



# ***lecture 16***

## ***software vendor environment***

csc302h  
winter 2014



- modeling – using uml mostly
  - design & visualize architecture
  - reverse-engineer design from code
- requirements analysis
  - robustness analysis to bridge requirements & design
- risk analysis & risk management
- v&v, testing strategies, static analysis, quality
- examined a few sdlc models

- will take all the pieces we have learned so far & put into the context of a software company
- we are emulating the r&d team of a company in our groups
  - using *matplotlib* as a stand-in for a commercial product developed by the (hypothetical) company



- much of the remainder of the course will be drawn from the book:

The Agile Planning Horizon  
in Professional Software Development

*“Managing at the dynamic boundary where business necessities meet software development realities”*

Dr. David A. Penny

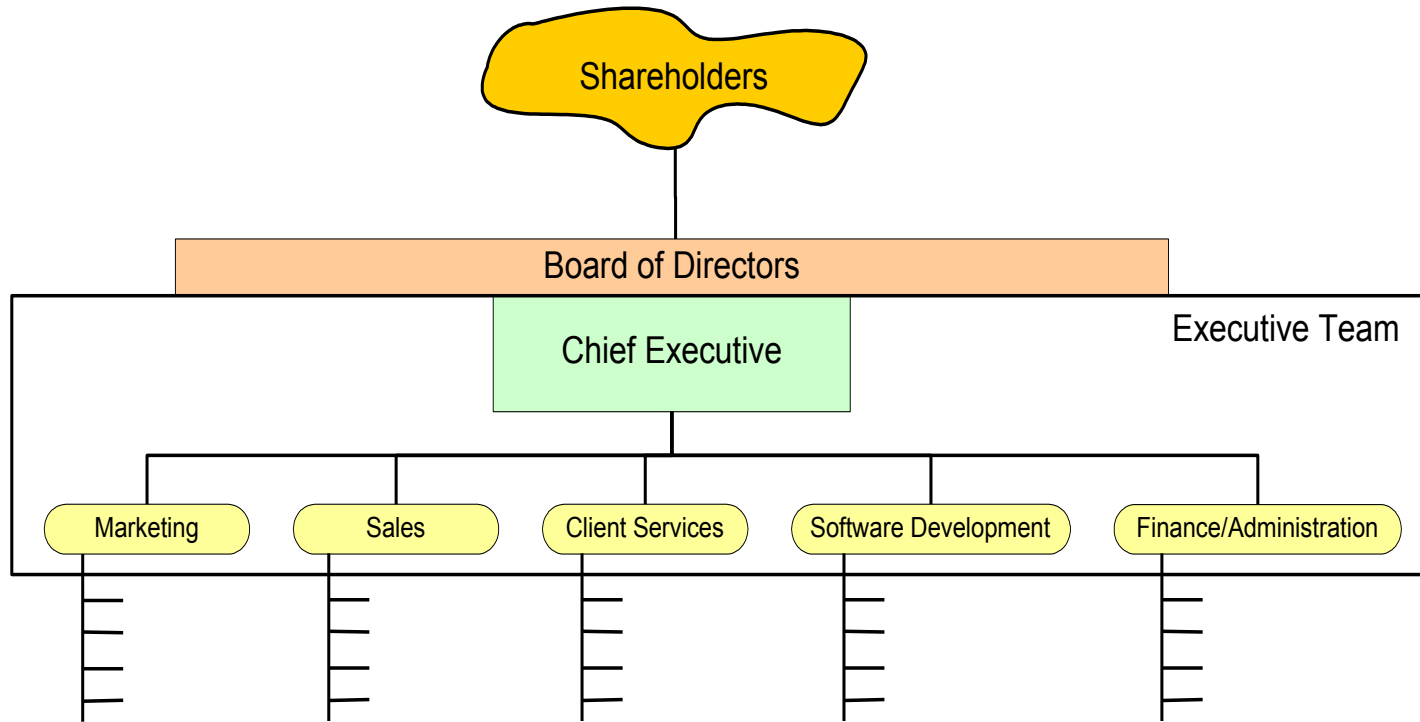
- see course web page for a link to an excerpt from the book.



***software vendor  
environment***

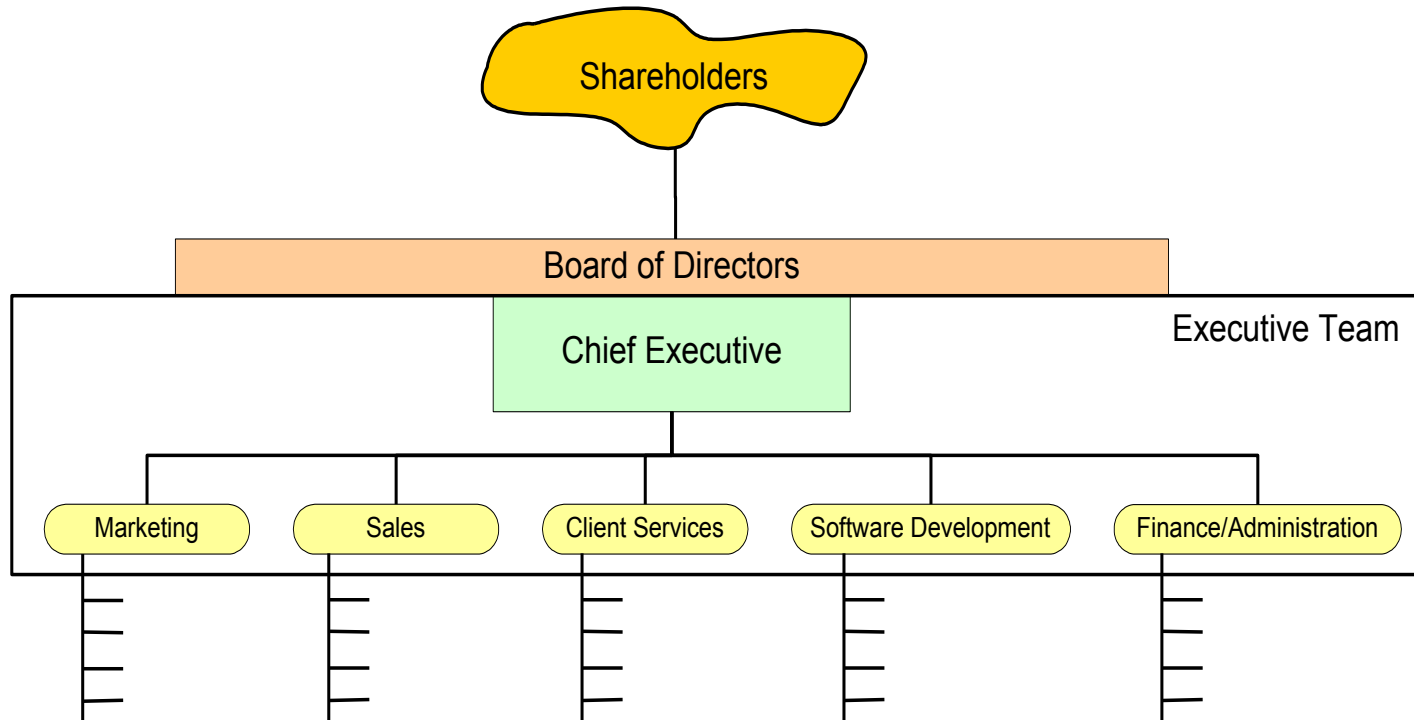


# *the software company*



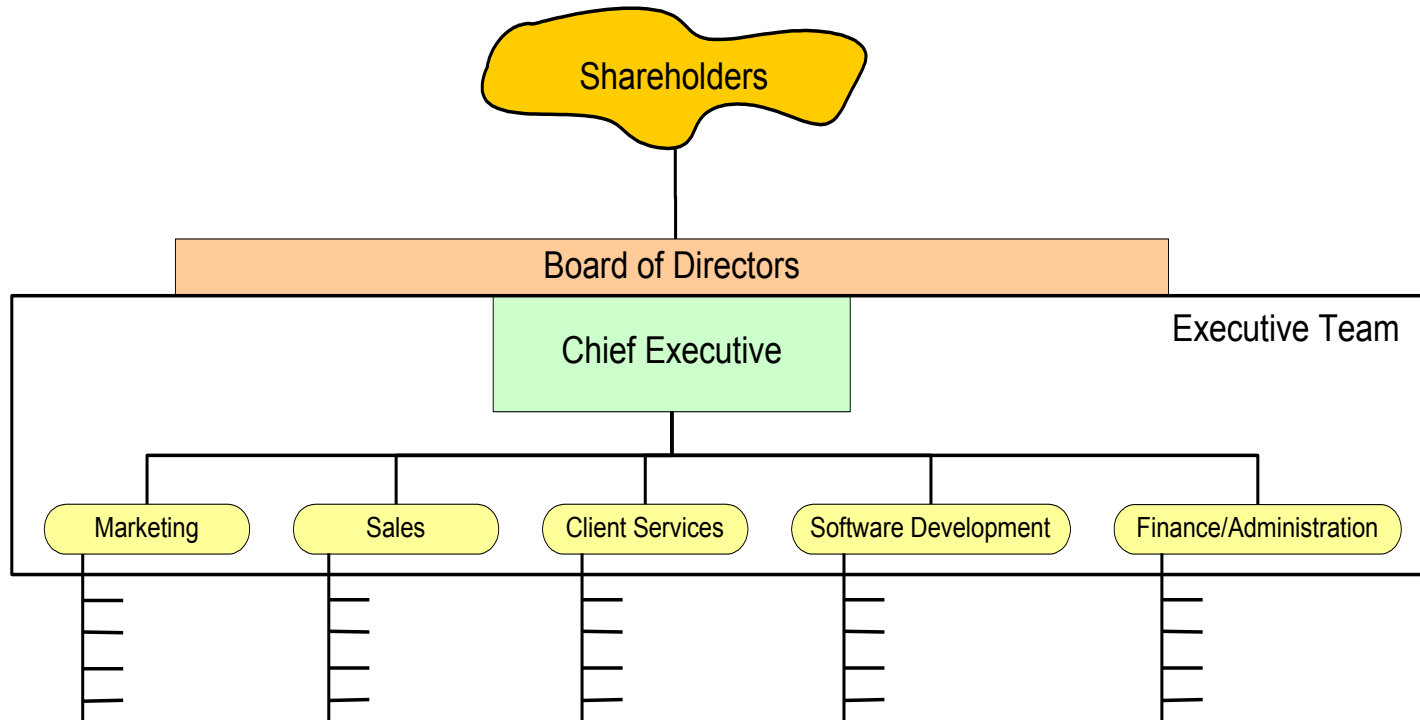
- Shareholders
  - owners of the company
  - elect the board of directors
  - same for private & public companies

## *the software company (2)*



- board of directors
  - represent shareholder interests
  - appoint officers, hire & advise CEO
  - legal liability (or LLC/LTD/etc.)

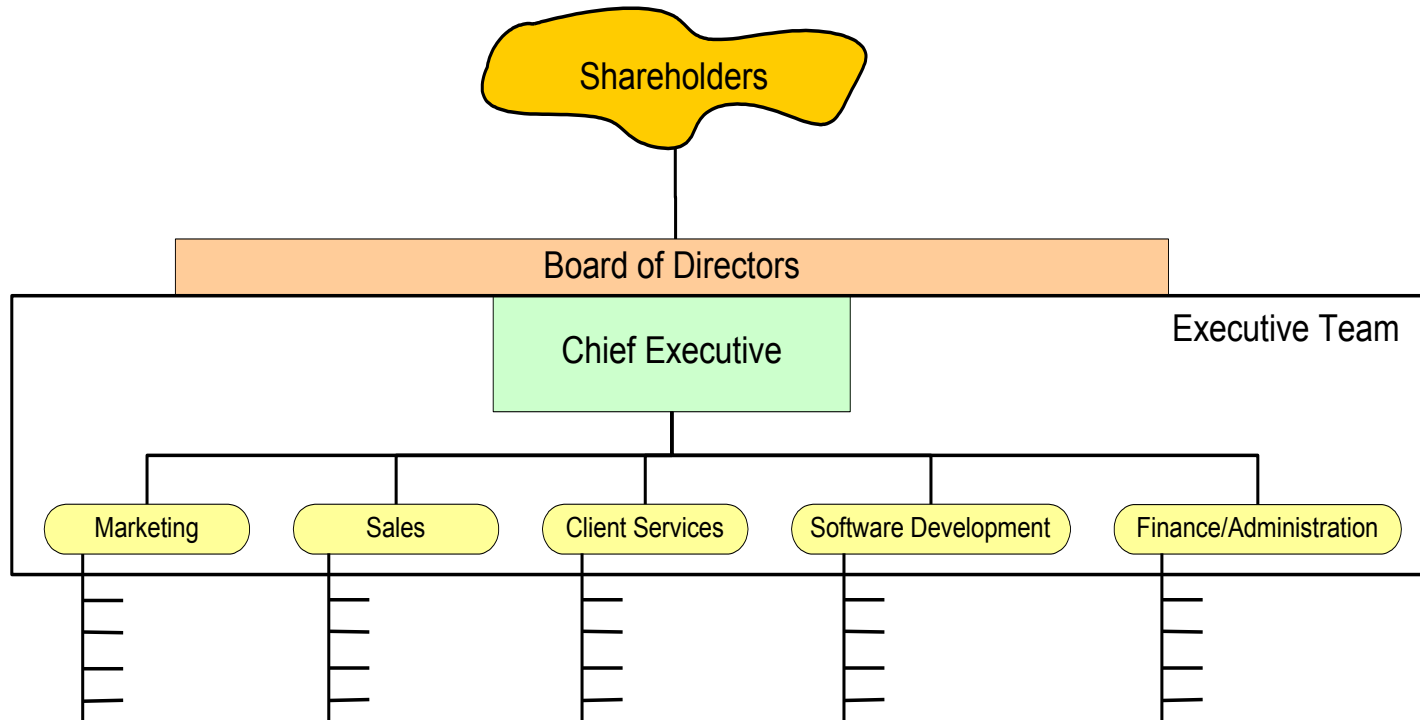
## *the software company (3)*



- Chief executive officer (CEO)
  - appointed (or hired) by the board
  - in charge of day-to-day operations & exec. Team
  - commits to financial targets (revenue/profit)

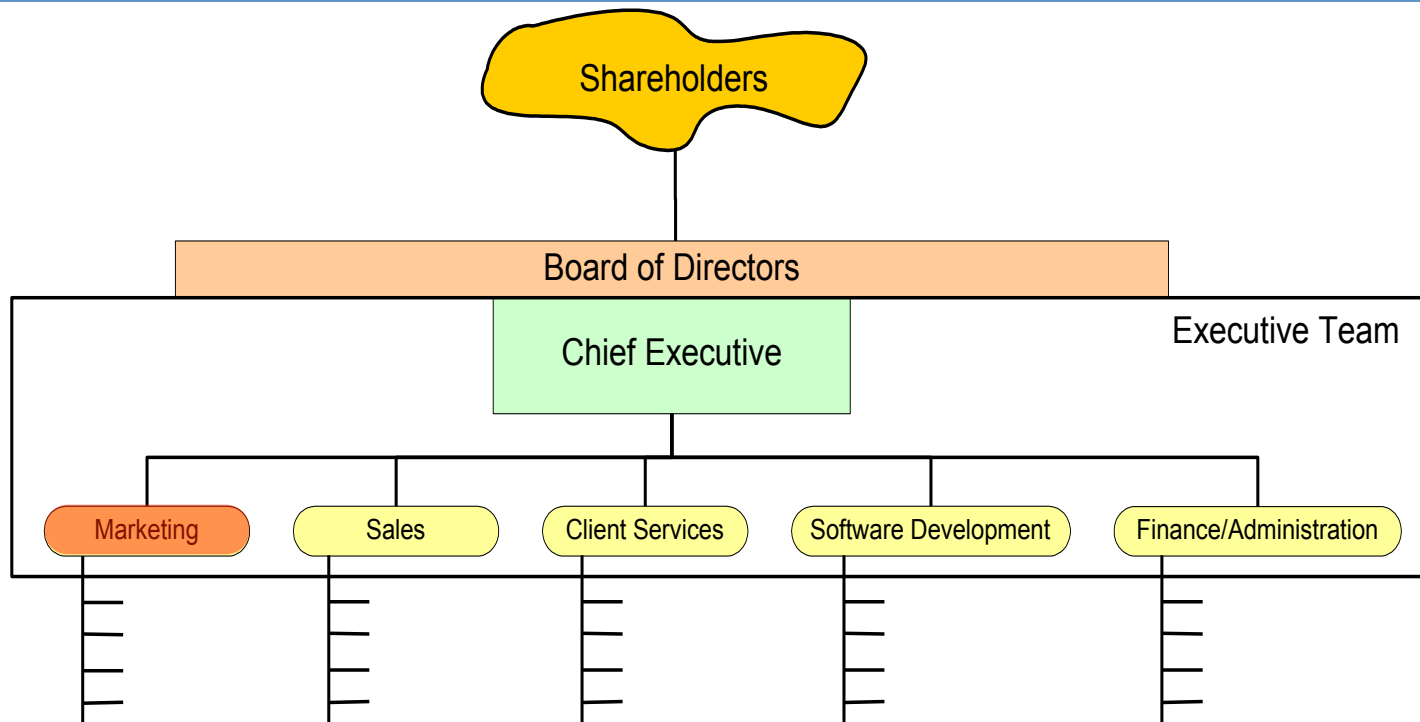


## *the software company (4)*



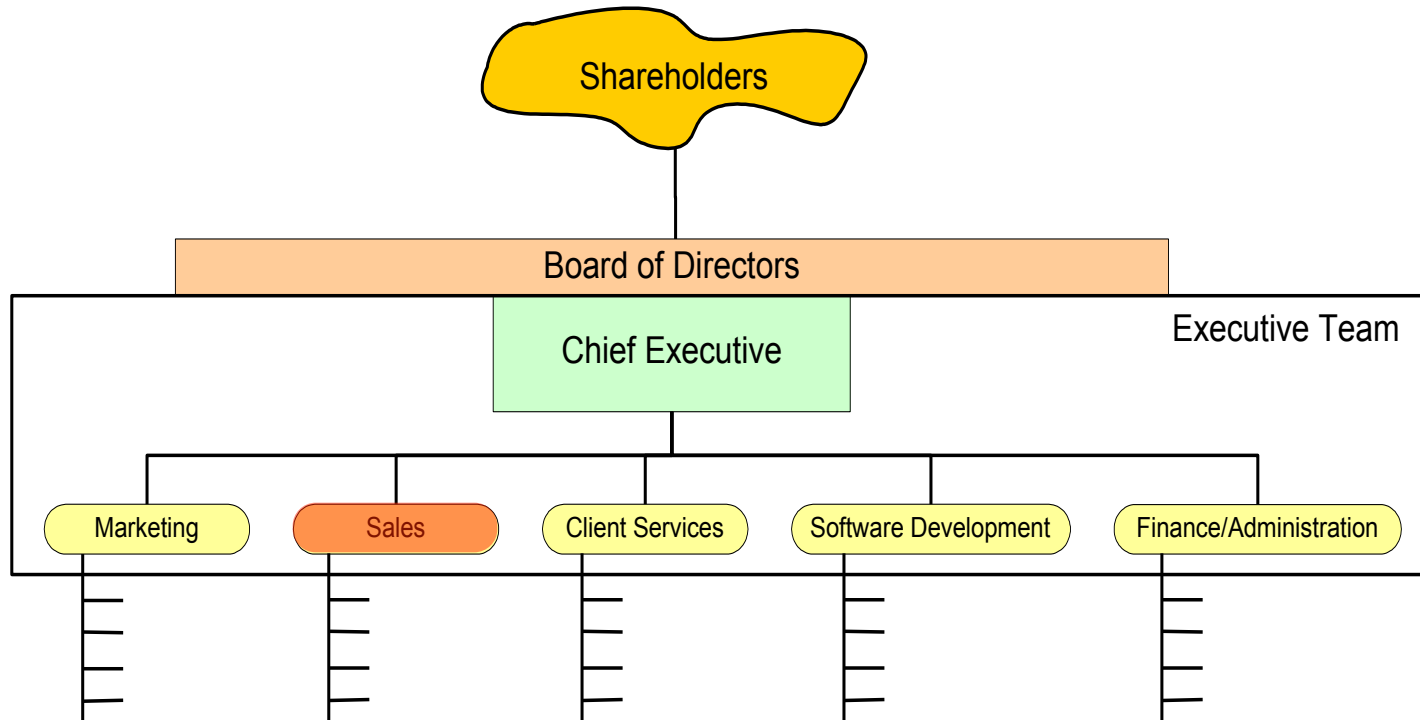
- executive team
  - vp & c-level officers. assembled/managed by CEO
  - in charge of day-to-day functional areas
  - meet regularly to coordinate strategy, budget, etc.

## *the software company (5)*



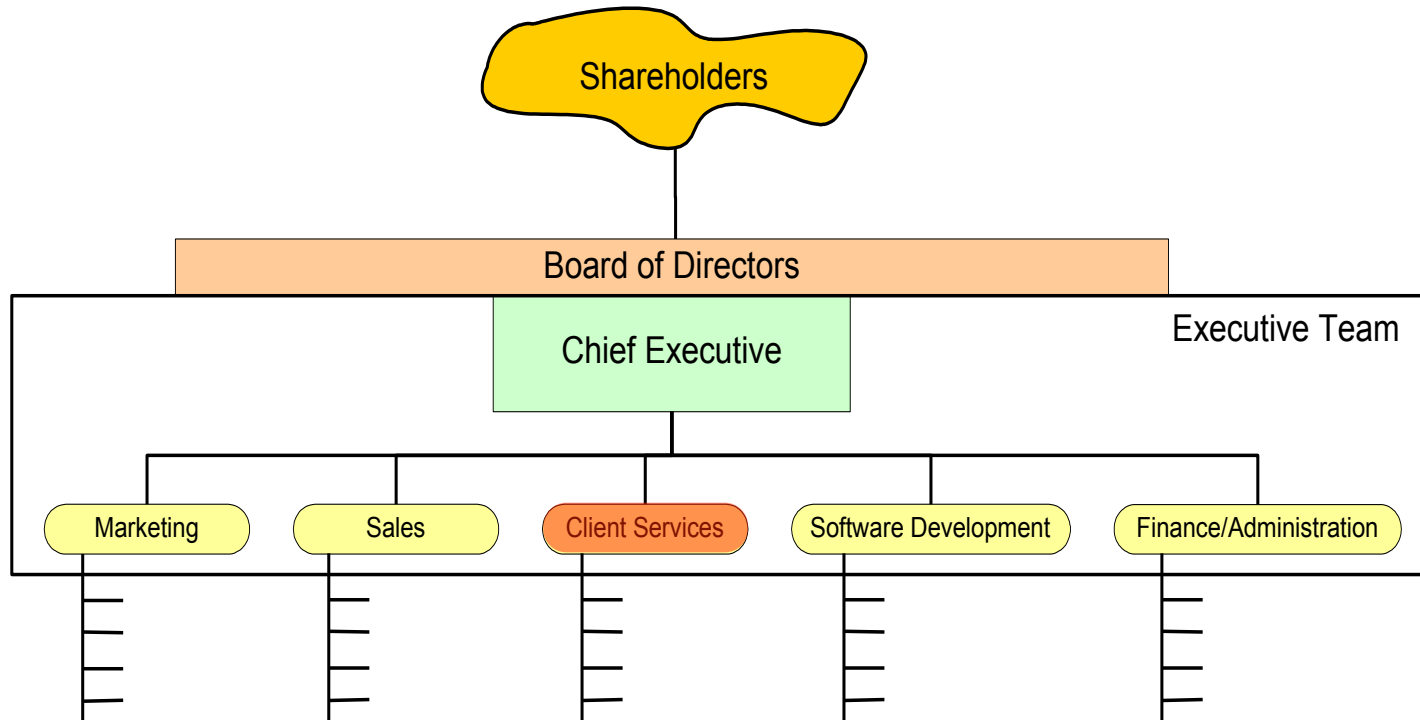
- marketing
  - product mgmt. (sometimes under r&d)
  - marketing communications (MARCOM)
  - business development (BIZDEV)

## *the software company (6)*



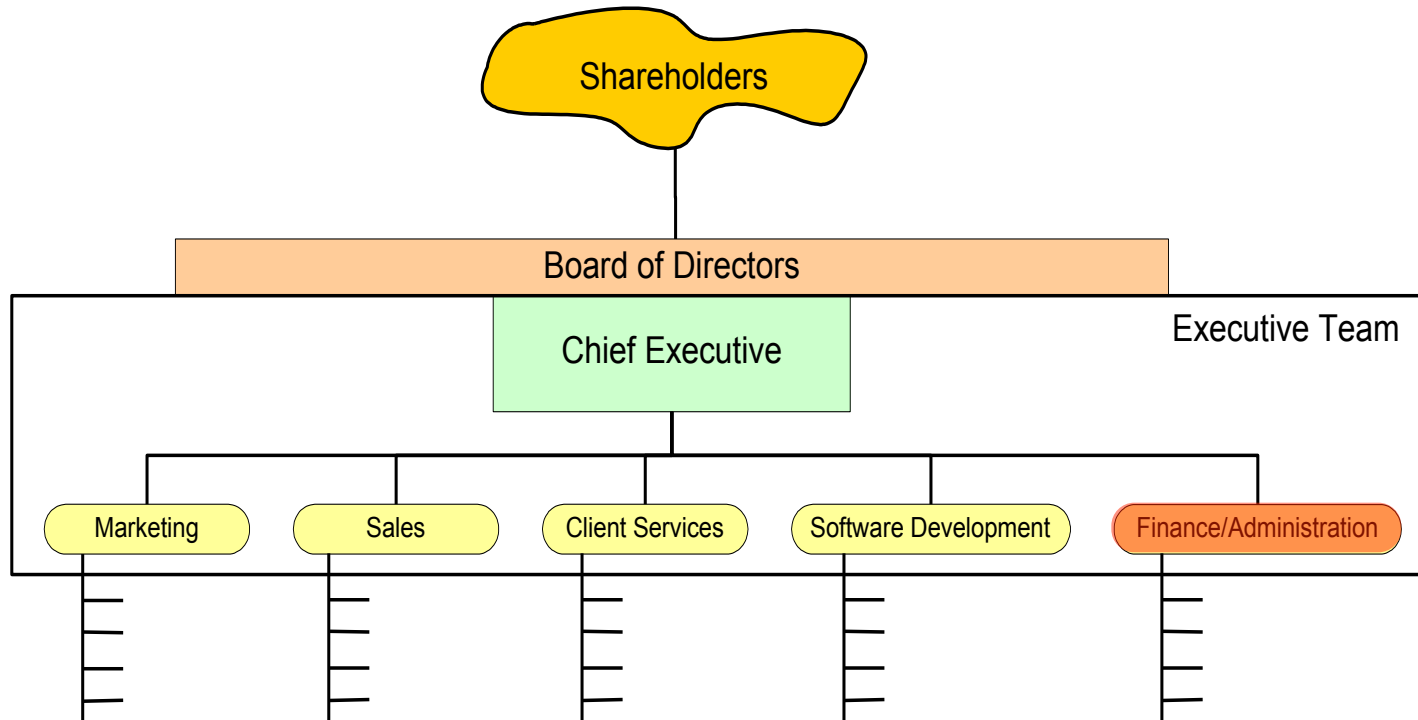
- sales
  - responsible for hitting revenue targets
  - models: direct, dialing-for-dollars, channels, ...
  - compensation = base + commission (+ bonus)
  - pipeline: leads, qualified leads, negotiating, close

## *the software company (7)*



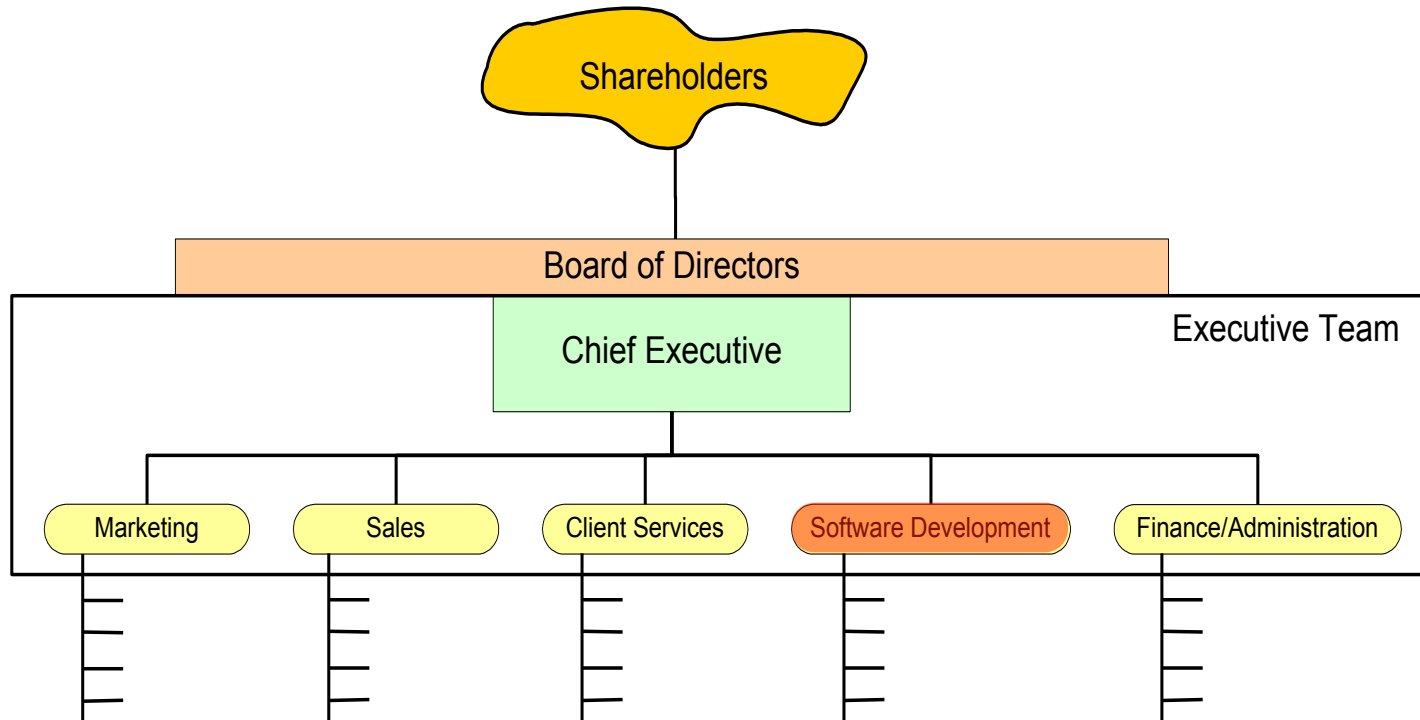
- customer/client services
  - pre-sales support & project planning, deployment
  - account management (ongoing)
  - help desk

## *the software company (8)*



- finance & admin
  - sometimes separate, sometimes include HR
  - investments, payroll, taxes, investor relations, HR, office mgmt., IT, etc.

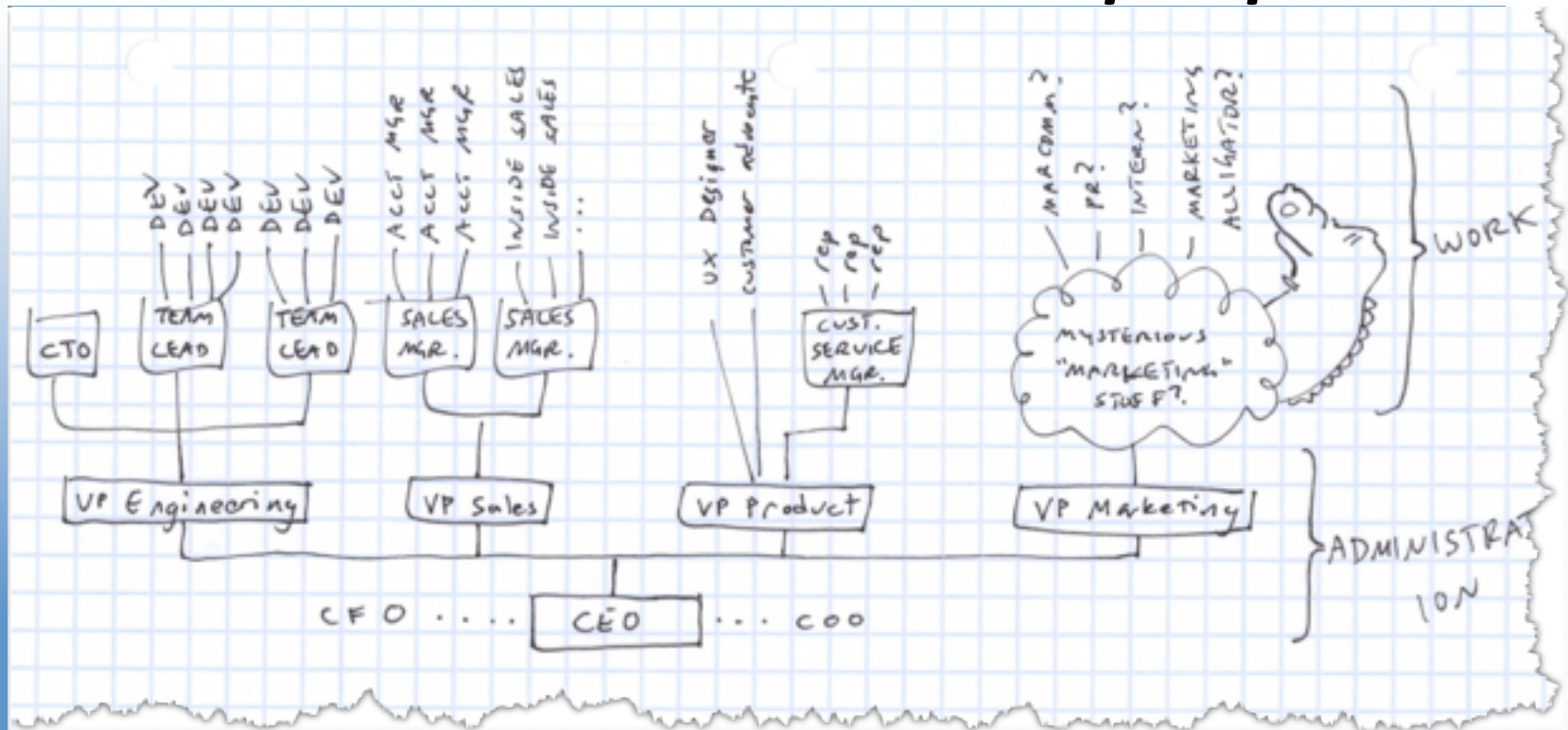
## *the software company (9)*



- software development (or, r&d)
  - responsible for delivering quality software, solving the correct problems, on time, and with low defect counts
  - CTO vs. VP R&D vs. CSA – who's in charge?



## *another perspective*



- this view helps eliminate “command & control”
- hire the best, and then control them, no good!
- this model = more of a “support” structure
- maybe call it “administration?”