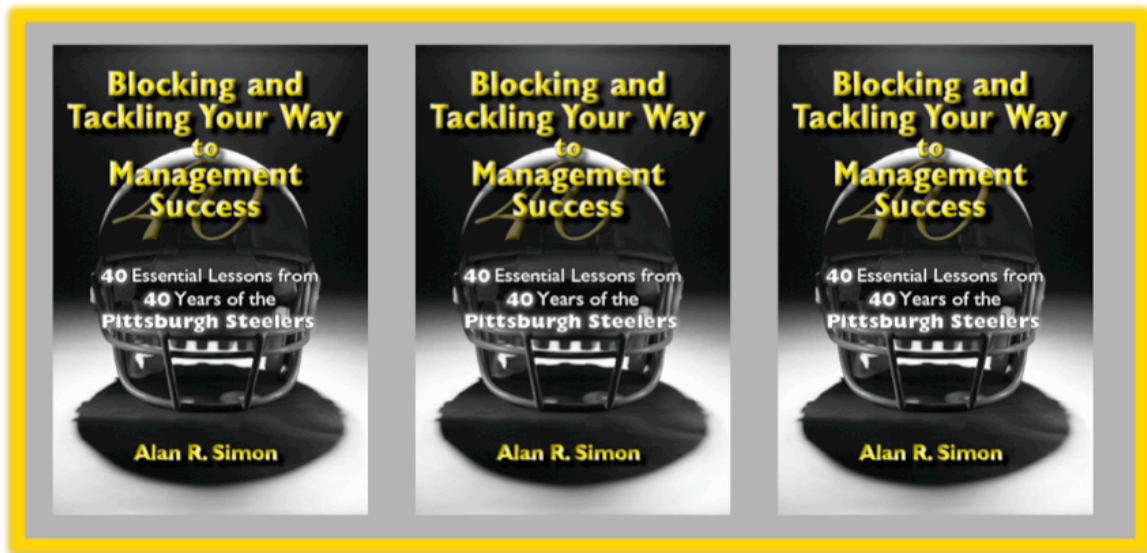


*The Alan Simon Series on  
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*Presents an excerpt from Alan Simon's latest book*



***Steelers-Style Management Lesson #4, 1972***  
**Having Loads of Data Isn't Enough:**  
**You need *World-Class* Analytical Capabilities**

This paper is an excerpt from Chapter 4 (Lesson #4) of the book ***Blocking and Tackling Your Way to Management Success: 40 Essential Lessons from 40 Years of the Pittsburgh Steelers*** by Alan R. Simon. Copyright © 2009 Precision Business Intelligence, LLC. All Rights Reserved.

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## Author's Introduction

**M**y recently published book *Blocking and Tackling Your Way to Management Success: 40 Essential Lessons from 40 Years of the Pittsburgh Steelers* uses forty years of Pittsburgh Steelers history – from the depths of their 1-13 record in 1969 through their sixth Super Bowl title in 2008 – as backdrop and analogy for (as indicated by the title) many important, thought-provoking managerial and business lessons that are especially aimed at beginning and mid-level managers.

Many of the lessons are “people management”-oriented in nature and are closely aligned with a particular decision or action the Steelers took in one season, while others use some facet of a given season as a sort of “parable” to emphasize the importance of a particular business function or some other important aspect of a company’s success.

1972 was the year of Franco Harris’ famous “Immaculate Reception” and the season in which the Steelers not only won their first-ever division title but also began their years of glory as the “Team of the ‘70s.” I used 1972 – specifically, the 1972 college player draft in which the Steelers surprisingly selected Franco Harris rather than Harris’ college teammate at Penn State, Lydell Mitchell, with their first-round choice – as the backdrop for a discussion of several business intelligence best practices that *should* be widely followed but still, disappointingly, fall short in way too many companies.

Unlike so many papers and articles about business intelligence that are rather dry – including some of my own, I have to admit – this particular paper should at least be “entertaining” as it conveys its message...*especially* if you’re a Pittsburgh Steelers fan. But even if you’re not, and even if you have little or no knowledge of 1970s-era Steelers history, I’m confident that the points raised and the examples used will still resonate with you as a definitely-NOT-dry-and-boring vehicle by which some very critical business intelligence best practices are presented.

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## ***Steelers-Style Management Lesson #4, 1972*** **Having Loads of Data Isn't Enough; You Need World-Class Analytical Capabilities**

Selecting Penn State's Jack Ham with their second round draft pick in 1971 had been a winning decision for the Steelers, so when that same school's Lydell Mitchell, Penn State's star running back, was still available when the Steelers' 13<sup>th</sup>-overall pick in the 1972 draft came Pittsburgh fans were thrilled. Mitchell had scored 42 touchdowns during his Penn State career, not to mention rushing for more than 1500 yards during his senior year. What an addition he would be to the Steelers! And after all, Penn State was sort of a hometown school for Pittsburghers with the campus located only two hours away in the middle part of the state. So here was a chance to add yet another sort-of-local college star to a team that had been improving year by year.

And the Steelers did use that draft pick to select a Penn State running back, just not the one everyone expected. Instead of Lydell Mitchell, they announced the name of the "other" Penn State running back, Franco Harris, a player who had mostly blocked for Mitchell throughout his college career.

*What in the name of Joe Paterno was going on here?*

Most every Steelers fan, even those who weren't alive or who were very, very young during the team's 1970s glory days, knows

the tale of Franco Harris: the Immaculate Reception, the many 1000-yard rushing seasons, the close brush with the NFL's all-time rushing yardage record before retiring in 1984, and the Pro Football Hall of Fame career.

To be fair, Lydell Mitchell wasn't exactly a slouch. He had a few 1000-yard seasons of his own in the mid-1970s with the Baltimore Colts<sup>1</sup> and usually picked up another 500-600 yards in pass receptions in his best seasons coming out of the backfield. But most would agree that Mitchell's professional football career was eclipsed by that of his former blocking back teammate.

Why did the Steelers make that surprise selection of Franco Harris instead of his higher-performing teammate? That question begs yet another: why were the Steelers "so right" that Harris would outperform Mitchell once they both got to the pro ranks?

And let's follow these two questions up with **The Big One**: why, year after year, were the Steelers able to find so many high-performing, long-lasting star players – including a whole cast of Hall of Famers – from the same

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<sup>1</sup> Interestingly, Mitchell wasn't selected by the Colts until the second round of the 1972 draft with the 48<sup>th</sup> overall pick, long after Harris' selection by the Steelers 35 positions earlier.

pool of college players from which every other NFL team was also selecting at the same time? The team consistently found these future greats not only in a given draft's first round, but in the second and third and even later rounds after every other team in the league had also had one or two or more chances to take those players away from the Steelers.

Part of the answer to these questions comes from the lesson of the previous chapter: not being afraid to form strategic partnerships (specifically, the BLESTO scouting combine in which the Steelers and other teams shared scouting duties and exchanged information) that could greatly benefit your own organization, even if the competitors with whom you're partnering can also benefit. The results from the pooled scouting efforts of the member teams produced mountains of data about available college players that could be used by the management of any of those participating NFL franchises to guide their selections in the upcoming draft.

But thinking about the Steelers' every-year haul from the college draft still begs the question about why their partners in BLESTO – the Bears or the Lions or the Eagles – couldn't and didn't do the exact same thing and take those players away from the Steelers. In almost every case, one or more of those teams had at least one chance to grab a player that eventually turned into a Steelers superstar.

Or, to pose the question another way (and segue into our business discussion): how were the Steelers, with exactly the same data as many of their competitors, able to make such important and *correct* decisions from that data?

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**M**y own particular area of specialization in the business world is a management and technology discipline known as *business intelligence*. You can find dozens of definitions all over the Internet for business intelligence (often referred to simply as BI), but here's a relatively simple – but straight-to-the-point – one for purposes of this book:

**Organizing and filtering through mountains of data so that when you ask “just the right questions” about the most important aspects of your business, you get the answers to help you make far better decisions than if you had to rely on incomplete information or just your instincts.**

In my experiences, most companies don't do nearly as good or thorough of a job with their investments in business intelligence technology as they should...which puts them at a severe disadvantage to their competitors who *do* better understand and exploit BI. Unfortunately, the handful of pages in this book allocated to the discussion of BI in the context of the Steelers isn't nearly enough for

a comprehensive look at the many best practices and lessons learned that separate business intelligence winners from the also-rans. But we can take a look at (in my opinion) three of the those most critical best practices. And so, continuing to use Steelers history as the backdrop, consider the following:

***1. You need to go far beyond rudimentary, after-the-fact reporting to achieve “real” critical insights and business intelligence.***

Imagine that the Steelers management and scouting teams went into the 1972 College Draft Day armed with nothing but simplistic reports indicating that Lydell Mitchell had rushed for more yards in his college career than Franco Harris, had scored more touchdowns than Harris, had a faster 40-yard dash time than Harris, and maybe a few other basic facts about their respective college performances that most likely indicated Mitchell was “better” than Harris. If the Steelers made their first round draft pick that day the way far too many organizations use business intelligence, they would have looked only at that handful of measures and then selected Lydell Mitchell because the data said he was “better,” and Steelers history would probably have turned out very differently.

But in actuality, the Steelers management and scouting teams were famed for going far beyond basic statistics and doing

sophisticated benchmarking, looking at obscure performance measures, and trying their best to answer questions along the lines of “tell me what is likely to happen if we make this draft selection over that one” rather than “tell me what happened in the past.”

Even though business intelligence as a discipline dates back to the early 1990s, far too many organizations use their analysis tools and data as if the calendar still showed 1972 and the Steelers were faced with their famed Harris-versus-Mitchell dilemma...and in the computing business, the days of old-style paper-based reports that were usually delivered on a stack of sprocket-hole paper and required managers to spend hour after hour scanning for a few glimmers of important information they might be able to use for important decisions.

So the next time anyone in your organization hands you a stack of basic reports and claims to be delivering business intelligence to the company, let your thoughts carry you back to how the Steelers made that difficult draft day decision in 1972 and do your best to move your organization into the 21<sup>st</sup> century (or at least past the end of the disco days!).

***2. Filtering and organizing your data is every bit as important as producing reports and analytics.***

As Draft Day in 1972 – or any other year – approached, no doubt

the Steelers draft team spent hour after hour digesting tons of information. But chances are they weren't spending a whole lot of time evaluating the 40-yard dash time, bench press numbers, game film, or much of anything else about Notre Dame defensive end Walt Patulski...the player the Buffalo Bills selected first overall. For one thing, Patulski was probably projected to go very early even if the Bills didn't select him, so the chances of him being available when the Steelers selected 13<sup>th</sup> overall were probably slim. And let's presume for purposes of this argument that the Steelers, with Dwight White and L.C. Greenwood already showing their stuff at defensive end, wouldn't have been all that interested in selecting Patulski even if he were still around when they selected. So why have data about Walt Patulski available at their fingertips as the 1972 draft drew closer? Better to concentrate their efforts on running backs and maybe other positions they thought they could use some help at.

What's my point? Simply this: another critical mistake many companies still make with their business intelligence efforts is to build their *data warehouse* – the collection of key information drawn together from a variety of sources – that's really more like a *data dump*<sup>2</sup>. You might think “So what's

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<sup>2</sup> When I wrote *Data Warehousing For Dummies* back in 1997, “data dumps” were so ubiquitous that I made specific reference to this problem. More than a

the harm? You can just grab the data you need, even if there's lots there you'll never touch.” My response, without going into too much technical detail to bore you: a data warehouse needs its data contents structured in “just the right way” to best support the types of analysis that deliver significantly higher value than simple reports. And the more superfluous data you have, the more you complicate your overall environment, impact response time, increase the potential for unintended problems from faulty data...well, the list of potential challenges goes on and on.

So when you're embarking on a business intelligence initiative, remember the prerequisite of “organizing and filtering through mountains of data” and that your first objective should be to reduce those mountains of data down to – ahem – manageably sized molehills (sorry about the bad pun). Even more importantly, remember that the exact content and structure of your “data molehill” will change over time. Going back to the Steelers as an analogy, not only did they have different players to evaluate in 1972 than they did in 1971, they probably went into their draft with somewhat different objectives. So as time goes on, make sure you adjust the data you're spending most of your time working with. You can always

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decade later, far too many companies still cobble together the same sort of everything-including-the-kitchen-sink data dumping grounds that do more to hinder their BI efforts than support them.

make additions or changes, but why complicate your life doing the equivalent of deep analysis of draft-eligible defensive ends if you're pretty certain you'll select a running back and need to spend your time on that particular problem?

**3. Don't look for "The Answer" from your business intelligence applications and environment; instead feed the results into your overall decision-making process.**

Did the pre-draft analysis performed by the Steelers management and scouts that led to that surprise selection yield a definitive answer with the exact words "Select Franco Harris!" – nope. What the Steelers draft team received from their analysis fed into the decision they made and the action they took, but it was *not* a "do this or else!" directive. Too often, users of business intelligence tools – the reports, dashboards, and other vehicles through which information is delivered – are looking for "the answer" and don't realize that the most critical decisions and the subsequent actions are rarely based on 100% certainty.

As I noted earlier, the Steelers didn't just run quickly a bunch of reports and seeing that Lydell Mitchell "scored better" than Franco Harris, call it a day and say "if they're both available when we choose, we'll take Mitchell; let's go play golf." The decision making process the 1972 Steelers management had then – and

however it's evolved to that which is in us today – no doubt makes great use of the analysis they perform on data about the draft-eligible players in concert with other data about the team, the league, and probably the world at large. But for the Steelers like most any other organization, the work processes to make critical business decisions deal *in part* with the results from analyzing data. Managers that ignore this important fact are essentially abdicating their responsibilities and, in many ways, making their own jobs superfluous. After all, if all decisions are to be made solely "by the numbers" why not put those decisions on auto-pilot and get rid of the human element?

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**I**t's all about the data. And how you collect it. And how you organize it. And how you present it. And how you analyze it. And how you use it to make critical business decisions. That's it; nice and straightforward.

Okay, we all know that business intelligence is far more complex than the highly summarized, super high level steps listed above. And understanding this complexity is your first critical step. I'm not saying that you need to become an expert at all the nitty gritty details of BI best practices and techniques – that's what top-notch BI advisors are for – but you do need to understand the best practices we discussed in this chapter, as well as having an appreciation that BI



is as much of an art as a science. I can say with certainty from a consultant's perspective that when I work with my clients BI is equal parts management consulting and technology consulting, and the clients that have that appreciation and understanding are the ones that make the greatest strides.

If it help, think of the decisions the Steelers made in the 1972 draft – or any other draft, in any year – as a metaphor for the data collection and analysis you need to do for your organization, and how the results of that analysis increase your confidence that critical business decisions you make will be the right ones. Again, there's no guarantee but your chances are far better with a solid business intelligence foundation behind you than without one.

After all, you can't always count on whatever your organization's version of the Immaculate Reception might be to make things turn out okay.

## About the Author



Alan Simon is the author or co-author of 27 books including *Data Warehousing and Business Intelligence for E-Commerce*, *90 Days to the Data Mart*, and *Data Warehousing For Dummies*. He is currently completing a new book about applying innovative best practices to a new generation of business intelligence solutions to enable enhanced performance management.

He is also the author of ***Blocking and Tackling Your Way to Management Success: 40 Essential Lessons from 40 Years of the Pittsburgh Steelers***, in which Alan – a native Pittsburgher and long-time Steelers fan – presents a year-by-year journey through recent Steelers history (1969 through 2008) as backdrop for critical lessons in management and business success. For more information or to purchase the book, or to learn about related book-based training for your company please visit:

<http://www.precisionbusinessintelligence.com/Books.html>

Alan is the Managing Principal of his own consultancy, *Precision Business Intelligence LLC*. He held vice president-level global and national BI practice lead positions at several professional service organizations before forming his own firm. His client work emphasizes BI and performance management strategy, architecture, and roadmap development along with techniques for revitalizing existing underperforming BI environments. He also regularly conducts “inspector general” style reviews of client projects.

Alan’s BI clients have included PNC Bank, US Steel, Highmark, Coca-Cola, McDonald’s, Quaker Oats, Pfizer, and many other global companies, plus governmental agencies such as the Pennsylvania Department of Transportation (PENNDOT), Pennsylvania Department of Health, Wisconsin Department of Administration, and the United States Department of Defense.