

# Software Vendors

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**Otter Advisory**

**COSS B03**

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# About Thomas Otter

- **My day job:** Otter Advisory GmbH

I advise HRTECH start ups, scale ups and mega vendors on product and GTM strategy. I also work with private equity and venture capital firms on HRTECH investments. Limited Partner in early Stage VC firm, Acadian Ventures. On the board of three companies, HHR, Basis Technologies and Immedis. Former Head of Product at SAP SuccessFactors, and Research VP at Gartner.

- **My academic background**

Ph.D. (Dr. rer. pol.), Karlsruhe Institute of Technology, on Externalities and Enterprise Software: Helping and Hindering Legal Compliance.

LLM in computer law, University of Strathclyde, with a focus on data protection.

PDM in HR, University of the Witwatersrand.

B.A. (hons), University of KwaZulu Natal.

Just finished PDGip in Strategy and Innovation at Oxford University.

# Index Performance

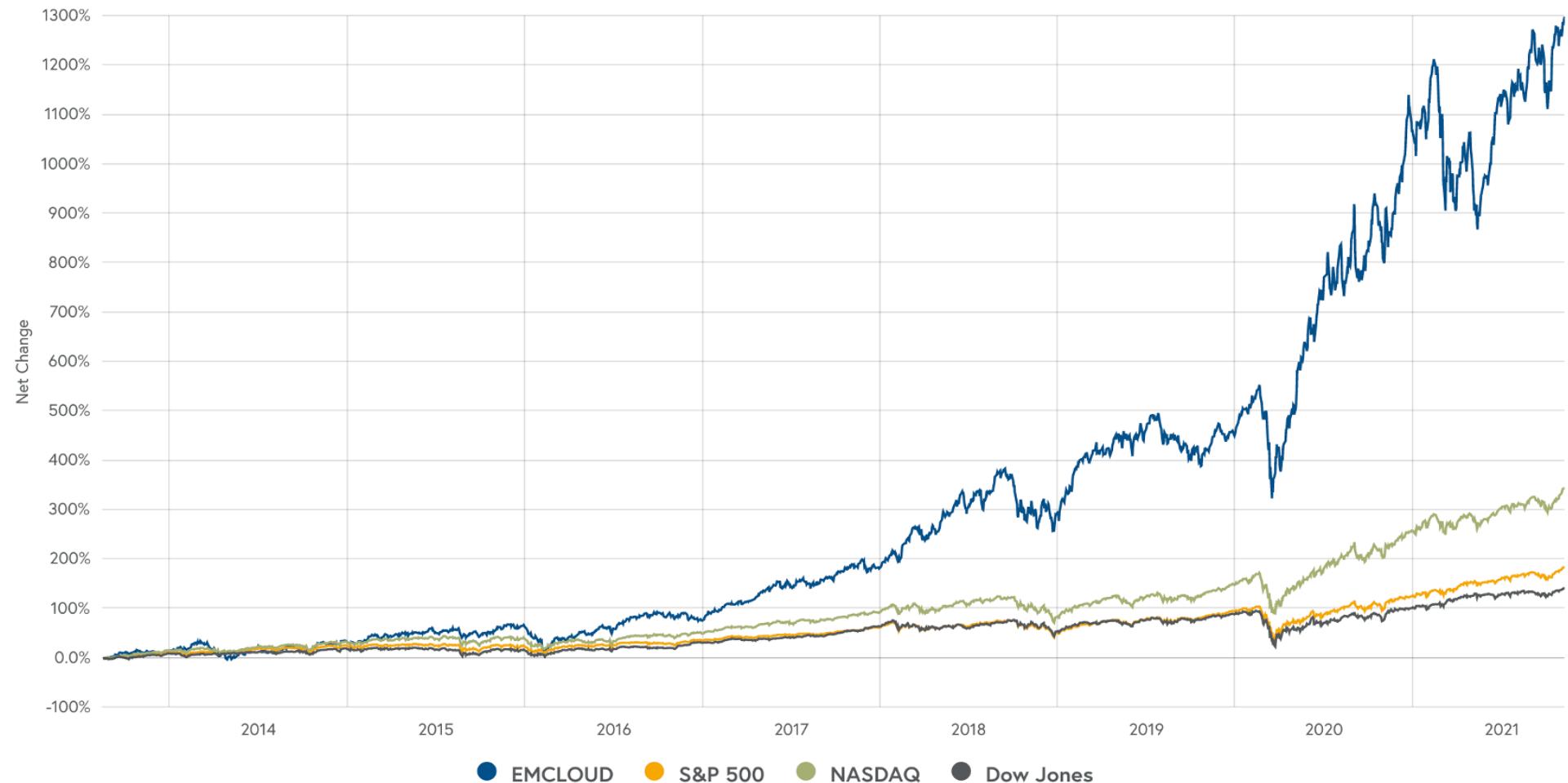
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**+1298.6%** EMCLOUD

**+343.6%** NASDAQ

**+183.9%** S&P 500

**+141.6%** Dow Jones



# Agenda

1. Products and vendors
2. Projects vs. product firms
3. The financial view
4. Business functions
5. Core business processes

# 1. Products and Vendors

# The Main Types of Industry Players (Recap)

- **Standard product providers**
  - **(Independent) software vendors (ISVs)**
    - Produce software products (“standard software” or “commercial off-the-shelf software”)
  - **Software service providers (e.g. “Internet companies”)**
    - Operate any form of software (and hardware)
- **Software consulting firms**
  - Development services firms
    - Produce custom software
  - Implementation services firms
    - Configure software products for use by customers
- **Non-profit organizations**
  - Standards organizations
  - Regulatory bodies
  - Certification agencies

# Core, Basic, and Whole Product (Recap)

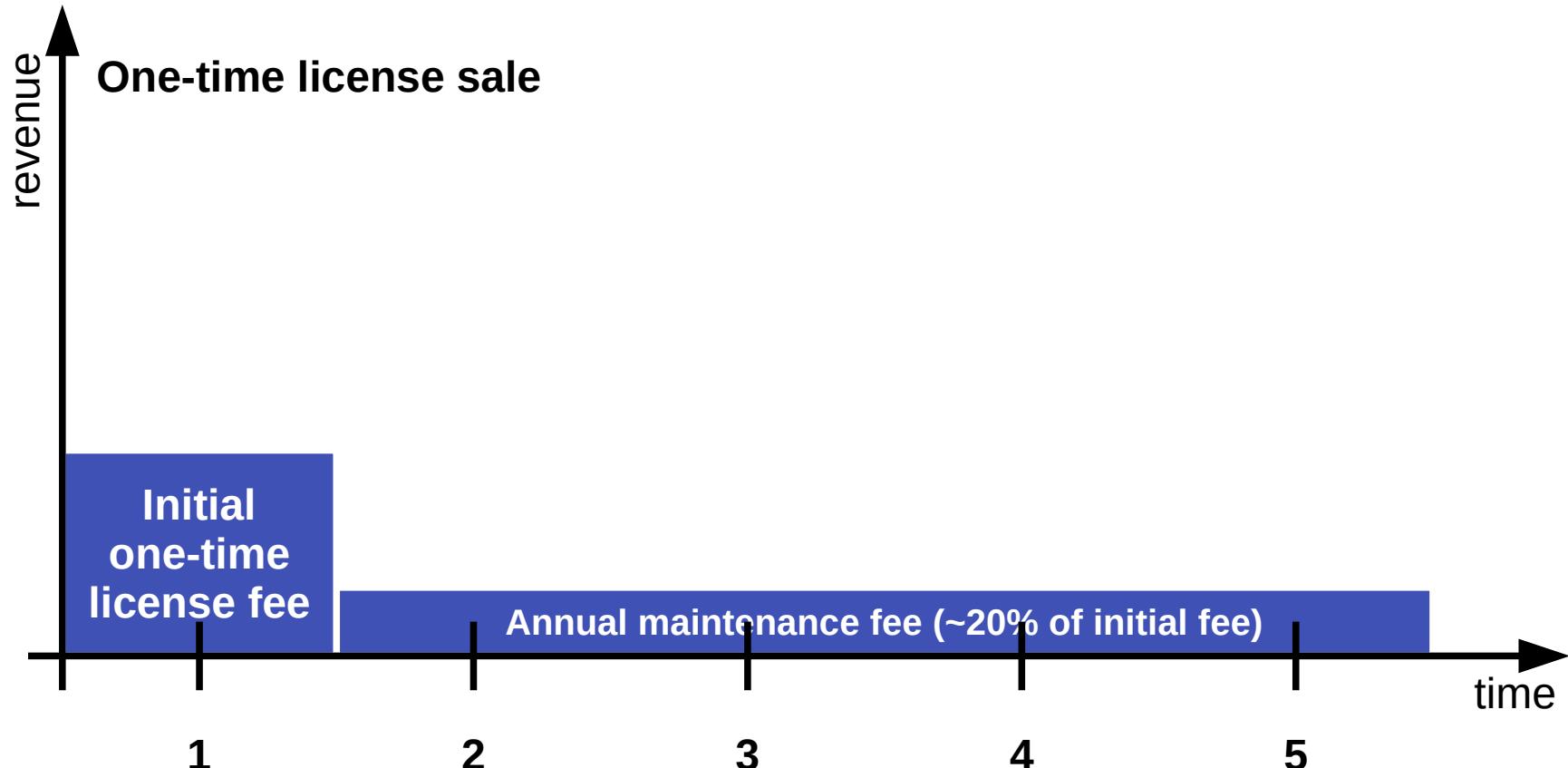
- **Core product =**
  - Core software
  - Additional functionality
  - Complementary artifacts
  - Self-help services
- **Basic product =**
  - Core product +
  - Fitness for use
  - Certification
  - Support services
- **Whole product =**
  - Basic product +
  - Training
  - Consulting
  - Operations

## 2. Product vs. Project Firms

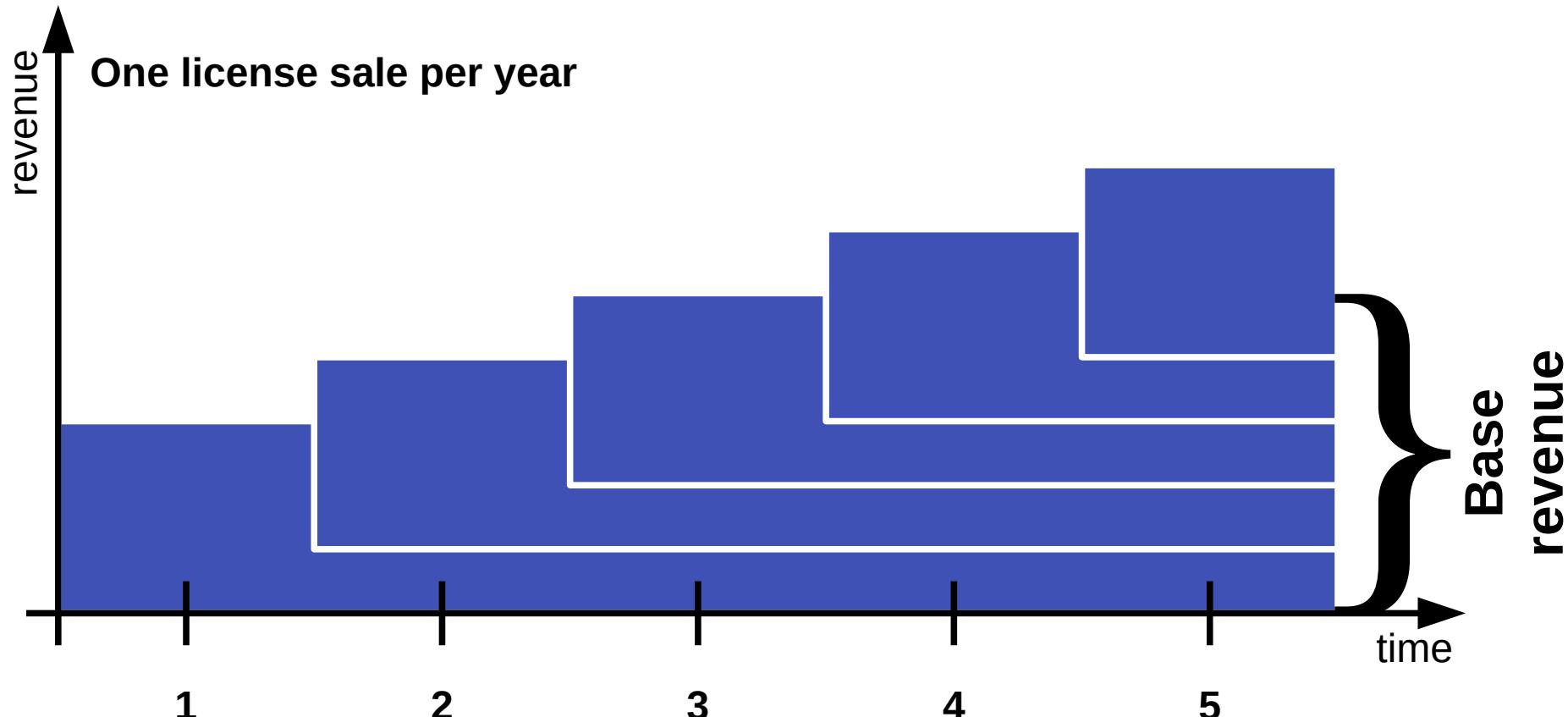
# Enterprise Software Products and Projects



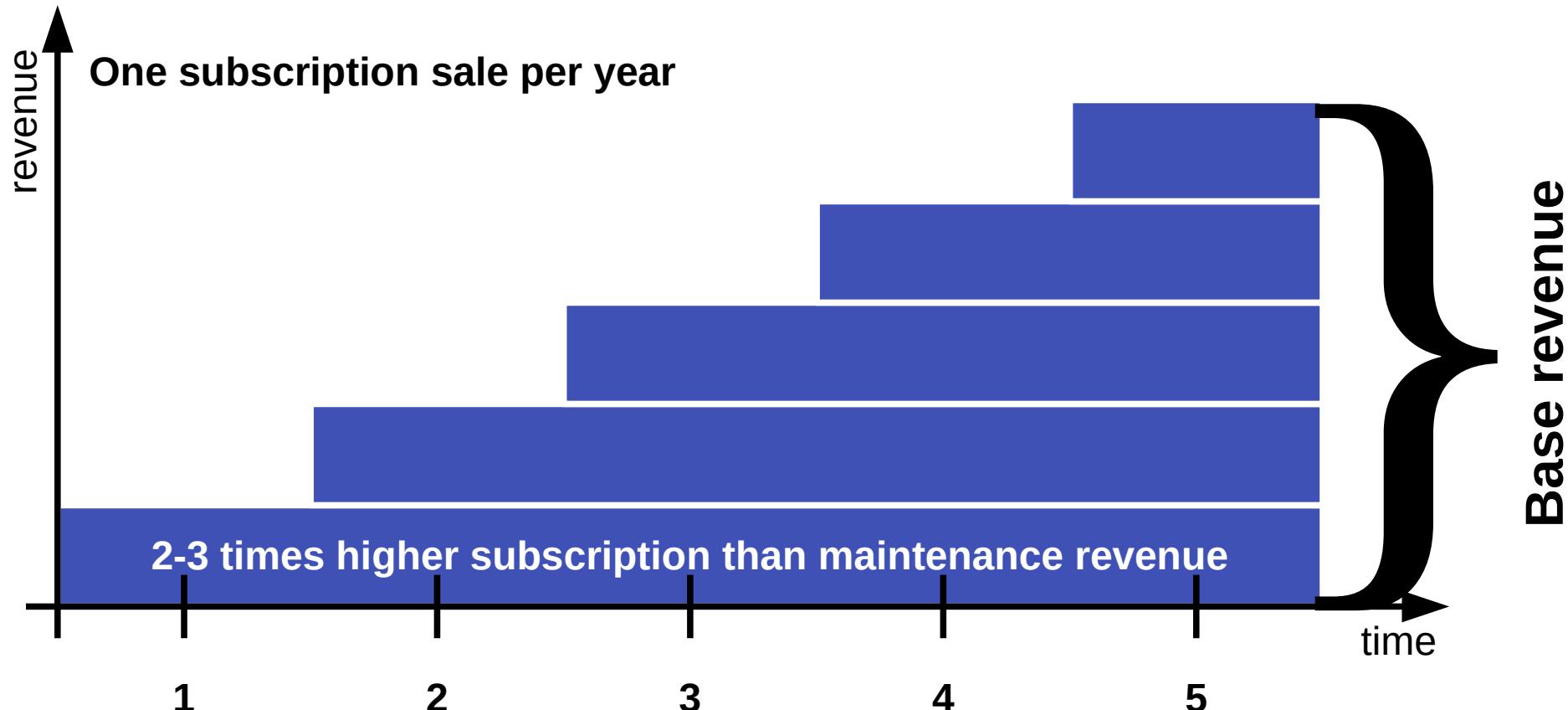
# (Traditional) Software Product Revenue



# Accumulating Traditional Software Product Revenue



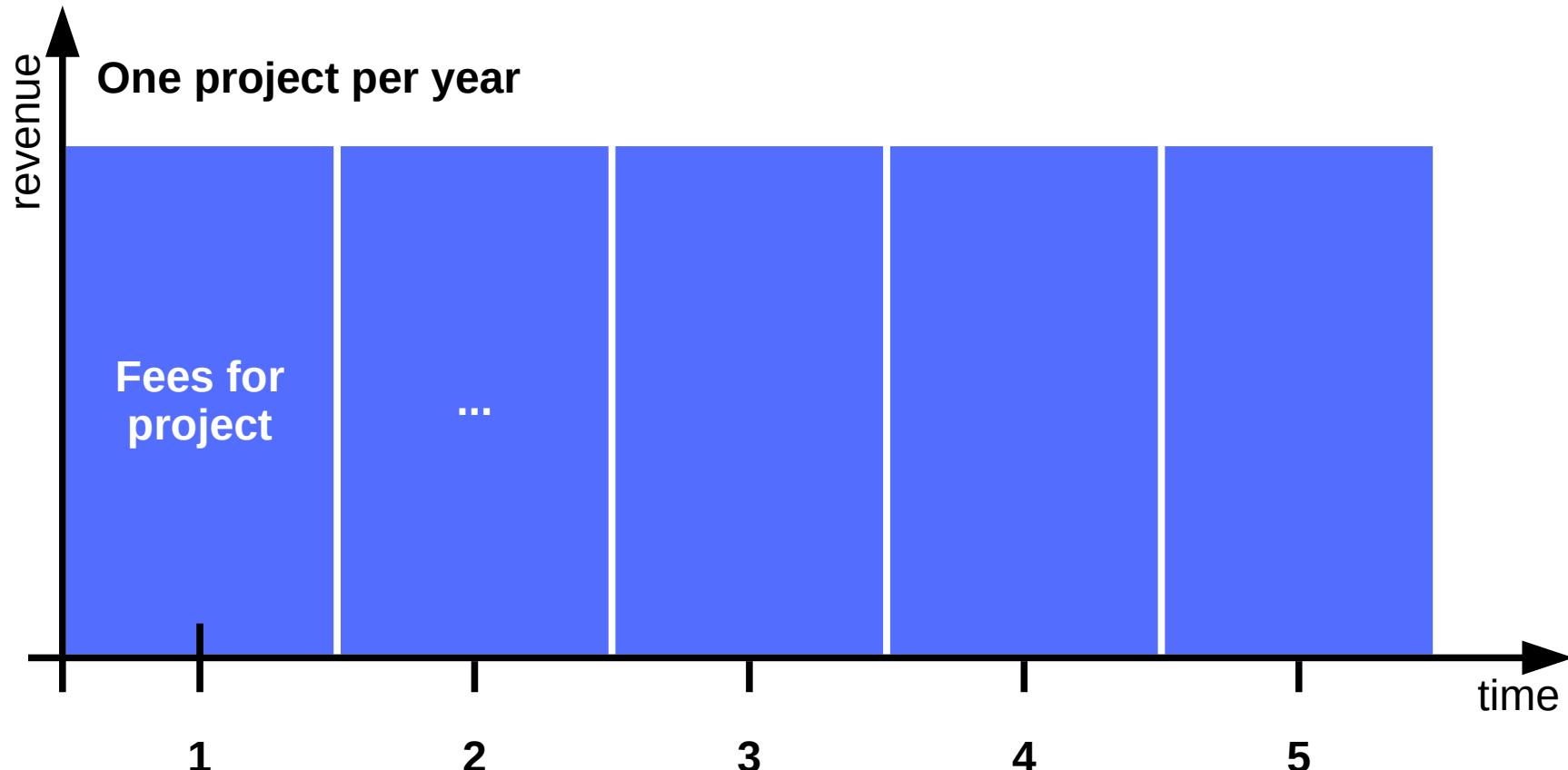
# Accumulating Subscription Software Revenue



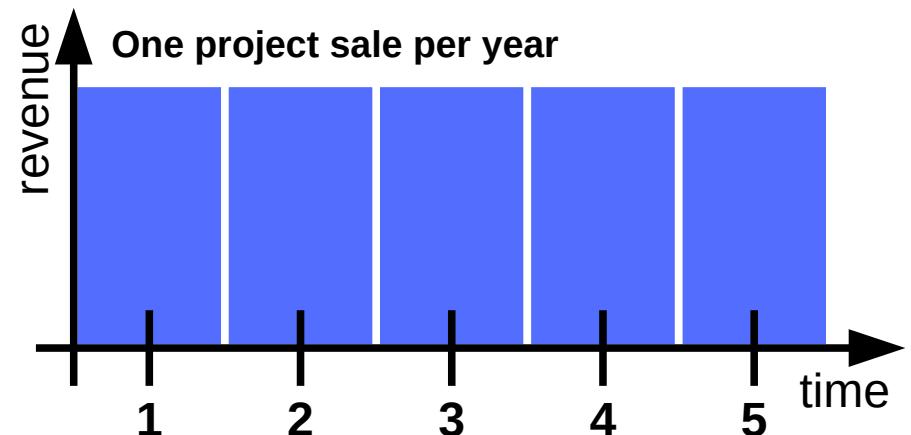
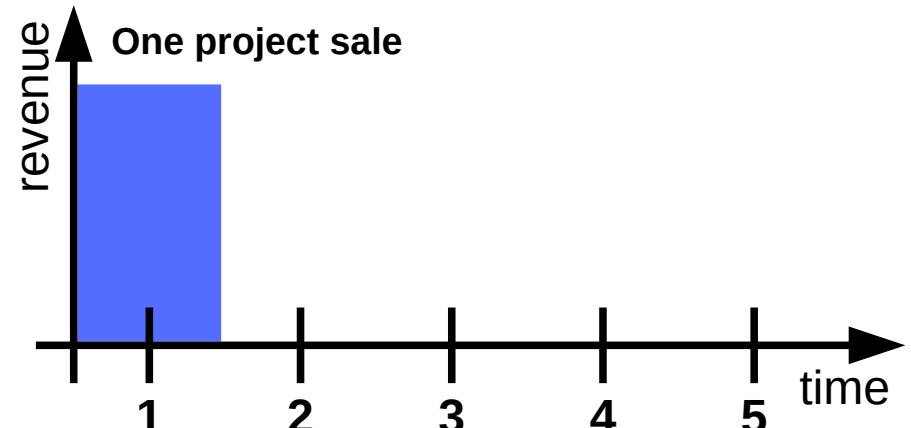
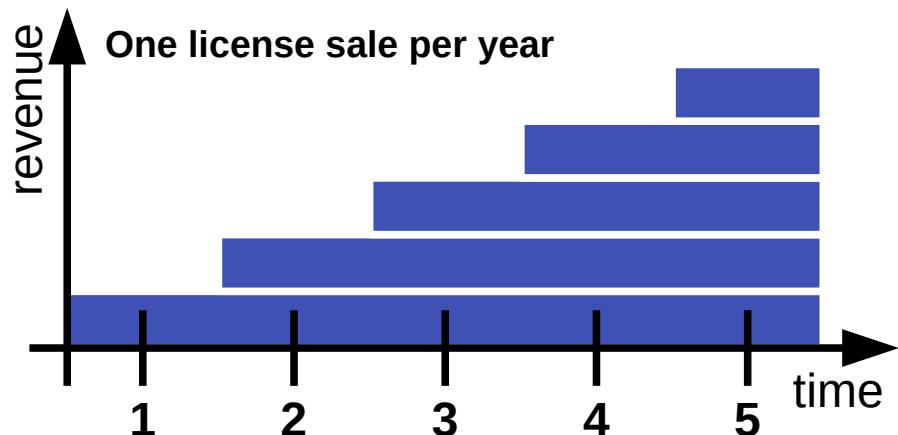
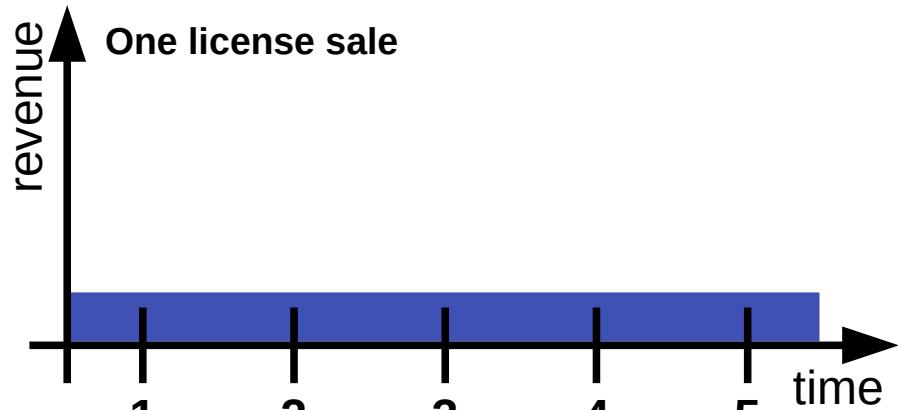
# Software Projects

- A **project** is an undertaking that
  - Has a process with a defined start and a defined end
- A **software project** is a project where
  - Revenues correlate with performed labor
    - Fixed price vs. actual labor
  - Accounted for as revenue and expenses
- Some example projects
  - Bachelor and Master theses
  - Customizing SAP for a customer

# Software Project Revenue



# Software Product vs. Project Revenue



# Software Product vs. Project Firms

	Software vendor	Consulting firm
Advantages	<ul style="list-style-type: none"><li>• Predictable revenue</li><li>• High valuation multiples</li><li>• Non-linear growth</li></ul>	<ul style="list-style-type: none"><li>• Not capital intensive</li><li>• Can be started easily</li><li>• Has simple pricing</li></ul>
Disadvantages	<ul style="list-style-type: none"><li>• Hard to get started</li><li>• Requires investment</li><li>• Most fail, few survive</li></ul>	<ul style="list-style-type: none"><li>• Somewhat fragile revenue</li><li>• Higher business volatility</li><li>• Limited scalability (linear)</li></ul>

### **3. The Financial View**

# The Three Statements of Financial Accounting

- Balance sheet (“Bilanz”)
  - A summary (annual) statement of assets, liabilities, and equity
- Income statement (“GuV Rechnung”)
  - A summary (annual) statement of revenues and expenses
- Cash-flow statement (“Mittelflußrechnung”)
  - A summary (annual) of flow of cash (and cash equivalents)

# Key Financial Concepts for Software Vendors

- Basic vocabulary
  - Revenues = income (sales)
  - Expenses = costs
  - Profit (loss) = revenues - expenses
- Vendor-specific terms
  - ARR = annual recurring revenue
  - MRR = monthly recurring revenue
  - CAC = customer acquisition cost
  - CLV = customer lifetime value
  - TCV = total contract value

# The Rule of 40

- The rule of 40 is a heuristic to understand health / valuation of a SaaS company
  - Free cash flow margin + revenue growth rate
    - Or profit margin + revenue growth rate
  - Should be equal to or greater than 40

	<b>2011 (\$m)</b>	<b>Percentage</b>
<b>Revenues</b>	\$1.657	100%
Subscription and Support	\$1.551	94%
Professional Services etc.	\$106	6%
<b>Cost of Revenues</b>	\$324	20%
Subscription and Support	\$208	13%
Professional Services etc.	\$116	7%
<b>Gross Profit (and Gross Margin)</b>	\$1.333	80%
<b>Operating Expenses</b>		
Research and Development	\$188	11%
Sales and Marketing	\$792	48%
General and Administrative	\$256	15%
<b>Total Operating Costs</b>	\$1.236	74%
<b>Operating Profit (and Operating Margin)</b>	\$97	6%

Source: Michael A. Cusumano. Reflecting on the Facebook IPO. CACM 10, 2012.

# Quiz: Accenture vs. Salesforce (2019)

Metric   Ratio	Accenture	Salesforce
Market capitalization	??	??
Revenue	US\$ 43 billion	US\$ 17 billion
Net income [1]	US\$ 4,5 billion	US\$ 0,1 billion
Price-to-sales ratio [2]	??	??
Gross profit margin [3]	30%	74%
Operating profit margin	15%	2,94%
Net profit margin	11%	0,74%
Revenue growth	4,4%	29%
No employees	510.000	49.000

[1] Net income = revenue – (COGS + SGA + operating expenses + depreciation + ... taxes)

[2] Price-to-sales ratio = market capitalization / last year's revenue

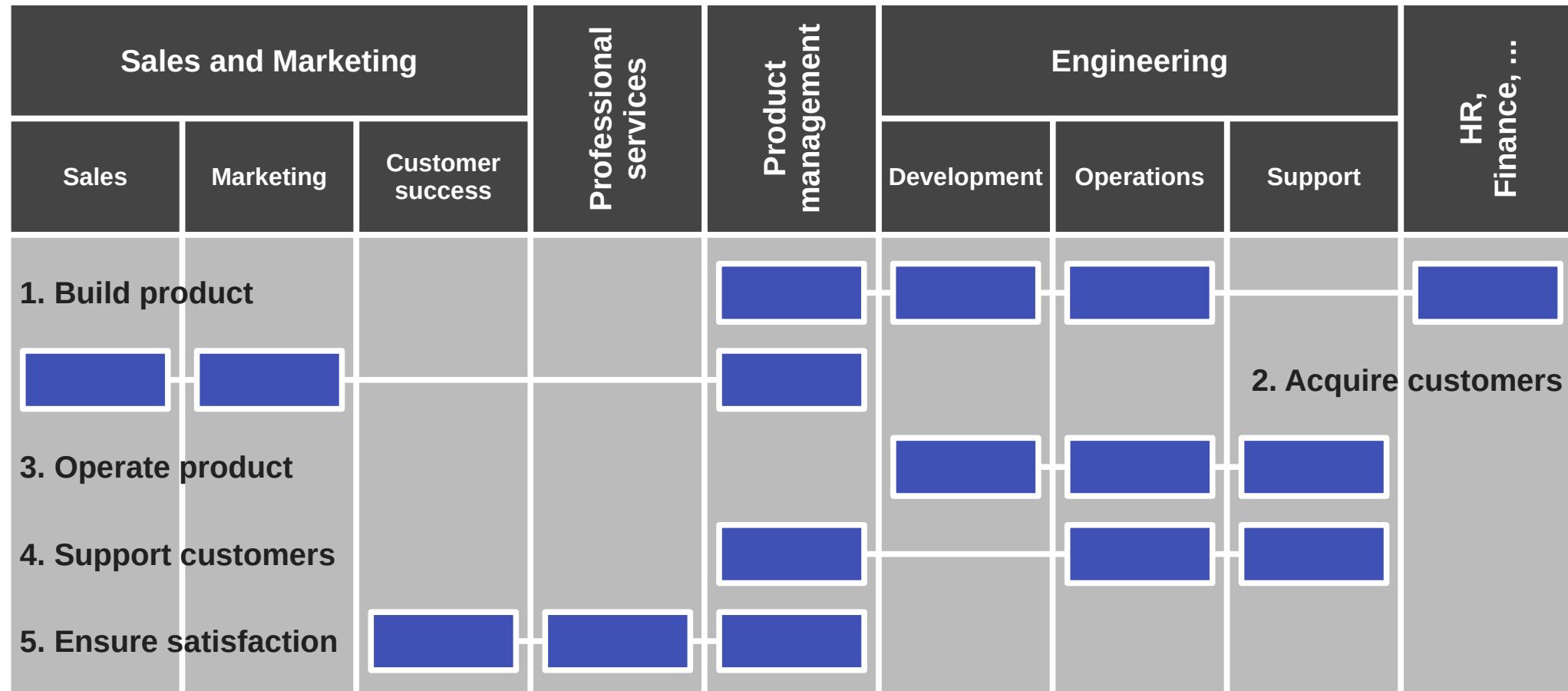
[3] Gross profit margin = (revenue – COGS) / revenue

# Accenture vs. Salesforce (2019)

Metric   Ratio	Accenture	Salesforce
Market capitalization	US\$ 134 billion	US\$ 144 billion
Revenue	US\$ 43 billion	US\$ 17 billion
Net income	US\$ 4,5 billion	US\$ 0,1 billion
Price-to-sales ratio	3,58	9,06
Gross profit margin	30%	74%
Operating profit margin	15%	2,94%
Net profit margin	11%	0,74%
Revenue growth	4,4%	29%
No employees	510.000	49.000

# 4. Business Functions

# Key Business Functions and Processes



# Product Management (Business Functions 1 / 9)

- Roles / titles
  - Chief product officer (CPO)
  - Strategic product manager
  - Technical product manager (e.g. Scrum product owner)
- Responsibilities
  - Identify and justify new business opportunities
  - Define and prioritize product vision, roadmap, and features
- Key stakeholder in
  - Build product
  - Acquire customers
  - Ensure customer satisfaction

# Engineering / Development (Business Functions 2 / 9)

- Roles / titles
  - Developer / engineer
  - Software architect [1]
  - Engineering manager
- Responsibilities
  - Design, build, and evolve product
  - Provide third-level support
- Key stakeholder in
  - Build product

# Engineering / Operations (Business Functions 3 / 9)

- Roles / titles
  - Site reliability engineer
  - Operations manager
- Responsibilities
  - Operate product
  - Provide third-level support
- Key stakeholder in
  - Operate product
  - Support customers

# Engineering / Support (Business Functions 4 / 9)

- Roles / titles
  - Support engineer
  - Support manager
- Responsibilities
  - Respond to support requests
  - Build support automation
- Key stakeholder in
  - Support customers
- May overlap with DevOps

# Marketing (Business Functions 5 / 9)

- Roles / titles
  - (Marketeer)
  - Marketing manager
- Responsibilities
  - Create brand awareness
  - Generate demand
  - Generate leads, qualify them
  - Make product known (campaigns, webinars, etc.)
  - Provide competitive intelligence
- Key stakeholder in
  - Acquire customers

# Sales (Business Functions 6 / 9)

- Roles / titles
  - Sales person / representative
  - Pre-sales (person)
  - Sales manager
  - Account manager
- Responsibilities
  - Turn qualified leads into customers
  - Drive upsell, cross-sell, and renewals
- Key stakeholder in
  - Acquire customers

# Customer Success (Business Functions 7 / 9)

- Roles / titles
  - Customer advocate
  - Customer success manager
- Responsibilities
  - Ensure actual use
  - Improve satisfaction
- Key stakeholder in
  - Ensure customer satisfaction

# Professional Services (Business Functions 8 / 9)

- Roles / titles
  - Consultant
  - Project manager
- Responsibilities
  - Help deploy the product (“solution”)
  - Review partner consulting firm (work quality)
  - Help manage consulting ecosystem
- Key stakeholder in
  - Ensure customer satisfaction

# Other (Business Functions 9 / 9)

- Human resources
  - Supports hiring
  - Ensures compliance
- Finance
  - Supports operations
  - Manages expenses / costs
  - Helps fundraising
  - Ensures compliance

# ORGANIZATION CHART

of

## THE TABULATING MACHINE CO.

**BOARD OF DIRECTORS - C-T-R-CO.**

Alfred DeBuys	Clarence P. King
George W. Fairchild	Stacy C. Richmond
Charles R. Flint	Joseph E. Rogers
A. Ward Ford	Christopher D. Smithers
Oscar L. Gubelman	Thomas J. Watson
Samuel M. Hastings	George I. Wilber
John W. Herbert	Rollin S. Woodruff
Joel S. Coffin	

**OFFICERS-C-T-R-CO.**

Thomas J. Watson - Pres. & Genl. Mgr.  
George W. Fairchild - Vice-President  
James S. Ogsbury - Secy & Treasurer

COMPUTING-TABULATING-RECORDING CO.  
Offices - 50 Broad St. - New York City

**THE TABULATING MACHINE CO.**

General Offices —— 50 Broad St.  
New York City

FACTORIES — WASHINGTON, D.C.  
— ENDICOTT, N.Y.  
— DAYTON, O.

THOMAS J. WATSON President  
R.L. Houston General Manager

OFFICERS  
Thomas J. Watson — President  
Gershon Smith — Vice-President  
R.L. Houston — Treasurer  
W.D. Jones — Asst. Treasurer  
James S. Ogsbury — Secretary  
O.E. Braitmayer — Asst. Secretary

**MANUFACTURING**  
O.E. Braitmayer  
Swift Boykin - Chief Clerk

Production Operating Machines	Production Cards	Maintenance Machines	Plant Maintenance	Purchasing
J.J. O'Brien Elmer Oldroyd	J.E. Braitmayer	Taylor Garnett	J.E. Braitmayer	O.E. Braitmayer

**SYSTEMS**  
Gershon Smith  
Pierre Bonetcou

INVESTIGATION and RESEARCH  
Survey and study of industries not using machines at present.  
Study of present uses of machines.  
Distribution of information to field force.

SCHOOLS  
Training of new men in Classes

**GENERAL EDUCATION**

**BOSTON DISTRICT**

**NEW YORK DISTRICT**

**PHILADELPHIA DISTRICT**

**CLEVELAND DISTRICT**

**ADVERTISING**

**ACCOUNTING**

**ORDERS**

**COSTS**

**SALES RECORDS**

**MAILING & FILING**

**FINANCIAL**

**ADMINISTRATION**  
R.L. Houston  
O.E. Braitmayer

**CHICAGO DISTRICT**

**WASHINGTON DISTRICT**

**ST. LOUIS DISTRICT**

**SAN FRANCISCO DISTRICT**

**SPECIAL**

Boston Office  
Springfield Office  
Worcester Office  
Providence Office

J. L. Hyde  
New York Office  
Syracuse Office  
Scranton Office

P. D. Merrill  
Cleveland Office  
Detroit Office  
Cincinnati Office

Pittsburgh Office  
Pittsburgh Office

General Publicity  
House Organs  
Booklets  
Pamphlets

Circulars  
Circumstances  
Copies  
Layouts

Cost Accts.  
Collections  
Accts. Payable

Producing  
Machines  
Maintaining  
machines

Statements  
Comparisons

Mailing  
Filing  
Inquiries  
Messengers  
Advertisers Lists  
Users Lists

C. L. Hayes  
Chicago Office  
Des Moines Office  
Indianapolis Office  
Milwaukee Office  
Minneapolis Office

M. W. Sheldon  
Washington Office  
Baltimore Office  
Atlanta Office

E. C. Richter  
St. Louis Office  
Houston Office  
Kansas City Office

C. W. Stoddard  
San Francisco Office  
Los Angeles Office  
Seattle Office

H. D. Coates  
C. J. Quackenbush

Billing  
Cost Accts.  
Collections  
Accts. Payable

Examining  
specifications  
Recording  
orders  
Filing of  
contracts

General Books  
Financial Reports

Producing  
cards  
Selling cards

Legal  
Patents

**AUDITING MACHINE CO.**  
Thos. J. Watson — President

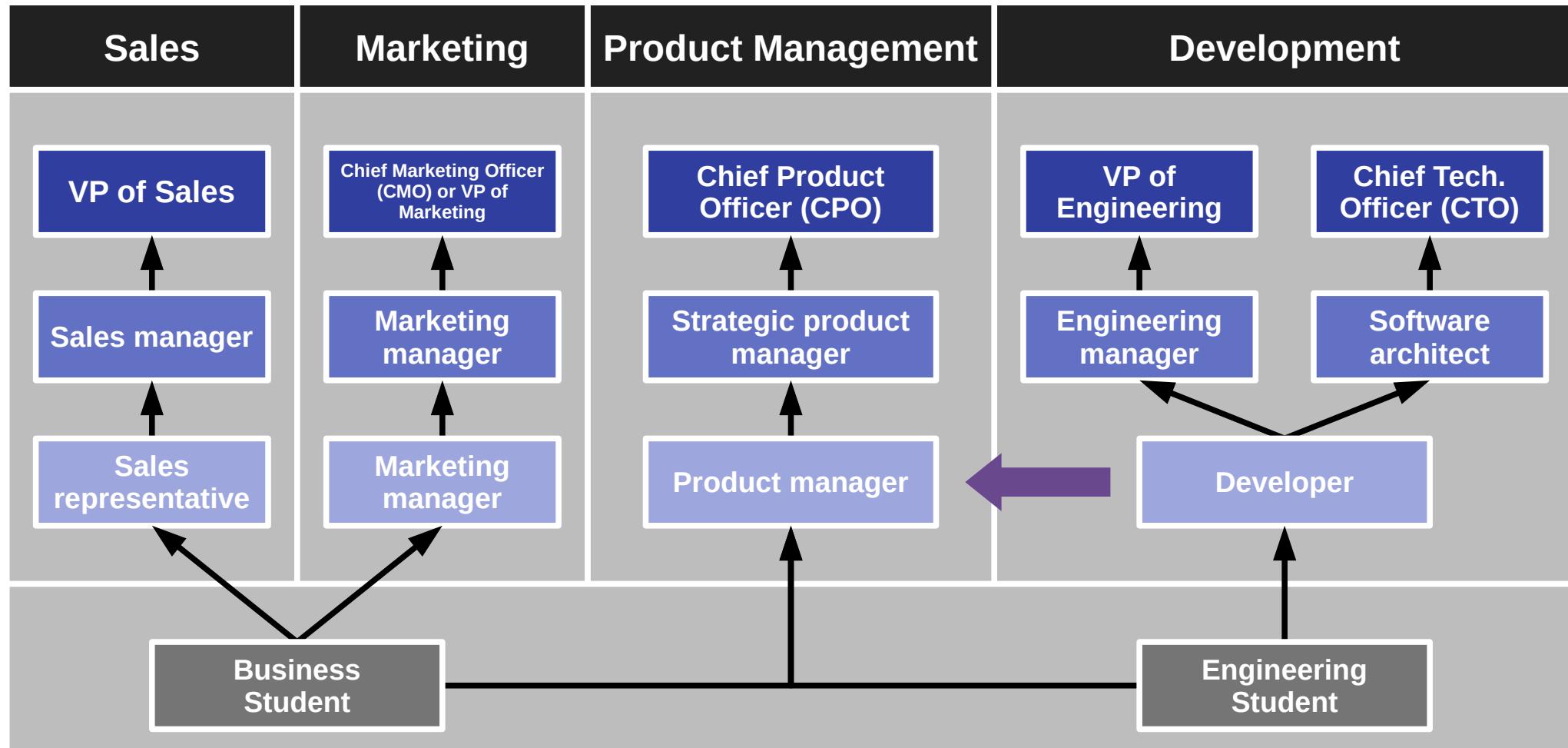
DIRECTORS  
Geo. W. Fairchild  
Herman Hollerith  
Thos. J. Watson  
Geo. O. Leavitt  
Jas. S. Ogsbury

OFFICERS  
Thos. J. Watson — President  
Gershon Smith — Vice-President  
O.E. Braitmayer — Treasurer  
Jas. S. Ogsbury — Secretary

**FOREIGN**

Switzerland	Canada	United Kingdom of Great Britain and all colonies (except Canada)	France	South America
Denmark			Belgium	Central America
Norway			Portugal	Russia
Sweden			Spain	Japan
			Italy	China
			Holland	

# Titles and Careers in a Software Company

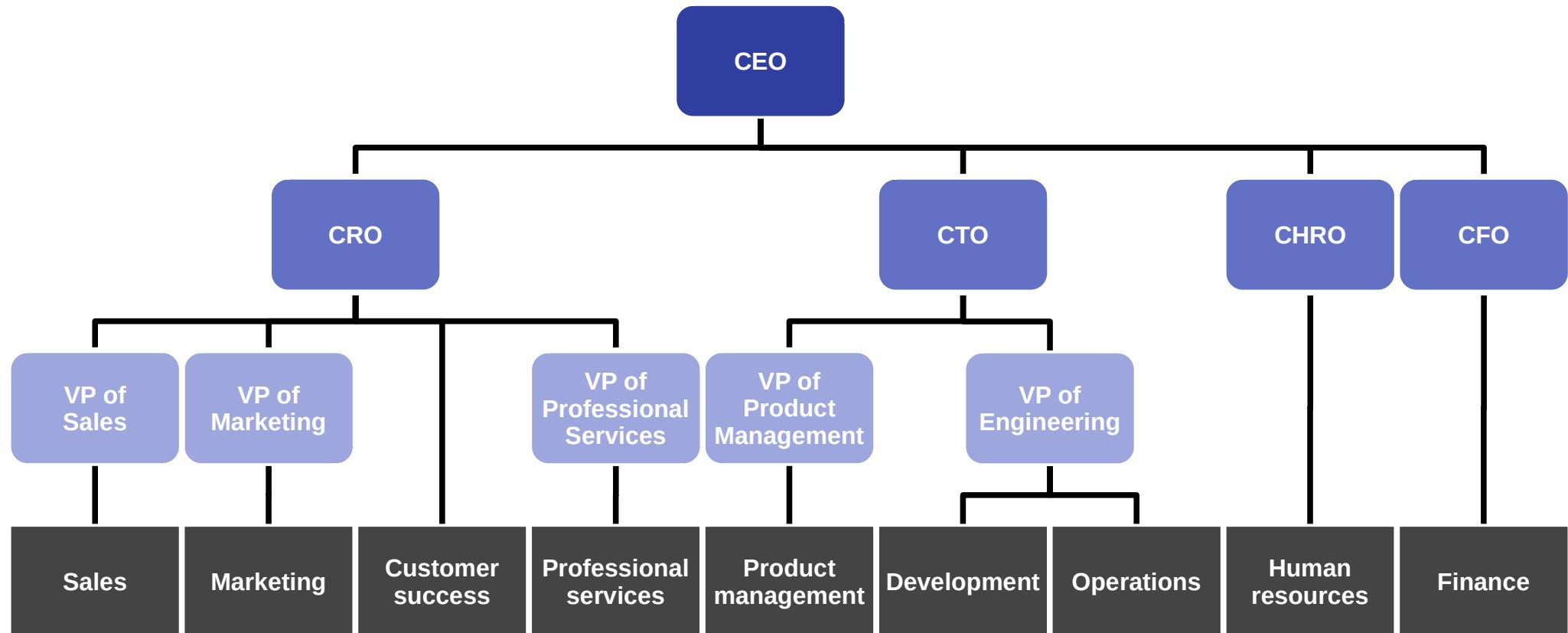


# 5. Core Business Processes

# Profit Center vs. Cost Center

- Profit center
  - Generates revenue (“makes money”)
  - Reason why company exists
- Cost center
  - Costs money
  - Needed to operate (“hygiene factor”)

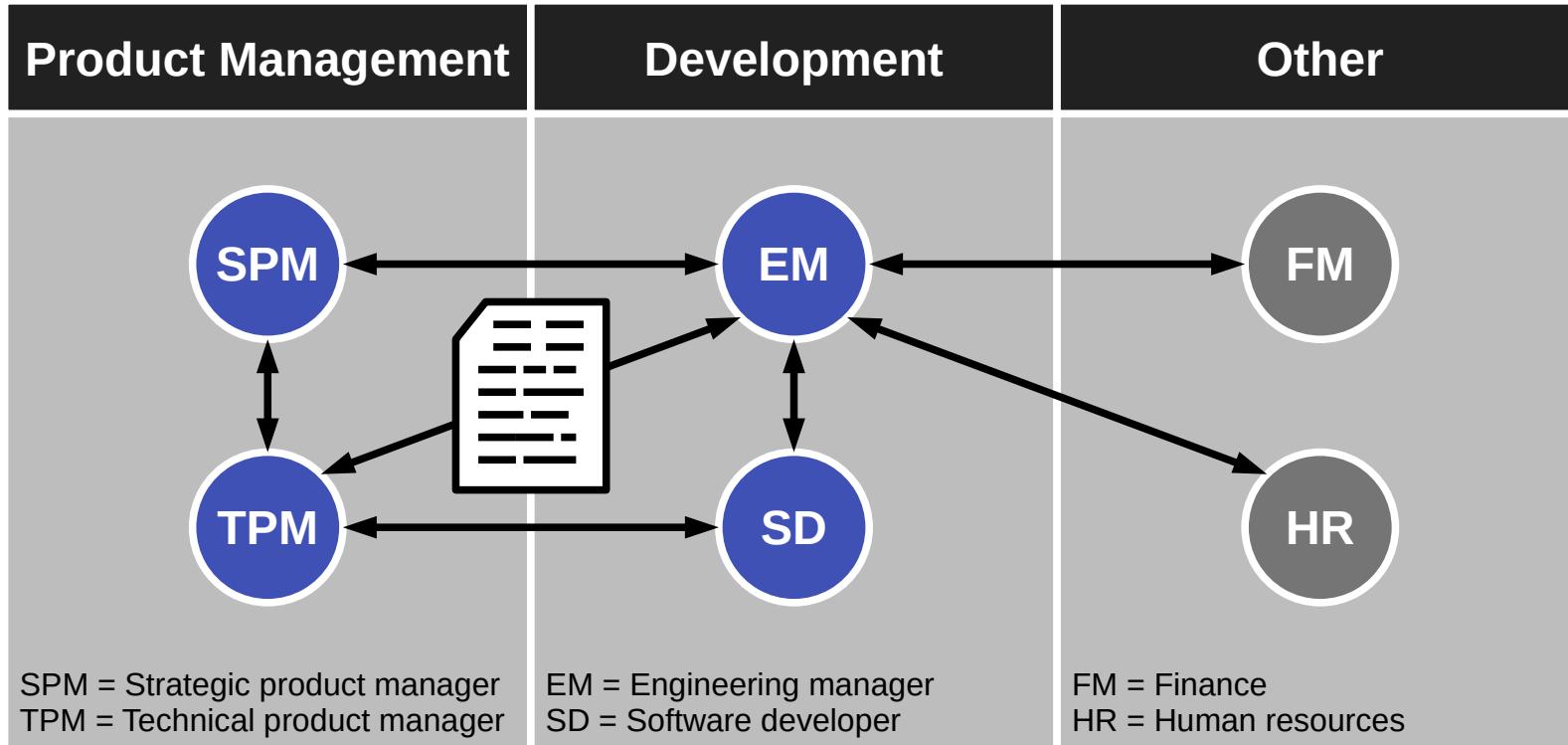
# Managerial Hierarchy (Line Reporting)



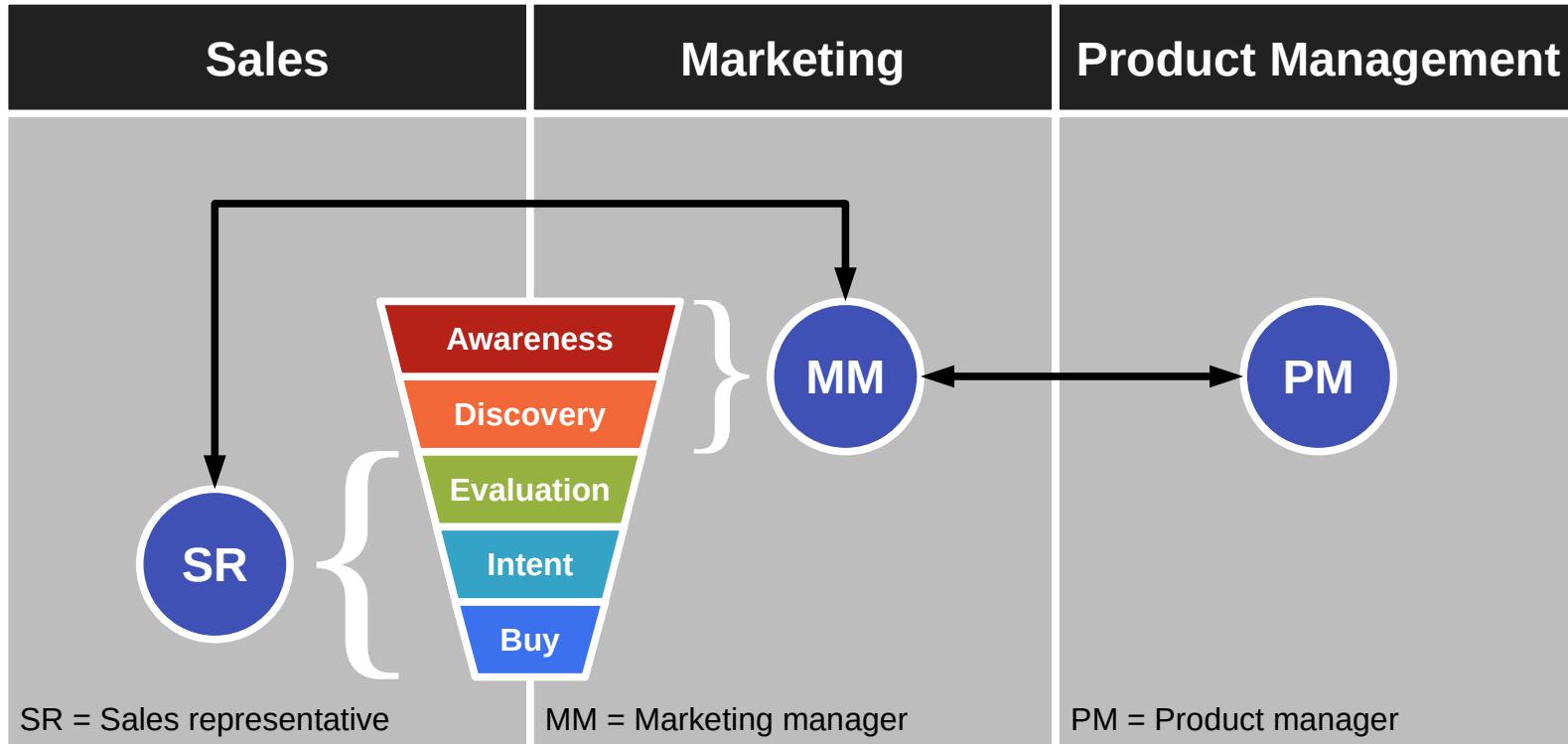
# Core Business Processes

1. Product development (“build product”)
2. Customer acquisition (“acquire customers”)
3. Product operations (“operate product”)
4. Customer support (“support customers”)
5. Customer success (“ensure customer satisfaction”)

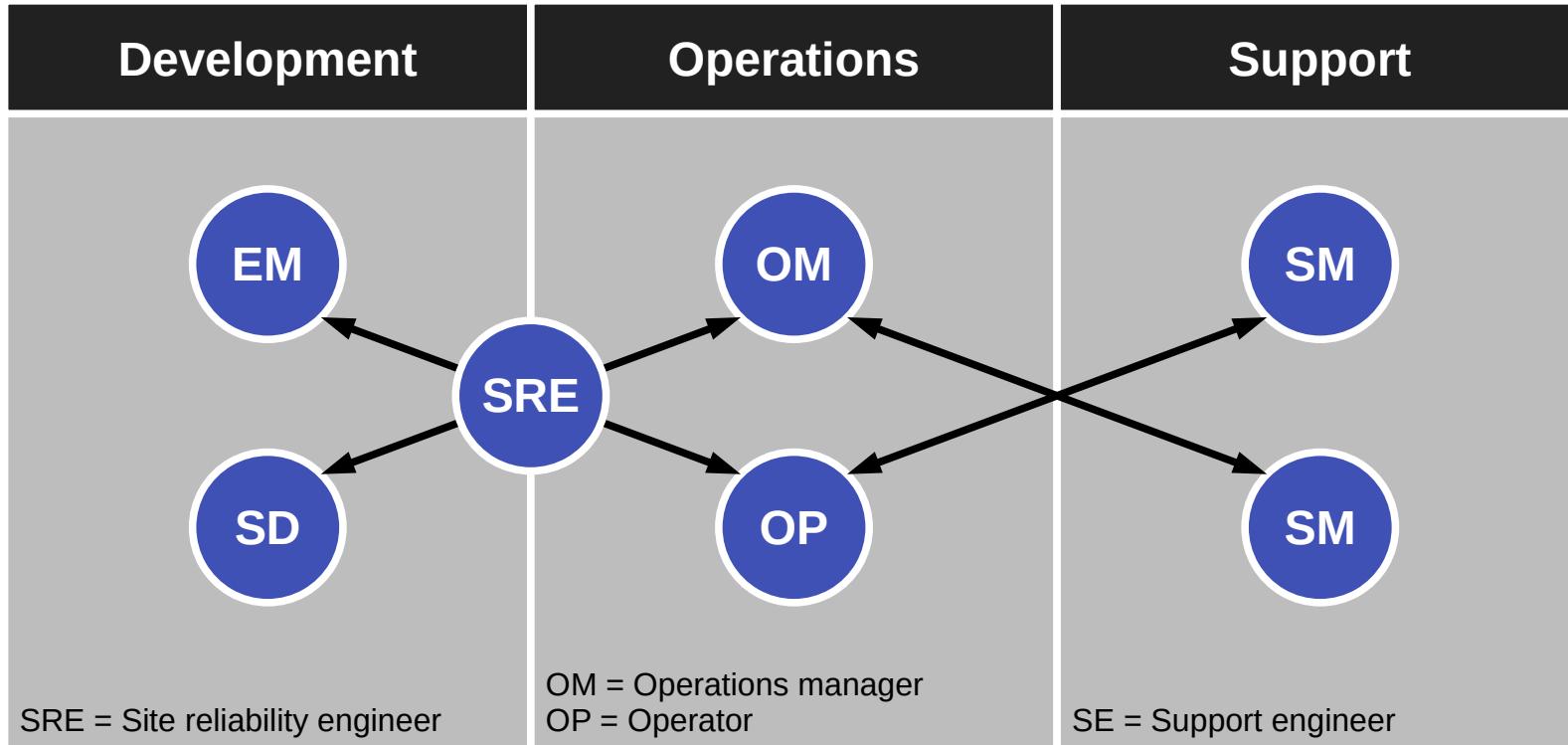
# Product Development (Business Processes 1 / 5)



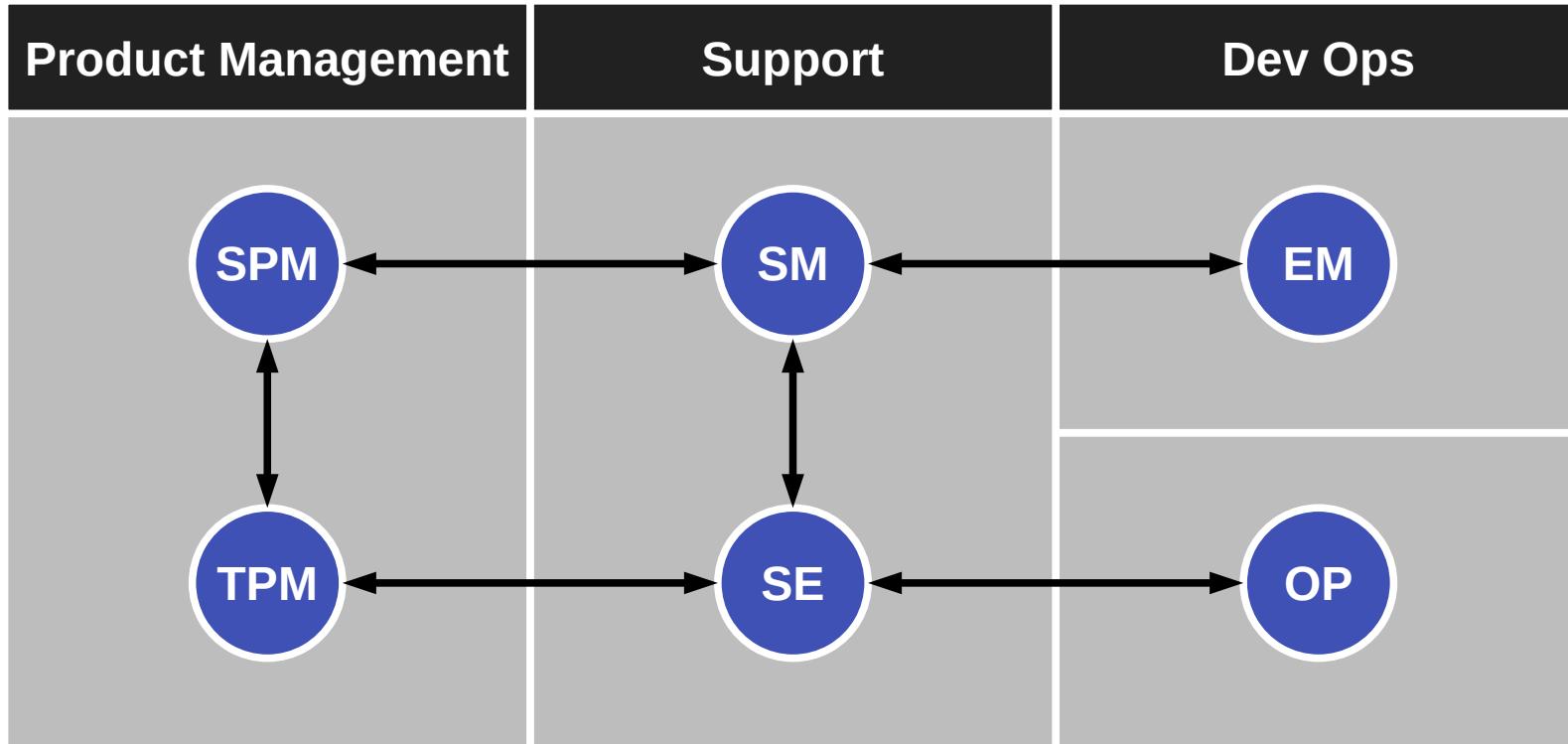
# Customer Acquisition (Business Processes 2 / 5)



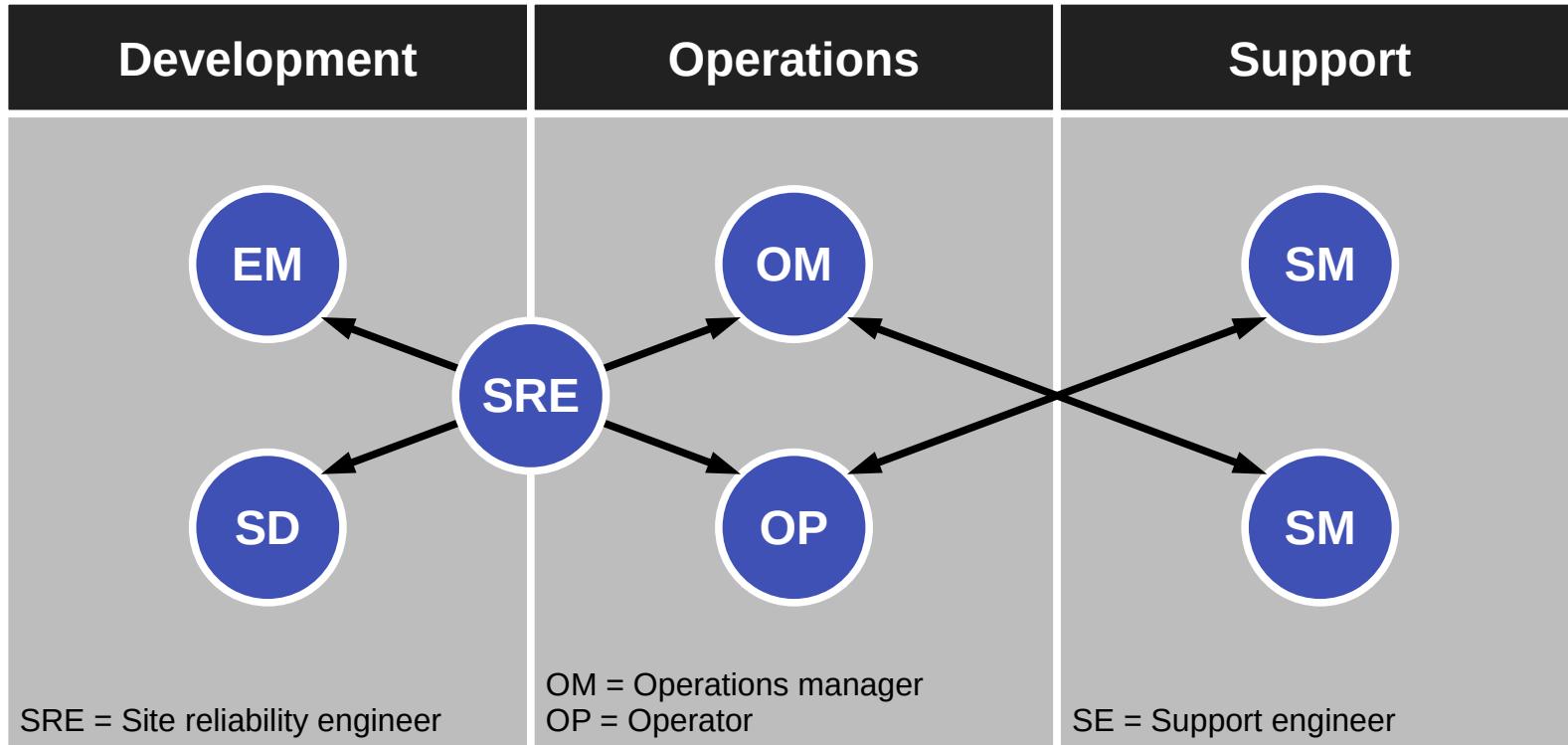
# Product Operations (Business Processes 3 / 5)



# Customer Support (Business Processes 4 / 5)



# Customer Success (Business Processes 5 / 5)



# Summary

1. Products and vendors
2. Projects vs. product firms
3. The financial view
4. Business functions
5. Core business processes

# Thank you! Questions?

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