

Book Review – Clea Zolotow

IT Virtualization Best Practices: A Lean, Green Virtualized Data Center Approach

by Mickey Iqbal, Mithkal Smadi, Christopher Molloy and Jim Rymarczyk.
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Virtualization can provide many benefits to a datacenter. It can provide a decreased footprint resulting in energy savings. It can provide a more robust datacenter environment, decreasing downtime and increasing SLA attainment. It can provide cost savings and a positive ROI for capital and run-time savings. However, just the act of virtualization does not necessarily realize the benefits. A successful transformation path includes much more than just the act of virtualization. This book, IT Virtualization Best Practices, provides a methodology to ensure a successful path to transformation and realize the many benefits of transforming the datacenter.

The authors provide a structured, tiered approach to transformation utilizing the underpinnings of virtualization. They start by providing a set of service patterns to maximize the value to the business from the process of transformation and virtualization. It's also interesting to note that this methodology need not be used for an initial first transformation. It can also be used for the re-transformation of an existing data center to obtain benefits not realized in an initial transformation, whether applied to virtualization, cloud-computing, resource pool sharing, or any other current and future transformational technology.

After an initial technical discussion about the various types of virtualization and the necessity of virtualization for a green datacenter, the book starts its highly structured approach to data center transformation by utilizing the Seven Lean Levers: segmenting complexity, redistributing activities, pooling resources, flexibly balancing resources, reducing incoming hardware infrastructure and work, reducing non-value adding work, and standardizing operations. Each of these Lean Levers is applied not only towards virtualization but also the transformation process.

The next seven chapters are organized around the virtualization patterns corresponding to each Lean Lever. This allows an effective, understandable methodology to apply complex technical and business re-engineering within a Lean Framework. One of the best chapters here is on the "Lean Metric Segmenting Complexity" in Chapter 5. This chapter discusses specific Critical Success Factors (CSFs) and Key Performance Indicators (KPIs) that can be used during the transformation. These include specific KPIs such as "applying unit costs to all consumed server resources." While some of these may be obvious, it's a good blueprint to follow when starting a data center transformation.

After the service patterns, there is a chapter on Virtualization Transformation Deployment, which explores the deployment process necessary to ensure a successful transformation. This chapter is geared towards the project management team and contains organizational phases to complete transformation successfully. This chapter contains the end-to-end deployment of the virtualization transformation in four phases: planning, diagnostic, future state design, and implementation for the PMs use. The book ends with a simplistic but effective business case template.

This book shows what a well-instrumented and measured transformation effort along with what virtualization technologies can do to help reduce energy costs, stop server sprawl, and promote standardization within the environment by utilizing service patterns. It's a good read for any IT professional and a must-read for any IT professional thinking about transforming their datacenter.