

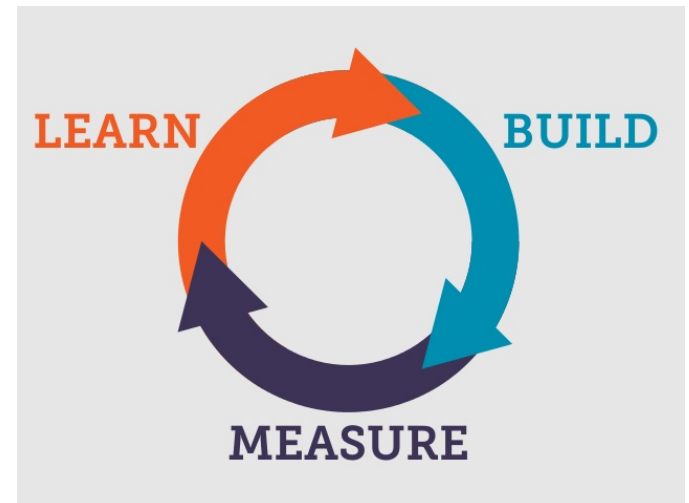
The Promise of Lean

- Increase customer value with fewer resources
- Eliminate waste
- Continuous improvement
- Honor employees intelligence
 - From blame to fixing the system
 - Horizontal communication to fix root causes

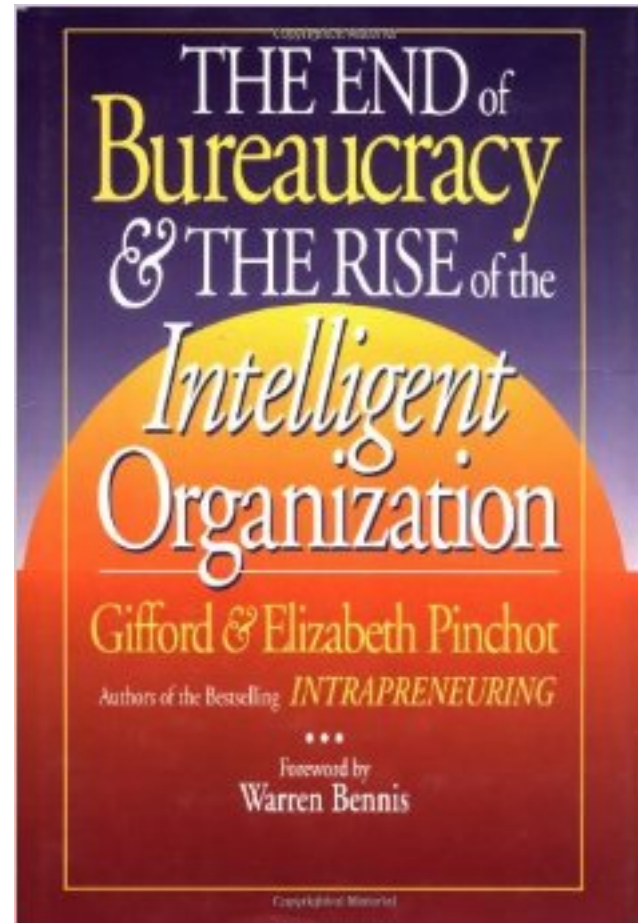
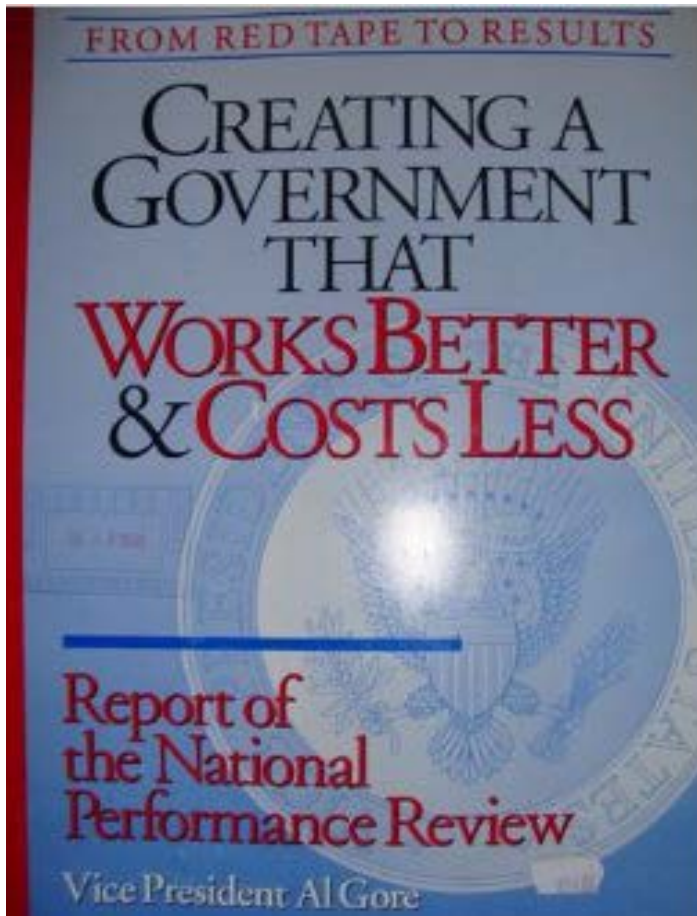


The Promise of the Lean Startup

- Faster, cheaper, better innovation
- Better fit with customer needs
 - Testing rapid prototypes with customers
 - Measure progress
 - Rapid learning from inexpensive mistakes
- A home for the entrepreneurial spirit



Reinventing the Forest Service 1994



Enterprise Team System Implemented in 1998



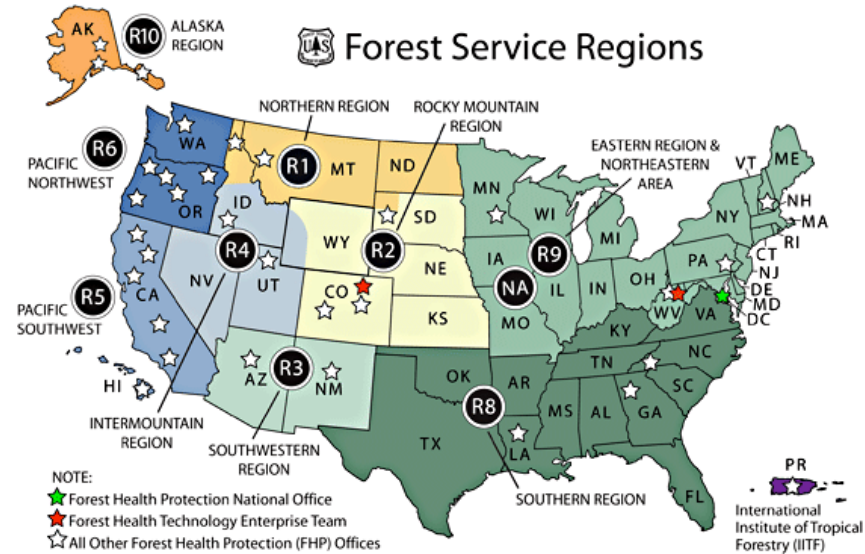
- Teams of internal service suppliers
- Freedoms much like entrepreneurs
- Regulated by pull from the forests

1.8 Times as Productive



The Forest Service

- 9 Regions
- 154 National Forests
- 20 National Grasslands
- 8 Research Stations





Forest Service Enterprise Teams

- Restoration biology
- Recreational planning
- Conflict resolution
- Road and trail building
- Wildlife biology
- IT services
- Archeology services
- NEPA assessments



Forest Supervisor Choice

- Ways to fill a need
 1. Hire someone directly
 2. Service from regional or national staffs
 3. Hire external contractor
 4. Hire an Enterprise Team
- Enterprise Teams
 - No allocated budget
 - No mandated customers
 - Full cost accounting



Applying science of fire
Business services
Planning

How it Works

- Teams may sell to anyone in the agency
- The teams set their own prices
- The teams choose what services to sell
- The teams choose their customers
- Teams choose their members.
- Full cost recovery
- Customers have several alternatives



The Enterprise Bank

- The team stores revenue in an internal bank account
- Funds remain until spent: Not zeroed out at end of year
 - Heijunka: leveling the flow
- Use the funds for any legitimate business purpose.
 - Doers decide
 - HR sets salaries and bonuses.



Team Freedom



- Solvent teams can't be fired
- Insolvent teams dissolved
- Control by customers, not bosses
- Freedom is the great reward



Enterprise Reduces Muri: Overburden

- Reduces peaks and valleys
 - Multiple customers
 - Cross training
- Scale & standard processes
 - Learning curve
 - Efficiency
- Customers, not power games
 - Each service is valuable – or else
 - Free from hierarchical stagnation
 - Can adapt to changing demand



CARS Team

- Analyses road maintenance challenges
 - Prevents erosion
 - Reduces landslides
 - Prioritizes maintenance
- Standard process
 - Fieldwork, data entry forms, analysis, report
 - 4 Kilometers of road analyzed in a day: \$2500
- Standardization & Scale
 - Reduce errors and cost



Enterprise Reduces Mura: Variation

- For Customers: JIT services for the agency
 - Pull “What you need when you want it”
 - Avoid purchasing dept. delay
 - Takt time of agency



Load Leveling Inside Internal Services

- 80 % of work in any large organization provides services to an inside customer
- Demand for services fluctuates
- Enterprise levels load
 - Multiple customers
 - Cross training
 - Process improvement



Reduces Muda: Waste

- 1.8 times as productive as average employee
 1. Clear service specifications
 2. Pull and load leveling
 3. Customer vendor relationship
 4. Fast, honest feedback
 5. Freedom to innovate
 6. Full cost accounting
- Carry learnings from forest to forest



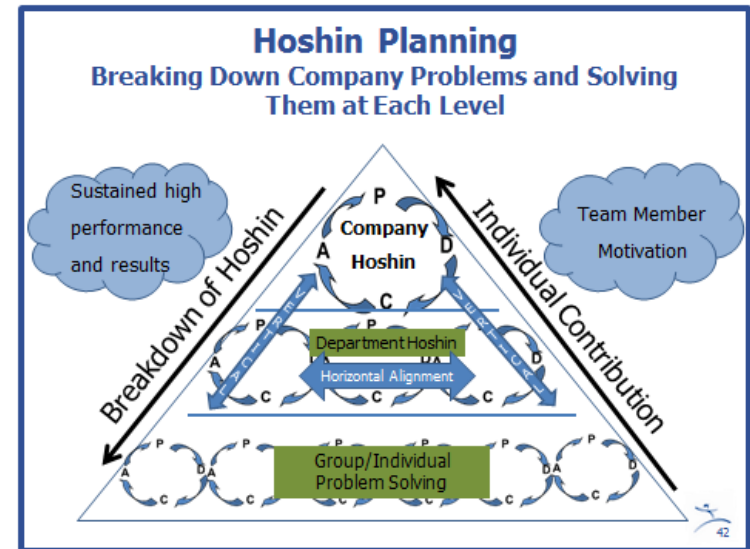
Rocky Mountain Research Station

Hoshin Planning

- Forest Service Strategic Goals

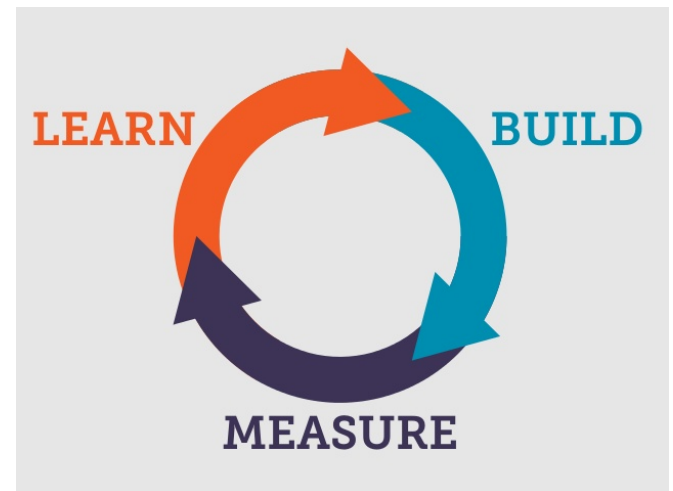
1. Sustain Our Nation's Forests and Grasslands.
2. Deliver Benefits to the Public.
3. Apply Knowledge Globally.
4. Excel as a High-Performing Agency

- Every team's business plan includes how serving those goals
- Enterprise creates high-performance



Enterprise and the Lean Start-up

- Frequent experiments
 - Rapid prototypes
 - Minimal Viable Products
 - Striving for perfection
- Validated Learning
 - Test your assumptions
 - Learn what works; discard what doesn't
 - Accelerate the feedback loop
- Innovation Accounting
 - Measure learning
 - Set milestones
 - Measure progress



Enterprise Embodies Many Lean Principles

- Specify customer needs
- Governed by Pull
- Rapid feedback loops
- Leveling workload
- Collaborative teamwork across boundaries
- Kaizen



1.8 Times as Productive

Digital Visions
Using software
to solve complex
Business Problems

The Benefits of Free Intraprise to a Government

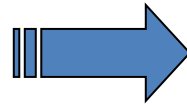
- Innovation in services
- Lower cost
- Less waste
- Better service to public
- Elimination of the excess capacity needed to staff for peaks
- Employee enthusiasm and energy



The School for Intrapreneurs



Purpose

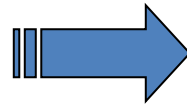


From employee



Intrapreneur

From group



High performance team

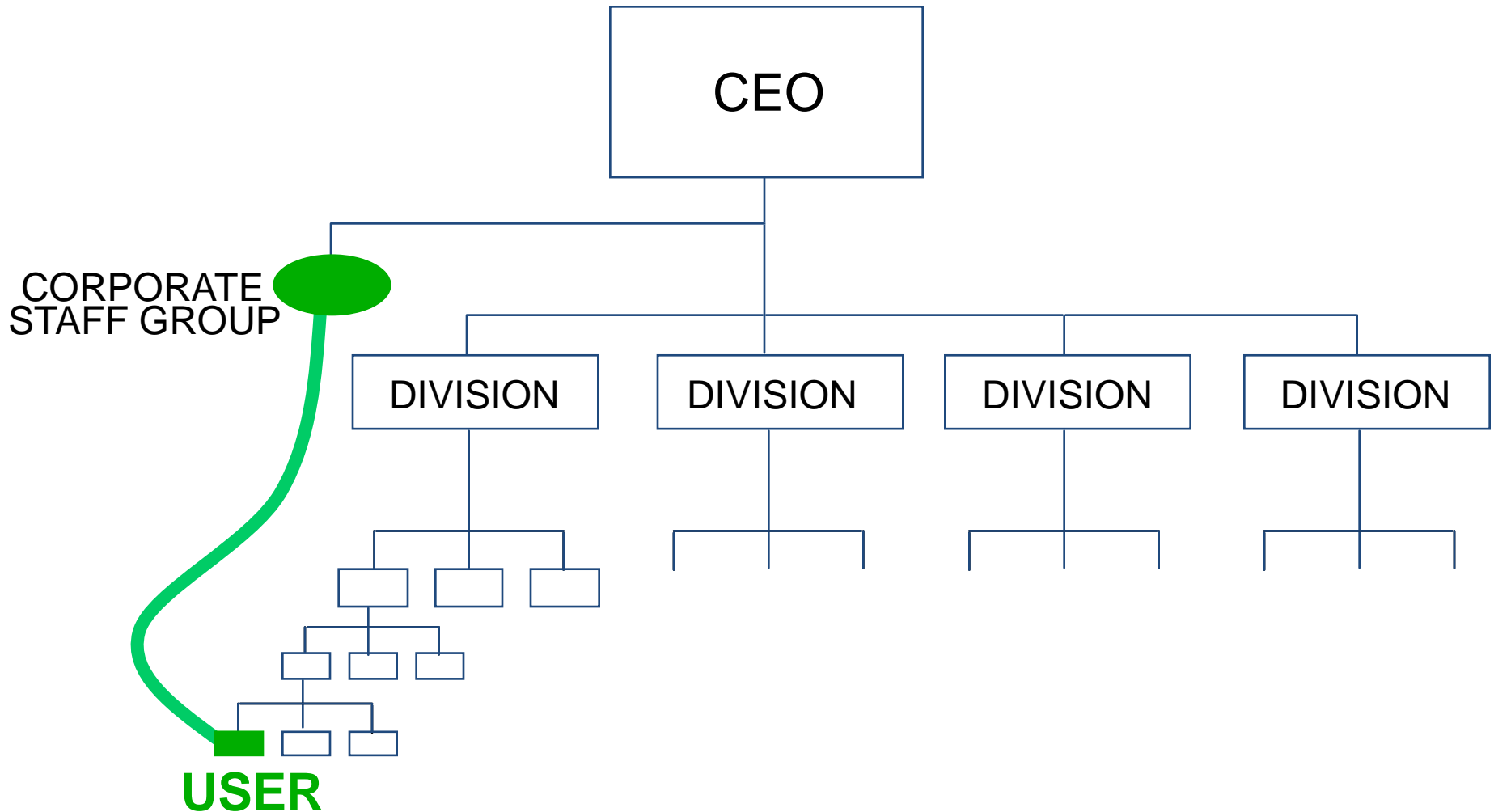
From concept



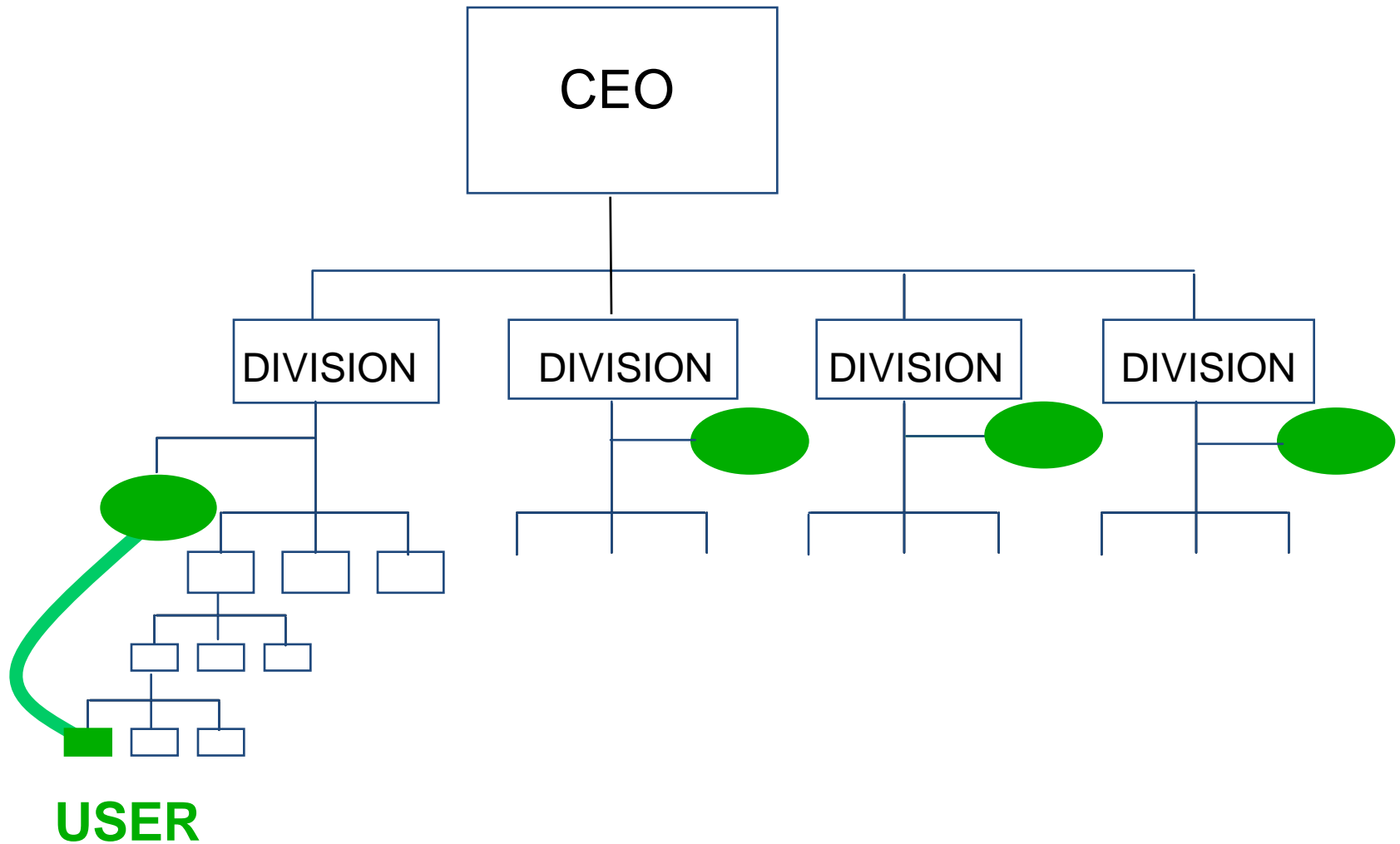
Business plan

Launched 800 Products and Businesses

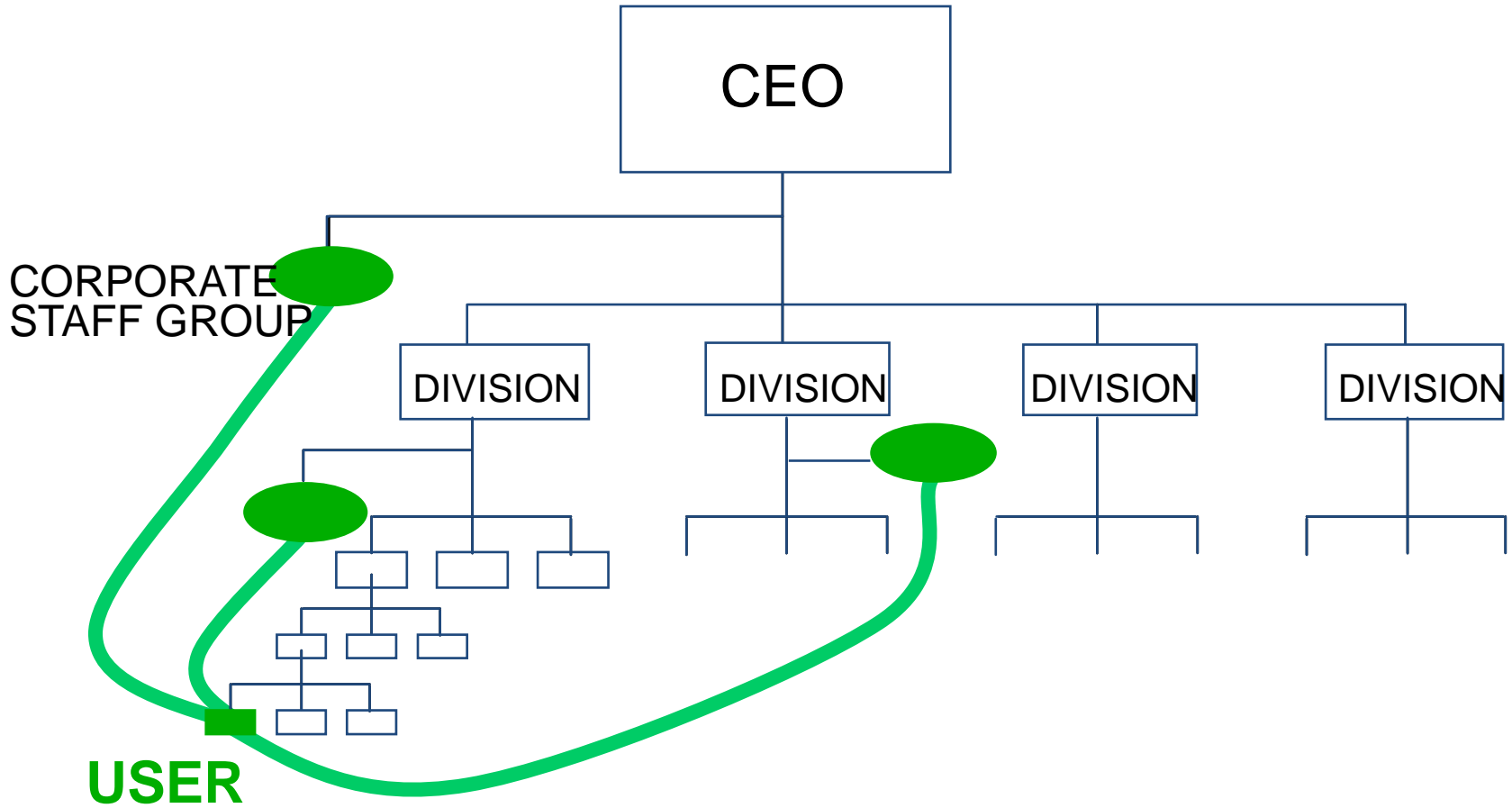
Centralized Staff Services



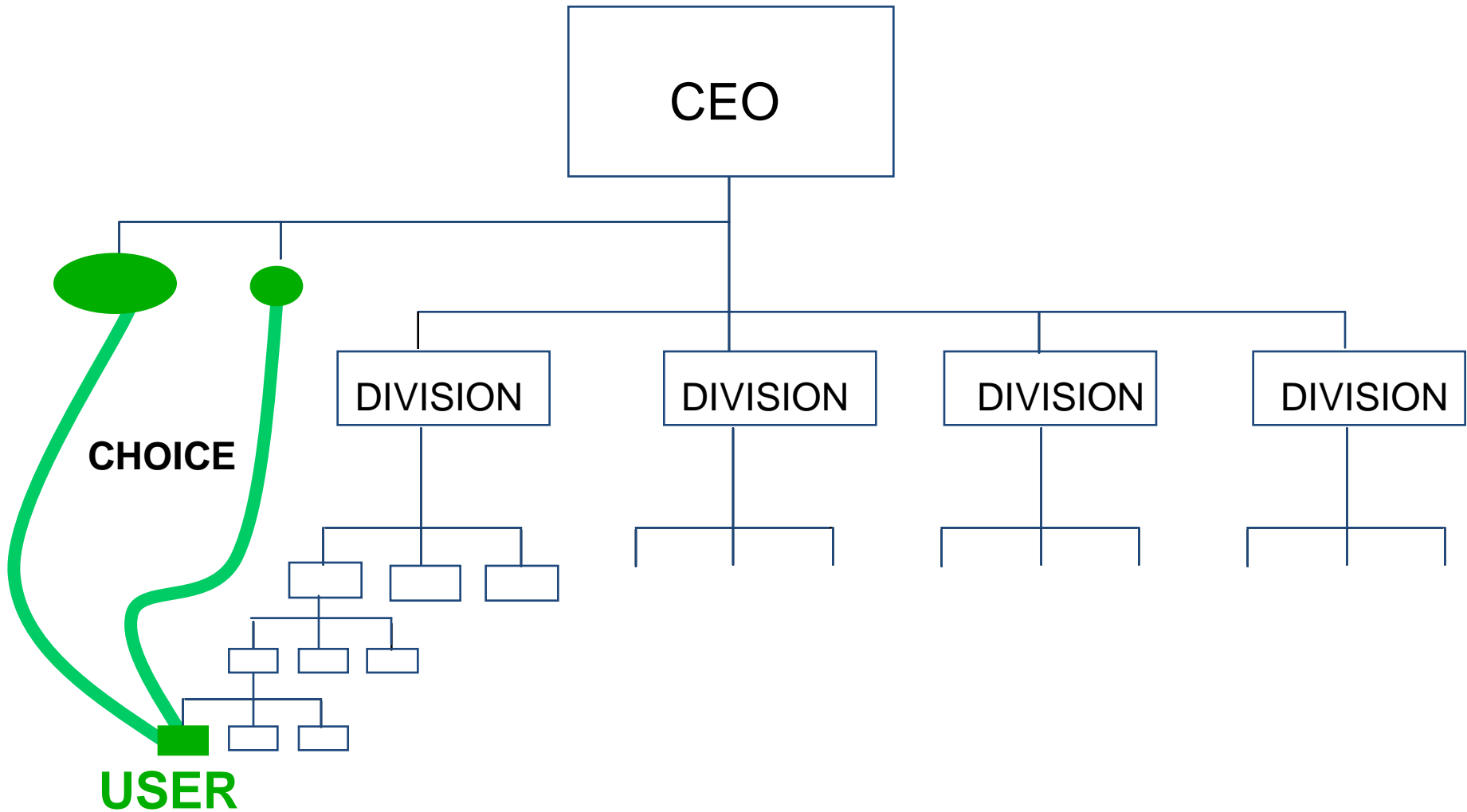
Staff Service Moved to Divisions



Choice



Centralization with Choice



The Intelligent Organization

