

10 Things A Lean Champion Can Do To Lead The Lean Transformation

Management Summary

“10 Things A Lean Champion Can Do To Lead The Lean Transformation” is a paper that presents a concise discussion of activities that can be undertaken by the American executive or manager interested in starting, extending, or restarting the Lean Transformation in their enterprise. The paper presents in logical deployment sequence practical low-cost or no-cost activities that can be begun immediately in virtually any company - large or small, whether product manufacturer or service provider. The paper makes a case for the proposition that one of the critical changes that will be required in the American Lean workplace is for American managers to transform from the current competitive management style to a cooperative management style:

Introduction

A question that I have been asked lately in my conversations with executives and managers of American companies who are attempting Lean Transformation is this: “How do I lead the Lean Transformation?” Executives and managers often find themselves following behind lean operations initiatives, rather than determining a “Future Lean Enterprise” vision, and then leading the way. The lack of Lean Business Policy and deployment of that policy is often the reason for the disconnection between top management and the ad hoc Lean Transformation. “Lean Business Policies define the lean business mission and are the drivers for development of lean project strategies. Executive management often expresses Lean Business Policies in business plans and strategic planning documents, including the lean vision statement.” (1) Lean Business Policy can be as straightforward as the endorsement of lean expressed as one of the Lean Business Policies of the Big Global Enterprise:

- “Big Global Enterprise is committed to being the leanest, highest quality, lowest cost and fastest to market provider of sprockets, grommets and widgets in the world.”

To commit to a Lean Transformation requires that management really understand the principles, tools and practices that deliver the power of lean, commit to those principles, and then invest in the education that the process operators and process area managers need in order to learn the tools and practices that deliver the “Future Lean Enterprise.” Here’s a review of the concepts: A Principle is something you believe in. For example, Lean Operational Principles are those presented by Womack and Jones in their book, Lean Thinking (2): value, value stream, flow, pull, and pursue perfection. A Tool is something you apply that helps you to identify, understand, diagnose and fix. For example, lean diagnostic, problem solving, and continuous improvement tools include 5S, Material and Information Flow Analysis

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(MIFA), 3 MUs', 5 Ws' & 1 H, 4Ms', and the SDCA - PDCA cycles. A Practice, on the other hand, is something you do once - or over and over again, in a process. For example, lean practices include Single Minute Exchange Of Die (SMED), cellular layout and flow, and kanbans.

Here are 10 things a Lean Champion can do right now – in order of practical application priority:

- 1 Commit To Lean Cultural Principles
- 2 Educate – Educate – Educate
- 3 Empower The Process Operators
- 4 Figure Out What A Process Is And Work On It
- 5 Determine What Loyalty To People Means For You
- 6 Organize Lean Enterprise By Product / Family
- 7 Decide If Your Lean Enterprise Needs ERP
- 8 Determine Whether Lean Is A Process Or A Project
- 9 Form A Lean Steering Committee
- 10 Conduct A Lean Assessment Before Project Begins

Let's take them in order.

1. Commit To Lean Cultural Principles

We all have heard that in order to get lean, companies must “lean” their processes, working back from the point of product or service delivery to the customer. In a lean enterprise, processes are “pulled” in response to the actual customer requirement instead of products and services being “pushed” into delivery or inventory. The five Lean Operations Principles that we stated above are employed: value, value stream, flow, pull, and pursue perfection. These are principles we believe in, they permeate everything we do. But, they aren't enough to get the Lean Transformation accomplished. It has become evident that lean enterprise has not (yet) emerged in many of the American workplaces that have attempted lean initiatives. Lack of Lean Culture is the reason.

Lean Transformation discussions often drift toward a Japanese cultural discussion – as in “Japanese Managers benefit from a culture of social cooperation that extends to the workplace.” Fair enough. The cultural beliefs in the American workplace are also the rules of success in the American workplace. It might be said that these cultural beliefs are almost impossible to change because current leadership has achieved its success using them. A Cultural Principle is a belief that permeates the ideas, customs, skills and practices of all of the people in an enterprise. Lean Cultural Principles are

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beliefs suited to the tasks in the process of Lean Transformation and the sustaining Lean Enterprise. They are not widely adopted in the American workplace. It is becoming obvious that American competitive business culture does not encourage, develop or sustain lean, and is incompatible with the needs of the lean workplace. American managers often miss inputs from others in the conversation who are not as insistent or "Type A." American managers are prone to over use their authority, and we often miss out on ideas from subordinates and others in the workplace because we are more "competitive" than "cooperative." It is clear that one of the critical changes that will be required in the American Lean workplace is for American managers to change their competitive management style. In order for American Lean to be widely successful, we will need to develop and adopt a set of American-style Lean Cultural Principles.

Often, the process toward Lean Transformation is sabotaged by traditional mass production cultural beliefs that permeate practices in the Human Resource processes, most especially job displacement, outsourcing, down-sizing and layoff. We have made a start, as demonstrated in the team dynamics employed in the operations physical processes in many companies. Now we need to extend that thinking into the office, along with the use of lean tools and practices, to get the management decision and information / support processes lean as well.

My last book, *"Lean Performance ERP Project Management"* is a book written by a project director who was empowered by a lean management team and lean culture. When I was developing and applying the Lean Transformation project methodology presented in the book, I thought every company had or was trying to build a lean culture. Certainly the companies where I worked and consulted were doing just that. I had been presented with ideas and challenges for practices including J-I-T and Zero Inventory since the beginning of my career in manufacturing. When the lean label was coined by Womack, Jones et al, in *"The Machine That Changed The World"* (3), I was working as a MRP II Project Director for an automotive component supplier, one of the underwriters of the MIT Automotive study that resulted in *"Machine"*. My book can help if you have a lean culture, and are on the lean journey. It works from the foundation of lean physical process success to extend the Lean Transformation into management decision and information / support processes, resulting in the "Virtual Lean Enterprise." When I exited the lean cultural cocoon of the (very lean) company at the center of my mid-career experience, I found myself consulting with companies that, while desiring to "get lean", were not prepared organizationally to nurture and sustain a successful Lean Transformation effort. My response to that problem has been to develop the ideas in this article with these companies. A fuller discussion will be presented in *"Lean Performance Management – A Handbook For Lean Champions"*, publishing in Fall 2005.

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In *“Lean Performance ERP Project Management”* I stated that the following Lean Cultural Principles were present in the lean workplaces I had observed. They had been adopted by these successful lean companies, in this approximate order:

1. Process Oriented Thinking Means What Before How
2. Product Quality Results From Process Quality
3. Every Process Needs A Process Standard
4. The Process Owner Is The Process Expert
5. The Next Process Is Your Customer
6. Loyalty To People Enables Continuous Improvement
7. Process Data and Measurements Drive Process Continuous Improvement

I have received some feedback on this section of the book, and most of it has been along the lines of “show me” - as in, show me a lean management practice that deploys or supports one of these Lean Cultural Principles. So, here’s one example: In order to deploy the Lean Cultural Principle “Process Oriented Thinking Means What Before How” a top management lean practice is “Manage The Process and The Result Will Follow.” I need to warn you, however. The lean management practice of “Manage The Process And The Result Will Follow” at first glance seems to violate a cultural belief in the American workplace, that being that management can drive results by forecasting the result desired and then expecting (demanding) the enterprise to deliver. This management practice can only be employed if you can “lead lean”.

The American Lean Champion will need to formalize a method of Policy Deployment for his or her enterprise in order to “lead lean.” Policy Deployment is a lean management tool, also known as Hoshin Kanri or Hoshin Planning. It is based in the Management by Objectives system developed by the American management guru Peter Drucker. Policy Deployment also incorporates the Plan, Do, Check, Act (PDCA) improvement cycle, a lean continuous improvement tool developed by the American quality control guru, W. Edwards Deming. The PDCA (Plan, Do, Check, Act) cycle is utilized to improve the Process Standard that results from the SDCA (Standardize, Do, Check, Act) cycle, which we will discuss below. In the PDCA cycle, a Plan (P) for improvement is determined and documented on the Process

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Standard. The proposed change is then Done or Demonstrated (D), Checked (C), and implemented or Acted upon (A). What Hoshin Kanri provides is the planning, implementation and review process for managed change, aligning management policy with daily operations, and the improvement activities that are ongoing in a lean enterprise. The Lean Performance Analysis described in *“Lean Performance ERP Project Management”* is the method of Policy Deployment I have developed and utilized in Lean Transformation efforts with clients both domestic and foreign.

Earlier we stated that the Lean Operational Principles permeate everything we attempt to do in Lean Transformation at the operational level. Lean Cultural Principles work in much the same manner, in that they permeate everything we do in Lean Transformation at the cultural level. Belief in Lean Cultural Principles is the reason Toyota and others are able to continue to invent new lean tools and practices, further perfecting their processes year after year. It is clear from their example that once your enterprise possesses lean culture, application and evolution of lean tools and practices is natural. Is culture important? It is first. Lean culture is an organization infrastructure that forwards and sustains Lean Transformation in the areas of job roles, reward and recognition systems, commercial agreements, customer contracts, and product and service offerings.

I am going to return to the most important Lean Cultural Principle, “Loyalty To People Enables Continuous Improvement” below, to amplify it further. In the overall sequence of Lean Cultural Policy adoption, this policy is not often the starting point; rather it becomes obvious and critical as the enterprise attempts to implement the preceding Lean Cultural Principles. We will also discuss some lean human resource practices that are being developed and employed to deploy this Lean Cultural Principle in some of the more successful American Lean workplaces.

2. Educate – Educate – Educate

A Lean Transformation should begin with a Lean Skills Assessment in order to demonstrate who needs education, and on what. It is becoming more and more obvious that the transition from Mass Business Administration (MBA) to Lean Business Administration (LBA) will require a transition in our business educational processes. Many educational institutions, including The University of Illinois At Chicago, are offering education on elements of the lean catalog. A Lean Champion will have to determine who in the enterprise could benefit from education on one or more of the Lean Principles, Tools, and Practices. In addition to those referred to above, lean practices include work cell layout, design for one piece flow, and a host of others.

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Match your people up from a need to know basis. Count the parts and the skills - don't assume they are already there. It is a very good idea to establish a "Pay As You Go" approach to using lean savings from inventory reductions and throughput improvements to pay for education expenses. The Human Resources function will need to establish a perpetual skills inventory to ensure skills and knowledge are kept current and up to date.

3. Empower The Process Operators

If your people believe that the traditional managers who want to run things the way they always have are the ones who decide what lean events will happen, what improvements will be made, and how the enterprise will execute those improvements – then you are most emphatically NOT getting lean. Management domination and command and control administration of the workplace does not nurture and sustain Lean Transformation. It defeats the very people who are the foundation of lean, and leaves management wondering why people are skeptical, or aren't contributing, or both.

A simple solution to the problems generated by too much management direction of lean improvement project selection is to develop an employee suggestion system to use as an input to drive future projects. The use of suggestion systems has been derided as a management "flavor of the month" in many companies. This is a failure on the part of management to organize and sustain the effort. In order to sustain the suggestion box, or suggestion mechanism of whatever sort, all suggestions must be evaluated for potential positive impact on Quality, Cost and/or Delivery (QCD). In the Lean Enterprise, all activities are measured in terms of how they support or improve the quality, cost and delivery metrics of a single process, a group of processes in a process area, or the entire set of processes in the process stream. All suggestions must be implemented if warranted. A suggestion not implemented for a good reason must be presented before being discarded. A working suggestion system is often the missing ingredient in a Lean Transformation. A great book on the topic is *"The Idea Generator: Quick And Easy Kaizen"* by Tozawa and Bodek.

4. Figure Out What A Process Is And Work On It

Material and Information Flow Analysis (MIFA) is a lean diagnostic tool developed by Toyota over 60 years ago to analyze material and information flow. "Value Stream Mapping", a lean diagnostic tool in widespread use in the emerging lean industrial community, is not always the same as MIFA. MIFA was not developed to replace process kaizen, rather it evolved out of the desire to link process improvements across departments and work locations that were not easy to "see" together. There are also many flavors of value stream mapping in use, and they are

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not all the same. MIFA is not meant to be a process identification tool, and it is certainly not a perfect tool for identifying a process at the level at which an operator performs it. MIFA is best utilized to generate process improvement ideas, when Process Standards have already been produced that illustrate the process as all participants in improvement activity agree it is performed. A Process Standard is a visual representation of the process activities required to transform a data or material input into an output needed or desired by a customer. A Process Standard is the result of the SDCA (Standardize, Do, Check, Act) cycle, a lean improvement tool we referred to earlier. The S task of SDCA is the documentation step that produces the Standard (S), which is then Done, or Demonstrated (D), Checked (C), and implemented or Acted upon (A).

While suggestion systems or kaizen activities can also generate improvement ideas, it is always necessary to drill down to the operator level in order to improve a process. At the operator level, a process is a structured sequence of tasks designed to transform an input (material, data) into an output (product, service). A lean process does that without wasteful work steps or material and time consumption. It's as simple as that. Working across departmental or geographic boundaries often makes the improvement effort more like a "re-engineering" activity – the experts make decisions, not the operators. A process is best identified as such by the operator or team that performs it. This includes the Business Planning and other management decision and information / support processes also.

The Lean Champion should ask every manager in the enterprise to identify one of his / her own processes and produce a Process Standard for it. Each owner or operator, singly or in a team construct, should name the process, state the process purpose, and write down all the process tasks, with inputs and outputs. Proceed to measure or estimate the Quality, Cost and Delivery Baseline (QCD). Utilizing the Process Standard, and any of the relevant lean tools, then identify value-added tasks vs. non-value-added tasks. Eliminate the tasks that do not provide value, considering the overall needs of the customer as well as the downstream processes. Report the improved QCD. Repeat. This provides the buy-in tone that the other process operators in the enterprise need, and sets an example that they can follow.

5. Determine What Loyalty To People Means For You

The "Loyalty Principle" is without doubt the single most difficult principle to interpret and implement in the American Lean workplace. An Operations Manager at a major defense contractor put it like this: "American companies pick the right words for their mission statement but typically fall short on backing it up – 'we value people' which is found in so many Mission Statements is cryptic in application -

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people are valued as long as (profit) is double digit and the stock is up - otherwise, 'see ya later'". In the American workplace there is a widespread attitude that the worker is disposable, and that doesn't work for lean. What will? Even recognizing and exposing the "disposable worker attitude" raises American managers' eyebrows.

The Lean Human Resource management practices emerging in the American Lean workplace include staffing permanent positions at 80% of expected down period volume, with "temp" pools used to cover higher market demand. In these companies, the first preference for a permanent opening is given to temps, who are recommended for permanent positions by the process teams that have worked with them. Another Lean Human Resource Practice is job sharing, with 2 employees splitting time, often when they are experiencing a life situation (pregnancy, illness in family etc.) that might otherwise result in a good employee leaving, and taking their lean training and team attitude with them. Lean companies are providing benefits even when full-time hours have gone below 37 per week. Flexible start and finish times, overlapping shift where the workers "manage" the coverage - all these options are being tried to manage demand fluctuations. The key is that people are assets that are managed without layoff and with human kindness and consideration. Is there a payoff? One Process Control Manager (in an award winning lean facility) put it to me like this: "I do not want my trained people laid off for a period of time and going to work across the street at my competitor. I have an investment in them, and I consider them to be valuable. I treat them as the asset that they are, and they reward me with their effort."

Lean Human Resource Practices are the new frontier of Lean Performance Management. A beginning can be made in your transforming enterprise by conducting a management policy deployment exercise that asks for suggestions from the process owners and operators on the following question: "What step or steps should we take as an enterprise to value our employees during the coming Lean Transformation process / project?"

Utilize the ideas gathered to develop Lean Business Policy that addresses company headcount concerns. These concerns will require decisions and commitments on issues such as:

- No layoffs during Lean Transformation.
- Layoffs only when market volume declines, not when efficiencies improve.
- One "re-structuring" layoff, followed by a commitment to market volume layoffs only.

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Expand the Policy Deployment initiatives to present and discuss opportunities to leverage lean benefits at the operator level. Process owners and operators will respond to questions that ask them how the enterprise should go about developing and distributing benefits in the area of ergonomics, education, bonus, gain sharing and profit sharing. Two widely adopted lean human resource practices are the payment of increased hourly rates for cross – training and team based performance incentives.

6. Organize Lean Enterprise By Product/Family

I have to admit that this is a trick question. You have already done this, if it is readily apparent. If it isn't obvious, from a QCD standpoint, what makes you think it is a necessary step to take - now or later? I recently had a participant in a seminar come up to me and say “Thanks for not ramming that ‘organize by product or family’ idea back down my throat again. I run a true job shop, and that doesn't work for me.” He went on to clarify that his product flow was all “cats and dogs” – that he almost never worked on the same product more than once. A better suggestion for him is to view the “Process Stream” that a typical product flows – like cut to turn to notch to knurl etc. He went away happy. So, take this step when it is the next right thing to do - like when lean has taken hold and the obvious new organizational structure is emerging. A Lean Transformation Project / Process can be organized initially by Process Area, so long as the Process Areas identified do not mirror the current organization chart, and Lean Transformation Teams are cross-functional. Or, follow our job shop example, and organize by process stream.

7. Decide If Your Lean Enterprise Needs ERP

This is another trick question. The best way to determine if your Lean Enterprise will need an ERP system is to examine the processes that are performed in your enterprise to see if they include any from the following list:

- Buy/Pay process: This ERP – based process creates purchase orders, receives material, records lot numbers and pays suppliers.
- Order/Ship process: This ERP – based process enables pull support for shipment triggers, shipping, inventory updates, and accounts receivable.
- Financial/reporting process: This ERP- based process enables balance sheet and income statement reconciliation and product-focused cost roll up.
- Forecast / Sales and Operations Planning / Master Scheduling / Material Requirements Planning / Capacity Planning / Vendor Plans and Pulls: These ERP – based processes enable the forward view of capacity and material plans.

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If you need to support these processes, at a minimum, you can benefit from an ERP system. I am not stating or implying that it should be implemented from a “mass production” perspective, however. A “Lean Performance ERP” implementation has fewer transactions and fewer exceptions. There is no transaction support for exceptions, just like a lean factory has no returned goods storage rooms for product returns. We do not issue a MRP schedule, but we do use the MRP Plan to advise our work centers and vendors what will “probably” be pulled in the next planning and production periods. This allows for capacity planning as well as evaluation of buffer and seasonal requirements. Of course, as you reduce batch sizes, balance operations, implement pull systems and supplier kanbans--you can eliminate all the MRP based shop floor control.

8. Determine Whether Lean Is A Process Or A Project

Let's be honest. If you were asked to identify your progress toward Lean, would you say it's formalized? Have you ever included any lean initiatives in the formal business plan or budget? Are you enabling and doing lean activities across the enterprise? Is lean a sustaining activity in the enterprise? Or, is lean gasping for survival? Have you done the product value stream reorganization, trained some “experts” and held some kaizens? Be brutally honest. Is lean “the latest failure”?

Unless Toyota is just an anomaly, Lean Production is going to replace Mass Production in the Global Supply Chain(s), and sooner rather than later. Why? Lean will win because Lean delivers better quality (Q), at a lower cost (C), in a shorter time (D). The better idea wins, in free market competition. If Lean Production works for Toyota, and it doesn't work for you – it's you.

Lean Transformation is a process worthy of formalization. Right now, make it formal. Budget it. Make it enterprise – wide. Develop a sustaining construct for lean by starting a Lean Project Office today and staffing it with your best and brightest “leanies.” Create the HR mechanisms that will allow for transfers of capable personnel to staff lean initiatives as resource people. Pick a “volunteer” to be the Lean Transformation Project Manager. Take all of his / her other assignments away. By the way, the best and brightest are already competing to join the lean firms and those firms that are getting lean. They can see where this is going, from a career perspective. And, of course, that just makes the leans firms stronger, and the remaining mass firms weaker. Don't be left behind.

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9. Form A Lean Steering Committee

Forming a Lean Steering Committee will demonstrate your commitment of time to formalize the lean effort, and will also get lean on the schedule. Taking this one critical step will empower Lean Champions throughout the enterprise. The Lean Steering Committee should be a non-traditional group. Include the visible Lean Sponsors from business units, Lean Champions from key process areas, and the Lean Project Manager. Be sure to include the Human Resource function and Finance. Expand it later, when you know more.

The first task for the Lean Steering Committee is to conduct a Lean Assessment of the enterprise. The second task for the Lean Steering Committee is to develop the Lean Implementation Project Plan. It must include an Education Plan.

10. Conduct A Lean Assessment Before Project Begins

A Lean Assessment is not about comparing the number of kaizen events your enterprise has conducted, either in total or relative to the other divisions in your overall enterprise. It's not about benchmarking competitors, either, because Lean is about competing with your self to get to Process Perfection. In your Lean Assessment, ask how well you are doing – really doing – on your Lean Transformation. Here are some checkpoints:

- How much and how often do you disappoint your customers? Is there a system of measurement and metrics?
- How many quality defects did you catch internally? How many were returned to you by your customers? What did that cost in dollars? In lost customers? Again, is there a system of measurements and metrics?
- How many deliveries (exact quantity ordered, exact product ordered, exact ship date promised) did you miss? Measurements/Metrics?
- What is the current trend on Quality, Cost and Delivery?
- What is the percentage of value creating time versus non value creating time as documented in current process standards?
- How wide is your current lean effort? Have you expanded your lean initiative to the planning processes? Are you removing impediments to lean, like rigid reliance on MRP – based schedule dispatching and cost transactions?

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- Have you expanded your lean initiative to the office? The benefits from lean are probably even greater in the office, even though the waste in the process, and sometimes the customer for a process, are not always so easy to see.
- Have you developed a plan to use the freed up time, equipment and space from your lean activities? What new products, services and markets are you targeting? If “Lean Means Layoff” - there is no lean.

Conclusion

It is up to the Lean Champion to make the management commitment to lead and manage a Lean Transformation. If not the Lean Champion, then who will fund a formal project, with dedicated personnel?

Take the time to vision a Lean Future Enterprise. Ask yourself if you will sell the same products and services, or new products and services. Consider carefully whether or not you will retain the same locations for production, or move to new locations (see my previous white paper, “Lean Performance China Strategy” for a checklist approach to determining the feasibility of the China option for your enterprise). No matter what products or services or from what producing locations, will you leverage the same supply chain, or will you need a new supplier and logistics base? Lean is a growth strategy, because if there are improvement-based layoffs during Lean Transformation, it fails. Will you need to develop new customers to absorb your newfound capacity?

Finally, do you know what and where your job is, in your new Lean Enterprise?

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About the author

Brian J. Carroll is a Principal of Performance Improvement Consulting, Inc. (PIC), a management consulting firm specializing in Lean Performance services located in Downers Grove, Illinois. He is the author of *Lean Performance ERP Project Management: Implementing The Virtual Supply Chain*, published in February 2002 by the San Lucie Press in the APICS Manufacturing Resource Series. Mr. Carroll is a Certificate instructor in the Lean Performance Certificate series offered by the Center for Enterprise Development, Inc. and the Institute for Entrepreneurial Studies at the University of Illinois at Chicago. Watch for his forthcoming book, *Lean Performance Management – A Handbook For Lean Champions*, publishing Fall 2005.

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CED offers a comprehensive program of Lean Certificates, Workshops, and Lean Transformation project assistance that are the standard for quality, cost and delivery in the lean education marketplace. Whether your enterprise is small or large, we can help to start, plan and manage the Lean Transformation with you, from Lean Business Policy Development to Lean Transformation success. CED would be pleased to discuss with you the time and resource commitments needed for Lean Transformation, the obstacles to Lean Transformation that may be present in your workplace and help develop plans and solutions to remove them.

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