



Growth in the future – how publishers can leverage stronger profits by using predictive analytics.

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Introduction

Imagine if it were possible to publish products which could retail at a different price to normal depending on the season or depending on customer buying trends. To some degree, this is what online retailers such as Amazon are already doing with higher volume purchasing creating a lower sale price to generate higher sales and stock movement. While this is good for stock (every publisher needs to shift stock), it's not necessarily good for profits – even Amazon's profits.

For publishers, particularly book and e-book publishers, the real *holy grail* is to be able to sell more books at a more robust price, rather than having to scrape a living off the meagre profit scraps at the end of the price waterfall. Yet the truth for many publishers – particularly those selling largely through the book trade – is that price (and even brand position) is determined by the retailers' own commercial issues. Witness indeed the meltdown not so long ago when Borders closed down and when Waterstone's was returning large quantities of stock.

In this article, I will examine the role played by analysis in the development of a more effective strategy for leveraging revenues through pricing and marketing. I will review conventional analytical activity before showing publishers a useful extension to this approach by focusing on the *prediction* of outcomes and, hopefully, the leverage of price and profit.

The use of descriptive analytics

Let's start by looking at what some/many publishers are already doing. Descriptive analytics – analytics which describe events which have already occurred - lie at the heart of sales and marketing departments which are charged to deliver stronger results. Senior management and marketing teams understand core metrics such as acquisition ROI, campaign response rate, cost per thousand (CPM), renewal rate (for subscription products or annuals), Return on Sales (ROS), Margin on Sales (MOS) and so on.

Using these descriptive analytics, management can then start to leverage them to improve the performance of sales and marketing: reduce marketing costs; deliver greater response by testing; lower component costs etc. These activities are, of course, right and proper.

Yet they deal with business problems as they exist (or used to exist) – they respond to events in an atmosphere where a pricing model is relatively inert (e.g. in trade sales environment) and therefore try to deliver a better profit from the prevailing trading conditions. In other words, these methods react to conditions and inform how management can manage costs.

On their own, descriptive analytics are useful in enhancing productivity but they place little emphasis on influencing external factors. In publishing, where decisions on profit are often taken at the beginning of a product's life and assume a certain volume of sales, descriptive analytics provide probably the only way of ensuring that these commissioning decisions can arrive at a position close enough to what was predicted.

Alas, decisions taken in the commissioning room are often taken on a unit cost basis: sell x quantity and leverage y margin. Sell 200 different front-list products at certain volumes in a year and an acceptable business profit margin – the company's return on sales – is achieved. Here, the business model rests on delivering an acceptable margin for the company *irrespective* of whether greater revenue and profits could have been achieved from the products if matched to their customers on a value basis.

The problems facing a business which looks to the past to define its future is that management focuses on delivering a predictable future from an unknown quantity: future sales of future products. Forecasting, therefore, needs to be more sophisticated if publishing companies are to generate revenue and profit outcomes higher than those which they achieved in the past. This is where predictive analytics come into play.

The use of Predictive Analytics

In a recent article¹, authors Dickman, Harris and Hanson argued that predictive analytics helps businesses “derive actionable insights from their data” but also suggest that the answer does not just rely of technology to deliver: “*it is much more than just a “technology solution” – it is a new way of doing business*”. But in a publishing business, how can this work? What predictive tools do we have available? What staff do we have who can implement it?

To begin at the beginning (in the words of Dylan Thomas)... a business which wishes to predict does need to have an understanding of data. Beyond simple sales metrics and sets of accounts, many publishers do not have this understanding. Nor have they sought it.

This lies at the heart of the publishing industry today: an over-reliance on sales through the trade and an under-investment in relationships with readers. This, indeed, explains the chaos wrought on publishers by online retailers and the social media. An analytical strategy is therefore required, what Dickman, Harris and Hanson call an “*Analytical Competitive Strategy*”; developing a regime of trusted descriptive analytics on which can be bolted a meaningful system of predictive analytical data collection and interpretation.

Background work

The development of a descriptive analytics strategy relies initially on top-level corporate strategy. Where is a company now? Where does it want to be? What does it need to do to get there? What are the information gaps which prevent it from doing so? Conventionally, a strategic marketing plan should form the basis of this approach, produced along the lines advocated by the Chartered Institute of Marketing through their postgraduate diploma.

¹ Jeanne G Harris, Kenneth Dickman and John G Hanson, "The allure of pricing predictively," Outlook 2011, No. 2. Accenture 2011.

Once a plan is developed, the company needs to determine what data is needed and how to store and use that data. This is not necessarily to advocate the development of an entirely new computer system; indeed, even publishing companies with an archaic version of the “Vista” system can develop meaningful data reports via the “Cognos” interface.

However, often a publishing system will report largely on transactional data (sales) and will require a secondary database to manage more sophisticated data sets such as marketing analysis, average pricing, products per customer record, web sales, click-throughs, cost per sale.

As we can see from the above paragraph, a company needs to define exactly what descriptive data it needs in order to go about its day-to-day business. This phase is critical. This is not a process of saying “wouldn’t it be nice if...”, it’s a process of identifying mission-critical data sets which will be used day in, day out; week in, week out to inform business process.

Having said this, it is important for the company actually to *know* what it wants and understand *why* it wants it. Indeed, companies which have been run in the same way for years may not be in the best position to grasp what they need in order to change.

For example, a company may currently be publishing books and e-books. But strategy may indicate a move to subscription models, bundled items, co-publishing deals, different distributors, different payment models (e.g. library lend for e-books). A combination of sales, marketing and finance department needs combined with a “blue sky” vision of the future means that an objective assessment, combined with a review of process may indeed be necessary.

Of course, cost of development is a significant issue. While it may be beyond the finances of a smaller company to initiate the purchase and maintenance of a top-level integrated data system, it may well be that significant data is held in separate databases. While not ideal, if existing systems can already provide the data required, or can be developed to provide it, this may well prove a good “middle way” provided that there is agreement from the top of the business and consensus as to “one version of the truth”.

The impact of Groupthink on decision making

Once the data structure is in place, a fundamental deliverable is management agreement about the data, how it is supported, managed and controlled. It is a sad truth that territorialism within companies can lead to neglect of key elements; equally, leadership ennui can lead to investment withering or, even, being reversed.

It is for these reasons that Dickman, Harris and Hanson argue – rightly – for a strategy of “one version of the truth”. At this point, a business is now in position to run itself, day-to-day, on a dashboard of metrics indicating performance in key areas.

This is the point at which a company is now set to initiate predictive analytics – what the authors argue is the ability to “*apply logic, business rules, algorithms, statistical models and analysis, combined with industry-focused management consultancy methods to develop insights*”.

Making predictions – what to predict?

The company is now set to move forwards more adventurously but here the questions become more provocative: what does the company wish to predict? This is where a company for the first time stops being a “normal” publisher and starts to size potential in the market, rather than make assumptions based on past performance.

In an era of rapid change in information procurement, the winners will be those publishers which have an innate understanding of the value of their products and of their customers’ willingness to pay for that value. The key battlegrounds, therefore, in the predictive publishing company will be market segmentation and modelling price to deliver profit in those segments.

In this environment, one can envisage a host of “what-ifs”; all of which (and more) the predictive publisher will need to model both within a conventional 4P (Price, Product, Promotion, Place) environment and in subsets – e.g. market segments.

In **Table 1** (below), a selection of elements is shown which may form part of a segment analysis for any publishers seeking to analyse its segments with a view to understanding potential events and forecasting a variety of scenario outcomes. The table is not intended to be indicative of exactly what a company *should* research but it does highlight a number of areas which a publisher may seek to analyse as part of a strategic predictive plan.

Table 1: Example of Segment Data Collection to Support Predictive Analytics in the Publishing Industry

Price	Product	Promotion	Place
Segment shrinks $x\%$	$x\%$ shift to e-book	Data building	Re-seller consolidation
Segment grows $x\%$	generic content threat	Data cleaning	Seasonal returns
Price elasticity	Content supply	Testing and feedback	Brand exposure
Component value	Brand relevance	Brand effectiveness	Online visibility
Bulk price per segment	Product visibility	KPI analysis	Re-seller performance
Event influencers	De-bundling	Customer mapping	Clout to competitor
Part/supplier Defects	Intra-company offers	Frequency	Price ownership
Supplier components	Redundancy	Timing	Geography
Returns/Upselling	New entrants	Source	Reach

An examination of these data sets highlights some exciting areas for defining company strategy. Below I provide a sample of four questions which companies might be asking to give the reader an understanding of the impact of this way of thinking on board decision-making:

- if the segment shrinks by $x\%$, what are our revenue strategies for the products and customers we serve there?
- If there is a shrinkage, what is our exposure in the segment and can we acquire more customers in that segment?
- If Waterstone’s were to shut down all its shops in Scotland, how do we leverage revenues and profits?

- Can we model the impact of re-investing in our direct-to-consumer retail website to set off against a predicted decline in direct mail sales?

It can rapidly be envisaged that, by thinking about market place trends and the impact of developments, company management moves beyond the creation and delivery of products alone towards a servicing of a market and its needs to deliver price optimisation and revenue and profit stability.

Staffing for predictive analytics

Yet data collection of this type – and by segment – is not a simple task; hence the earlier acknowledged requirement for a company understanding of “one version of the truth”. Within a publishing company, such data collection and assessment may have a number of competing staff members looking to “own” such a function.

This is contentious. In his classic work, *Transforming the Company* (Second Edition, Kogan Page, London 2004), author Colin Coulson-Thomas asks this question: who speaks for the customer in the board room? He writes:

“Departmentalism and professionalism are curses upon those trying to develop network organisations. We have seen that vertical departmental barriers are generally the prime source of delay in delivering the value sought by customers. The consequences of departmentalism are painfully apparent in boardrooms. “Specialist” directors in the boardroom are often obstacles to, rather than facilitators of change.”

The same applies to a role involving predictive analytics. Ideally, the predictive function should reside within a strategic marketing role within the company; in all likelihood a top-level function similar to a senior product manager but with board-room clout and influence and not necessarily seen as being “a part of marketing”. Matrix management capability is crucial to highlight the role as consultative and to avoid the position being seen as territorial. Such an appointment would be able to:

- Engage with Editorial and Publishing teams to discuss market trends and matching product delivery to strategic reach ambitions
- Liaise with Marketing teams to gather core data along agreed “one version of the truth” guidelines
- Work with Sales teams to implement effective pricing regimes designed to leverage profit in all segments
- Negotiate with – or advise others on negotiations with - third party suppliers to ensure maximised efficiency to the bottom line
- Have the complete confidence of the Finance Director and Managing Director in developing strategy and, if necessary for driving through core price/profit strategies

In short, such a role would need to be *seen* as independent and objective rather than territorial; this would permit a greater sense of commitment from all function heads without the role being seen as a threat to any. Having said this, of course, it would be important for the role to be seen as being at least on parity with functional heads so as to ensure that the outcomes of predictive analytics were

not seen as trophy pronouncements which were never implemented. The role would facilitate a process which had “buy in” from the very top of the business.

The implementation of predictive analytics

It can be appreciated that predictive analytics focus on strategic pricing to optimise core market segments. For this reason, the strategic outcomes of the analytics phase must be observed if the business is to take advantage.

The analytical phase will produce an array of pricing options across the product range, all of which will need to be enforced if the company’s targets are to be achieved. Some examples may include:

- Sales of e-books to e-tailers to be sold at a discount of x
- Online sales via the company’s website to reduce discounting in profitable sectors
- Pricing of all products to be based on price sensitivities of top customers (the Pareto Principle)
- Dropping product ranges below certain price points
- Product Life Cycle price changes
- Revision of price skimming or market penetration pricing if results not effective
- Additions/exclusion from product bundles by segment

Crucial to effective implementation is the analysis of sales channels: where discounting decisions are being made, who is making them, why they are making them etc. Enforcement of strategic pricing as a result of predictive analytics is crucial to ensure growth in the business; published rules must be produced (and revised if necessary) and these are to be adhered to.

Pricing, after all, is crucial to brand perception: the first weakness in any pricing and positioning strategy occurs when the first salesperson succumbs to consumer demand without top-line (informed) clearance. Pricing and perception is far too important to be left to individual sales and marketing personnel to implement on a whim.

It’s useful here to quote from Dickman, Harris and Hanson directly:

“Recently, responding to a decline in margins, a building products manufacturer examined the contracting behaviours of its sales force. The company’s strategic intent was to ensure that discounts and service levels always rewarded its most valuable customers.

What the company found, using in-depth descriptive analytics, was that certain sales offices were offering the lowest prices to their high-cost customers simply to meet revenue quotas. By instituting more disciplined, data-driven negotiation guidelines and incorporating margin into the salespeople’s compensation structure, the manufacturer was able to stem this behaviour and even recover some lost customers.

Critically, the company also used sophisticated predictive analytics to calculate the risk of pricing particular products and deals higher. As a result, it was able to manage the risks of revenue and profit loss associated with stricter pricing guidelines. The company now estimates that its more strategically-aligned approach to pricing has increased profits by more than \$100 million “

Of course, achieving a \$100 million increase in sales is beyond the power of most publishing companies but the point is that there is *opportunity*. So the question for publishers – especially smaller ones fighting tight margins and tight deadlines – is where to start?

Where to start

In order to develop a predictive analytics mentality, publishers can select a meaningful part of their portfolio. Our authors state that “starting with the greatest opportunity is common sense”. Of course, publishers may well be nervous about immediately committing to a process on a part of their portfolio which is working well. In my experience of working with boards, difficulties immediately arise about putting a key part of the business at risk. Hence, it would be prudent to assign a meaningful portfolio to an initial test run; not some barely-alive under-performing element but perhaps a part of the business which you know to have potential.

In working on a smaller target area within your business you can adjust core areas – particularly in the area of descriptive analytics – so that you can hone the processes for roll-out later. Similarly, projections based on market size, penetration, prices, revenue and profit can be tailored and adjusted so that more complex and reliable algorithmic approaches can be used. This approach has an additional advantage in that “under the radar” changes can be made without implying a company-wide approach too soon. Better to build the skills than to go out “all guns blazing” to be shot down in flames and doom the project to external failure and internal lack of support.

Finally, it is important to invest in the right staff to undertake this function if it is to be successful. Our authors state that “*few companies manage analytical talent as a strategic resource*” and certainly this has been my experience too. Larger publishing corporations are able to (and indeed are now) investing heavily in marketing strategists and professionals who can use descriptive analytics to inform predictive thinking. But smaller publishers by definition are focused on very tight budgets to drive top line margins. As we have already discussed, this latter approach will not create a changed business model and nor will it be able to do anything other than create a multiple (based on new units) of what it has been able to produce before. As Dickman et al make clear:

“What distinguishes talent-powered analytical organisations isn’t just the quality of their analytical talent; it’s their ability to unleash their analysts’ talents to maximise and continually expand the company’s analytical capabilities.”

For a smaller publisher, however, recruitment remains an issue as the perceived benefit at an early stage could be seen as too much of a risk. In such cases, publishers may choose to recruit an interim practitioner to help develop thinking and processes within a business, to trial the process and then to review future options for the company.

Conclusion

In their work *The Price Advantage*², McKinsey authors Marn, Roegner and Zawada paint a convincing picture of the impact of price in delivering sustainable profit and revenue growth, reporting that *if*

² The Price Advantage by Michael V Marn, Eric V Roegner and Craig Zawada. First Edition published by Wiley Finance 2005.

volumes and fixed costs stay the same, a 1% increase in price can deliver an 11% increase in operating profit. They write:

“Setting prices for goods and services is one of the most fundamental of management disciplines. It is unavoidable. Every product and every service sold since the beginning of time has had to have a price assigned to it. And setting the price is among the most crucial, most profit-sensitive decisions that all companies have to make. For a host of reasons, few ever develop anything resembling a superior, business-wide, core capability in pricing. In other words, few companies build pricing into the distinctive business advantage it can be.”

In this paper, I have argued the case put down by Accenture consultants Dickman, Harris and Hanson for descriptive analytics forming the bedrock of predictive capability. By predicting future outcomes more robustly, and by placing this function at the heart of a publishing company, publishing boards can begin to turn their attention away from the endless churn of product delivery to meet arbitrary profit margins.

Instead, they can focus on strategic markets, with a view to revenue potential from a complete market rather than individual products. Of course, product performance will be key but by understanding market potential and by modelling through segmentation, companies will focus their board discussions on issues significantly more strategic than the balance sheet and monthly figures alone. Figures in isolation, after all, mean little and create stresses disproportionate to their size.

I conclude with our Accenture authors’ own concluding words, which are highly pertinent for publishing companies at a time of great commercial stress:

“In short, business leaders who grasp the value of predictive analytics can stop looking over their shoulders to see what their competitors are up to – and start taking charge of their own destinies. And that’s something their shareholders all want to see.”

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