

## Module 10: Measuring Performance

Sports is a world of **measurement**. Let's take a sport like basketball where players attempt to make baskets. No, I meant ball in hoop-type baskets. Suppose I tell you a player averages 23 points per game. Is that a good player, a bad player or a great player? A good coach would know that based off this **limited information**, it will be impossible to answer that question **with any certainty**. I mean basketball is about more than just **scoring** right? Players can block shots, rebound miss shots, steal the ball, and assist others in scoring. They can also make a number of mistakes that benefit their opponents. So now what if I tell you that the player averages 23 points, 9 rebounds, 12 assists, and 4 steals per game, is that a good player, a bad player, or a great player? A poor coach might **be tricked into** answering that question but a good coach would still realize that those **statistics measure** only certain **aspects of effectiveness**.

To truly **assess** this player you still need more information. How many shots did they take? How many minutes did they play? How many possessions did their team have during the game? In essence, a good coach wants to know how the player **made use of their resources**. So suppose I gave you the shots, minutes, possessions, available rebounds, and any other **efficiency-related data**, would you feel comfortable making a decision about that player? Think before you answer. What other type of data would you want? I would want to know **situational data** suppose those 23 points, 9 rebounds, 12 assists, and 4 steals were **accumulated** by a tall 25-year-old man against the worst offenders in blowout games, in a league of five-year-old children. Still feeling good about these clear statistics? What we're seeing is that not every set of data is **sufficient in helping** us make good decisions.

A **good system of metrics** needs to provide information on **effectiveness, efficiency, and adaptability**. And this isn't just true for sports like basketball. Businesses constantly **seek to collect and study data** in an effort to make good decisions. In fact, humans are hopelessly **addicted to metrics** that will **aid** them in making good decisions. What time is it? What's the temperature? What's your grade in this class? These are numbers that **guide our actions**. You see, **performance metrics** can actually **motivate** the **behaviors** of athletes, employees, students, and business partners. As the manager of a global supply chain? How can you know if your supply chain is **effective, efficient, and adaptable**? How can you **motivate** employees and supply chain partners **thousands of miles away** to do the things your customer and your company **value most**? And how can you identify those employees that **deserve raises and promotions** as well as those who need **assistance, additional training, or perhaps disciplinary action**? What we're seeing is that a good system of **performance metrics** can provide guidance for managers employees and even customers but to do so modern managers especially supply chain managers must **marry quantitative skills, psychological understanding, and operational know-how** to develop the right **performance measurement tools and systems** so their companies can achieve their own **unique set of goals**. And this is an enormous challenge.

Like a basketball coach, supply chain managers need to **identify** their best players, **identify and improve the weaknesses** of the team, know which **situations** provide

the team with the best **opportunities**, and also understand which **resources** are being **wasted**. But your team is made up of thousands of players all over the world and it's your job to get them all **working toward** the same set of goals. So don't let bad numbers lead you down a **destructive path**. Take control of the numbers and let them guide your team to an effective, efficient, and adaptable global supply chain.

## Module 11: Quality Management

In one word, tell me what you want from a new car. If you said **quality**, then you're like most **car buyers**. Now, is there one single vehicle that could potentially **satisfy** every customer's **desires**? Of course, not everyone wants quality but every single person has **their own definition** of quality which they're rarely willing to share with you. And even when they do **share their vision** and you **deliver**, there's nothing to stop a **rival company** from **coming up with new features** the customer never even imagined. And now your customer has changed their quality **definition** and they're **very likely no longer** your customer.

To complicate things further, how we **specifically define quality** for a product and service **differs**. And when you make **purchases** that have both **product** and **service elements** as we often do, how we **measure overall quality** can be even more complicated. For example, in the United States when you purchase cell phone **service**, what are some of the things that define the level of quality? The phone, the **available applications**, the number of **bars** you have in your **location**, your **contract terms**, **customer service**, and of course, the **overall cost** you pay **over the life** of your contract. It's no wonder that most cell phone companies have such poor **reputations**. It only takes one thing to **go wrong** before you begin to **downgrade** your cell phone provider's **quality score**. And this is where we can make the supply chain management connection because once again, we see that your overall quality is **only as good as** that of your **weakest link**.

Perhaps one of the primary quality management lessons is that **simplicity** makes managing quality that much easier. Cell phone companies have so many different **aspects** of quality to **consider** thus **managing quality** is very challenging for them. You see this is what modern businesses are **faced with** every day and it's the primary reason, many companies have managers whose **primary focus** is to **foster**, **manage** and **improve** quality. Managing quality in the modern global economy means that customers expect **excellent design**, **flawless manufacturing**, **quick delivery**, and **seamless transactions**, as well as **innovations** that will make tomorrow's purchase better than today's. In essence, they demand **eternal perfection** but if we review the list of customer **desires**, we'll find that no one is **better equipped** to meet the challenge of **satisfying** a customer's quality **expectations** than the supply chain manager

## Module 12: Supply Chains and Information Technology

Modern global integrated supply chains couldn't be **global** or **integrated** without a modern **technological infrastructure** to act as both the supply chain **connective tissue** and **nervous system**. And while modern supply chain executives are expected to **have a grasp of** modern business technology, the thought of actually making **technology-related decisions** can be scary for even the most **senior** executives.

So what should supply chain managers expect their **systems software** and **hardware** to do for their supply chain? Let's try and relate it to something you may have done before: buying a computer. Beyond **entertainment**, what are the reasons people buy computers? To communicate with people, purchase things, meet new people, search for information, **analyze** data, and to **organize** their lives. Computers have become the **tools** we use in the present to connect us to things in our past and to help guide us to a more **promising future**. Supply chains need to **accomplish** the same things except we refer to them as **research and analysis**, **planning and scheduling**, **purchasing**, **networking**, and **relationship** management. So similar to the **decision-making process** we would all go through when buying a new laptop computer, companies need to consider a number of issues when making IT decisions: **memory**, **storage**, **computing speed**, **applications**, **hardware**, **mobility**, and the **operating system**. These are the **key components** of the organization's **central nervous system**. We want a fast powerful system that will help us connect with our most **trusted allies** and customers, protect us from **potential enemies**, and it must also be built for **flexibility**, ready for whatever our business may need in the years to come.

Presently, companies achieve these **capabilities** from an alphabet soup list of **systems** and **applications** that include ERP, CRM, SRM, and while these things may change over time one thing that will not change is the supply chain's **dependence** on technology. Managing resources, **operations**, **logistics**, and customers requires **immediate access** to data and information that only technology can provide. Supply chains need to meet the challenges of the present and future. **Sustainability**, **consumer safety**, **supply chain security**, and **legal** and **ethical behaviors**. These are all expected and in some cases **demand**ed by consumers and governments worldwide. These are things that can only be **effectively managed**, **monitored**, and **realized** with the support of modern technology. Even at the lowest level individual supply chain managers are tasked with **measuring performance**, **improving** supply chain **visibility**, and managing relationships all of which are very much **dependent on available technologies**. Supply chain managers don't necessarily need to be **computer geeks** but they do need to **develop** an excellent working **relationship** with the folks in IT because the supply chain without a **healthy nervous system** can't be **integrated**, **global**, or even **responsive**. Make sure your supply chain has the tools that will give it the **lightning-fast reflexes** required to be a world-class global competitor.