Chapter 1 : [KINDLE] Free Kindlebook The Art of Capacity Planning from www.nxgvision.com

*The Art of Capacity Planning: Scaling Web Resources [John Allspaw] on www.nxgvision.com *FREE* shipping on qualifying offers. Success on the web is measured by usage and growth.*

Capacity Planning Best Practices: What is Capacity Planning and Why is it Important? In the context of professional services PS , capacity planning is an activity the resource management office RMO would own, or at least help to facilitate. The goal is to have the right people with the necessary skills in place at the right time to meet your business needs. In order to make investment decisions, knowing what the future demand will look like is a key aspect that makes capacity planning an important process for PS. The goal [of capacity planning] is to have the right people with the necessary skills in place at the right time to meet your business needs. Analyzing and estimating demand Translating demand into capacity requirements Understanding existing and planned capacity Aligning supply, demand and business goals Each of these involve a combination of science, the analysis of existing data, and art that fills in the blanks when the necessary data is not available. Analyzing and Estimating Demand Estimating the demand involves combining your sales opportunity pipeline and your existing delivery backlog. However, there is a lot more to establishing an accurate estimate of demand than a simple mathematical formula. The quality of the pipeline and backlog data directly impacts the precision of the demand estimate. Opportunity Pipeline Sales opportunity pipeline data from your sales tracking system, preferably from your CRM customer relationship management system, provides the baseline to begin estimating the demand. How accurate is this data? These factors have a direct impact on estimating the PS demand. Many companies do pipeline analysis and have quantified data that can be used to augment the demand calculation. Engagement Backlog Engagement backlog data from your engagement tracking system, preferably from your PSA professional services automation system, provides the baseline to estimate the other portion of the PS demand. Just like the pipeline data, the backlog data quality needs to be assessed. Consider the situations where certain types of engagements or certain customer engagements end early or run long. Engagement escalations also have a direct impact on the PS backlog, and thus impact the precision of demand calculation and the overall capacity plan. These potential events could impact the precision of the demand rollup. Translate Demand into Capacity Requirements This is one of the more challenging aspects of capacity planning. This results in the need to translate the pipeline and backlog from currency values to raw HC. One of the more common methods is the use of ADR average daily rate per delivery resource , by taking the total value of the PS demand and dividing it by ADR the result is the average man days to deliver estimated demand. Factor in average utilization and partner delivery mix, and the result is a value in terms of resource required. The Real Challenge with Capacity Planning Estimating the schedule for when the resources will be needed is one of the more challenging aspects of capacity planning. It relies heavily on resource and project scheduling and a fair amount of artistic insight when historical scheduling data is not available. There are many deep analytical approaches to the forecasting of project and resource schedules, and is an area that can quickly be over-engineered. Understand Existing and Planned Capacity Talent and skill management activity is a key activity for resource management and is the primary source for understanding existing delivery resources and their skills. Human resources HR will also have important data to help understand existing and planned capacity. Aligning Supply, Demand, and Business Goals With the PS demand and PS supply identified as precisely as reasonably possible, the focus shifts to the business goals and objectives. These metrics are impacted by capacity planning decisions of when and how many people to hire or not. Next are the big picture influencers such as mergers, acquisitions, divestitures, industry trends, market changes, economic, political, and geographic changes, which all play a significant part in creating a capacity plan. Aligning supply, demand, the business goals, and the influencers is much more art than science. When capacity planning is done well, improvements in the overall health of the business, predictable utilization, lower attrition levels, improved margin and generally happier operations and delivery resources can be realized. In the bigger picture, successful capacity planning facilitates a competitive advantage through reduced time-to-market for new solutions, improved growth, enabling scale, and helping the business to be

more agile and respond to market changes more quickly. TSIA benchmark and capability assessment data indicates that our members are having varying success with capacity planning. How mature are your capacity planning activities? Organizational capabilities that technology services businesses must master Download PDF.

Chapter 2 : The Art of Capacity Planning [Book]

The Art of Capacity Planning is written by the manager of data operations for the world-famous photo-sharing site www.nxgvision.com, now owned by Yahoo! John Allspaw.

Achieved through the implementation of specialized software, hardware and sensors, DCIM enables common, real-time monitoring and management platform for all interdependent systems across IT and facility infrastructures. Manufacturing resource planning Key functions and features Capacity planning or capacity requirements planning CRP Manufacturing resource planning Industry specifics Capacity planning is the key to success in this as in many industries, and it is in those that MRP II is less appropriate. VMware â€" Other products VMware Capacity Planner, an information technology IT capacity planning tool, collects utilization-data in heterogeneous computing environments and compares it to industry-standard reference-data to provide analysis and decision-support modeling. He developed a computer performance model for a major computer vendor. His innovative research results were adopted in commercial compter performance tuning and capacity planning tools. Tata Consultancy Services â€" Products and services TCS and its 54 subsidiaries provide a range of information technology-related products and services including application development, business process outsourcing, capacity planning, consulting, enterprise software, hardware sizing, payment processing, software management and technology education services. Performance engineering â€" Transition Identify projected trends from monthly and quarterly reports, and on a quarterly basis, execute capacity planning management activities Service catalog â€" Service catalogs for cloud computing services To make selection easier and to speed service deployment, service definitions are often standardized in cloud service catalogs. This presents three benefits: Business transaction management â€" Applications Capacity planning: Analysis of usage and performance trends in order to estimate future capacity requirements. A practical consequence of burstiness and heavy-tailed and correlated arrivals is difficulty in capacity planning. Many companies arrive at that figure through trial and error by stacking virtual machines on top of each other until performance slows to a crawl. Capacity Management â€" Network performance management tasks and classes of tools Network managers perform many tasks; these include performance measurement, forensic analysis, capacity planning, and load-testing or load generation. They also work closely with application developers and IT departments who rely on them to deliver underlying network services. Prescriptive analytics â€" Applications in healthcare Prescriptive analytics can also benefit healthcare providers in their capacity planning by using analytics to leverage operational and usage data combined with data of external factors such as economic data, population demographic trends and population health trends, to more accurately plan for future capital investments such as new facilities and equipment utilization as well as understand the trade-offs between adding additional beds and expanding an existing facility versus building a new one. Operations management â€" Modeling Also any serious discussion of capacity planning involves adjusting company outputs with market demands. Capacity planning In the context of capacity planning, design capacity is the maximum amount of work that an organization is capable of completing in a given period. Effective capacity is the maximum amount of work that an organization is capable of completing in a given period due to constraints such as quality problems, delays, material handling, etc. The phrase is also used in business computing as a synonym for capacity management. Capacity planning The goal of capacity planning is to minimize this discrepancy Capacity planning â€" Strategies The broad classes of capacity planning are lead strategy, lag strategy, match strategy, and adjustment strategy. Capacity planning â€" Capacity In the context of systems engineering, capacity planning is used during system design and system performance monitoring. Velocity tracking is the act of measuring said velocity. The velocity is calculated by counting the number of units of work completed in a certain interval, the length of which is determined at the start of the project. It also collects data for long term performance analysis and capacity planning. The product consists of the following components: It also speaks to optimization of such processes, charging for them as well as estimating future requirements, sometimes called capacity planning. E-services â€" Social, cultural and ethical implications of e-services Meeting these expectations comes at a price to government agencies where it

concerns managing information â€" more specifically, ease of access; data integrity and accuracy; capacity planning to ensure the timely delivery of data to remote possibly mobile sites; and managing the security of corporate and public information. Interactive Intelligence â€" Acquisitions On August 1, , Interactive Intelligence acquired Bay Bridge Decision Technologies, a developer of capacity planning and strategic analysis technology, in an all-cash transaction.

Chapter 3 : Capacity Planning â€" The Art of Service, Standard Requirements Self Assessments

The Art of Capacity Planning is Web-based companies live or die by the ability to scale their infrastructure to accommodate increasing demand. This book is a hands-on and practical guide to planning for such growth, with many techniques and considerations to help you plan, deploy, and manage web application infrastructure.

Chapter 4 : The Art of Capacity Planning : Books

The Art of Capacity Planning by John Allspaw Success on the web is measured by usage and growth. Web-based companies live or die by the ability to scale their infrastructure to accommodate increasing demand.

Chapter 5 : Mastering the Art and Science of Capacity Planning | The Source

In a basic sense, capacity planning is resource management. When resources are finite, and come at a cost, you need to do some capacity planning. When a civil engineering firm designs a new highway system, it's planning for capacity, as.

Chapter 6 : The Art of Capacity Planning, 2nd Edition [Book]

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Chapter 7 : The Art of Capacity Planning: Scaling Web Resources - John Allspaw - Google Books

The Art of Capacity Planning: Scaling Web Resources in the Cloud by Arun Kejariwal, John Allspaw In their early days, Twitter, Flickr, Etsy, and many other companies experienced sudden spikes in activity that took their web services down in minutes.

Chapter 8 : The Art of Capacity Planning, 2nd Edition - O'Reilly Media

When capacity planning is done well, improvements in the overall health of the business, predictable utilization, lower attrition levels, improved margin and generally happier operations and delivery resources can be realized.

Chapter 9 : The Art and Science of IT Capacity Planning: Best Practices | TSIA

Capacity planning is an art as much as it is a science. Along with certain parameters, it also involves experience, knowledge of the domain itself and insight into the system. In some instances, it goes as far as analyzing the psychology of the system's expected users and their usage patterns.