

A new gold rush?

Education institutions have access to ever growing pools of data, but need support to help them analyse it. **Ian Koxvold**, head of education strategy at PwC, investigates

We are reminded regularly that there is a lot more data than there used to be, and that information is increasingly important to business. The challenge, of course, is turning the flood of data into information or insight that can actually be used.

It is therefore unsurprising that data businesses are doing well – being profitable, scalable and growing, they trade typically at multiples of 10-16x ebitda. The global business information market is £99 billion and growing at 3.8%.

In a survey of the UK business information landscape we catalogued about 500 entities, of which just over 20 were in the education domain and predominantly providing market data. (Three common use cases are marketing data to recruit students, marketing data for selling to schools or universities, and library catalogues of research data in journals and monographs.)

But there is no comparison of education data businesses to those in more established sectors. Financial services sees Bloomberg and Markit; retail, consumer & leisure sees Hitwise and GfK; even the motor industry sees organisations like Cap Dynamics, Autodata and EurotaxGlass. In addition, far beyond the fact that there are fewer education data businesses, the ones that do exist are much smaller.

The market is stronger than the model, so far

We at PwC do a lot of work with business information companies, both in respect of transactions and to support the development of their corporate strategy. From these engagements we have identified eleven factors that make a great business information company – grouped into market characteristics, business model

and growth opportunities.

When we look at a company in this space we assess each of these factors individually; so which ones are holding education data businesses back? To illustrate some of these issues we have assessed five education data and information businesses: The Key for School Leaders, Starfish (now part of the Hobsons group), Arbor Education, UCAS and the International Schools Consultancy. We have anonymised the ratings as A to E above – and if you wish to amuse yourself you can try to match the rating to the business.

Market characteristics

Firstly, there is no doubt that education is a large and growing market. Globally it is second by employment (c.6% of workforce) or fourth by contribution to GDP (around \$5 trillion), growing at over 7% per year. Even in the UK the broad education and skills market is around £100 billion, and is still growing (per pupil constraints in schools and classroom-based further education are more than balanced by demographics and areas of substantial growth).

Operating across the value chain can be a tough nut to crack in education. Winners in this space become a common language between organisations that are trading with each other – in the way that Tesco's clubcard data became used by suppliers to the supermarket chain, or that CAP's pricing data is used by car insurers as well as dealers. When we look at businesses that don't manage this we don't generally see fundamental constraints, but rather that the product has been designed narrowly, without the desire to serve a wider constituency. For most businesses this need not be an enduring constraint.

Business information providers are often natural monopolies, taking advantage of both the network effect in data (more data makes each component more valuable) and

the unwillingness of data contributors to engage with more than one aggregator, especially if the data is collected by survey. In the education world there are many niche market leaders, where it is beginning to be difficult to see a new provider able to displace the incumbent.

Business models

Great business information businesses are exemplified by strong products that their customers can't do without. When we look at our cross-sector sample of data businesses we see average volume retention rates of c.80%, and value retention rates of c.90%. Sometimes we see value retention of over 100% – the growth in sales to retained customers is greater than the total value of lost customers. In the main, education is quite a friendly environment for renewal rates; it is common to see subscription products in schools renewing at 85-90%, and the five data businesses we reviewed are all performing well.

The next element of the business model is about automation – how much cost is involved in adding customer volume? In this respect we see mixed performance so far; several of the five businesses appear to have some manual processes to serve customers (whether to set up / configure, or ongoing training requirements, or manual order processing).

The exclusivity of the underlying data varies substantially. Some businesses collect or develop unique and proprietary data; others rely on analysing either public data or the data belonging to their customers (which can become a proprietary advantage if it can yield benchmarking, but not if the data is structured differently in each case).

Similarly the 'must have' nature of the information spans a range, and is a function not only of the quality of the data (and value it creates) but also of the tenure of supply – data businesses tend

**FIGURE 1: WHAT MAKES A GREAT BUSINESS INFORMATION COMPANY?
(AND FIVE ANONYMISED EDUCATION EXAMPLES)**

		A	B	C	D	E
Market	Large and growing end markets	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓
	Ability to operate across industry value chain	✓✓	✓✓	✓✓	✓	✓✓✓
	Market-leading position	✓✓	✓✓✓	✓✓✓	✓✓✓	✓
	Total - market characteristics	✓✓	✓✓✓	✓✓✓	✓✓	✓✓✓
Model	Subscription model / high customer retention	✓✓✓	✓✓	✓✓	✓✓✓	✓✓
	Scalable model with largely fixed cost base	✓✓	✓✓	✓✓	✓✓✓	✓
	Access to proprietary information	✓	✓✓	✓✓✓	✓✓✓	✓
	Provision of must have, value-add information	✓✓	✓✓	✓✓✓	✓✓	✓
	Embedded into customers' workflow	✓✓✓	✓	✓	✓✓	✓✓✓
	Total - business model	✓✓	✓✓	✓✓	✓✓✓	✓✓
Growth	Ability to grow usage amongst existing customers	✓✓✓	✓✓	✓✓	✓	✓✓
	Ability to grow pricing	✓✓	✓✓	✓✓	✓✓	✓✓
	New growth areas	✓✓✓	✓✓	✓✓	✓✓	✓✓✓
	Total - growth opportunities	✓✓✓	✓✓✓	✓✓	✓✓	✓✓

Source: PwC

FIGURE 2: THE NUMBER OF COMPANIES VARIES BY SEGMENT...

	General	TMT	RCL	FS	EUMI	Industrial Products	Business Services	Health & Pharma	Education	Real Estate
Economic & financial	●		●	●	●	●			●	
Pricing		●	●	●	●	●		●		●
Market databases	●	●	●	●	●	●	●	●	●	●
Market research, analysis & insight	●	●	●	●	●	●	●	●	●	●
Compliance, IP and legal	●	●	●	●	●	●	●	●		●
'How to'	●	●	●	●		●	●	●	●	●
Publishing-led business information	●	●	●	●	●	●	●	●	●	

Bubble size = number of companies identified ● = 1 - 4 ● = 5 - 9 ● = 10 - 19 ● = 20 - 30

Source: Source: PwC

Making the magic

Education data businesses often face an uphill battle in driving adoption of their services. These businesses – or investors into them – should remember to address the most significant challenges:

- Designing a customer journey (and its evolution from initial contact to full adoption) that embeds the product into the user’s workflow – whether this is preparation or delivery of class teaching, creation of an individual learning plan, or targeting student recruitment
- Considering the potential to serve non-core customers (ideally your customers’ customers or their suppliers) with extended or repurposed products
- Developing partnerships to get data (or more data); sometimes from customers, and sometimes from third parties. It will be vital to understand the value of this data to you, and to offer value in return if you wish to achieve a sustainable partnership
- Structuring and calibrating a charging model that recognises and references the value that your data creates for customers, while being accessible to less mature or more sceptical customers. In particular it can be difficult to communicate this value proposition in contrast to a low cost to serve; and both tiered offer levels/pricing and volume-based pricing can be very helpful in this.

► to become stronger over time as more of their customers’ decision-making becomes fitted to their product. In the main, data that is time-sensitive is more valuable than static data.

The same is true of workflow; not fitting to workflow is a key barrier to uptake and a key driver of customer attrition in the early days of product adoption. Over time, though, this becomes easier – customers will begin to mould their processes around the data they rely on.

Growth opportunity

Managing critical data and becoming embedded within a customer’s workflow tends to surface new opportunities to help and it is common to see customers beginning to use more data – either finding ways to apply it to their challenges, growing the part of their business that relies on it, or adopting adjacent products. Here we see a range in the five rated businesses – one is very well positioned (becoming the data analyst of choice for its customers), one less well positioned (effectively selling a fixed pool of content) while the others have clear opportunities on which they are working.

None of the businesses we look at appear to be materially increasing pricing. We all know – from looking at private schools if nothing else – the power over time of pushing pricing up by 2-3% more than

inflation. A strong data business should be able to do this.

The wider growth opportunity is very strong – given the relatively immature state of education data and business information, there are many easily-identifiable avenues for new development.

Within data and analytics, the applications are even more fragmented, although within each of these niches there are leaders.

The education data and business information landscape has some way to go before maturity – but already leaders are emerging that may over time turn into the sort of £200 million+ value companies that we see across the rest of the economic landscape. This is not to say that it’s a closed shop – there is still plenty of untapped potential. ■

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