

DEVSECOPS IN THE CLOUD FROM THE LENS OF A WELL-ARCHITECTED FRAMEWORK

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SECTION 1: CONTEXT AND BACKGROUND

WE HAVE REALLY COME A LONG WAY.

BUT THE BUSINESS REQUIREMENTS HAVE NOT CHANGED.

JUST HAPPY THAT THE BUSINESS OUTCOMES, USE-CASE IS MET WITH A WELL-ARCHITECTED SECURE WORKLOAD



ARCHITECTURE IS THE GLUE THAT HOLDS IT ALL TOGETHER

WHY DO WE NEED TO EMBRACE THIS SO-CALLED DEVSECOPS?

SECTION 3: ARCHITECTURE CONCEPTS



IEEE 1471:2000 "THE FUNDAMENTAL ORGANIZATION OF A SYSTEM... PRINCIPLES GUIDING ITS DESIGN AND EVOLUTION."

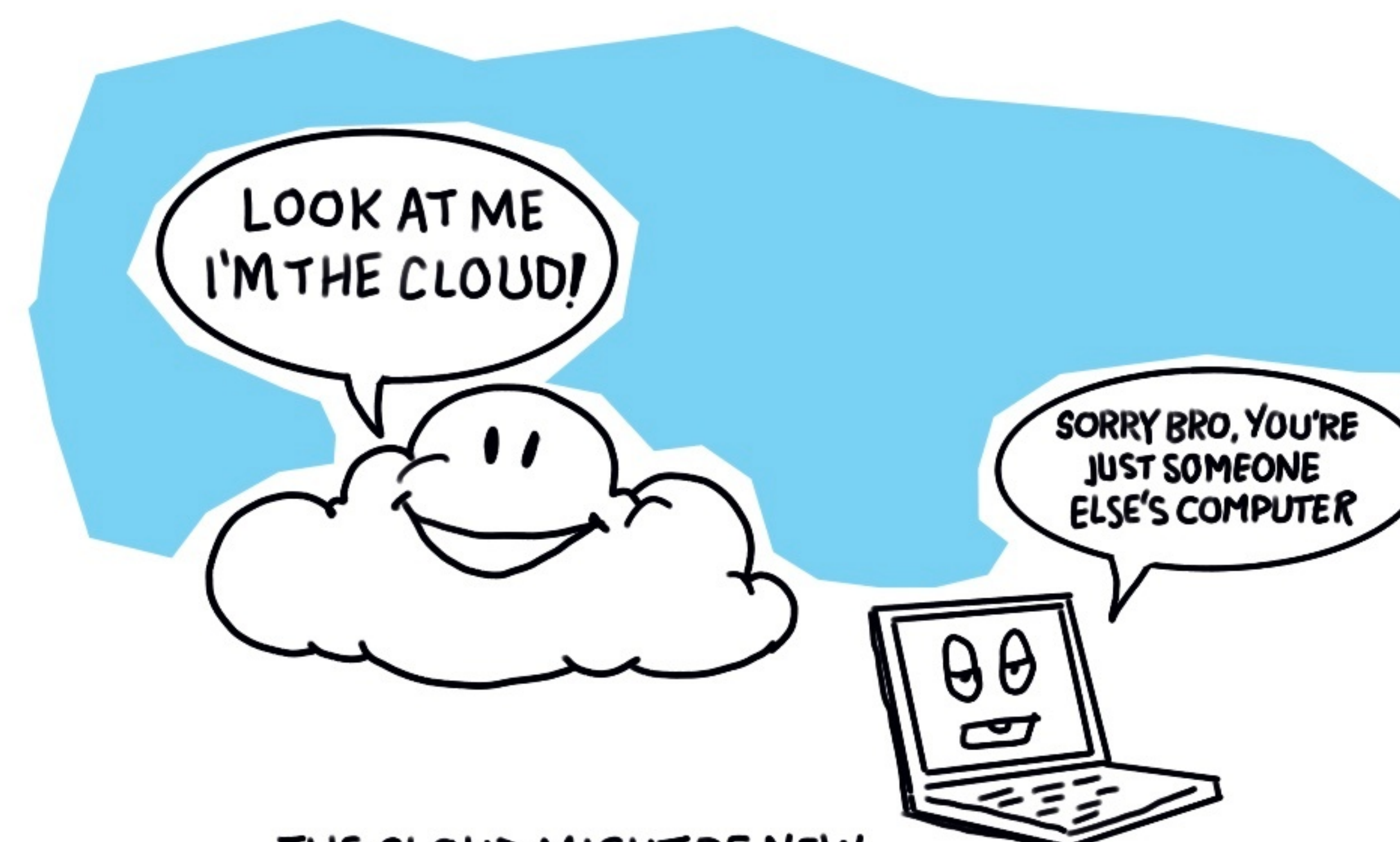
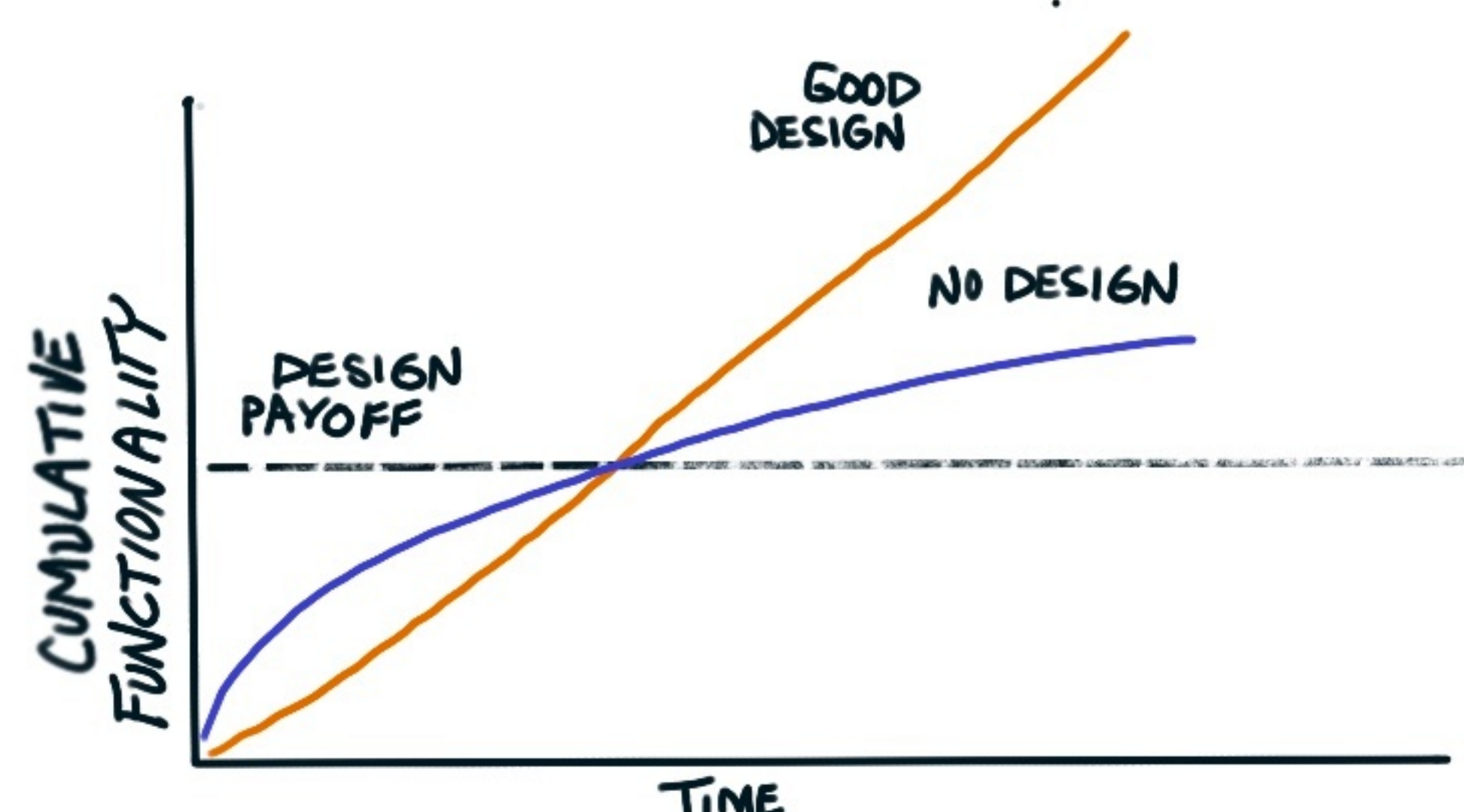
WHAT IS ARCHITECTURE?

ALL ARCHITECTURE IS DESIGN BUT NOT ALL DESIGN IS ARCHITECTURE

SET OF DESIGN DECISIONS THAT MUST BE MADE EARLY

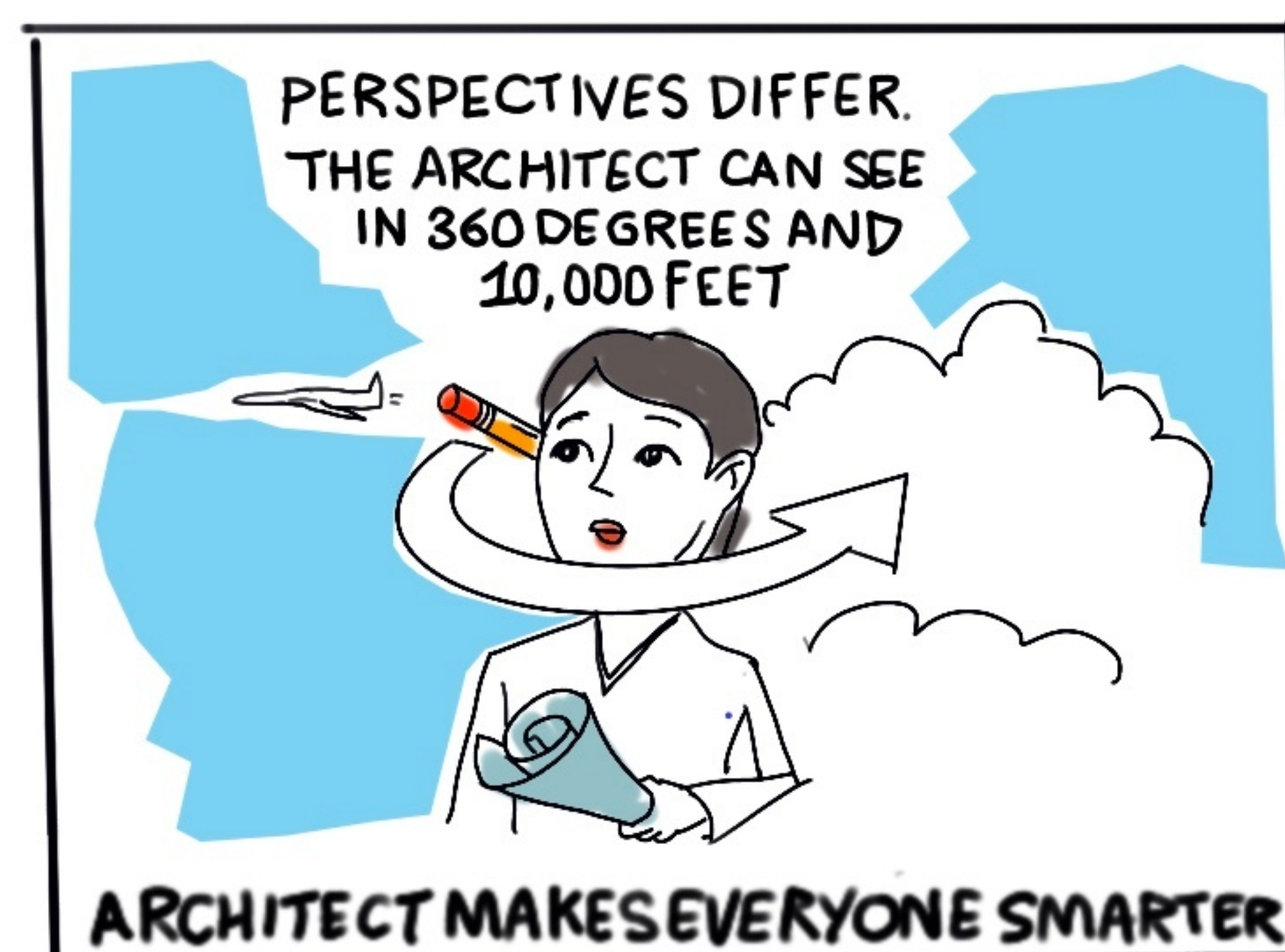
ARCHITECTURE, IN SW DEV ARE DECISIONS THAT ARE HARD TO REVERSE

GRADY BOOCH MARTIN FOWLER MATTHEW PARKER



THE CLOUD MIGHT BE NEW, BUT THE ESSENCE OF ARCHITECTURE REMAINS THE SAME.

"AT A HIGH-LEVEL, IF YOU REALLY THINK ABOUT IT, DEVSECOPS PRINCIPLES ARE EXTENSIONS OF THE BEST PRACTICES/STANDARDS THAT ENFORCES THE SAME NFR(S) THAT WE DISCUSSED"

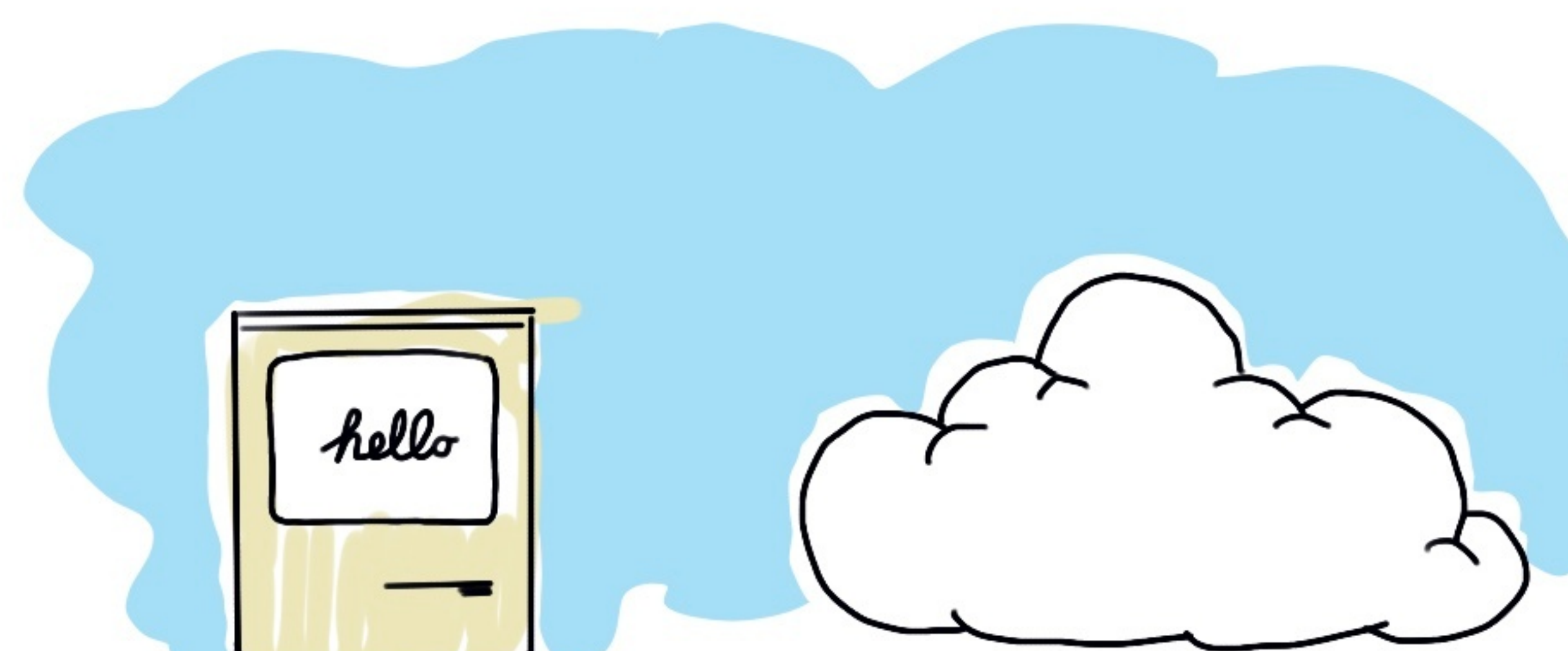
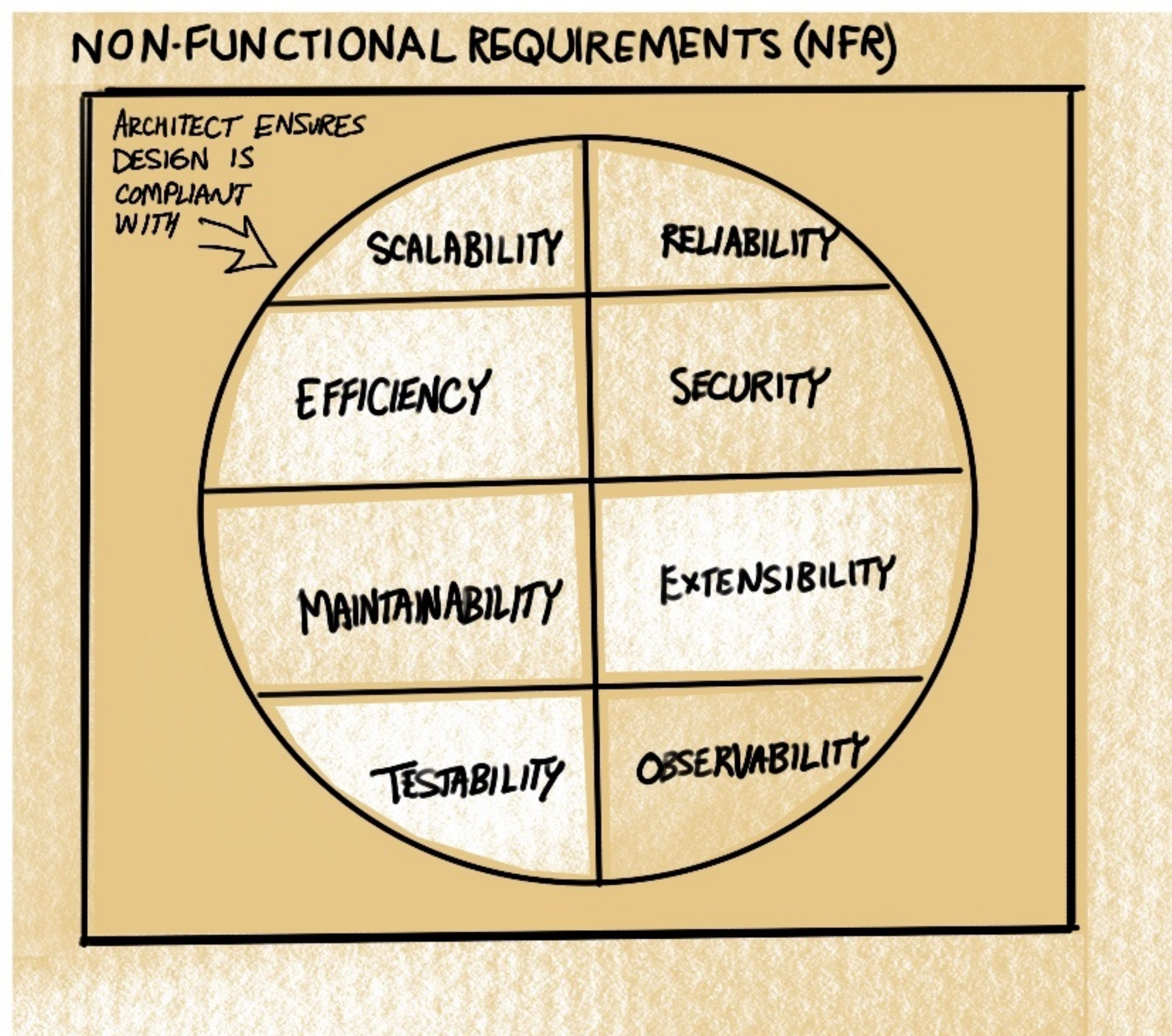


ARCHITECT MAKES EVERYONE SMARTER

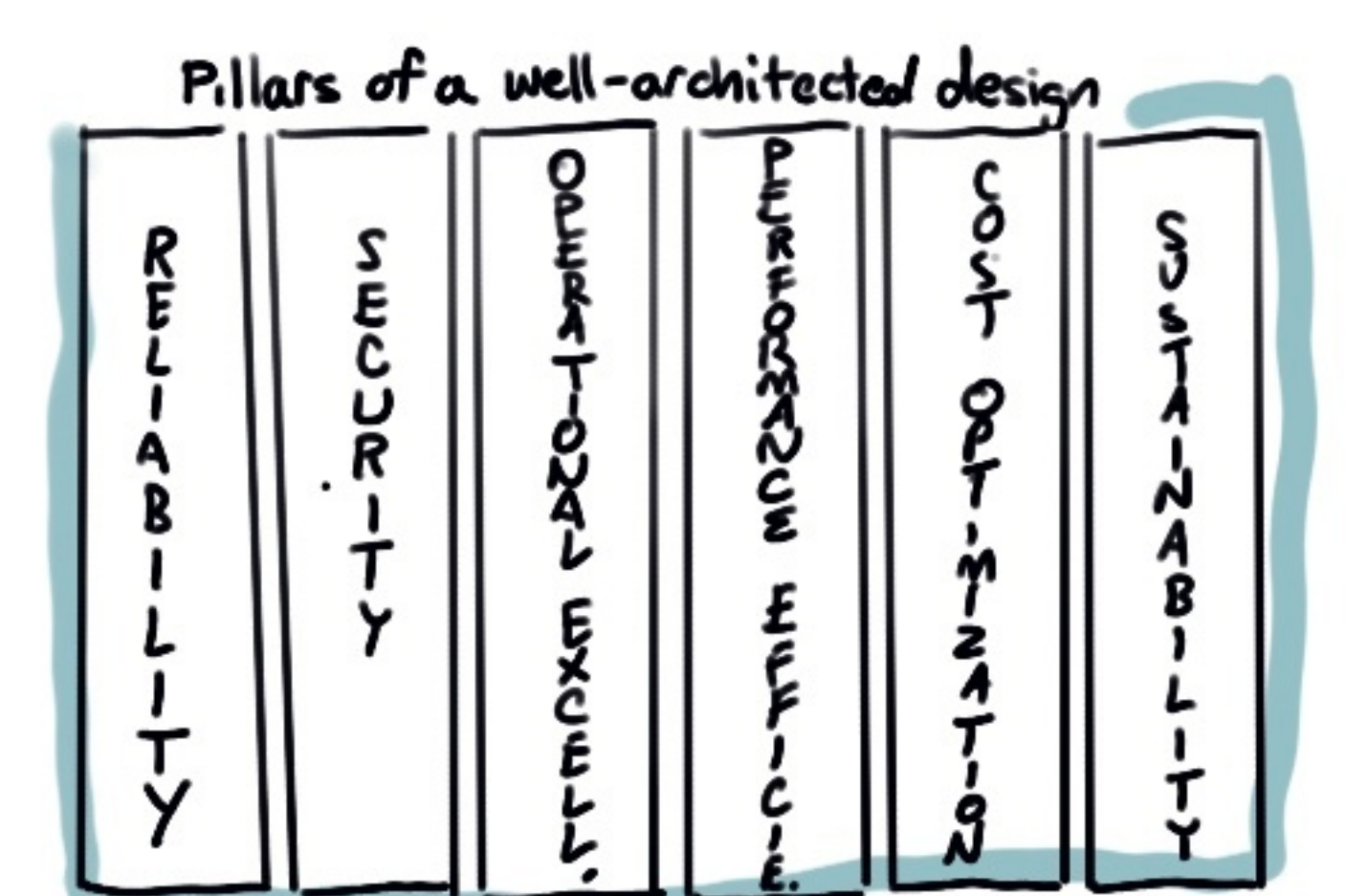
AGILE ARCHITECTURE

- o IMMEDIATE ARCHITECTURE TO ARCHITECTURE INTENT

DESIGN NOT BASED ON A STRONG ARCHITECTURAL FOUNDATION → BUSINESS OBJECTIVES NOT MET

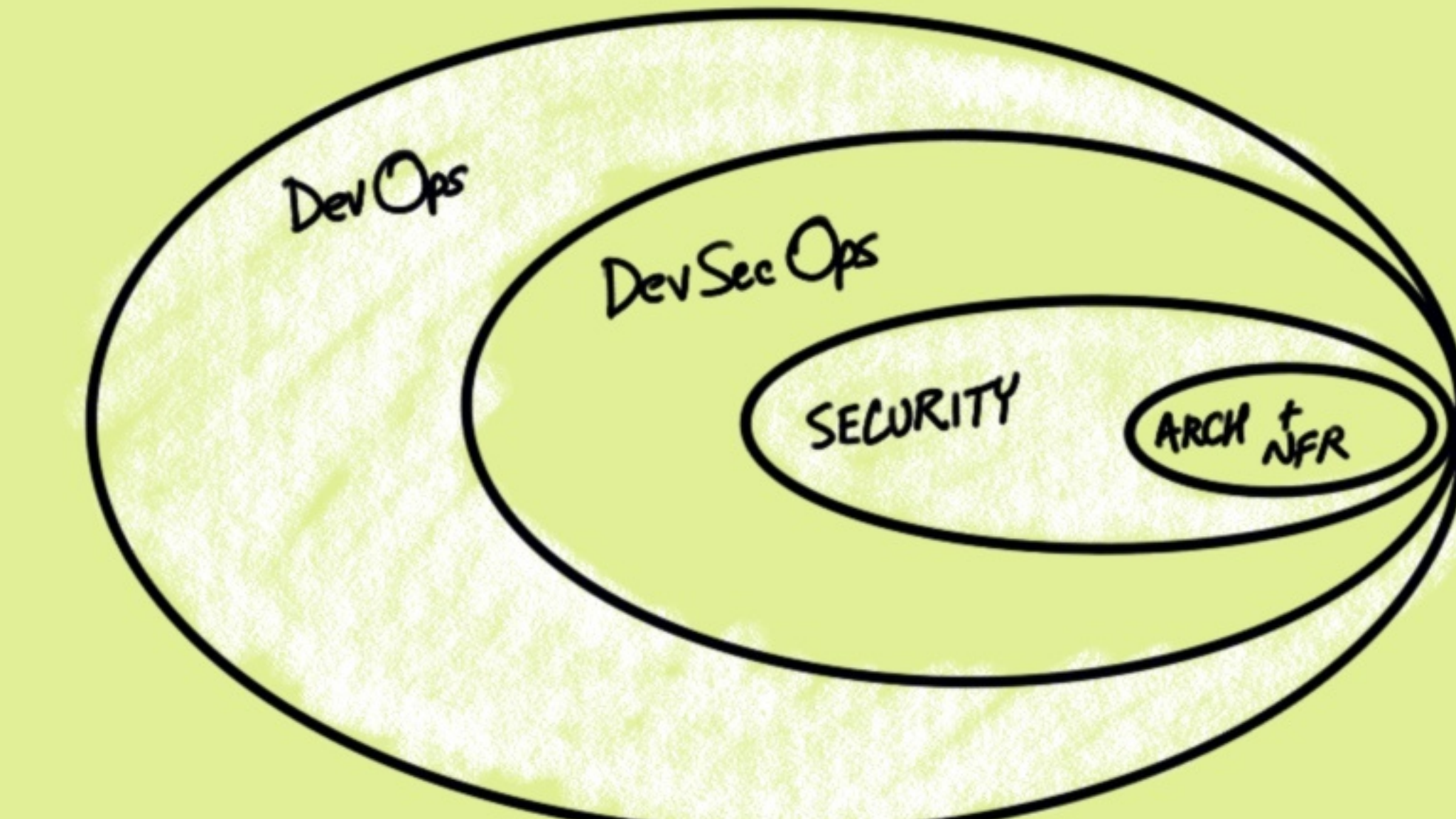


WELL-ARCHITECTED FRAMEWORK (WAF)



SECURITY PILLAR IN WAF IS NOT JUST RELATED TO THE SECURITY NFR, RATHER RELATED TO OTHER NFRs LIKE RELIABILITY, PERFORMANCE, DEPLOYABILITY, AND SO ON.

SECTION 5: CONCLUSION



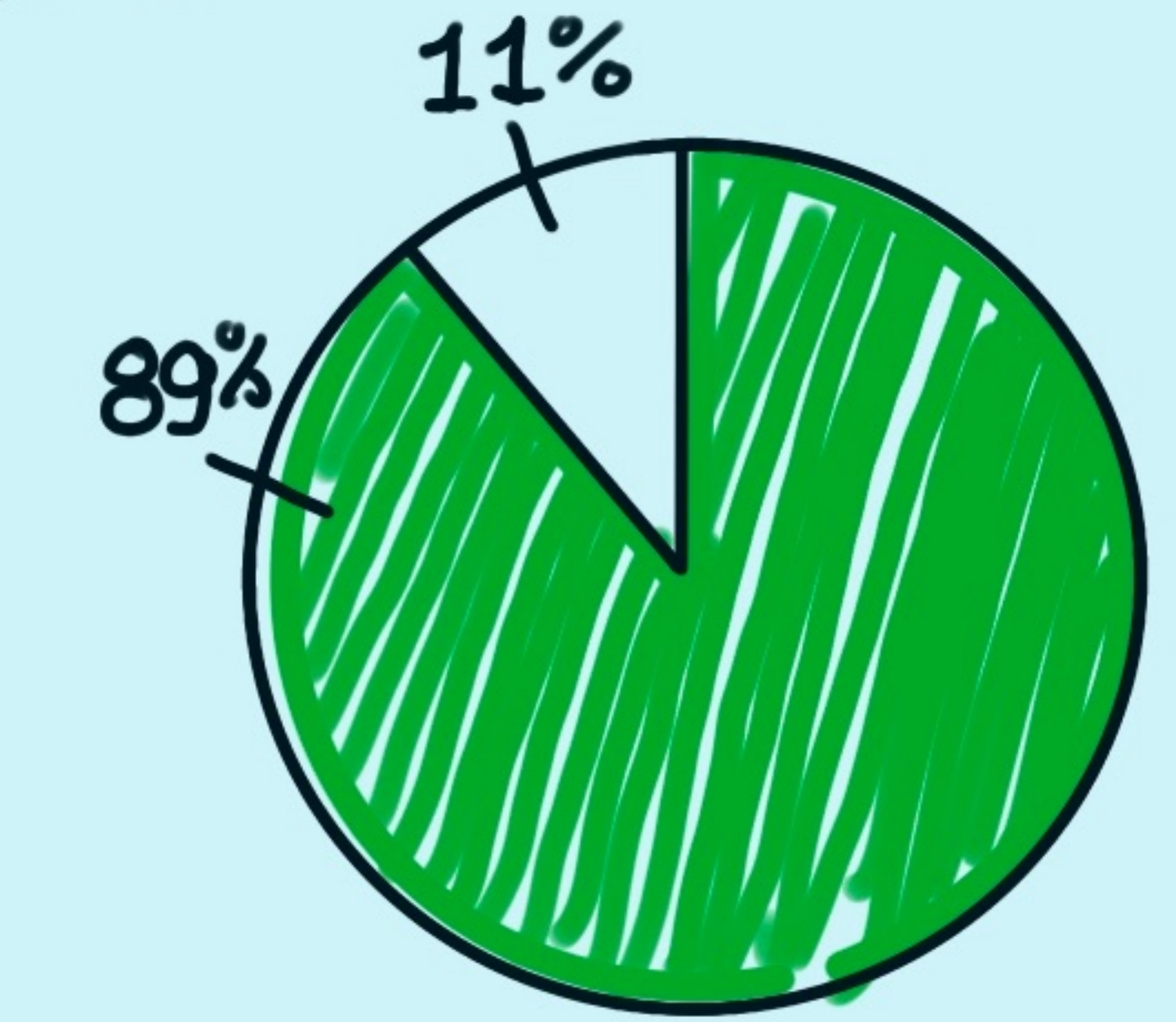
IF YOU ACHIEVE YOUR NFRS YOU CAN ACHIEVE YOUR BUSINESS OBJECTIVES

SECTION 2: WHAT IS DEVSECOPS?

- APPROACH THAT INTEGRATES SECURITY AS A SHARED RESPONSIBILITY THROUGHOUT THE ENTIRE IT LIFE CYCLE.
- EVERYONE FOCUSES ON SECURITY

NO SURPRISES AT THE END

MOST ORGS ARE INVOLVED WITH SOME PART OF THE IMPLEMENTATION JOURNEY



ONCE YOU GO DOWN A PATH ITS HARD TO CHANGE COURSE, ARCH. DECISIONS ARE HARD TO CHANGE



"If you think good architecture is expensive, try bad architecture."

Brian Foote