O'Reilly Architectural Kata 2021

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GitHub   : https://github.com/InCodeWeTrustForever/ArchitecturalKata2021

Management Summary
Main Thoughts, Findings, Suggestions

Use a SaaS Solution

- As the business of Sysops Squad is closely related Penultimate Electronics business a professional cloud solution has to be established (Scalability, Multi-Tenancy)

- Business of Sysops Squad is nothing special, thus the professional SaaS solution **Sales Force Service Cloud** will cover the ticketing use-cases.

- For **contracts management Sales Force CPQ** will to the job.

- Billing will be covered by the **billing add-on to Sales Force CPQ.**

Integrate special functionality with custom code and/or enterprise information integration

- For the matching of the right expert to the problem ticket some kind of special functionality could be necessary (as this is not described in detail) , but can be integrated into an extension of the SaaS solution (customizing) or via side-car modules and enterprise application integration.

Do not reuse the existing system, do no further activities with current provider

- The analysis of the current systems shows that the current provider of the solution might not be the best choice for any further projects for the business of Sysops Squad.

- Neither an re-engineering and migration of the existing system makes sense.

Find an overall enterprise architecture which also covers Penultimate Electronics business and integration of both businesses

- As the current CRM solution of Penultimate Electronics is not known, an architecture only related to the business of Sysops Squad implies the risk, that an integration of both businesses could be hard.

- But as this is necessary an enterprise architecture which covers both businesses makes much more sense, than only finding the right cut for business of Sysops Squad.

Tackle risks (functionality, licensing)

- Next steps will be setting up a proof-of-concept together with the SaaS provider (Sales Force) to address the remaining risks which are: covering the expert selection functionality.

- More over negotiations about licensing and pricing has to take place to underfeed this suggestion with economical facts.

Business Analysis – Sysops Squad User Journey / Business Case

- Customer buys electronics
- Customer optionally buys support plan
- Support „Sysops Squad" provides support

Penultimate Electronics Additional information

- Large electronics giant
- Numerous retail stores
- Spread over the country

Business Analysis / Personas – 1 Admin

- Maintain internal users of system
    - Experts
        - Skillset
        - Location
- Manage billing processing for customers for system
- Maintain reference data
    - Products
    - …

Business Analysis / Personas – 2 Customer

- Register for service
- Maintain profile
- Maintain support contracts
- Maintain billing information
- Enter problem ticket
- Fillout survey after work on tickets

Business Analysis / Personas – 3 Expert

- Get assigned tickets
- Gets notified about assigned tickets
- Fix problem due to ticket
- Browse knowledge base for solution
- Enter notes about repair
- Maintain knowledge base

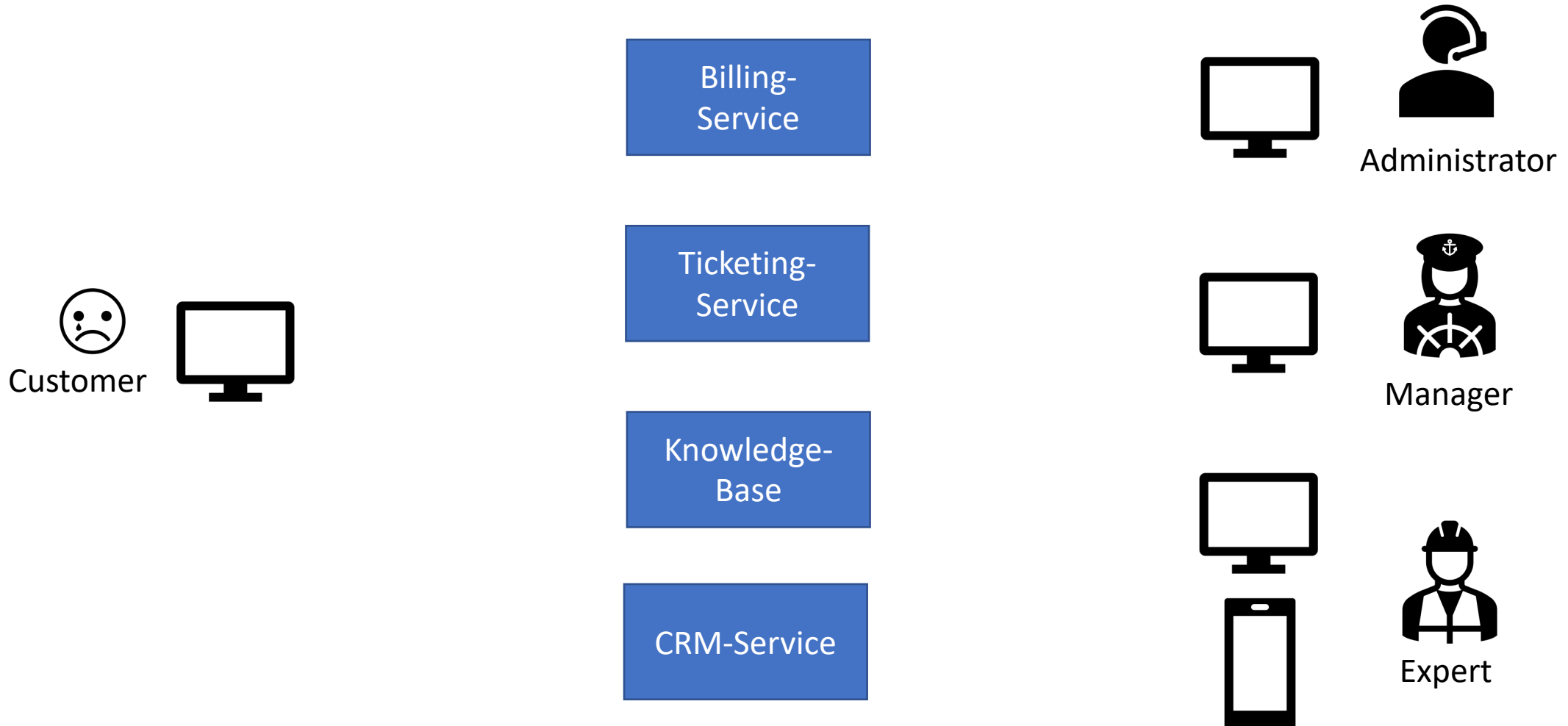# Business Analysis / Personas – 4 Manager

- Track problem ticket process
- Get operational report
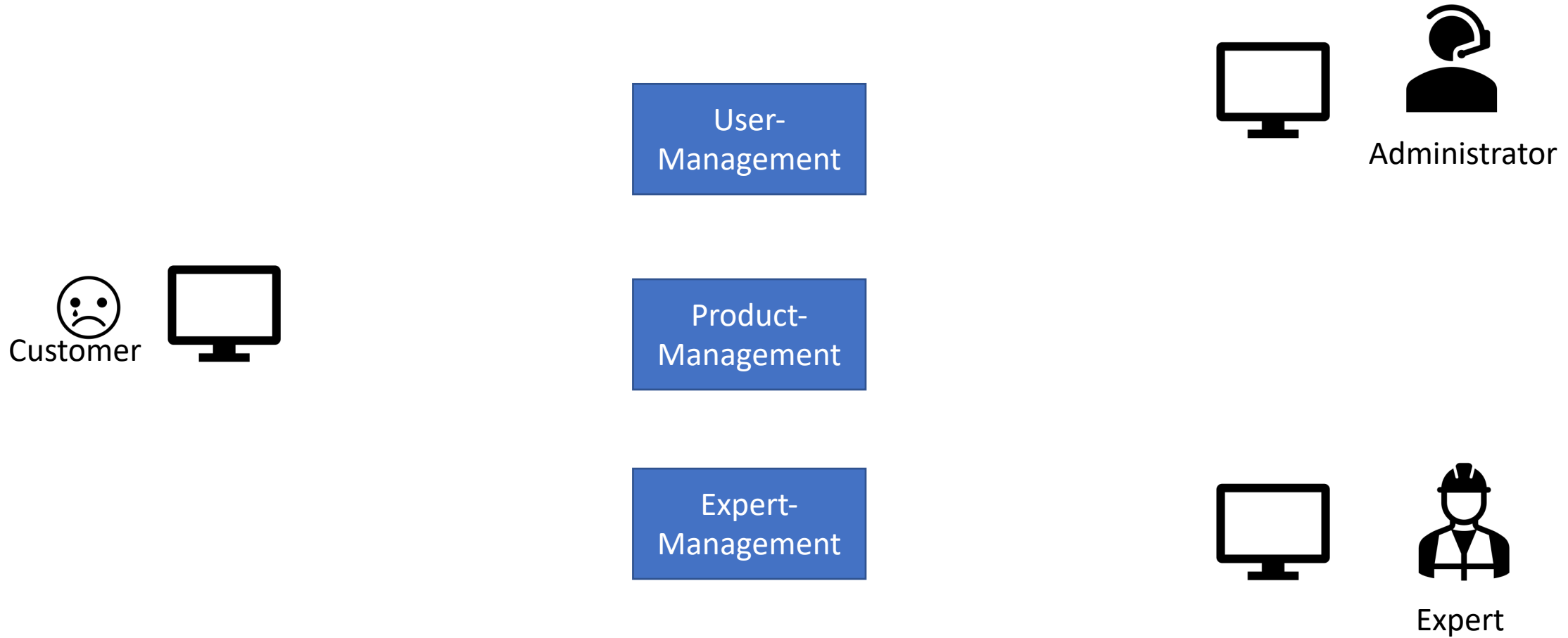- Get Analytical report

Current situation
Weaknesses of existing system

- Monolithic, developed may years ago
- Customer complaints
  - No consultanty due to lost tickets
  - Wrong consulant
  - Consultant without appropriate skillset
- Customers/Callcenter
  - Issues toward availability (Customer entry, Call entry)
- Developers
  - Change is difficult and risky and error-prone
  - Even breaks existing functionality
- Operations
  - Realiability issues → Freeze/Crashes
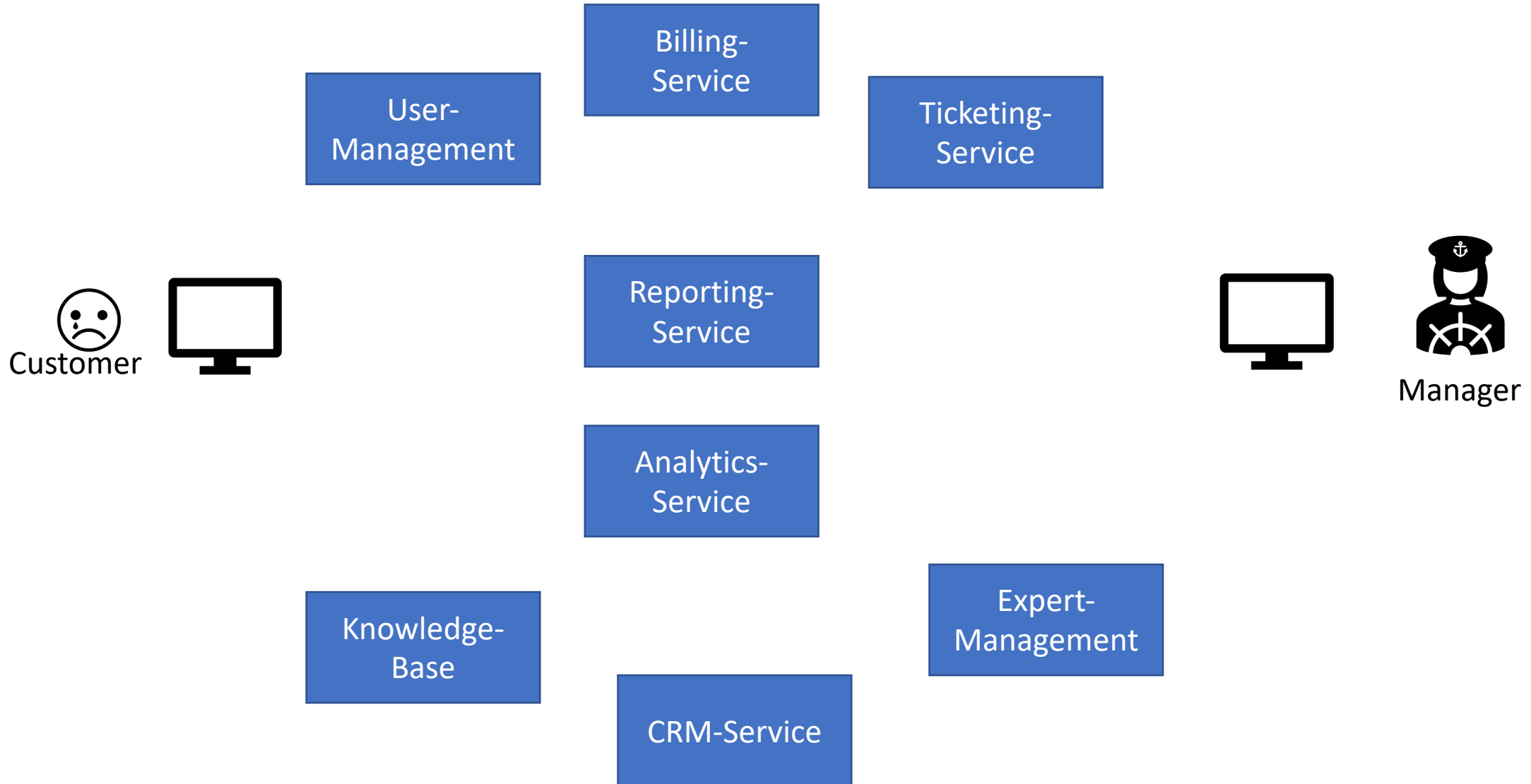 - Assumption: Scalability not given –> Requests, Number of customers

Components – Operational Tasks

Customer

Billing-Service

Ticketing-Service

Knowledge-Base

CRM-Service

Administrator

Manager

Expert

Components – Administration tasks

Components – Management tasks

ADR 1: SaaS solution for case management eg. Sales Force Service Cloud

Status

Proposal

Context

The basic use cases for Sysops Squad can to a high degree be covered by a modern cloud based **case management system.**

Decision

We will use **Sales Force Service Cloud** for the new system towards case management.

Consequences

It has to be prooved, if costs will be acceptable, but it seems that scalability towards number of customer, internal staff and experts can be negotiated.

As billing will not be covered another solution for billing must be integrated.

ADR 2: SaaS-Solution for product management, pricing and contracts management
eg. Sales Force CPQ

Status

Proposal

Context

The **configuration of products, support contracts** etc. for Sysops Squad can to a high degree be covered by a modern cloud based contract management system.

Decision

We will use **Sales Force Service CPQ** for the new system towards **handling products, support contracts and pricing.**

Consequences

It has to be proofed, if costs will be acceptable, but it seems that scalability towards number of customer, internal staff and experts can be negotiated.

As billing will not be covered another solution for billing must be integrated.

ADR 3: SaaS-Solution for billing
eg. Sales Force Billing Add-On for Sales Force CPQ

Status

Proposal

Context

The **billing of the customer** etc. for Sysops Squad can to a high degree be covered by a modern cloud based billing system.

Decision

We will use **Sales Force Service Billing Add-On for Sales Force CPQ** for the new system towards **biling.**

Consequences

It has to be proofed, if costs will be acceptable, but it seems that scalability towards number of customer, internal staff and experts can be negotiated.