# The Race to Realization

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EXECUTIVE BRIEF

# Executive Summary

To survive in today's constantly changing business environment, you need to be able to make decisions and take action quickly. To *thrive* in today's business environment, you need to be able to make decisions and take action more quickly than your competitors. This is the essence of what TARGIT offers: the ability to identify business opportunities and challenges, and address them more quickly than your competitors. TARGIT has achieved this by maintaining a laser-sharp focus on the objective of identifying opportunities and challenges, understanding what these mean for the business, and taking action to capitalize on the opportunities and address the challenges.

Traditional business intelligence (BI) vendors provide different solutions for different user groups that require different data-access methods. There has been some effort in the marketplace to consolidate these various methods of accessing and working with data to present a single platform for all methods. The primary drivers for this, however, are to provide a single platform for IT administrators to work with—thus reducing the diversity of skills required, resulting in reduced workload—and for the customer to have a single "throat to choke" for any commercial or technical issues. The objective has not been to provide a single, seamless experience for a single user to work with data in many different ways.

TARGIT is a company with a focus on providing a single, seamless experience of working with data. Its approach to the challenge within BI has resulted in one of the most homogenous platforms on the market. Its platform has two distinct features: the seamless transition from one way of working with data to another; and built-in "intelligence" within the platform. The combination of these features results in what TARGIT describes as "the fastest way to better decisions."

As a result of this focus, the TARGIT BI platform is best suited to decision makers within an organization. From the C-level executive to the production manager, anybody that needs to understand the business environment and make decisions or take action will benefit from the TARGIT BI platform.

The main BI areas that the TARGIT BI platform hasn't been designed to address are **production reporting**—where hundreds of thousands or millions of reports need to be produced (and potentially printed) in a short period of time; **complex reports**—reports that need some complex data manipulation within the report, or a custom (often graphical) layout; and **embedded BI**—applications that need reporting or analytics as a part of the application. Given the maturity of the TARGIT BI platform, these areas can be addressed to a point—and indeed, TARGIT has customers using its platform to generate relatively complex reports for thousands of users—but the platform has not been designed to address these BI requirements directly.

# Introduction

Colonel John Boyd was a US Air Force fighter pilot and military strategist in the late twentieth century. He is well known for the "OODA loop" (observe, orient, decide, and act) concept. The OODA loop is a process that every one of us goes through before we take action. We **observe** the environment, understand the context of the environment (i.e., the implications of our observations, or **orientation**), **decide** on the action to take as a result of the orientation, and then finally take this **action**. The results of the action taken and the impact on the environment is fed back into the observation and orientation phases of the next loop.

Boyd used the OODA loop to describe how to overcome an enemy in a dogfight without the use of brute force. Essentially, his idea was that the key to victory is to be able to create situations where one can make appropriate decisions more quickly than one's opponent. If a fighter pilot can iterate through this OODA loop faster than his opponent, he can make decisions faster, keeping one step ahead of the enemy, causing confusion and ultimately "psychological paralysis."

Companies need to focus on iterating through this OODA loop faster than ever, not just to stay one step ahead of the competition, but also to adapt to a business environment that is changing faster than ever.

TARGIT has focused all its efforts on one objective: to help companies iterate through the OODA loop as quickly as possible. Appreciating the benefits that the TARGIT BI platform delivers depends on appreciating this concept. In this paper, we outline some of the methods TARGIT uses to achieve its objective.

# Single, Seamless Platform

Virtually every BI vendor has some claim to a "single platform" for BI. However, the vast majority of BI vendors use this single platform as the foundation for disparate sets of BI technology that are targeted at different types of user groups. They have the data mining tools for the analysts, the ad hoc report development tools for the "techies" within the lines of business, the dashboards for the executives, and so on. The "single platform" is just a technology platform. Of course, this does have its advantages: a single vendor to contact if something should go wrong, reduced investment in hardware, and one set of IT skills to administer and maintain the platform, for example.

# BI Objectives: User Groups versus OODA Loops

There are very few BI vendors that have a single platform with a single set of seamlessly integrated BI tools. TARGIT is one of those vendors. The reason it has a single, seamless BI platform is the primary objective of its product: helping companies iterate through the OODA loop as fast as possible. Contrast this with the primary product objective of the majority of BI vendors: to create tools that address the information needs of the different user groups within an organization. This inevitably leads to "siloed" BI solutions for different groups. BI vendors will sometimes integrate an acquired technology into an existing BI platform and continue to call it a "single BI platform." Clearly, it is virtually impossible to seamlessly integrate an acquired technology that addresses a completely different information user type (which is usually the reason for the acquisition) into an existing BI platform.

Thinking of the way the TARGIT solution has evolved puts me in mind of Apple. MP3 players existed before Apple introduced the iPod. Tools to rip CDs to MP3 files existed. PC software to play MP3 files existed. Apple's goal with the iPod and iTunes was to make the entire process of listening to music on the move easy and painless. Everything it did contributed to achieving that goal. From making it easy to rip your CDs to files that can be transferred through the PC application that "just worked" when it came to moving those files to your portable music player, to creating a simple interface on the music player for selecting the track you want to play, the entire "iPod/iTunes ecosystem" was designed to do one thing: make it easy to listen to music on the move.

By setting the primary objective of its technology to "identify challenges and opportunities and address them in the shortest time possible," TARGIT has created a "BI ecosystem" that reduces the amount of effort required to iterate through the OODA loop. I suspect that each new feature, version, and product is tested with this question in mind: "how will this new feature/version/product help reduce the time it takes to iterate through the OODA loop?" If there is no good answer, the feature/version/product is not developed. The end result is that TARGIT has created an extremely efficient platform for identifying opportunities and taking advantage of those opportunities.

It just so happens that this platform also addresses the traditional BI objective of fulfilling the needs of disparate user groups that the rest of the BI industry is so focused on. There's dashboarding, data analysis, reporting, calculations, alerts, what-if analysis, data mining, predictive analysis, performance management, data sharing and enrichment, monitoring, workflow, and distribution and communication of results. The key point, however, is that all of these are very tightly integrated into a seamless BI environment that makes the transition from one phase of the OODA loop to the next a trivial task. These transitions feel like natural progressions rather than the usual jumping into different tools to achieve different tasks.

# In-built Intelligence

Having a single platform that enables seamless transition from one "state" to the next is a vast improvement over other, more traditional BI tools. Adding intelligence into the platform just increases the speed with which analysis is done and decisions are made. There are several areas of the TARGIT platform that employ intelligent ways of working with data. These are described below.

The first manifestation of the in-built intelligence is in how the data presentation is influenced by the data itself. Time data, for example, lends itself to being presented in a graphical form well suited for trend analysis—bar charts, area charts, or line charts. The amount of data determines how they are presented, too. Data with few "categories" is automatically presented graphically in charts. Data with many "categories" is presented in cross-tabs or flat tables. Of course, this presentation can quickly and easily be changed by the user—it just means that, in the majority of cases, there is one less step for the user to take to get the data in the most appropriate format.

And if the user regularly uses a specific method of working with data, the platform "learns" this and starts defaulting to this method for that user. For example, financial controllers find that the default presentation of data becomes multiple linked cross-tabs with drill-downs and links to transaction-level data. Sales representatives, on the other hand, are presented with bar charts, pie charts, and maps with color-coded dots or zip codes representing their customers—even when viewing exactly the same data as the financial controllers. Drill-down for the sales representatives is to the full sales history for each customer. The financial controllers and sales representatives may be working from the same data, but the fact that they have different presentation requirements is understood by the TARGIT platform. Once again, the platform reduces the number of steps a user has to take to reach their objective. Drill-downs are not predefined, and so a user can become completely immersed in the data, following paths—without restrictions—to reach a conclusion.

TARGIT has a "TARGIT This" feature. This allows a user to drag an element (or "measure") to a "TARGIT This" area of the interface in order to see details on it. For example, a user is able to drag "Revenue" to the "TARGIT This" area to get a default view of revenue over time, broken down by quarter. This is a single click-and-drag action that provides immediate insight into the measure that is of interest. Should the user be interested in the same measure broken down by alternative dimensions, these dimensions can simply be dragged and dropped into the analysis area. Within seconds, the user has a view of revenue broken down by time, salesperson, and product.

Once the user has a view that is satisfactory, with two clicks it's possible to create an intelligent agent that will provide an information alert when a key performance indicator (KPI) changes within the underlying data. The data is then constantly monitored, comparing it to the intelligent agents that have been set up. Changes in the data that exceed the thresholds set in the intelligent agent trigger an alert that can be sent to the Windows desktop client or via e-mail.

Structured data is only a part of what's needed to make an informed decision. Data needs to be explained, backed up with experience, and complimented with knowledge in order to be a reliable source for decision making. Currently, the best source for answering the question "why is the data the way it is?" is other human beings. TARGIT's Intelligent Search feature provides a way to link explanations about the numbers to the numbers themselves. With a single click, again, a search is performed on documents and e-mails, taking the current context of the data as the source of the search.

Intelligence built into the BI platform in the areas of data presentation, user behavior, data monitoring, and search contributes to the single objective of the platform to iterate through the OODA loop more quickly than the competition.

# Innovation in BI

In addition to the seamless platform and in-built intelligence, there are many innovative features within the TARGIT BI platform. Features that deserve a mention include data filtering, information lineage, storyboards, sentinels, and the desktop client.

Data filtering is a single-click action. Taking the above "TARGIT This" example a step further, a user can focus on a specific quarter simply by clicking on that quarter in the bar chart. This applies the quarter's filter to both the salesperson breakdown and the product breakdown.

The TARGIT BI platform makes it so easy to navigate the data that, unless you have a clear idea of where you're going or what it is you want to achieve, you could lose yourself in the data. The platform has a solution to this, in the form of the "Info-i." This is a pop-up box that describes the data in the pane and the filters applied to that data. One of the most common questions from BI users—even those that receive "regular" reports or analysis—is "what am I looking at?!" Data that is presented in a logical way still needs to have its lineage described. The Info-i is TARGIT's way of doing this.

Once a decision has been made and a plan put in place to resolve an issue or take advantage of an opportunity, everyone that this decision affects needs visibility of how the proposed changes are contributing to the goal. This is the objective of the TARGIT storyboards. Storyboards provide an ongoing view to all those contributing to the business objective.

Sentinels essentially alert you in advance to potentially obscure things that are going to happen. They monitor the underlying data in real time, with the sole objective of identifying trends and extrapolating to determine potential upcoming issues. The sentinels do not restrict themselves to specific "domains," preferring instead to look at the entire data set as a whole to see how one area has an impact on another seemingly unrelated area. They look for patterns in the data and then report when they start to see a pattern re-occurring that has had a negative result in the past. Sentinels enable business people to take preemptive action to prevent the same negative result.

For business users to be able to take action as quickly as possible, they must have instant access to the data. Having to interrupt your working flow to check the status of the business in a Web browser—just in case it's reporting an exception—is likely to result in a delayed response. The TARGIT desktop client immediately alerts business users to any exception occurring in the underlying data, based on intelligent agents that have been set up, enabling them to go directly to that exception from within the Windows desktop environment.

# Results and Benefits

The TARGIT platform can undoubtedly increase your competitive advantage. Even if you already have a standard BI platform, the speed with which data can be analyzed and "actioned" with the TARGIT BI platform would likely be worth the investment.

The TARGIT BI platform enables you to identify challenges in advance, giving you time to fully prepare for these. For example, having visibility of the fact that customer call rates are likely to decrease allows you to staff the call centers appropriately.

Overcoming the challenges that many BI users face in terms of being restricted in what you can do with the data (and not understanding the meaning of the data) results in faster decisions being made. With the TARGIT BI platform, you are able to become "enveloped" in the data, without restriction, enabling you to form a much more complete picture of the problem and potential solutions. Compare this to many BI solutions where the user has many questions outstanding after spending much longer trying to understand what the data means and how to work around some of the limitations within the tool.

Faster decisions result in an increase in business agility and competitiveness. You can be first to market with a new product. You can nip problems in the bud before they sap resources from the company. You can take preemptive action to ensure that your existing customers remain happy.

Being able to iterate through the OODA loop quickly ultimately results in increased revenue, reduced cost and company growth.

# Conclusion

TARGIT is the Apple of the BI industry. Apple focused on a single objective ("Make it easy to listen to music on the move") and created an entire integrated ecosystem designed to achieve that objective—an ecosystem that includes the iPod and iTunes. While other BI vendors focus on "extending BI to the masses" and "providing targeted solutions for individual user groups," TARGIT is, like Apple, focused on a single objective: "make it quick and easy to discover what needs to be done, action it, and monitor it." TARGIT has created an entire BI ecosystem designed to achieve this in the most efficient way possible.

# About the Author

Russell Cooper is TEC's BI analyst. He has over 15 years of experience in the enterprise software industry, and has a keen interest in how organizations maximize the value of their existing data. During his career, Cooper has worked exclusively for companies that have built their businesses around the storage, movement, and retrieval of data-from electronic data interchange (EDI) to BI, from fourth generation language (4GL) application development to geographic information systems (GISs). This experience has afforded Cooper a broad perspective on data and data management.

Now based in Ireland, Cooper has a global perspective on business, having worked in many countries including the UK, Australia, Denmark, and the US.

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