Lean Six Sigma tools in the hiring process

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Abstract

Purpose – *The purpose of this paper is to examine how "Lean" principles from the manufacturing world can be adapted to create a best-in-class recruiting function and demonstrate the causal connection between the "value-added" recruiting activity and positive business results.*

Design/methodology/approach – *This concept paper is based on practitioner experience in leveraging Lean Six Sigma tools in improving the efficiency and effectiveness of the talent acquisition process.*

Findings – *Talent acquisition today is an activity fraught with risks – Did we hire the right person, the right skills the right fit? – and has the maximum impact on an organization bottom line. It is more than just posting a requisition and making an offer, but a series of sourcing activities, branding efforts, assessment processes and on-boarding activities and more – all designed to help an organization answer these key questions and find talent relevant to its business context. Appraising some of the evolving best practices in talent acquisition within the larger ambit of talent management issues facing organizations at large underscores the need for a new way of thinking about talent management.*

Originality/value – *Being more innovative in sourcing and recruiting can give organizations a sustainable competitive advantage with visible impact on the bottom line.*

Keywords *Recruitment, Talent, Metrics, Talent management*

Paper type *Research paper*

Executive summary

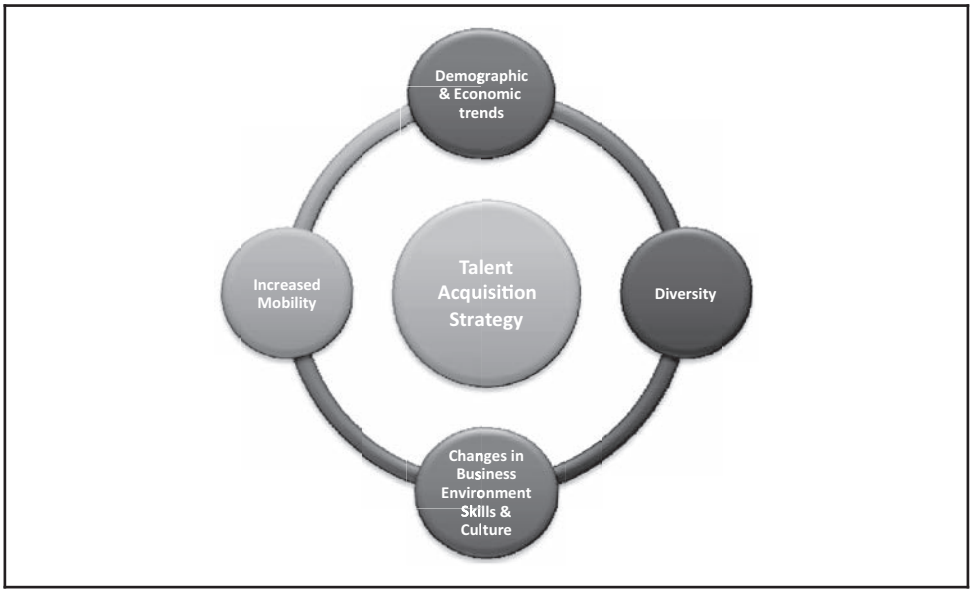
Talent acquisition today is an activity fraught with risks – *Did we hire the right person, the right skills, the right fit?* – and has the maximum impact on an organization bottom-line (Figure 1). It is more than just posting a requisition and making an offer, but a series of sourcing activities, branding efforts, assessment processes, on-boarding activities and more – all designed to help an organization answer these key questions and find talent relevant to its business context.

Rapid, complex and pervasive changes (Figure 2) are occurring in our business landscape that will continue to impact the traditional concepts of work, employer and employee relationships. As a result, companies are getting smarter and innovative about how they acquire talent. They are making their recruitment operations more strategic by connecting external and internal recruitment activities with succession planning and performance management. Balancing immediate needs with long-term goals, they are improving how they apply people, processes and technology to acquire critical talent. It is this critical talent that goes on to create new products and services and find new and innovative ways of doing business. Being more innovative in sourcing and recruiting can give an organization a sustainable competitive advantage by enabling it to find and hire more of the right people who can drive innovation throughout the entire company. This concept paper examines how "Lean Sigma" and "Just-in-Time" principles from the manufacturing world can be adapted to create a best-in-class recruiting function and demonstrate the causal connection between the "value-added" recruiting activity and positive business results.

Figure 1 Lean Sigma tools in the hiring process

Source: Pradeep Sahay, www.linkedin.com/in/pradeepsahay

Figure 2 Changing talent acquisition landscape



Understanding Lean

Lean operation principles are derived from Lean manufacturing practices developed as a strategy by the Toyota Motor Company. The key focus of Lean is to identify and eliminate wasteful actions that do not add value to customers in a manufacturing process. Because Lean deals with the production system from a pure process point of view, and not a hardware point of view, it has been found that the principles of Lean can be adopted to improve the efficiency and speed of all processes in any business context, including the services setting.

Lean is typically driven by a need for quicker customer response times, a need for faster cycle times and a need to eliminate wastes in all its form. It strives to continuously eliminate wastes from all processes – a fundamental principle in alignment with the goals of the *Six Sigma Management System*. Just as this management approach is capable of turning out a better product, when applied to recruitment, practitioners can expect a more efficient and responsive process to find candidates.

7 Wastes in Lean

The 7 wastes (also referred to as MUDA) in Lean are mentioned in Figure 3.

Critical to effectively leveraging Lean is the identification of which steps in a process add value to customers and which do not. After classifying process activities into these two categories, the focus is to take steps to improve the former and eliminate the latter.

Applying this Lean philosophy to similarly evaluate the talent acquisition process, it is practical to view the components at a granular level. Figure 4 illustrates a typical talent acquisition process (Table I).

A useful analogy for identifying the areas of improvement is to envisage the recruiting process as a leaky pipe. The leaks, or sources of waste, in the talent acquisition process can occur in many ways. They could be found in the activities and practices at each stage of the process and during handoffs that occur in the cycle of the process. An appreciation of the non-value-added activities at each stage of the process could then be evaluated in terms of labor and unnecessary expenses.

Figure 3 7 wastes in Lean

Figure 4 Talent acquisition process map

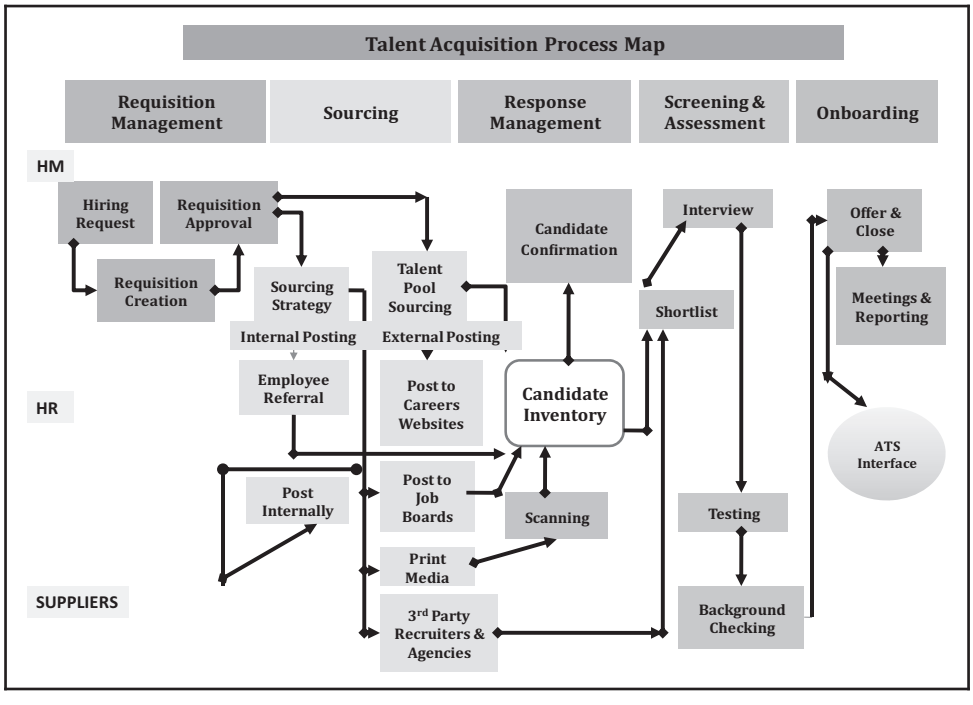


Table I Type of wastes in a sample recruitment process flow

Type of waste	*Sample recruitment process flow*
Waiting	Escalations/approvals, waiting for feedback, indecision on hold prospects and waiting for offers release
Overproduction	Processing prior to the need and WIP candidate pipeline
Rework	Incorrect data, JDs, improper stakeholder buy-in and role appreciation gaps
Motion	Tracking down paperwork and time spent on non-value-add administrative tasks
Overprocessing	Updating job flows and ATS
Inventory	Offers to be processed and resumes to be reviewed
Transportation	Shipping offer letters, acceptance to joining timelines and interviewing process

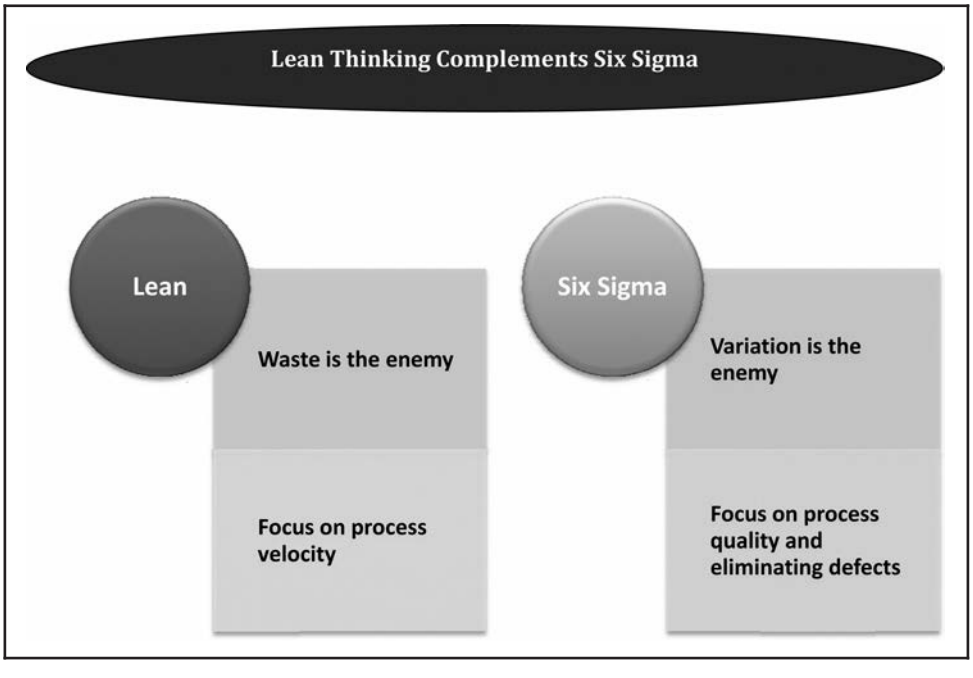
The total economic value of the process efficiency leaks can be optimized to uncover the hidden ROI of the talent acquisition process with tangible business impact:

- inefficiencies in requisition management;
- inefficiencies in sourcing; and
- inefficiencies in screening and assessment (Figure 5).

What is Lean, just-in-time recruiting?

Shortly after the turn of the century, when *bento boxes* had become Japan's best-known contribution to the culinary world, came the widely popular *conveyor belt sushi restaurants.* Also known as *sushi-go-rounds*, the customers, once in, could simply pick little portions of fresh *sushi* and *sashimi* of their choice from a moving conveyor belt. The final bill would be calculated based on the number and the type of *sushi* portions consumed. The idea combined Japanese minimalism, the *"Just-in-Time" philosophy* and their loathing for wastage. In a perfect world, businesses would like nothing better than a wide variety of *talent flowing steadily* on a conveyor belt, giving them the freedom to pick what they choose optimally and pay for the bite instead for the whole platter. Peter Cappelli, Director, Centre for Human Resources at Wharton Business School, calls it "Talent on Demand". In a dynamic, fast-changing knowledge economy, the imperatives of the availability of appropriate talent cannot be overstated.

Figure 5 Key focus areas – Lean and Six Sigma methodology



"Lean is typically driven by a need for quicker customer response times, a need for faster cycle times and a need to eliminate wastes in all its form."

A critical lean concept, just-in-time (JIT), is founded on the principle of continuous reduction of all *inventory* while satisfying changing market demand with shorter lead times and flexible production. In a volatile and competitive market, inventory is deemed as risk and waste. The goal of JIT is to deliver just the right amount of supply to meet demand, neither falling short nor going over. It is a pull-based production strategy also referred to as the "Toyota Production System" and is anchored on three fundamental principles:

1. do not send defective products to the subsequent process;
2. the subsequent process comes to withdraw; and
3. produce only the quantity withdrawn.

Anchored on these basic principles, JIT is deployed into the following policies and strategies:

- reduce lot sizes at all stages of production;
- apply the Kanban system or pull system of production;
- improve market response times by cutting all lead times for processing, manufacturing and procurement;
- reduce machine setup time or changeover time to cut lot size and increase number of models produced;
- reduce the number of suppliers and partner and train the remaining few; and
- introduce Kaizen or continuous improvement program to encourage all employees to continuously improve quality, cut inventory levels and reduce all lead times and setup times.

Applying JIT to recruitments

The process of identifying an organization's talent needs and identifying, acquiring and retaining talent for those needs is essentially human capital supply chain management. A supply chain is a system of organizations, people, technology, activities, information and resources involved in moving something of value (a product, a service *or a person*) from a source to a customer/consumer. Conventional supply chain activities transform natural resources, raw materials and components into a finished product that is delivered to the end customer.

A staffing supply chain (Figure 4) transforms *relationships and data* (ad responses, resumes, social networking profiles, etc.) *into candidates* who are delivered to hiring managers.

In the language of supply chain management, the problems of undersupply and oversupply are collectively known as mismatch costs, the goal being to match the demand with the right amount of supply. Applying this concept to talent identification and acquisition, *JIT recruiting is a pull-based strategy of providing hiring managers/clients with the right candidates at the right time with the right skills at the right place.*

The JIT strategy is designed specifically to reduce the wastes of overproduction, waiting time, defects and inventory. Instead of proactively building, maintaining a work-in-progress candidate pipeline and creating a talent inventory without an actual hiring need, JIT recruiting has a primary focus on tapping into "raw material" candidate inventory (resumes, social media channels and other sourcing networks) and qualify and deliver a talent pool in direct response to a hiring need.

Cultivating a Lean Six Sigma mindset – the hiring case

The core of Six Sigma methodology involves measurement and evaluation as a way to quantify process outcomes, identify defects and make adjustments to improve the process. Evaluation of staffing as a business process also requires this mindset. Ensuring quality

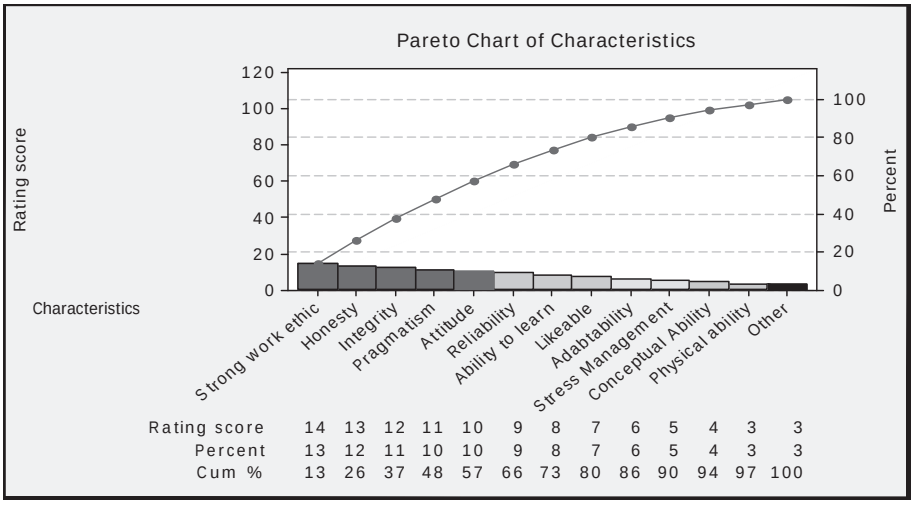
Table II SIPOC diagram – high-level process map

Suppliers	*Input*	*Process*	*Output*	*Customer*
External search and selection partners, internal hiring team, employee referrals and internal talent mobility	Resume, CV, social media profiles and performance reviews	Requisition management, sourcing, response management, screening and assessment, selection and on-boarding	Selected candidate, requisition closure and quality of hire	Hiring manager, business unit heads, HR, employees, hiring team, SMEs, corporate communications and marketing

Figure 6 Lean prioritization tool and Pareto chart

Paired Comparison Analysis

	Key Job Characteristics	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Total
A	Reliability		a	a	d	e	f	a	a	a	j	k	a	a	a	a	9
B	Writing Skills			c	d	e	f	g	h	i	j	k	l	b	n	o	1
C	Ability to Learn				d	e	f	c	c	c	j	k	c	c	c	c	8
D	Strong Work Ethic					d	d	d	d	d	d	d	d	d	d	d	14
E	Attitude						f	e	e	e	j	k	e	e	e	e	10
F	Honesty							f	f	f	f	f	f	f	f	f	13
G	Adaptability								g	g	j	k	l	g	g	g	6
H	Stress Management									h	j	k	l	h	h	h	5
I	Conceptual Ability										j	k	l	i	i	i	4
J	Integrity											j	j	j	j	j	12
K	Pragmatism												k	k	k	k	11
L	Likeable													l	l	l	7
M	Functional Experience														n	o	0
N	Computer Skills														o		2
O	Physical Ability																3



hires with fewer errors demands an evaluation function, so that the impact of decisions can be understood, and waste (incorrect hiring decisions) can be minimized.

The schematic below outlines the application of some simple but *powerful tools* that can be leveraged to augment the generic human resource analysis method and customize the *selection process for any given hiring situation*.

The hiring managers, candidates (prospective) and employees are the key customers of the hiring experience. This "Voice of the Customer" is the primary variable in understanding the current state of the hiring process and figuring out the key skill and attribute mix in ensuring an optimum – quality of hire. Depending on the size of the customer base and the complexity of the initiative, the voice of the customer can be captured form of a supplier, input, process, output, customer (*SIPOC*) diagram or tools such as surveys, interviews, Kano analysis.

SIPOC explained

At the most basic level, the components stand for:

- *Suppliers:* Upstream, internal/external suppliers to the process.
- *Input*: Inputs to the process.
- *Process*: The means that convert the inputs into the outputs to satisfy key customer constituent needs.
- *Output*: The process outcomes, key deliverables.
- *Customer*: Downstream, internal/external stakeholders (Table II; Figures 6 and 7).

Figure 7 Lean selection/decision-making tool: the Pugh matrix

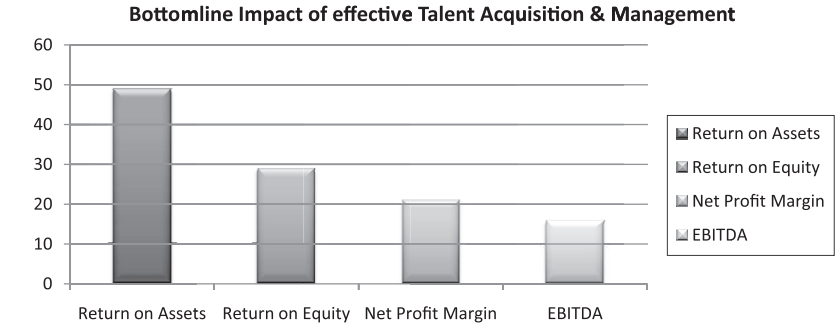
Sample Candidate Evaluation Summary
Pugh Matrix

Candidate 1 Datum
Candidate 2
Candidate 3
Candidate 4
Candidate 5

Characteristic/Skill	Importance	Datum	Candidate2	Candidate3	Candidate4	Candidate5
Strong Work Ethic	9		s		s	+
Honesty	9		s		s	s
Integrity	9		s		s	s
Attitude	7			s	s	s
Conceptual Ability	3		+	s	-	s
Adaptability	5		+	s	+	-
Physical Ability	3		-	-	s	s
Computer Skills	1		s	-	+	s
Writing Skills	1		s	-	s	+
Reliability	7		+	-	s	s
Pragmatism	7		s	s	s	+
Likeable	5		+	-	s	s
Ability to Learn	7		s	-	+	+
Stress Management	5		s	s	+	s
Functional Exp	1		+	s	s	s
Sum of Same			8	6	10	10
Sum of +			5	0	4	4
Sum of			2	9	1	1
Weighted Sum of +			21	0	18	24
Weighted Sum of			10	51	3	5
Total Weighted Score		0	11	−51	15	19

Candidate 1 and 5 are clearly better fitment & hiring cases
Candidate 4 can be considered as a back up in the event of a fallout

Figure 8 Business impact of talent acquisition



Source: Mucha (2004)

There should be a direct link between the SIPOC (or alternative voice of customer tools used), the prioritization tools and the decision-making tools. In the above sample illustration, all of the inputs from the SIPOC were evaluated in the pair-wise comparison and then used in the Pugh matrix to identify the *top candidate/hire*.

End notes[1]

Appraising some of these evolving best practices in talent acquisition within the larger ambit of talent management issues facing organizations at large underscores the need for a new way of thinking about talent management. Business strategy today has moved away from the assumption that we can plan our way around uncertainty, heading instead toward a model wherein the key competency is the ability to react and respond quickly to new opportunities. Talent management must move in the same direction if it is to support this new orientation in strategy. The goal of talent management is the more general and important task of helping the organization achieve its overall objectives. In the business world, that objective is to make money. And making money requires that we understand the costs as well as the benefits associated with the talent management choices. By far the greatest risks in talent management are, first, the cost of mismatch in employees and skills, and second, the costs of losing the talent development investments through the failure to retain employees. Being more innovative in sourcing and recruiting can give organizations a sustainable competitive advantage with visible impact on the bottom-line (Figure 8).

Note

1. "Talent on Demand" – Peter Cappelli.

Reference

Mucha, R.T. (2004), "The art and science of talent management", *Organization Development Journal*, Vol. 22, pp. 96-101.

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