

## Retail Success Story

### WHSmith – Contributing to Profit

WHSmith is the UK's number one family retailer selling a range of products that extends across education, entertainment and information. Each year, WHSmith High Street stores sell enough pens to circle the earth; enough books to fill a library shelf from London to Edinburgh; and some 122 million magazines and newspapers each year which stacked one on top of another would be 69 times taller than Mount Everest.

But competition is fierce, with profits born from thin margins earned by providing customers with the products they want. Understanding what customers want – and what is making money – are the keys to success.

To better ensure that its front line people in the stores and those that manage them have the information needed to maximise revenue earning potential, the company turned to MicroStrategy. The results have been dramatic.

Not only has the company's MicroStrategy Business Intelligence Platform™ delivered substantial benefit to WHSmith's bottom line, but return on investment has also been achieved within just 10 months. Arguably even more significant in the longer term is the effect the solution is having on the culture in its stores.

Steve Walker, a WHSmith store manager 22 years with the company explains: "We can focus on contribution to profit, not just on sales. It's a huge change. I am more informed about my business and I can run it more efficiently. This new insight has allowed me and my colleagues to challenge ourselves more than we have ever done before. In the past, we talked about sales. Now we talk about contribution to profit. Before, I couldn't really compare our performance with other stores – now we benchmark ourselves every week and even learn from each other.

#### Turning Data into Actionable Information

For many years, data from store EPOS (electronic point of sale) terminals has been fed over dial-up and leased lines into the company's corporate Teradata® data warehouse. A bespoke data analysis tool ensures that headquarters' staff have access to the information they need to understand the big picture. However, what was missing was the ability to feed back the data to the stores in a way that enabled information for better day-to-day management.



#### Challenge:

WHSmith recognised that the key to maximising its revenue earnings potential was to have a greater understanding not only of what its customers wanted, but also by identifying what sales were making the most significant contribution to profit.

#### Solution:

MicroStrategy provided WHSmith with a 'proof of concept' five day intensive examination of the MicroStrategy 7i platform, offering an enterprise-class analytical server allowing all users the capability to process a variety of reports and analysis. In addition MicroStrategy were able to offer a Web based scalable solution that placed no demands on users other than to access the system via their Web browser. MicroStrategy were clearly further down the Web route than their competitors.

#### Benefits:

Within just 10 months the MicroStrategy Business intelligence platform has provided a substantial return on its original investment. In addition the solution has not only contributed significantly to WHSmith's bottom line but also is having an extremely positive effect on the culture within its stores.

"The richness of information that exists within an organisation like ours is massive," says Mark Leckie, Business Systems Manager for WHSmith. "We have over 550 stores on the high street and the larger branches each sell over 70,000 product lines. The challenge is to make that information available to people in such a way that they can act on it. Before we developed our MicroStrategy platform, store managers could really only follow their gut instincts in terms of



what were their best selling lines – and even then, only for their own store. Now they can download reports including one

telling them what the best selling 20 lines are, not only in their store, but also for those in the same area or region. This might identify, for example, that five items appear on everyone else's top sellers but not theirs. That is when it really starts to hit home – when you realise that the item left forgotten in the corner of your store is the line others have been making a lot of money from."

## Opening the Information Treasure chest

WHSmith has sophisticated end users of business data, and in addition to its Teradata warehouse, the company makes use of a variety of analysis tools. The access of area and store managers to this potential treasure trove of information was limited, however, to a series of pre-formatted reports that contained basic profit and loss type information. Also, because historical data was difficult to access, there was no readily available comparison with previous years' performance.

Just over two years ago, with the creation of WHSmith's intranet came the opportunity to address the issue. The company recognised immediately that it wanted a Web-based information solution, as it was not felt feasible to move large amounts of data across the wide area network serving stores. The solution would also have to be easy-to-use and offer users a range of up-to-date weekly reports.

A tender process which considered business intelligence solutions from the world's major vendors saw MicroStrategy emerge as the front-runner, even ahead of other well-known systems already in use at WHSmith. "While other systems such as Cognos and Business Objects were being used as departmental analytical tools,"

recalls Trevor Dukes, Project Manager within Business Systems, "they did not appear to be an industrial-strength platform capable of working across the entire organisation. We also consulted the industry analyst company Gartner, which endorsed MicroStrategy and confirmed that it had the product set to meet our requirements."

## Proof of concept

In fact, MicroStrategy gave great importance to the product fit and offered WHSmith 'proof of concept' – a five-day, intensive examination of the main elements of the MicroStrategy 7i platform. The retailer wanted to explore how the platform could integrate with its data warehouse and how easy it would be to develop sales-based reports.

The key components of WHSmith's MicroStrategy platform were:

- MicroStrategy Intelligent Server™, an enterprise-class analytical server optimised for enterprise querying, reporting and OLAP analysis and able to process report requests from all users through Windows® and Web interfaces.
- MicroStrategy Web™, providing users with a highly interactive environment and low maintenance interface for reporting and analysis.
- MicroStrategy Desktop™, the business intelligence software component providing integrated query and reporting, powerful analytics and decision support workflow on the personal computing desktop.
- MicroStrategy Architect™, a rapid development tool that maps the physical structure of the database into a logical business model and holds those maps in a centralised metadata repository.

Looking back on the proof of concept phase, Dukes recalls: "We were also very pleased to confirm the inherent scalability of the solution as this was a key driver for us." Another critical area was MicroStrategy Web, MicroStrategy's HTML-only Web solution that – with its 'zero footprint' on the desktop – places no demands on users other than to access the system via their Web browser. Support for open standards like XML and Java would also pave the way for the rapid development of new reporting tools and information delivery of tools.

"MicroStrategy was clearly further down the Web route than their competitors," recalls Leckie, "but another thing we looked for was a cultural fit. MicroStrategy, like us, are oriented towards getting the most out of information in a way that makes a difference to users."

Dukes expands: "For us it was a case of making sure that we could work with them. They were prepared to work with us. They weren't going to dictate what we should be doing. The key issue was could they join the team? It actually worked out really well, they were very supportive and had very good quality people."

The proof of concept confirmed MicroStrategy's selection, contracts were signed and a three-month pilot scheduled to start just seven weeks later in ten stores. While four WHSmith people were trained to be certified in the use of the MicroStrategy toolset, three MicroStrategy consultants joined Dukes' team and began developing the data strategy and reports. Critically, a group of area and store managers were also closely involved in developing the reports, including area manager Ian Rowley.

## MicroStrategy Consultants Adding Value

Rowley remembers being impressed by the consultants' contribution. "MicroStrategy helped us to understand the type of information we needed, from what perspective we needed to examine it, and therefore how they could make the platform work for us. They took ideas and incorporated our feedback into the software. Sometimes they forced us out of our comfort zone, making us question what we had done as well as making us look at maintenance, administration and usage in a completely new way."

From that focus, three key report objectives emerged:

- educate managers at the 'contribution to profit' level. Historically reports only really highlighted sales volumes – far more important to a store's commercial well-being would be to focus on the profit margin of each line and its contribution.
- provide the ability to understand what line is making a contribution. Rather than see the store as a site where various products were sold, people should instead view the store as a single entity and be able to understand and influence the role and impact of each line on the overall performance of the store.



- provide information that would enable managers and their teams to take action. Timely, comparative information about other stores' performance at a line level would enable people to help identify how best to maximise contribution while delivering customer satisfaction.

While reporting requirements were being finalised, WHSmith and MicroStrategy built the software platform and integrated it with the data warehouse. It says much for the skill and commitment of the team that, after just seven weeks the pilot went live in ten stores.

## The Critical Importance of User Feedback

"We felt it was very important to understand how stores would react to the new system before we deployed it across the organisation," explains Dukes. "It was all very well for us in the centre developing a range of reports, but how would they be used in a store environment? And what were the training requirements?"

User feedback from the stores was very positive, and included refinements that would further improve readability. The most important aspect flagged was the need for a 'lock row header' facility so column headings remained visible as users scrolled through data.

"It might have seemed a minor issue but from a store's perspective it was very important," recalls Dukes. "We fed the problem back to MicroStrategy. They were very responsive and rewrote the code to provide that functionality. Even better, the change has now become part of the core product so I have maintained a standard platform as we move forward."

The pilot also proved that the reports were helping stores ensure that top contributing lines were always in stock. It also highlighted the need to provide a deeper level of information that enabled people to understand sales activity within a product area such as stationery.

Dukes explains: "By using information in a live environment we started to look at how it would help people do things differently. For example, if you know what your top contributing lines are, it might make sense to prioritise the replenishment of ranges which contribute relatively more to revenues. And if you go down a level, you can begin to understand that some lines that might be taken a little for granted - lever arch files, for example - are actually among the top contributors and need to be replenished early and throughout the day."

## Business-led Training

Importantly, the pilot made clear the type of training people required. A core team of people from stores and regional commercial managers were brought together to design the training. It would have to be hands on, and concentrate almost as much on how to 'drive' a PC as the application. And while the training went through the reports, the most important thing was to explore the concepts behind them - such as contribution - and how the information could be used to support the business.

To quickly roll-out training to some 550 stores and make it credible, WHSmith people undertook the training in a cascade programme. Initial one-day training sessions were held for around 20 people who included area managers and nominees from their stores - two sessions in the North and two in the South. Over the following three weeks these teams trained all the store personnel in their areas, with the system going live throughout WHSmith's 550 stores nationwide and on schedule.

"I'm a great believer in not training too far away from actual deployment," says Dukes. "It was also critical that people didn't lose sight of the need to continue to serve the customer. We didn't want people running reports when they should be serving customers, so the reports needed to be embedded into their working day, not grafted on to it."

## People Embracing Web-Intelligence

The extent to which that goal has been achieved can be measured by the degree to which the platform has entered the lexicon of WHSmith day-to-day business language. WHSmith's MicroStrategy platform, officially known as Web Intelligence, is now universally known as Web-I.

When people talk about Web-I they are not just describing the application. It carries with it a far deeper meaning, of a new business-led debate, a new focus on contribution to profit, the ability to more proactively manage the store environment and of the stores' increasing influence on the centre.

Store manager, Steve Walker, provides an insight: "*The impact of Web-I has been substantial. It gives me the information on a weekly basis that I need to benchmark myself against similar sized business in my area, investigating performance to a line level. It helps me understand how much contribution I am generating from a given amount of space and compare it to others.*"





And if any anomalies are found, Walker says he may now phone his colleague in another store to investigate what the differences might be. *"Is he doing anything in his store that I am not doing? Or it could be that he has a regular bulk order; or is the problem that we are not replenishing stock in my store fast enough which might be flagging a personnel training need? This is information that enables me to take action, to better drive our overall performance,"* explains Walker.

The impact of being able to recognise and make use of the various 'business levers' can be soon grasped, says Walker. For example, most of the profit from the wide range of computer printer cartridges on sale, may be generated by sales of just six items. *"Web-I allows me to identify these critical areas of my business. And for the first time I can see my store's performance compared to others and I can challenge other store managers on their performance."*

*"This is a significant culture shift. Information from Web-I now forms the basis for most of the discussions at area monthly meetings. For example, the first thing we look at is receipts against targets and we can look at reasons for variations together. It also enables me to have similar conversations with my own people which can help me understand why, for*

*instance, the lady who looks after greetings cards in my store is selling so many cards and making so much money."*

## Unlocking the Power of People

From his area management perspective, Ian Rowley too recognises the impact. *"It has shown the business that when you unlock the power of the store manager and their teams they can really influence sales and their interaction with customers. We can identify local tastes more easily, and meet them. We can also look more critically at promotions planned from the centre. Web-I gives store managers the ammunition they need to question planned promotions armed with real facts and ensure that everything passes the 'so what' financial test,"* observes Rowley.

The increased influence stores can exert on the centre was brought into sharp relief in Rowley's own area when he recognised that shredding machines were doing very well in several of his stores. Now virtually all the stores in the South West carry paper shredders and the office equipment range is being built up, even to the extent of introducing WHSmith-branded shredders.

"Web-I is giving me and my store managers a real handle on what the drivers of our businesses are. It's enabling us to challenge the business by reflecting what our customers' want through a new understanding of figures and information. And yes, there is power in peer group pressure, but even more important is the fact that the stores are now talking the same language as the centre, that we are all more clearly focused on the same things, guided by the same information," Walker explains.

### Spotting Problems Quickly

Another group of people benefiting is WHSmith's Loss Prevention Group. Brett Betton, one of 12 Loss Prevention Specialists whose job is to help stores protect their profits by minimising unnecessary losses, explains: "Web-I enables me to better target resources and to be more proactive by seeing patterns building up faster. Very often the problem is an in-store process error which, thanks to the weekly reports using up-to-date information, we can now get on top of typically three months faster than we could before." He is particularly pleased that reports are continually being developed, and is looking forward to a new series of exception reports.



### An Exceptional Future

Mark Leckie elaborates: "One of the reasons we partnered with MicroStrategy was because their the most advanced when it comes to true exception reporting. There is little point in having lots of data if you have to trawl through it to find anything interesting - it is far more powerful if the system actually presents the valuable data to you. True exception reporting is one of our next key focus areas."

It's a very real scenario as Rowley echoes: "I'm actually in the leadership business and I get best results by encouraging people to do more of the right things. This sort of exception report would, for example, enable me to make an unplanned detour to a store and congratulate someone for doing something that has made a difference. That is incredibly powerful."

"When we began this project, we knew that we had chosen the right business intelligence platform for our needs. Working with MicroStrategy has been a great experience all-round," says Leckie. "We were thrilled by the fact that, from end-to-end, the deployment of this venture took less than six months and MicroStrategy provided us with some customised features to enable us to get optimum use out of the platform without affecting other WHSmith production systems."

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