

# TECH UP *Or* LOSE OUT

**How To Use Technology  
As a Competitive Advantage  
In Your Business**

*Featuring  
11 Top Tech Experts in North America*

**FOREWORD BY JAMES KERNAN**

# **Chapter Fifteen**

## **Business Intelligence**

### **Phil Wright**

When a business reaches a certain level of success, getting to the next level can seem daunting. The business will encounter obstacles which will feel out of the owner's ability to control. Typically when this happens, the business will plateau and no matter how hard they work it seems impossible to break through to the next level. Businesses that want to grow need to build and deploy Business Intelligence systems, processes, visibility, and accountability to scale up.

#### **Business Intelligence (BI)**

Business Intelligence reduces the time it takes to discover, track, and analyze data in real time. With this awareness, the business owner and the team can quickly take action when needed. BI streamlines budgeting, reporting, forecasting, and cash flow with a complete overview of critical data in the business.

Marc Benioff, the founder & CEO of Sales Force, famously said that he runs his entire business from his smart phone. How do you think that is possible? How is it possible to run a nearly 150 billion dollar company from an iPhone? The answer is that Marc has boiled down his company's most important numbers onto a single pane of glass. He's built a Business Intelligences Owner's Dashboard. At a glance, Marc can see how the company is performing in all critical areas which enables him to identify early stage problems, forecast results, and have a real-time pulse on net new sales and customer satisfaction. That's Business Intelligence. Marc

knows what numbers to watch in order to manage his organization from any device anywhere in the world.

Ask yourself these questions to help evaluate if you need Business Intelligence in your company:

- Do you have real-time visibility of all of your revenue, departments, finances, production, and output?
- Are you pulling data from multiple sources manually to make decisions?
- Does everyone in your organization from the leadership team to the product team know in real-time if you're winning or losing?
- Does your company have goals, are they publicly visible, and are they updated in real-time?
- Does your business make important decisions based on subjective hunches, or do they utilize and leverage objective-based data?

### **How Business Intelligence Helps My Organization**

In the summer of 2019, I attended a conference with James Kernan and other IT professionals. When one of the speakers gave a presentation on the EOS® (Entrepreneur Operating System) and the power of building business intelligence, it was clear I needed to implement BI in my business.

Less than one year later, our organization has seen vast improvements in all areas of the company. We have seen improvements in the response time for tickets, sales numbers, and bottom line profits. Meetings with senior staff are now efficient and based on real-time numbers. We set goals for growth in each department and monitor our ability to achieve them. In fact, everyone in the company is now involved in achieving measurable goals – all the time. We have placed monitors throughout the company facility where everyone can see the data

supporting our achievements. We can also all see where we need to improve in order to reach goals for individuals, teams, departments, or for the companywide vision.

One of the things I like best is the fact the data is automatic and reported in real time. At any time of the day, whether I am in the office or not, the BI process continues. I can see what is being done and make corrections immediately when needed.

I cannot imagine running my company without business intelligence today. Later in this chapter I will share what we do, including actual screen shots from my own company dashboard, so you can see how BI operates for us.

### **Business Intelligence for Your Business**

BI can help your business operate at its peak performance. It can help you make snap decisions based on facts, rather than feelings and intuition. It can help you predict the future based on prior results so you can make wise and strategic decisions resulting in the greatest impact. BI enables CEOs, leaders, and managers to visualize trends and see real-time data on how key departments, production, and processes are performing. Most importantly, it can help you turn raw data into actionable decisions and predictable results and can help you see or be alerted to potential problems before they turn into colossal catastrophes.

BI helps businesses to make smarter and faster decisions. It gives quick at-a-glance answers to critical business questions without delays or human bureaucracy. Good BI can help your business benchmark its performance against competitors, the industry as a whole, and even create some internal competition between teams within your own company. BI doesn't lie. BI is the ultimate representation of facts that state objectively where you are today, at this moment, and where you have already been.

### **How to Find Business Intelligence Data**

Data collecting and data mining is essential for businesses. Today, all modern businesses from the small HVAC company to the mid-sized custom manufacturing business are all creating hundreds to millions of data points every single day. This data is created through the activities of

prospects, customers, quotes, sales, inventory, assembly, shipping, labor, etc. Most of this data is buried behind the software (apps) your business uses every day to conduct normal operations. These apps include your Accounting, Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), or your specific Industry's Line of Business (LOB) software.

If your business is operating on popular software from Intuit, Sage, Microsoft, Netsuite, Zoho, or Salesforce it's highly probable your business already has a mountain of *Historical Data*. Possibly you even have some *Realtime Data* that you can build Business Intelligence on today. Whether you host your apps in the cloud, on-premise, or both, you can build BI if there are methods to access the data.

Data stored in the cloud is usually accessible via Application Programming Interfaces (APIs) and data that is stored locally (on-premise) is usually accessible via a local SQL Database or data file. When it's possible to access the data directly, it's possible to build your own Business Intelligence.

### **How BI Data is Consumed and Analyzed**

Business Intelligence can be consumed in multiple forms such as Reports, Dashboards, Alerts, and Automation. Most businesses start their BI evolution with Reports and then implement real-time Dashboards and eventually add Alerts and Automation.

- **BI Reports** are printable snapshots generated on demand by visiting a website, launching an app, or scheduling an email. These can be delivered or printed automatically with specific recurrence patterns. For example, in our organization every workday at 7:00pm a scheduled report is emailed that displays the sales performance numbers for that day (*See figure 1*). This report is emailed to the sales manager and each member of the sales team. This daily email helps with accountability and visibility within our sales team.

Figure 1

## Sales Summary

Name	Start	End	All Calls	Call Time	FTA Scheduled	FTA Completed
Bill	6/30/2020	6/30/2020	49	01:57:00	0	1
Justin	6/30/2020	6/30/2020	55	01:23:00	2	0

\* FTA: First Time Appointment for that contact

## Scheduled Appointments

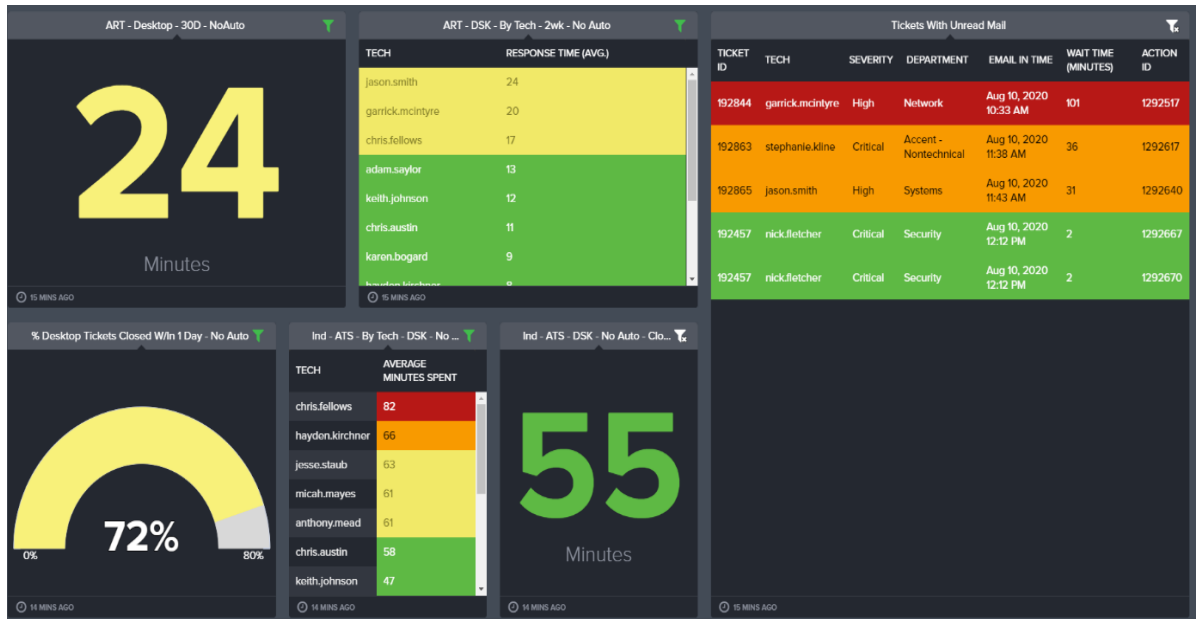
Name	Date	Company	Contact	First Appt
Justin	6/30/2020	Team Wellness Support, Inc.	Will S.	Yes
	6/30/2020	J & R Schiller, LLC	Ted W.	Yes

## Completed Appointments

Name	Date	Company	Contact	First Appt
Bill	6/30/2020	TD Rivers & Associates, LLC	James T.	Yes

- **BI Dashboards** are typically accessible via a website or an application. The dashboard can be setup to show either real-time data or historical data. Some dashboards are static, where you cannot interact with the data that is displayed. Other dashboards are interactive, meaning you can click on a gauge to get the data behind the visualization. In our organization we have mounted 42" and 65" TVs in each department that are connected to small form factor computers displaying real-time rotating dashboards. For example, the Sales Department displays the Sales Dashboard (*See Figure 2*) for 5 minutes and rotates to the Company Goals Dashboard for 1 minute, then repeats. All the dashboards automatically refresh every few minutes and change color between green (on target to achieve the goal), yellow (off target but very close), or red (off target by more than 10%). Everyone in the organization knows instantly how they are performing and how the company is doing at all times.

Figure 2



- **BI Alerts** are notifications of events or KPIs (key performance indicators) that fall outside of their predefined thresholds. These alerts can trigger different types of activities such as an email, text message, business process workflow, automated action, or some form of auto-remediation. For example, in our organization we have defined an Alert in our ticketing software to notify a service manager if a ticket is inactive for more than 3 days. The service manager will receive an email notification alerting them of the ticket number, the customer, how long it's been inactive, and which tech is assigned to the ticket. The concept behind BI Alerts is to notify stakeholders of potential problems before they become major problems.
- **BI Automation** is, for most Small to Midsized companies, a huge leap in technological advancement. This allows companies to define business process workflows and execute predefined activities without human intervention or timely decisions. This takes your company to the next level by removing unnecessary bureaucracy and speeding up various business processes. The manufacturing industry has operated this way for decades, with

Just-In-Time (JIT) Manufacturing/Inventory. This is where companies execute on demand orders of equipment and parts to suppliers when inventory levels drop below specific thresholds. The standardization of Electronic Data Interchange (EDI) within industries has created a method for companies to conduct commerce directly with each other to fulfill orders automatically, thus reducing human errors and expediting the whole process.

## **Deploying the BI Dashboard**

To get started with deploying BI in your organization you really need to ask yourself some important questions. What are our problems that we want to improve? What are our core objectives with BI? Once you are able to clearly define a couple of core objectives you can begin investigating what data points you already have in your business that you can measure.

I suggest implementing a 10-Step, 60-day plan to get your first Business Intelligence dashboard operational. We will discuss each of these steps in detail below.

### **Step 1 - Define Your Goals**

What do you want to improve in your business? Do you want to increase Sales, Profits, Efficiencies, and or Customer Satisfaction? All of these are common struggles and, in many cases, the goals that business owners would like to improve. I suggest starting with a short, very-specific list of no more than four goals. By keeping it limited, you can get a Minimum Viable Product (MVP) dashboard up and running quickly. You want to get this dashboard in the hands of your team as quickly as possible. You can always go back and add, iterate, and improve from there. Don't be tempted to implement every possible goal for your business at this step. It's not going to be very impactful if it takes you six months to launch this dashboard. Define the top four specific goals you want to achieve in your company and make sure they are realistic. If the goals are unrealistic, and therefore not achievable, people won't even try.

Make sure your goal is meaningful and measurable, such as "add \$250,000 of net new revenue next quarter"; a non-specific goal such as "increase sales" is not meaningful or measurable and



will not work.

## **Step 2 – Define Your Action Plan**

Most of us can easily define audacious goals, but without a clear list of activities to achieve the goals, they are just dreams, which will likely never happen. Simply measuring the goal instead of the activities that are required to achieve it makes it difficult to know if we're on target or off target. Simply put, the purpose of a good dashboard is to let people know if they are winning or losing on the activities required to achieve the goals.

For example, if your goal for the sales team is to "add \$250,000 in new revenue next quarter" what are some good activity goals your company could use to measure as an indicator that you're going to achieve this goal? Activity Goals for a Salesperson might be:

1. Calling 90 prospects per workday
2. Emailing 15 prospects per workday
3. Booking 10 appointments per month

## **Step 3 - Define Your Gauges**

Key Performance Indicators (KPIs) are measurements of an activity or goal at a particular time. A gauge is a visual representation of a KPI. A gauge can be a just a number, a percentage, a graph, etc. A Smart Gauge indicates to the viewer instantly if the gauge is winning or losing based on the target thresholds. For example, if your organization has a gauge that measures how many sales calls are made each day, a Smart Gauge will dynamically change color to indicate its relative status to the target thresholds.

In the example below (*See figure 3*), if your target was to have 90 sales calls completed each day, you could setup two Smart Gauges. One could be a cumulative gauge that adds up each call as they occur throughout the day and changes color based on the target thresholds. The other could

be a gauge that measures how many calls were made in the last hour and indicates whether you're on target to meet your daily goal.

Figure 3

KPI Goal	Green "Winning"	Yellow "Slipping"	Red "Losing"
Daily Sales Calls	$\geq 90$	$<90 \geq 72$	$< 72$
Hourly Sales Calls	$\geq 10$	$<10 \geq 9$	$< 9$

Note: It's easy to get a little gauge zealous once you have identified how to measure things. I suggest keeping this first dashboard simple with no more than eight gauges, a maximum of two gauges per goal.

#### Step 4 - Design Your Dashboard

I've learned it's much easier to draw your vision of what the final product is, in this case a dashboard (See figure 4). This addresses a couple of common problems.

Figure 4

Days Until End Of Quarter	Helpdesk Dept. AVG Response Time Past 30 days No Automation Goal: $\leq 15\text{min}$	Helpdesk Dept. AVG Time Spent Past 30 Days No Automation Goal: $\leq 45\text{min}$	Total Open Tickets All Depts. Goal: $\leq 600$	Total Open Tickets Helpdesk Dept. Goal: $\leq 65$
Total Sales Calls This Quarter Goal: 4500	Total Sales FTAs This Quarter Goal: 26	ITBRs Completed This Quarter Goal: 6	Helpdesk Dept. % of new Tix Closed Past 24 hours No Automation Goal: $\geq 80\%$	All Dept. Ticket Burn This Week No Automation Goal: $\geq 0$
Total Shrink This Quarter Goal: $\leq \$0$	Outstanding AR Invoices Goal: $\leq 3$			

First, it forces you to think through all of the information you want to display. Second, it makes it clear to the Developer what your final vision is (See figure 5). Being a Product Manager and Developer myself and working with software developers and designers for more than 20 years, I can tell you that details do get lost in translation. Physically handing a developer a drawing of what your desired vision is will clear up a lot of the confusion and get everyone on the same page.

Figure 5



**Step 5 - Define How You Will Consume the Business Intelligence**

How do you envision using the BI? It's important to know how you will use the data because your choice of the platform that everything is developed on needs to match your vision of how your company will use it. Otherwise, you'll be disappointed in the results and will have to spend more time and money rebuilding on other platforms. For example, if your vision is to have highly visible dashboards on TV's throughout the office and production floor, that needs to be

clearly stated and taken into consideration when picking the right BI platform for your business.

Is the BI platform mobile friendly, is it launched by an application, or is it a website? Many BI platforms require interactive actions on a mouse and keyboard to pull up data or switch between dashboards. If your goal is to have your dashboard displayed on a TV and have it automatically switch to different dashboards periodically, that will only work with some platforms. Think carefully how you plan to consume the data before choosing a platform. Your BI consultant can help you understand the pros and cons of what the best BI platforms are for your particular needs.

### **Step 6 - Assemble Your BI Dev Team**

The Business Intelligence Development Team (BI Dev Team) is important to getting what you want for the company. Unless your company already has an in-house Software Developer, Database Administrator, or Data Analyst you're probably going to have to hire an outside firm to build some or all of this for you. You need to find a trusted partner that has built BI solutions before and can show you examples of how they work.

Building a BI solution is almost always a custom solution for your specific business needs. Although there is some canned software that data can be pulled from, chances are if you have more than one data source you will need those linked up and it will take a developer to help build it for you. It's important to pick the right team for this type of work. It's highly probable that after you build your first dashboard you will want more and you will want it faster. Pick the right BI Dev Team that can move fast and make the biggest impact for your business.

### **Step 7 - Analyze Existing Data**

In conjunction with your BI Dev Team you need to review the major goals from Step 1 and the gauges you want to measure from Step 3 to determine what datapoints you can retrieve from your apps. The BI Dev Team should be able to identify which gauges can be built and which ones cannot. Note this step can take some time and if your Step 1 list requires pulling the data

from multiple sources it also will take longer. I recommend pulling data from just one app data source and not attempting to merge two or more data sources until you have completed your first dashboard project.

### **Step 8 - Build & Deploy a Prototype**

The purpose of building a prototype and getting it into the company's hands is to work through all of the unforeseen technical hurdles that are going to occur throughout the process. The prototype is a proof of concept to validate what is possible to build with the least amount of cost and time. Your objective needs to be to get something up and running as quickly as possible. If your final vision is to have ten dashboards with sixty gauges as the final solution, downsize the prototype to show just one dashboard and two gauges. Once those two gauges are functioning, begin implementing the dashboard through the company. Share the dashboard and mount the TVs as soon as possible. Get the dashboard in the hands of the people fast.

### **Step 9 - Build & Deploy an MVP**

In the software development world an MVP is a Minimal Viable Product. It's a slightly more developed product than the prototype you launched in Step 8. A well-defined MVP includes the minimum features you want to launch with. I suggest defining the MVP objective to be a single full featured dashboard for a single department. Keep it simple and focus on one dashboard and conquer that dashboard before moving on to another. Once your MVP is ready, deploy it!

### **Step 10 - Iterate and Improve**

Now that you have a BI MVP deployed in the workplace it's time to begin working on other dashboards. Throughout this process you will continuously iterate and improve your dashboards.

### **Use BI to Transform Your Business**

Like I said earlier, I found BI has transformed my own business. There are things you want to make sure are present to experience the transformation yourself. You'll find the things I think are most important below:

*High Visibility:* Over time it will become clear what gauges are most important and which ones really don't matter. Just make sure the highest impact gauges are visible to your people. This visibility will improve performance and you will get buy-in from employees when there is a sense of competition. The objective of a good dashboard is to get everyone on the same page at a glance. Within seconds they know if we are winning or losing.

*Competition & Gamification:* Not only will the BI help you stay ahead of your competitors, it will also create internal competition. Displaying leaderboard gauges with scores lets everyone know they are in the game and it is being scored. Not "everyone wins or gets a trophy"—who is the top producer today, this week, this month, this quarter? It is easy to motivate and reward individuals, teams, and your entire company when you are keeping score and they know what is at stake. Gamify it, make it fun, make it competitive, and have a worthy reward prepared for when the big goals are achieved.

*Quarterly Reset:* I suggest reviewing all of the KPIs and dashboards with your leadership team at end of each quarter at minimum. Verify that the most important goals you want to accomplish for the upcoming quarter are tied to KPI's that are front and center on your dashboards for your organization. Make sure your goals are realistic and achievable. Make any necessary adjustments and redefine KPI thresholds and activity goals as needed.

*Operating from a Dashboard:* Once all the key departments and teams have their dashboards, build yourself an owner's dashboard. As the leader of your organization your time is limited, and it is not realistic that you will be reviewing 15 reports and dashboards every day to know how well the company is doing. Take the most important KPIs that indicate the health of your organization and put them all on one dashboard. Manage your business from the numbers on this dashboard. Mount a TV in your office for an always-on Owner's dashboard that you will see 100x a day. Remember, if it's out of sight, it's out of mind.

## **Additional Resources**

The best BI platforms and tools will change over time. As of this writing, my organization primarily uses [Brightgauge](#) for real time dashboards. We use [Microsoft Reporting Services](#) for scheduled BI Reports, and [Microsoft Power BI/Automate](#) alert and notification services. To view my favorite dashboards, latest tips, and recommendations visit [www.accentconsulting.com/bi-book](http://www.accentconsulting.com/bi-book).



## ABOUT THE CONTRIBUTORS

**Phil Wright** is a serial entrepreneur with a passion to solve complex business problems by leveraging technology to increase profitability, productivity, and efficiency. His experience spans five technology-based companies that he has founded over the past two decades. Presently, Phil serves as the CEO of Accent Consulting, a leading provider of IT Consulting, Managed Services, Software Development, and Business Intelligences for small to mid-sized businesses throughout the Midwest. Accent Consulting has consulted and built IT solutions with over 450 businesses across the globe in more than 20 states and 7 countries including several Fortune 500 companies.

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Technology is important in today's challenging business climate for any business. TECH UP OR LOSE OUT is co-written by 11 of the top tech experts in North America. This team has come together to provide entrepreneurs an outline of how they can leverage technology as a competitive advantage in their business. From Cloud to Business Intelligence, this book has the tech basics you need to succeed.

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