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# Getting System Sizing and performance testing right

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SEMA  GROUP

 **Livingstonrental**  
electronic equipment

# Summary

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- The rentals business
- Why prototype performance?
- The prototyping process
- Our results
- Conclusions

# The Rentals Business



Sales Person

Customer



① Check Availability

④ Return

③ Rent

② Confirm Order



Stock

SEMA GROUP

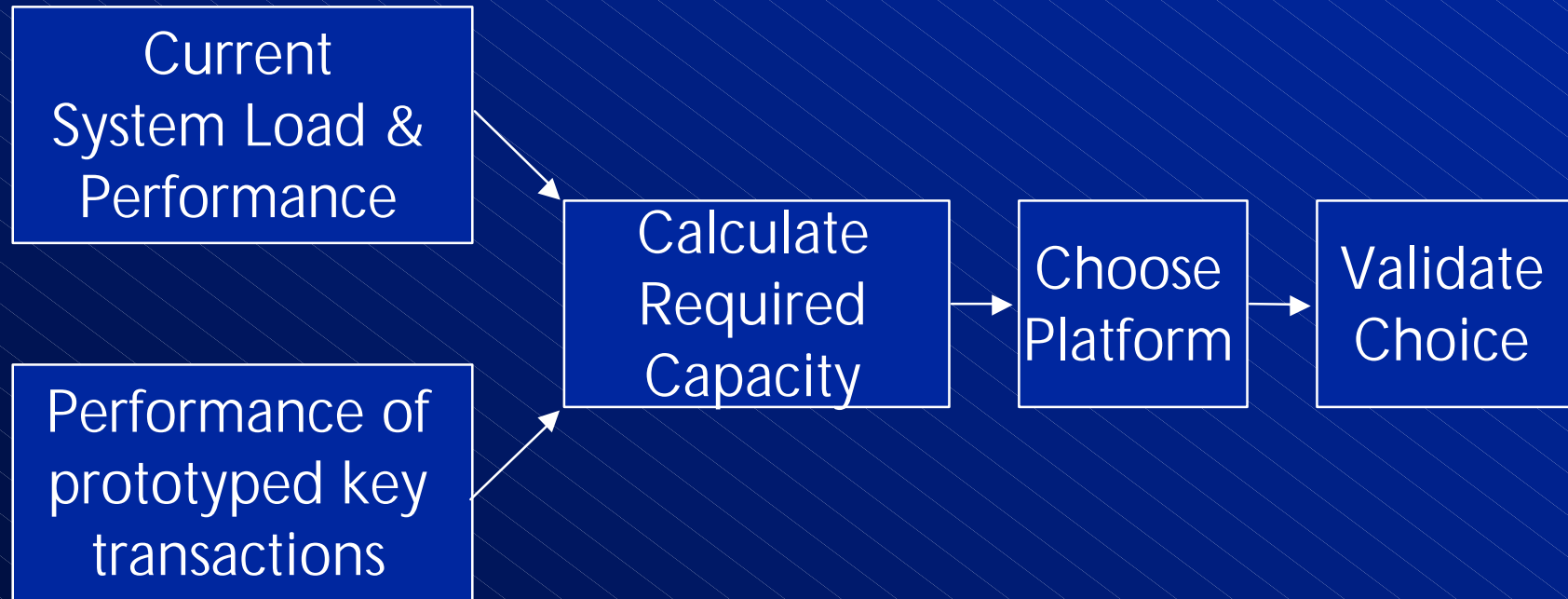
# Why Prototype Performance?

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- Balance costs against risks:
  - Hardware Costs
  - Cut back to old system
  - User perception
  - Loss of business

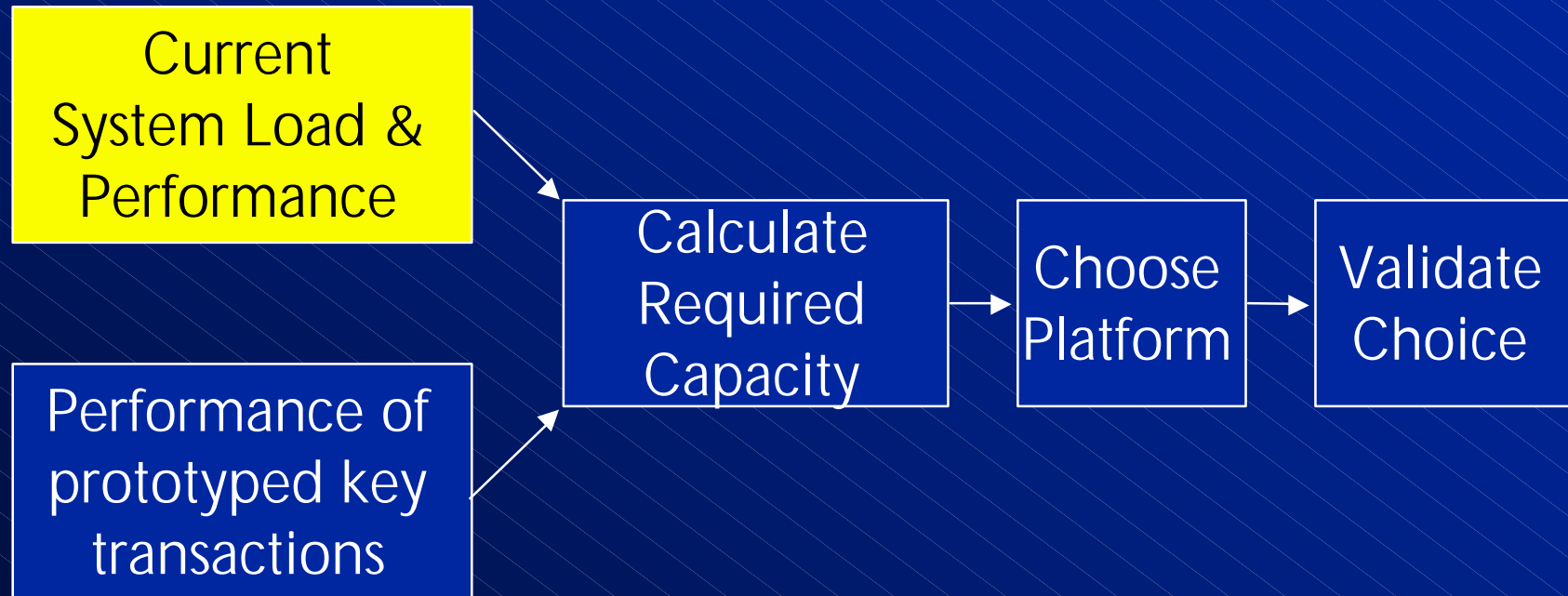
# Process Overview

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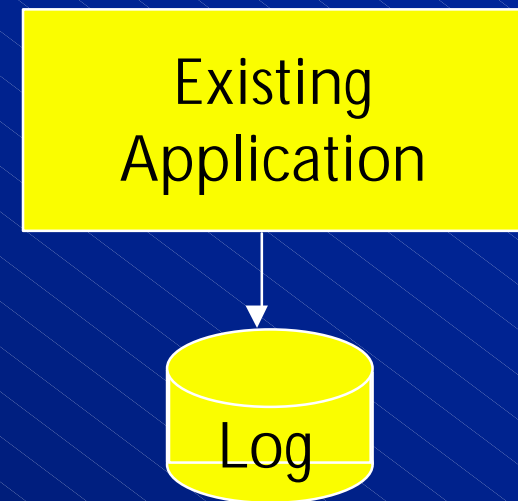
# Measuring Current System Load

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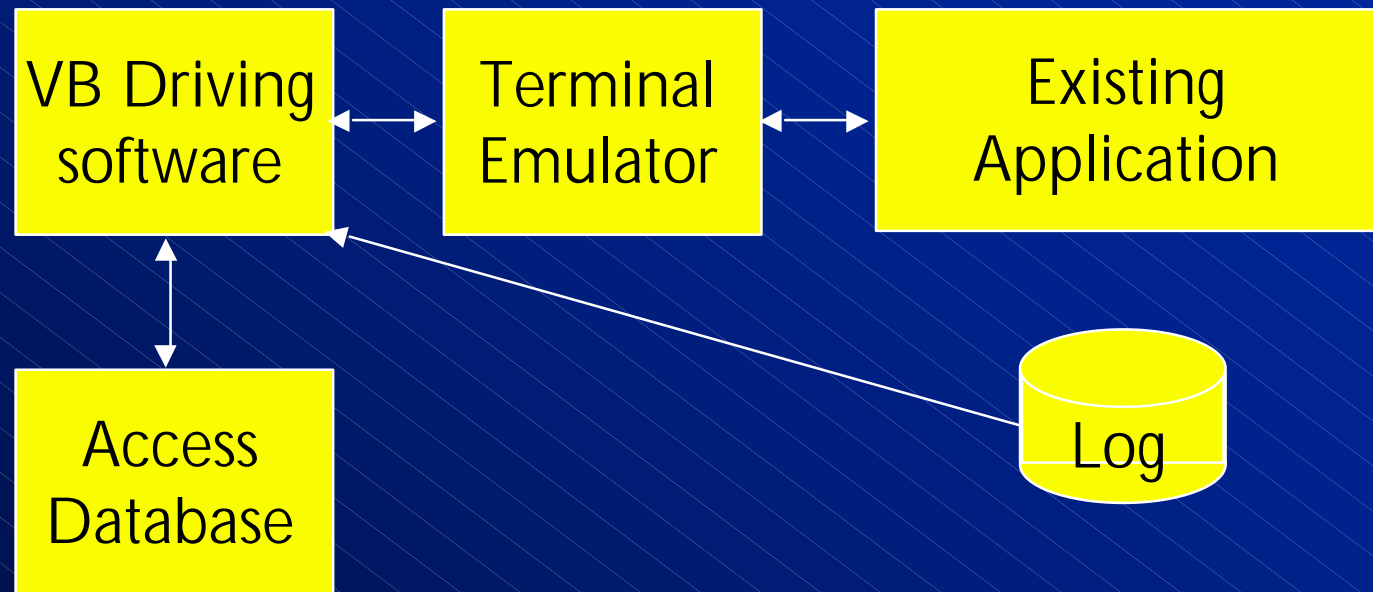
# Measuring the Transaction Profile

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# Measuring the Transaction Profile

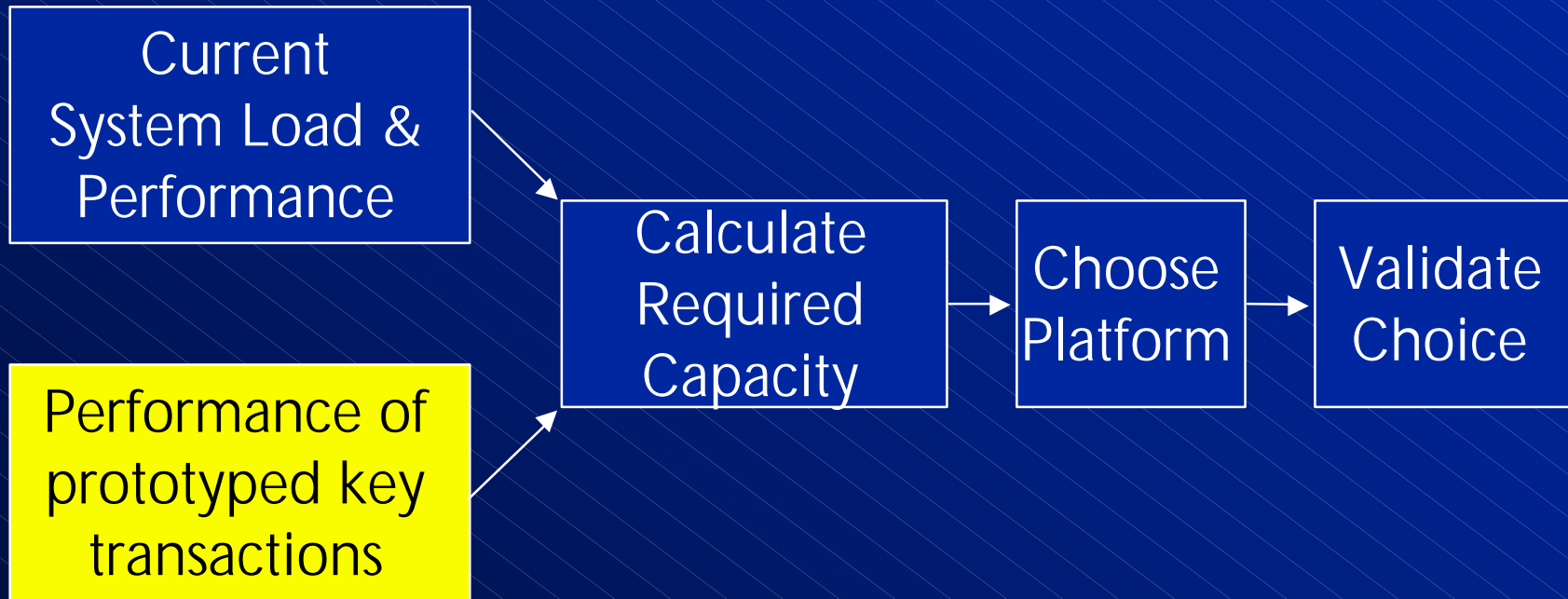
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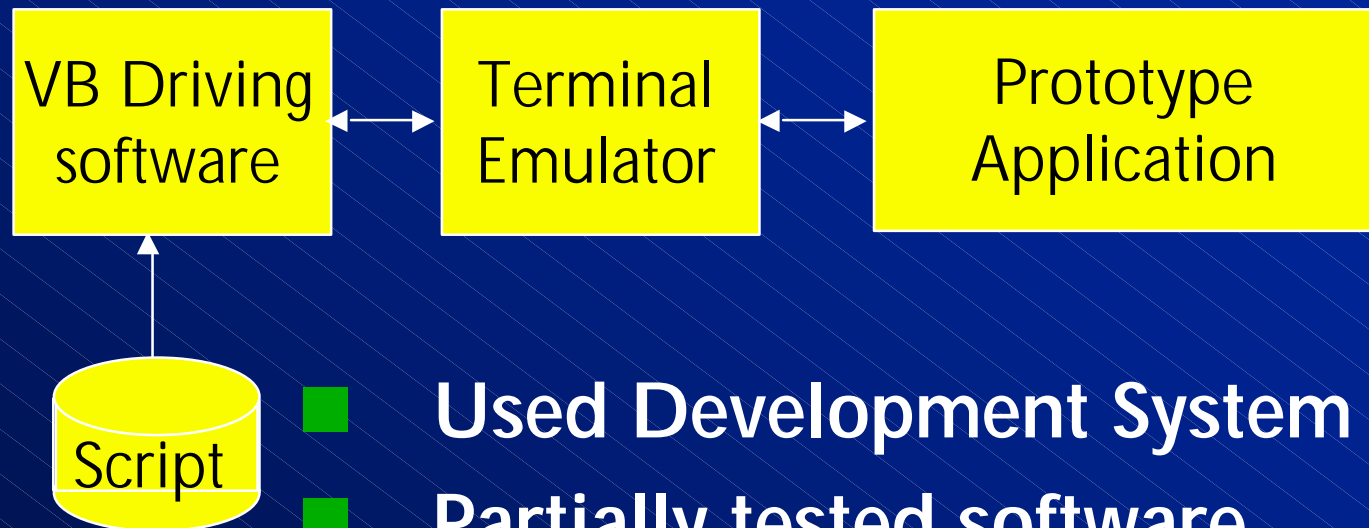


# Prototyping Key Transactions

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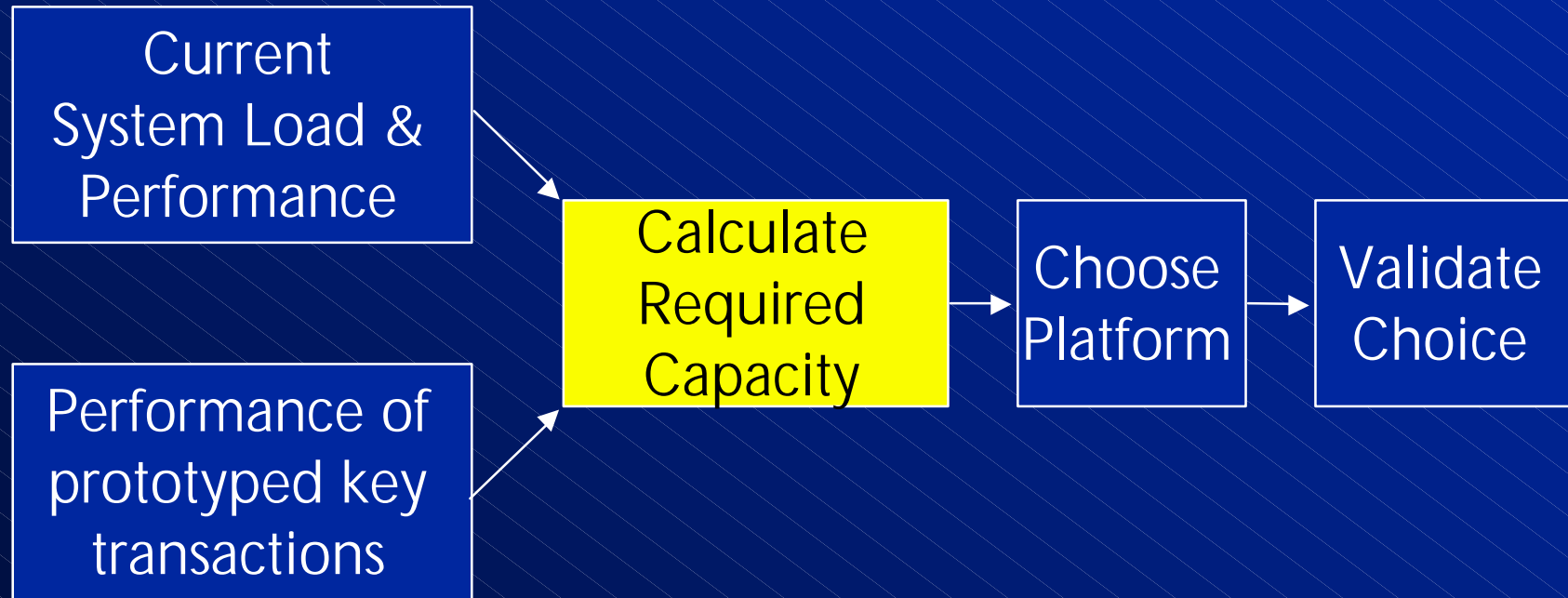
# Prototyping Key Transactions



- Used Development System
- Partially tested software
- Provided CPU and disk usage
- CPU would be bottleneck

# Calculating Required Capacity

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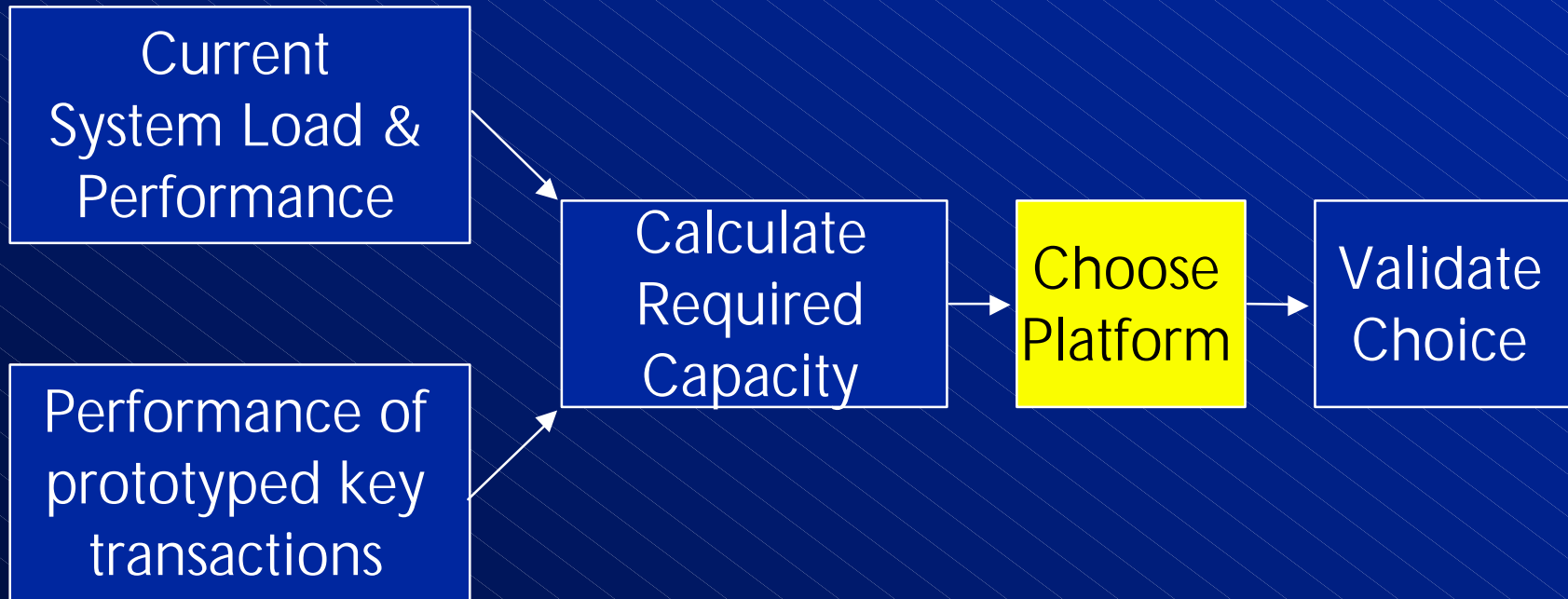
# Calculating Required Capacity

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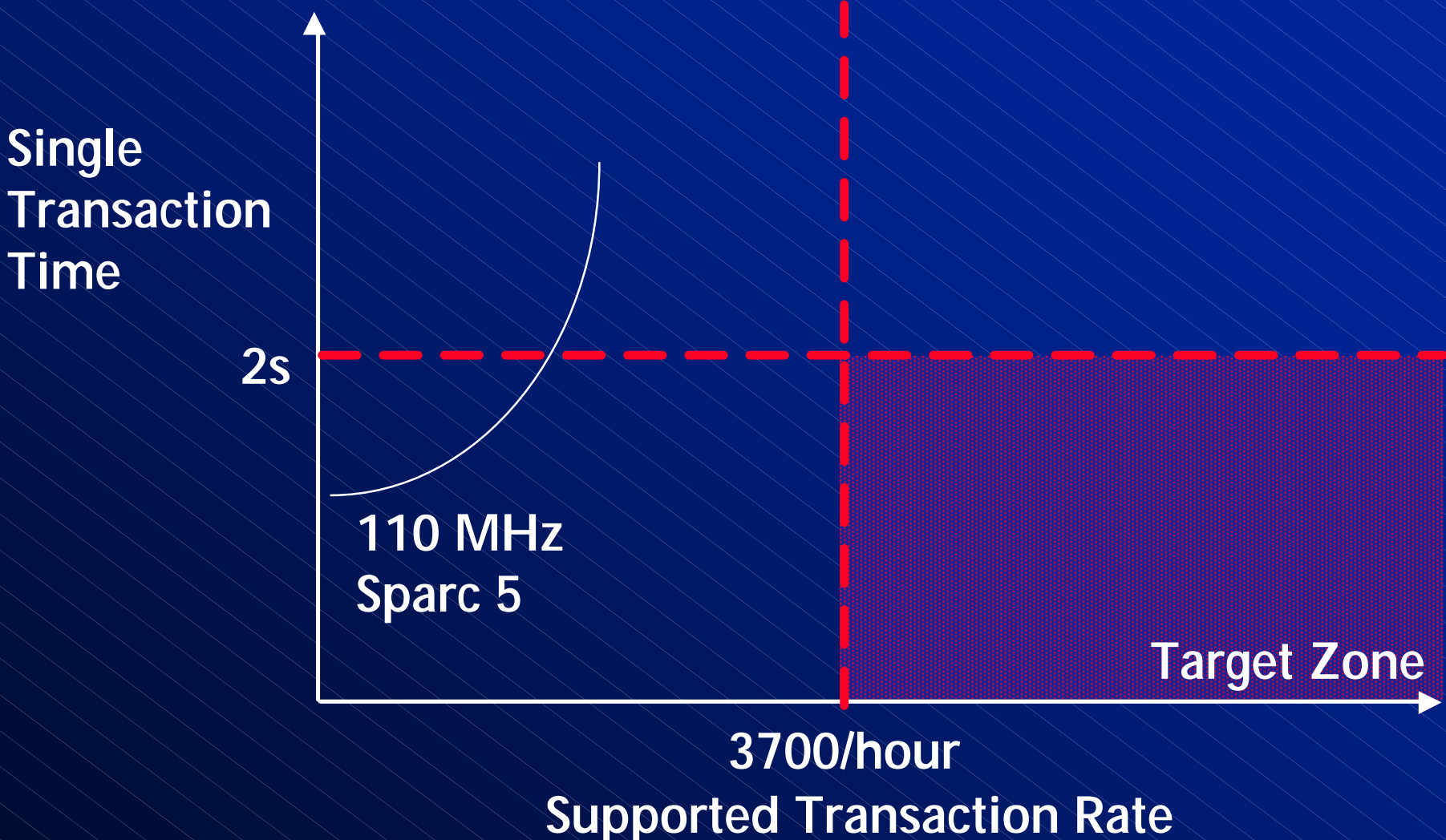
- Lightly loaded prototype indicates processor speed
- Prototype under load indicates total processor power required
- Memory from vendor recommendations
- Disk from old system and vendor recommendations - prototype valuable

# Choose Platform

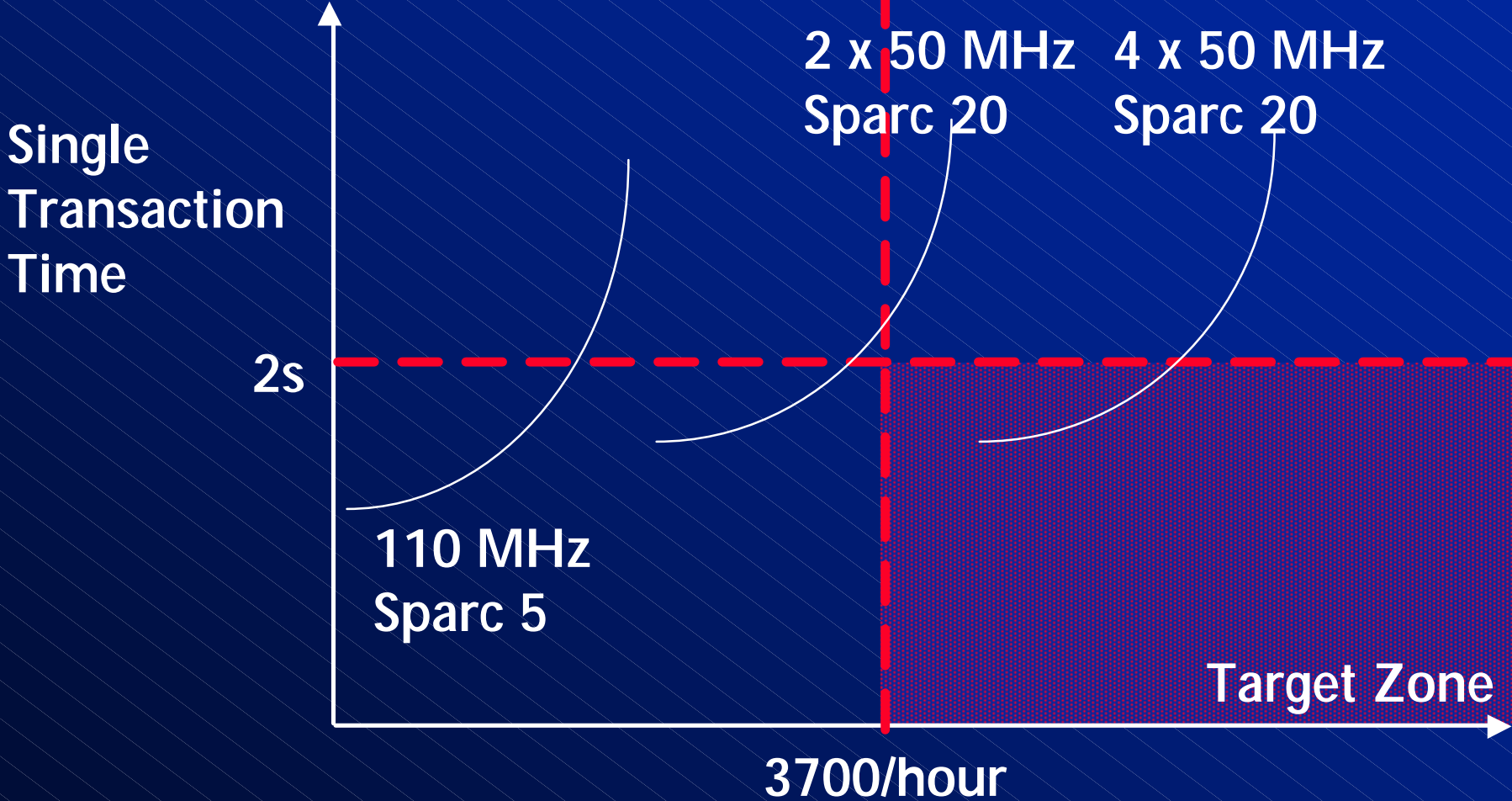
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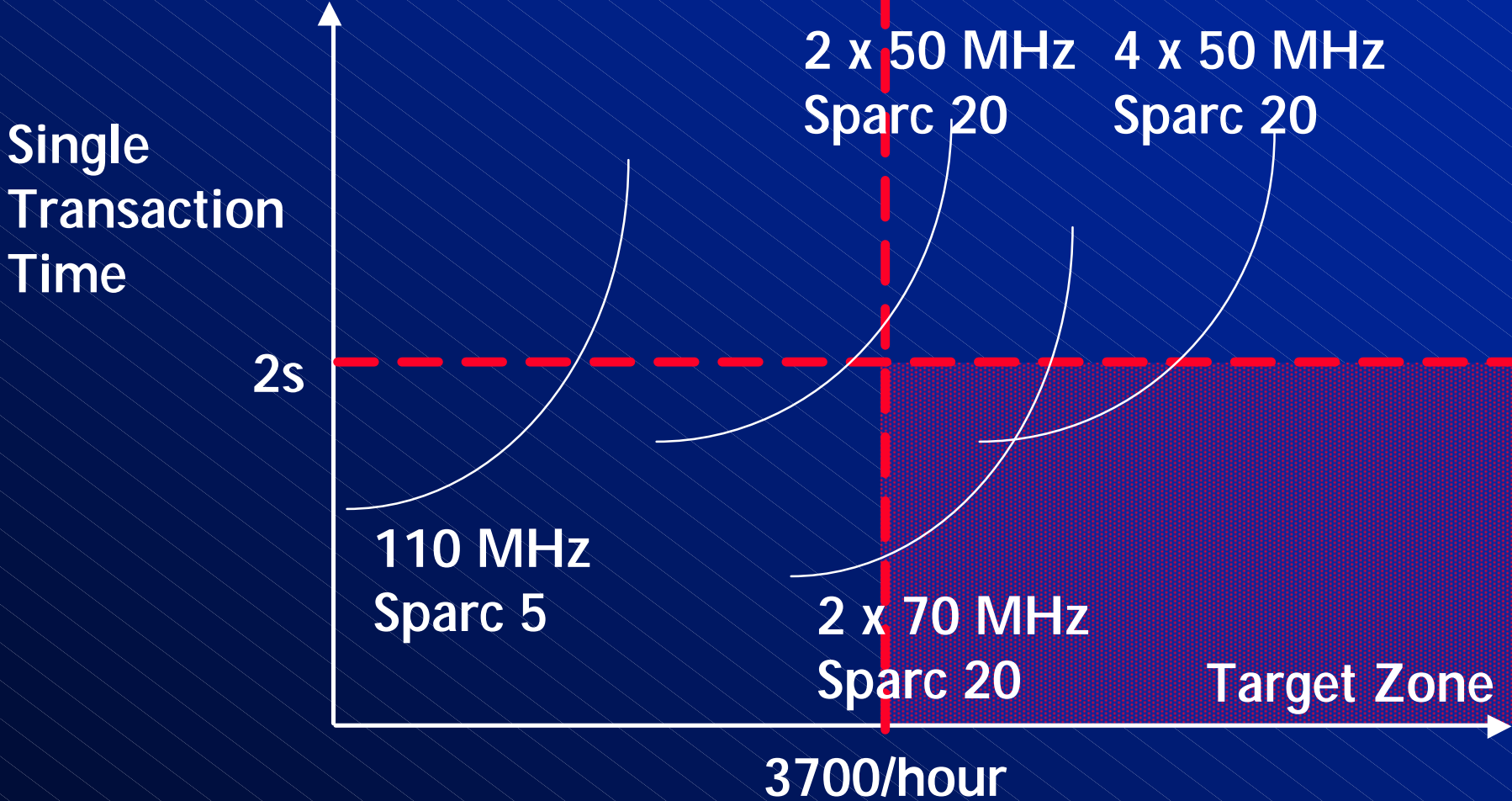
# Choose Processors



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# Choose Platform

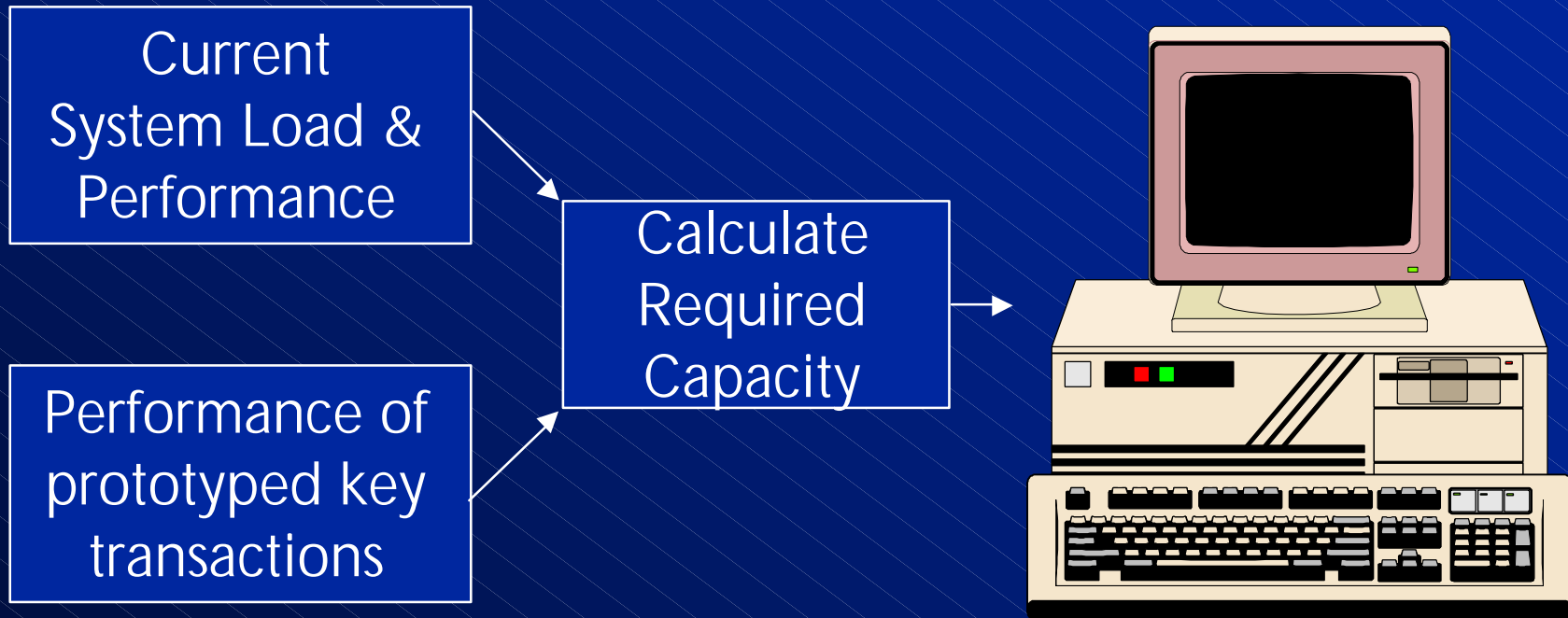
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- Consider
  - Cost
  - Error Margin
  - Growth (business and MIS)
- Rent memory and processors if uncertain

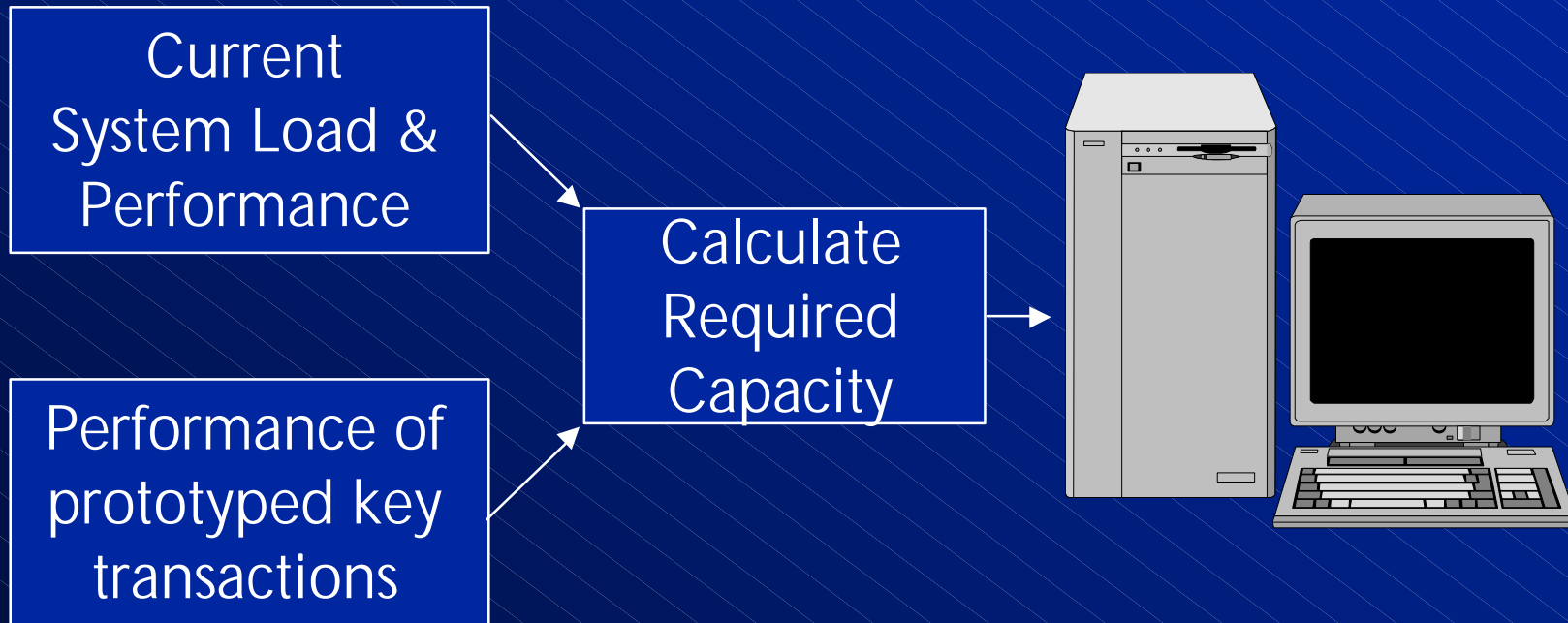
# Choose Platform

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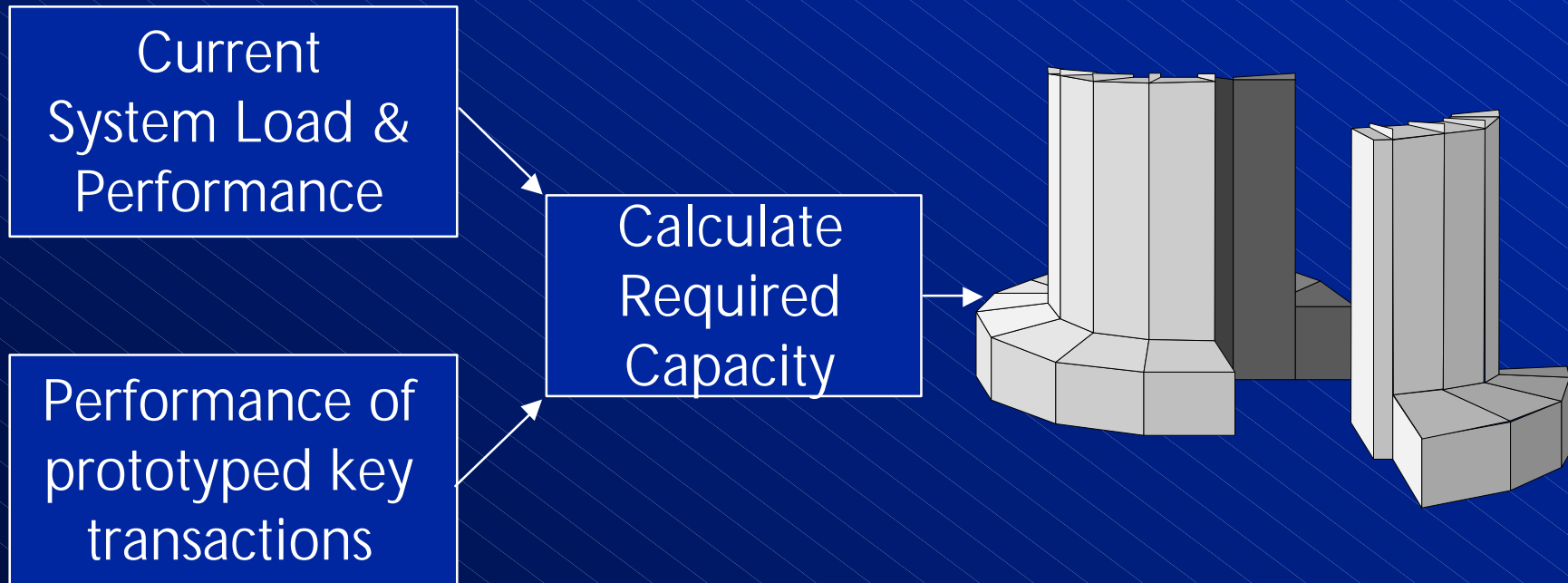
# Choose Platform

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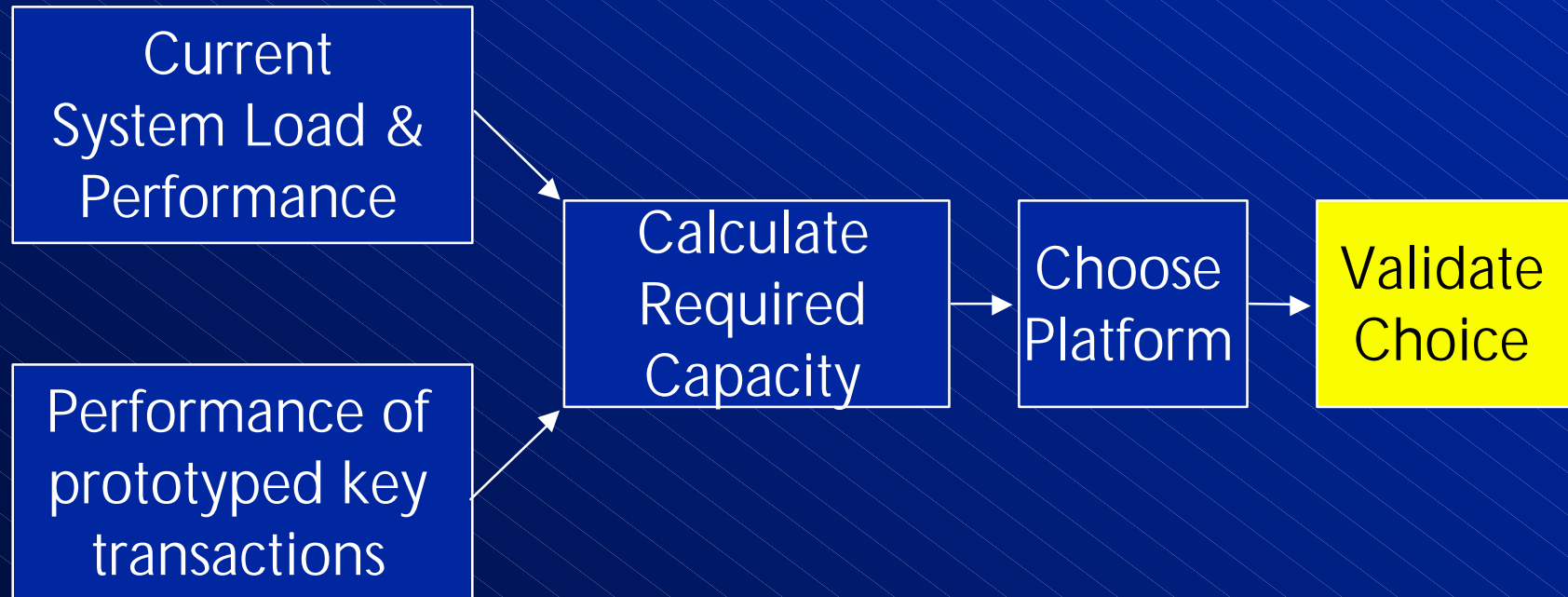
# Choose Platform

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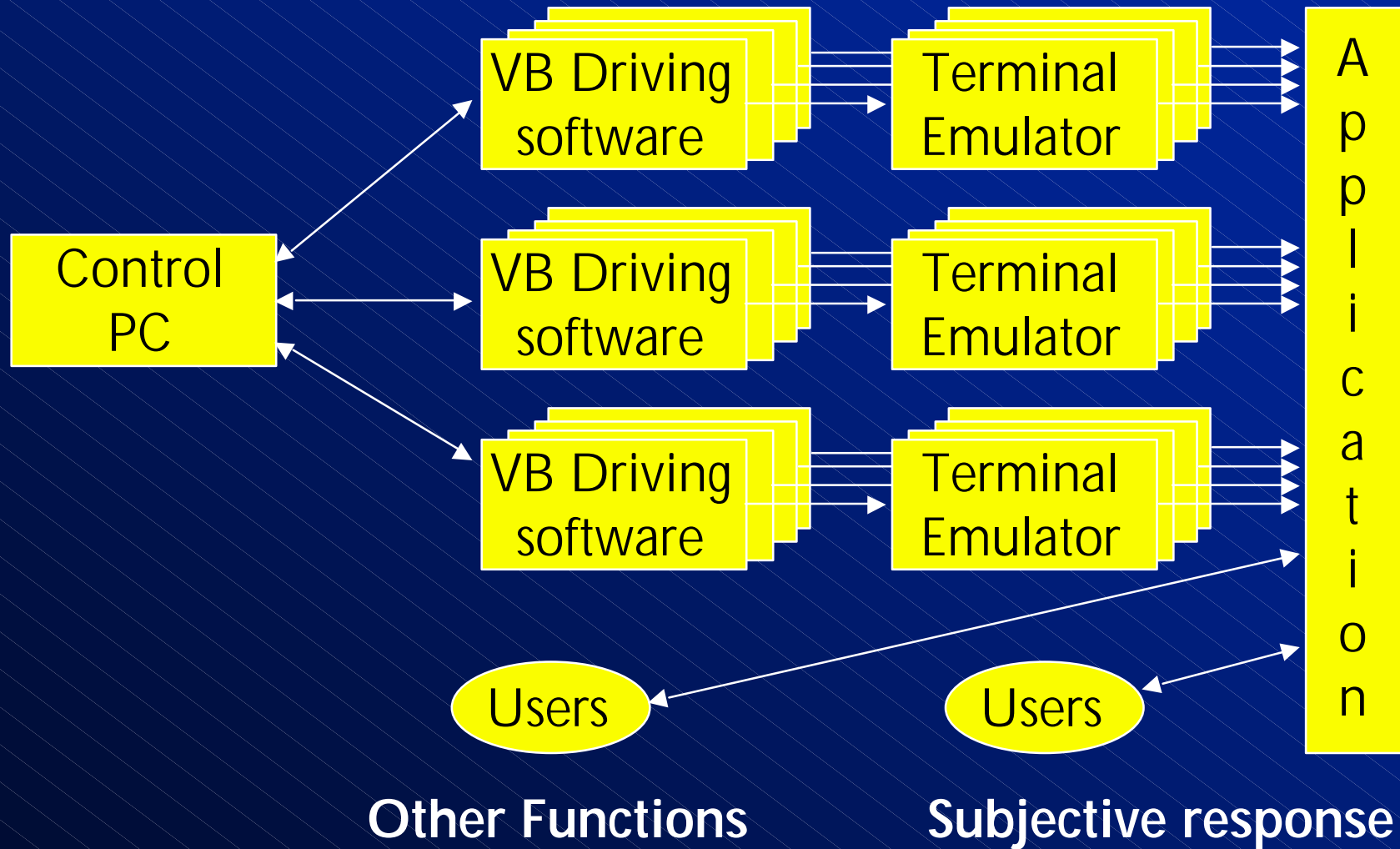


# The Performance Test

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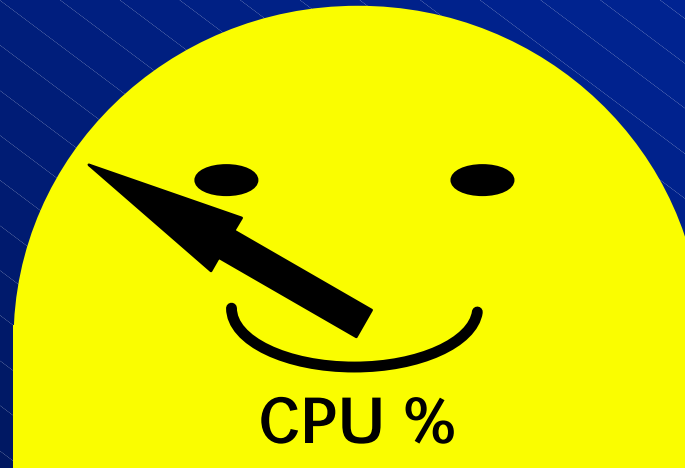


# The Performance Test



# Results of Our Project

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# Conclusions

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- Confirm the business case first
- Concentrate on bottlenecks
- Invest in test tools that will do the job
- Involve your users throughout