

AN ANALYSIS OF BUSINESS IMPACT FROM CQRS PATTERN-BASED
MISSION CRITICAL APPLICATIONS

VITU HANSAKUL 5537221 EGTI/M

M.Sc. (TECHNOLOGY OF INFORMATION SYSTEM MANAGEMENT)

THESIS ADVISORY COMMITTEE : SUPAPORN KIATTISIN, Ph.D., ADISORN
LEELASANTITHAM, Ph.D., WARANYU WONGSEREE, Ph.D.

ABSTRACT

This thesis discusses an application of the Command Query Responsibility Segregation (CQRS) architectural pattern in mission critical business software. It can be used within collaborative domains to decouple the requests of the system (commands) from the processing of that request (queries). We built a proof-of-concept application to give us ideas on what types of impact we would face when implementing the CQRS pattern in the real world. Finally, we ran scalability tests and found that the CQRS pattern, which focused on collaborative domains, has far more potential to improve your system scalability while decreasing long-term operational costs for your business than just applying the traditional CRUD N-tier architecture in every portion of the system.

KEY WORDS: COMMAND QUERY RESPONSIBILITY SEGREGATION/
DOMAIN-DRIVEN DESIGN/ENTERPRISE PATTERN

44 pages