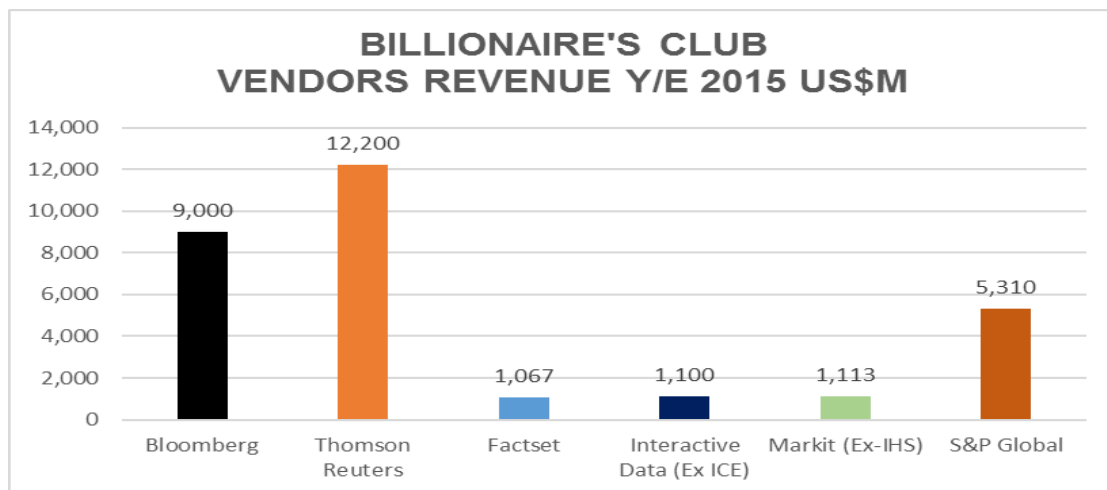
It changes the price dynamic from cost of service to dollar return. In order to maximise that return, the data sources, information providers, vendors, ISVs and other service providers need to understand and be familiar with why market data is being used.

There is an example, the development of the Spread betting industry is based upon advanced algorithms to create synthetic products. ISVs have been creating a whole new 'why' which is highly profitable for themselves and their clients. Monecor, LCG, FINSA are a new breed of financial institution, and in order to provide them services, there is the need to know why do they need the prices they subscribe to.
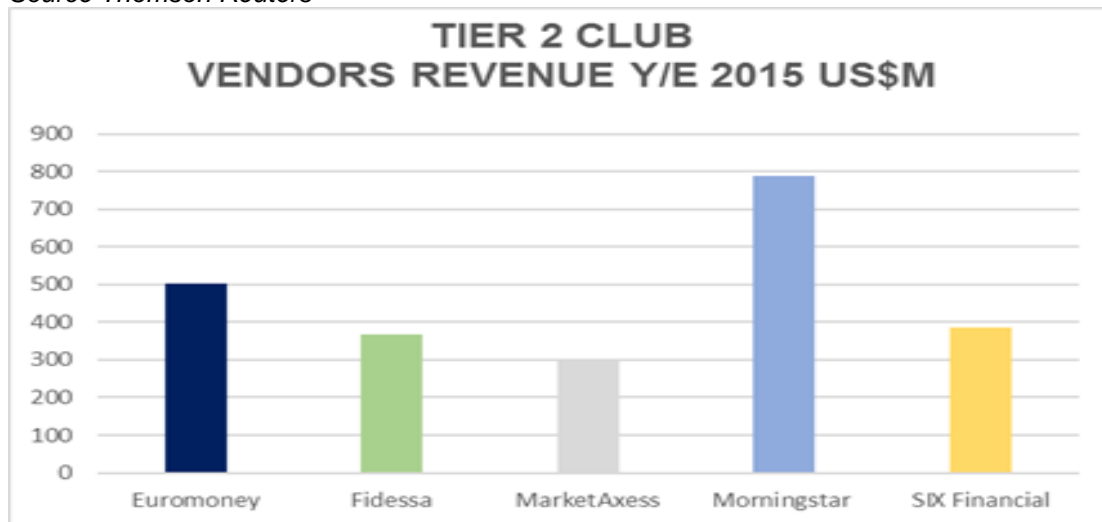
2.2   Information Providers: Billionaires & Millionaires

For the Year Ending 2015 the leading Information Providers revenue for all services which can and do include non-market data activities totalled **US$32,320 Billion**, comprising of:

- The top 6 'Billionaire's Club' **US$29,790 Million.**
- The 'Tier 2 (next 5) Club' **US$2,530 Million.**

Source Thomson Reuters

Source Thomson Reuters

This excludes significant global players like MSCI, FIS Global, the Exchanges (though IDC is included above as separate from ICE), Inter-Dealer Brokers, large players from Asia, and the plethora of smaller information providers that exist largely under the radar outside their own specialist markets. These will be discussed in more detail in upcoming instalments.

In Context

The reality is the financial information industry is dynamic and it is difficult to label companies simplistically. So rather than attempting to put each company in a 'market data bucket' we categorised them all (simplistically) as information providers and facilitators that provide a wide and expanding range of services that 'oil the engine' of financial markets.

Instead of splitting out component units, we view these businesses as information providers in their entirety as there are synergies, even if certain vendors seem unable to exploit them as meaningfully as they could.

In these terms the Thomson Reuters, S&P Globals, and now FIS/Sungard and IHS Markit are not conglomerates with multiple distinct business lines, but conglomerates combining original market data with data manipulation, analysis, systems, news, trading platforms, and other tools which assist financial institutions and the retail market to make

Their services provide 3 levels of functionality:

1. Data and tools to aid in creating investment decisions and strategy.
2. Processing of trades throughout the trading cycle from pre- to post-trade.
3. Facilitate accurate market reporting.

What is noticeable is these are very much the leading players that were around 30 years ago, albeit a lot has changed since then owing to mergers, acquisitions, corporate re-brandings. Some information providers have preferred to grow organically with the odd strategic purchase, i.e. Bloomberg, and Factset, while others have proven more acquisitive like Interactive Data (IDC). Yet many have been assimilated into the amorphous blob best known as Thomson Reuters, including Bridge Information, Datastream, Teknekron, Telerate and most recently REDI.

However, will these be the same leading players in 5 or 10 years-time? A revolution is underway, new entrants with new philosophies, new technologies, are investing in financial markets opening new doors to new opportunities.

But can they succeed? The Uber revolution cannot be readily applied to market data, the supply and demand mechanics are fundamentally at odds with the world of fiercely protected IPRs and stringent regulations. Please see our upcoming article _'Why Market Data Cannot Be Uberised. For Now'_.

There is no stopping innovation, but the inbuilt strengths of incumbents will be hard to overcome. Bloomberg and its embedded universe of clients, Thomson Reuters and its ubiquitous 'Thomson Reuters Enterprise Platform', and the effect of the humble ticker symbol which makes it very hard to change vendors when how many systems are impacted just through having to change the ticker.

2.3   Information Providers: Leadership from East Coast to West Coast

Just as organisms have evolved from humble single cell beginnings to the complex structures of today, market data as an industry is evolving. Just like life there are periods of steady evolution, there are also periods of sudden revolution.

Whereas up until now there has been evolution, now we are seeing revolution.

An interesting question is, are the big beasts of the market data industry such as Bloomberg and Thomson Reuters dinosaurs heading towards extinction with the oncoming Cloud Technology asteroid or other unseen catastrophe?

For now, their demise appears unlikely. While shackled to legacy technologies and managements that find it hard to be reactive, let alone proactive, dynamically, they have the consolation their biggest clients are in the same position.

What is clear is that the large market data vendors have evolved in linear environments, through organic growth like Bloomberg whose prime business is terminals, or mergers like Thomson Reuters and Interactive Data, itself now subsumed into ICE Data. They now have to adapt to a more multi-dimensional universe.letera

Average revenues for the leading information providers business year ending 2015:

- The Top 6 Billionaire's Club **US$4,965 Million**
- The Tier 2 (Next 5) Club **US$506 Million**
- Average for combined 11 **US$2,938 Million**

Of the top 6 vendors leading vendors today, all are headquartered in the United States, with the exception of IHS Markit with its operations run out of London, but it is listed on NASDAQ with major shareholders being American.

The ownership and location of the leading information providers is a reflection not only of where power is concentrated in the market data industry itself but a correlation of the development of global financial markets and media, i.e. where the money is, or at least was.

Of the US companies, all except Factset (Norwalk) and Morningstar are based in New York. Interactive Data headquarters are in Bedford, Massachusetts, but the decisions are made in New York.

Inevitably the market data industry has revolved around New York and London, and other markets seen through the prism of this axis. It is dominated by English language products and services catering to the preeminent 2 global financial centres.

But what about going forward? Amazon and Microsoft are based in Seattle, while Google is in Silicon Valley, not that far from Stephane Dubois' market data upstart, Xignite.

These are West Coast companies, with different world views, and their financial information business' which now and in the foreseeable future are components of larger business universes. However, their financial markets sales offices are based in New York.

Is FinTech Industry Development an Indicator?

While FinTech covers a multitude of offerings, very often unrelated to market data directly, and aimed as much at the retail as institutional market, it could well be an indicator of where the market data business dynamics will be shifting.

FinTech is not only a consumer of information, it is also a creator in its own right as it generates output based upon analytics and statistics.

If FinTech is a leading indicator as to the future 'balance of power' as a consumer and source then there is merit in assessing the current state of development in the FinTech market.
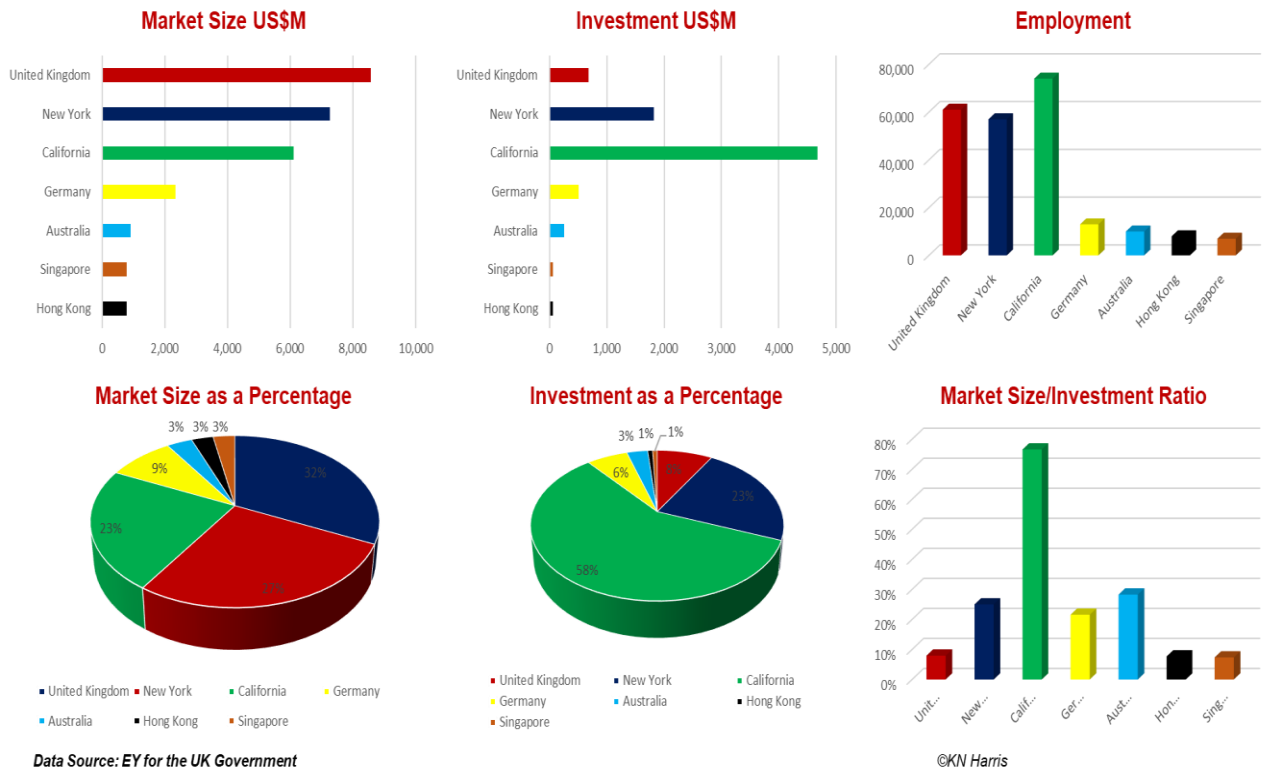
Defining FinTech markets is somewhat subjective, therefore available statistics and analysis can be broad. However, there has been good research.

In 2016 EY produced a report of the top 7 FinTech global centres for the UK Government. In summary, these accounted for:

* Market Size   US$26,780 Million.
* Investment   US8,060 Million
* Employment 230,000

Source EY, Figures in GB£ 2016 with US$ X-Rate 22 May 2017

When market size and investment figures are looked at more closely it shows existing FinTech centre leaders UK, and New York are seriously lagging California in investment.

Market Size US$M

Investment US$M

Employment

Market Size as a Percentage

Investment as a Percentage

Market Size/Investment Ratio

Data Source: EY for the UK Government

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Key Points:

- While the UK is the single biggest market, it has low investment to market size ratio.
- The US is the largest single country market, with a far higher ratio of investment to existing market data size.
- Employment is highest in California and combined with investment indicates a substantial growth in potential knowledge base.
- China and Japan were not included in the study.

Is this a portent of things to come in the world of financial information and market data? After all, many FinTech innovations are data driven.

Crystal Ball

- Linear concepts of market data services, management, and relationships will continue to be a feature, but going forwards as only as a strand within a multi-faceted relationship system.
- The existing leading market data vendors' dominance is not under threat from within the industry, their future challenge is coming from without.
- Outside challenges come at both the top end and the bottom end of the market.
- At the top end, the challenge will be led by content seekers such as Amazon and Google based on new technologies reaching new audiences and breaking down cost barriers that currently exist within the market data industry as it now stands.

- At the bottom end the new players are the FinTech companies whose perception of the market place is going to be broader than just institutions, but encompass the retail market ranging from High Net Worth Individuals to the Mass Affluent.
- These are outsiders moving in, and to an extent this has happened with IHS merging with Markit, and The ICE's purchase of IDC, S&P's evaluated bond pricing service, and Super Derivatives.
- The future leaders within the industry will still be overwhelmingly American, though more likely to be based on the West rather than the East coast.

Importantly these new players coming to the financial information industry have fundamentally different mindsets to a Bloomberg, or a Thomson Reuters. Their world views are shaped by different environments in concept and application.

They are not likely to be limited by the boundaries of the financial institutions, but see their consumer base from the individual retail investor up. This is as true for a Google or a start-up.

This raises the questions, where does the development of the financial information industry lie? Is it with the Moreton Steakhouse (i.e. a Bloomberg) or MacDonald's Hamburgers? Perhaps they will co-exist?