

Matthew's Book Club Summary #3

By: Matthew Klippenstein

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Title: The Toyota Way

The book club started as an informal, fun way to explore and consider business ideas relevant to our work with colleagues. The format consists of one person (usually Matthew) reading a book and writing a summary for discussion during team meetings. This allows the other team members to benefit from the book's insights, without carving time in their schedule to read the full volume.

The idea was to summarize *an interesting part* of each chapter in a paragraph or two, and where applicable, note how these could be relevant to the workplace. This provides the reviewer with practise condensing a mass of data into a few pieces of key information: an underappreciated skill. The reviews are meant to be accurate but light-hearted, on the assumption that people learn more when they're having fun.

Matthew's company gave permission for these to be distributed to non-employees as long as the employer-specific content was removed, for which he is sincerely appreciative.

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About the author:

Jeffrey Liker is a professor who spent a long time studying Toyota. He's won some awards – but since he's documenting what has been a remarkably successful company, one wonders whether he'd've won those awards if he was covering a mediocre company... even if he came up with the same theories.

And there are a lot of downsides to The Toyota Way – for instance, I was told by a former co-op student there that engineers at Canadian plants work 60+ hours a week. They're mainly wealthy, divorced men. And the fact that the CEO

wanted the Prius developed in 18 months, meant the chief engineer *moved into the office*. Which says a lot about the engineer's commitment, and even more about the CEO's lack of concern for the engineer's work/life balance.

Since the book identifies 14 principles behind The Toyota Way of doing things (finally! A list that isn't artificially constrained to an arbitrary number like 10!) instead of going chapter by chapter, I'll go principle by principle.

Ch	Title	Summary
1	long-term philosophy	A long-term philosophy is needed to anchor a company's decisions and practises. Otherwise, it's liable to make decisions which look good in the short term, but are catastrophically bad in the long-term.
2	the right process gives the right results	If a task is done poorly, it's almost always because of deficiencies in the process. And boredom from excessively repetitive tasks, counts as a deficiency.
3	to add value, develop people	Bonsai trees, not flowers. Buy flowers and they'll beautify the room for a few weeks at most. Bonsai trees take a lot more work, but they can offer decades – not weeks – of aesthetic enjoyment. If you invest the time. Same story with employees: choose the right ones and put extra effort into their development, and they'll add value for decades.
4	organizational learning comes from solving root problems	To permanently fix a problem, you need: <ul style="list-style-type: none"> - a deep and thorough understanding of the root cause. Not just the proximate cause, but the ultimate root cause - tenacity to solve the root cause - methods to preserve that acquired wisdom in the organization.

Ch	Title	Summary
1	the long-term is more important than the short term	<p>Hard to summarize this chapter, so I'll just list the main section titles. They're pretty explanatory. Toyota purportedly is all about:</p> <ul style="list-style-type: none"> - having a mission greater than earning a paycheque - doing the right thing for the customer - building trust with employees - not letting business decisions undermine trust and respect - using self-reliance to decide your own fate (ie. all key components must be made in-house) <p>Employee trust (for instance, that their suggestions for improvement won't cause job losses) is the foundation for Toyota's continuous improvements. Layoffs erode employee trust. And long-term, losing trust is a bigger problem than occasional years of losses or reduced profits.</p> <p><i>[We will see in the coming months and years whether Toyota has lost customers' trust – MK, April 2010]</i></p>
2	bring problems to the surface (using continuous flow)	<p>Traditional manufacturing processes create lots of inventory, which creates wasted effort (e.g. moving/tracking parts to and from inventory). It also hides problems: if we're bad at screen-printing but we always have tons of inventory, no one will ever notice that we need to improve.</p> <p>Toyota <i>wants</i> its workstations to shut down occasionally. That shows employees are pushing the boundaries of their understanding and knowledge of each process... which means they can make further improvements.</p> <p>Managers whose workstations don't shut down often enough, have been known to be chided. They're not learning from failures, frequently enough.</p>

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3	let demand "pull" production; avoid overproduction	If you overproduce, you waste space on inventory and there's a risk of unsold goods if you build too much of the wrong thing.
4	level the workload (don't start/stop frequently)	<p>What this means is that if you plan to make [400 X] and [100 Y] this week, you make [80 X + 20 Y] every day. This seems inefficient, but it's actually the better choice.</p> <ul style="list-style-type: none"> - you avoid building up inventory of "Y" parts - the "Y" production line is continuously running; you don't have to worry about issues you'd get if you started up only once a week - your production techs have a bit of variety to their day - your designers start thinking about standardizing so they can make X and Y (and later Z and A and B...) on the same production line with the same equipment
5	get it right the first time, and stop to fix all problems	See comment in item "2" about Toyota wanting its workstations to shut down occasionally. Anything that doesn't get fixed, will bite you a second time... and a third...
6	standardize, standardize	<p>Toyota doesn't want engineers to write work instructions, only review them. They want production workers to write the protocols, own them and frequently improve them.</p> <p>As smart as the engineer is, he won't have the insight of the people who do the tasks every day, week in and week out, for months and years.</p>
7	use visual systems for quality	Toyota's work with the 5S visual workspace system is discussed here.

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8	don't rush into sexy new techs	<p>Toyota and the Amish react the same way when new technology comes on-scene. They get a few people to study it, to determine its value first-hand. Then they decide <i>if it can be integrated in a manner consistent with their culture</i>. If so, they adopt it widely.</p> <p><i>Believe it or not, the Amish were among the first users of genetically-engineered crops.</i></p>
9	grow walk-the-walk leaders from the inside	<p>If a company wants to sustain its culture, it has to grow its own leadership. Furthermore, those leaders have to be authentic; they need to have earned the respect of the people relying on them to exercise good judgment.</p> <p><i>This is like the concept of "followership" espoused at celebrated US technology firm W.L.Gore & Associates.</i></p>
10	invest in people and teams	<p>Toyota goes to exhaustive effort to develop its employees. In return, employees contribute tens of thousands of ideas for improvement... which give Toyota the savings to fund continued employee development.</p> <p>While a lot of companies see training as a (short-term) expense, Toyota sees it as a (long-term) savings.</p>
11	respect your suppliers	<p>A poll of auto parts suppliers in 2003 apparently ranked Toyota as the favourite auto company to deal with – they wanted low prices, but would help the supplier improve, so that even at those prices, they'd make a decent profit margin.</p> <p><i>The generalized lesson is not to squeeze your suppliers too hard; they won't want to work with you, or help you when you're in a pinch.</i></p>
12	to understand problems, see them with your own eyes	<p>This seems fairly obvious and elementary. It can sometimes be tempting (I'm really bad for this) to assume that from a verbal description, you know</p>

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		<p>what a problem is and how to solve it.</p> <p>The Toyota approach is that your <i>most important task</i> is to devote the time to examine the problem in detail. Otherwise you might miss the ultimate root cause.</p> <p>This goes for managers also – unless they know in fine detail what a problem is, how can they accurately report it to their superiors?</p>
13	use consensus; once it's there implement fast	<p>One important reason for getting consensus is that, in a complex system like a car if you overlook one design consideration... you could find yourself stuck in a very. long. crisis.</p> <p><i>(Toyota has been forced to re-learn this lesson, it seems.)</i></p> <p>Interestingly, for its major decisions Toyota purports to use 1-page (11x17) reports. While I think that's extreme, that's probably better than some death-by-powerpoint presentations we've all seen...</p>
14	invest time thinking about things	<p>Kaizen, or "continuous improvement", is a bit of a quality buzzword. Hansei isn't, but deserves to be; it's the foundation of kaizen.</p> <p><i>Hansei</i> is reflection – specifically about things that have gone wrong. It's more than lessons learned, though, because there's an acknowledgement of sincere personal culpability. (When Japanese CEO's apologize to the public, they're trying to show <i>hansei</i>.)</p> <p>In Toyota, no matter how successful the project (e.g. the first Prius) you are expected to spend time enumerating everything that went wrong, discuss them, and through contemplation figure out how to do better the next time.</p> <p>If people aren't willing and encouraged to take responsibility for their</p>

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		<p>mistakes, a corporate culture could develop where the people who get promoted are the ones who are best able to “spin” the problems they’ve created, or paper over their inadequacies. Neither is conducive to building a company’s greatness.</p> <p>Another implications is that we should do our best not to be working all the time on tasks, but spending some time every week “just” thinking. It’s hard to think up those month-to-month improvements unless we step back occasionally from the day-to-day.</p>