

A PERFORMANCE CENTRIC APPROACH

MAINFRAME COST OPTIMIZATION

GLOBAL
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SOLUTIONS
GROUP

MAINFRAME
MANAGED SERVICES



MAINFRAME WILL BE A KEY BUSINESS ASSET OVER THE NEXT DECADE.

When you spend as much time as we do on the mainframe, you're going to be asked how to run it more efficiently from a cost perspective. We get that question – a lot. This is an overview of our approach.

We attack the problem in its three elements:

**Hardware
Software
Personnel**

HARDWARE

We'll start with the most straightforward first.

We use the complementary techniques of performance, workload and capacity management in an effort to ensure that our clients can avoid upgrades, achieve SLAs, or even downgrade a processor in a sunset scenario. For those who are interested, we have a longer paper on this. For here, suffice to say that:

Performance Management is the practice of iteratively eliminating or reducing the consumption patterns of a given job, schedule, transaction, or query. "Tuning" is a term commonly used to describe this process; it is MIPS elimination/reduction – plain and simple.

Workload Management is the practice of prioritizing workloads and delivering computing resources where they are needed to meet SLAs. Almost always overlooked, Workload Management is critical if you want to avoid unnecessary processor upgrades.

Capacity Management is the practice of modeling future computing resource requirements based upon historical consumption, achievement of SLAs, business forecasts, the effects of the tuning work, and anticipated business events. Nothing is worse than having to brute-force a capacity upgrade and deal with the fallout of software licensing, board proposals, etc. that accompany an unexpected expenditure that has a few zeroes behind it.

Obviously, there are close relationships among the three. Workload Management becomes more difficult when the Capacity is improperly planned; Capacity Management predictions are skewed if savings from tuning are not accounted for; and SLAs are missed by inadequate Workload Management. This leads to a false perception – either that the capacity program is flawed or that more hardware is needed. This is obviously not the right answer when the assignment was to reduce spending by 10% (or more).

These duties are important enough that when we manage someone's mainframe environment, we accept this responsibility willingly as part of the relationship.

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SOFTWARE RATIONALIZATION

Step One: Eliminate tools used by a small audience.

The sheer size of the audience is not the only determinant of importance but it's a start, and this is after all a cost reduction initiative. Survey all of the tools; quantify the audience size; assess the impact of possible elimination; propose alternatives if the impact cost trumps the tool cost.

Step Two: Replace a product with an existing feature.

z/OS has numerous features now that might not have been available when you purchased a specific-function product. We exploit all of these inherent features in a cost-pressured environment.

This involves training of the user audience – but the payback is often substantial. Politically, it's hard for anyone to argue against using a robust feature for which you're already paying.

Step Three: Competitive displacement of a low use product.

Picture an expensive product used by a small group within your organization. If you can't do without the product (Step One) and can't

replace it with a built-in z/OS feature (Step Two), consider a competitive displacement where you swap Vendor A for Vendor B with locked in pricing for the term you feel is most appropriate for you. Then do the math on the training and migration required. Mainframe software deals abound these days – you just need to look.

Step Four: Competitive displacement of a high use product.

When Steps One through Three do not work – consider this. Admittedly, this is tough sell to the audience of the product – but if the financial support the acquisition of the tool, the implementation of the tool, and the training required can be justified – this research is certainly warranted.

STAFFING

Given the shrinking pool of mainframe experts, it's unusual that we are asked to reduce a percentage of the team. One place we can help is in looking at which skills are more effectively provided from a pool to take advantage of the economics of a fractional resource model.

In most shops, if you have CICS, DB2, and maybe some IMS mixed in,

it's not uncommon to have a specialist for each. In some cases, the CICS expert might be able to support IMS or DB2 from a Systems Programming level, but comes up short for DBA support.

Rather than provide our clients three resources in the example above, we right-size the time requirement to the size of the environment. CICS might need only 20 hours, IMS 15, and DB2 20-25 – so this is what we provide. No more staffing with a fully burdened 40 hour per week resource – we give you what you need, yet let you have more when you need it.

The other thing we do is contract to a gradual decrease in monthly charges relative to the workload, being moved off the mainframe. It's not perfectly linear all the time...but it's directionally correct. We've got a more detailed post on this as well – feel free to call or email and mention your interest. We hope this helps. If you'd like to talk further please call us at (877)467-9885 or email us at mainframe@GTSG.com. Thanks.

With GTSG, you bring hundreds of years of mainframe practitioner experience to your mainframe effectiveness project.

To learn more, write us at mainframe@GTSG.com and we will set up a conversation.

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HYBRID CLOUD STRATEGY AND MIGRATION

Strategic Approach

- Business case development
- Transition planning
- Technical modeling
- Non-disruptive execution

Application Analysis Methodology and Tools

- Decomposition
- Affinities
- Wave planning

Project Leadership

Implementation Subject Matter Expertise

INFRASTRUCTURE SUPPORT SERVICES

Managed Services

- Multi-platform including DB & MW
- Service-level based or FTE-based
- Architecture, administration, programming, systems management
- Remote or Onsite

Project Based Services

- Platform upgrades
- Workload migrations
- Implementation services
- Consulting and Assessment (performance, DR, HA....)
- Project Management

INFRASTRUCTURE TRANSFORMATION

Transition Services

- Insourcing/Outsourcing
- Knowledge transfer and interim support
- Application migration
- Service management design

Disaster Recovery Design and Implementation

High Availability Design and Implementation

Application Assessment and Deployment

- Reference Architecture
- Infrastructure Alternatives/Recommendations
- Implementation/Migration

INFRASTRUCTURE OPTIMIZATION

Architecture Assessment and Design

Server Virtualization/Consolidation

Storage Optimization

Data life-cycle management

- Tiering
- Standardization/Automation

Application Decomposition Application

Re-design/Remediation Performance

Management and Tuning Latency

Analysis and Consulting