

WHY WEBVAN FAILED:

IT WASN'T A

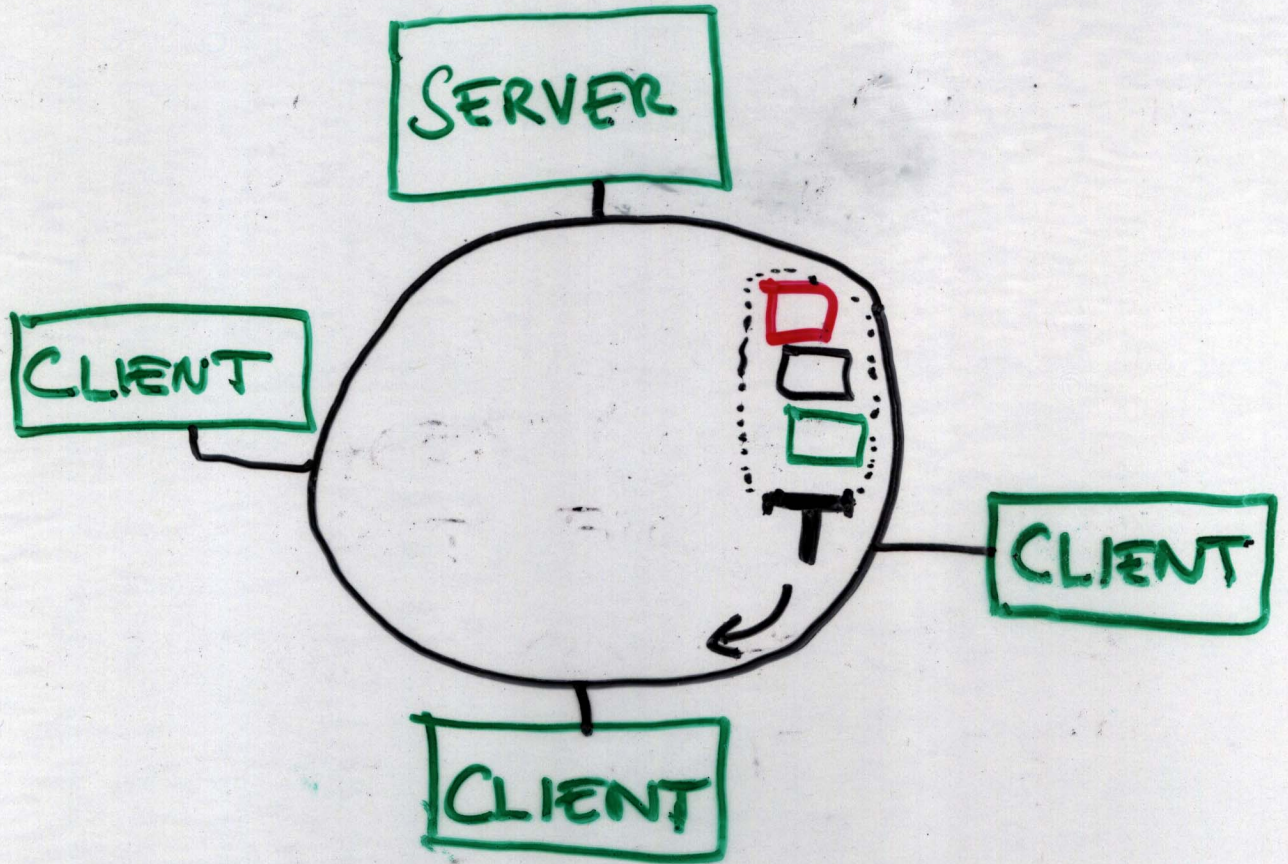
REAL INTERNET

COMPANY

... AND WHAT TO  
DO WITH ALL THOSE  
PLASTIC CRATES!

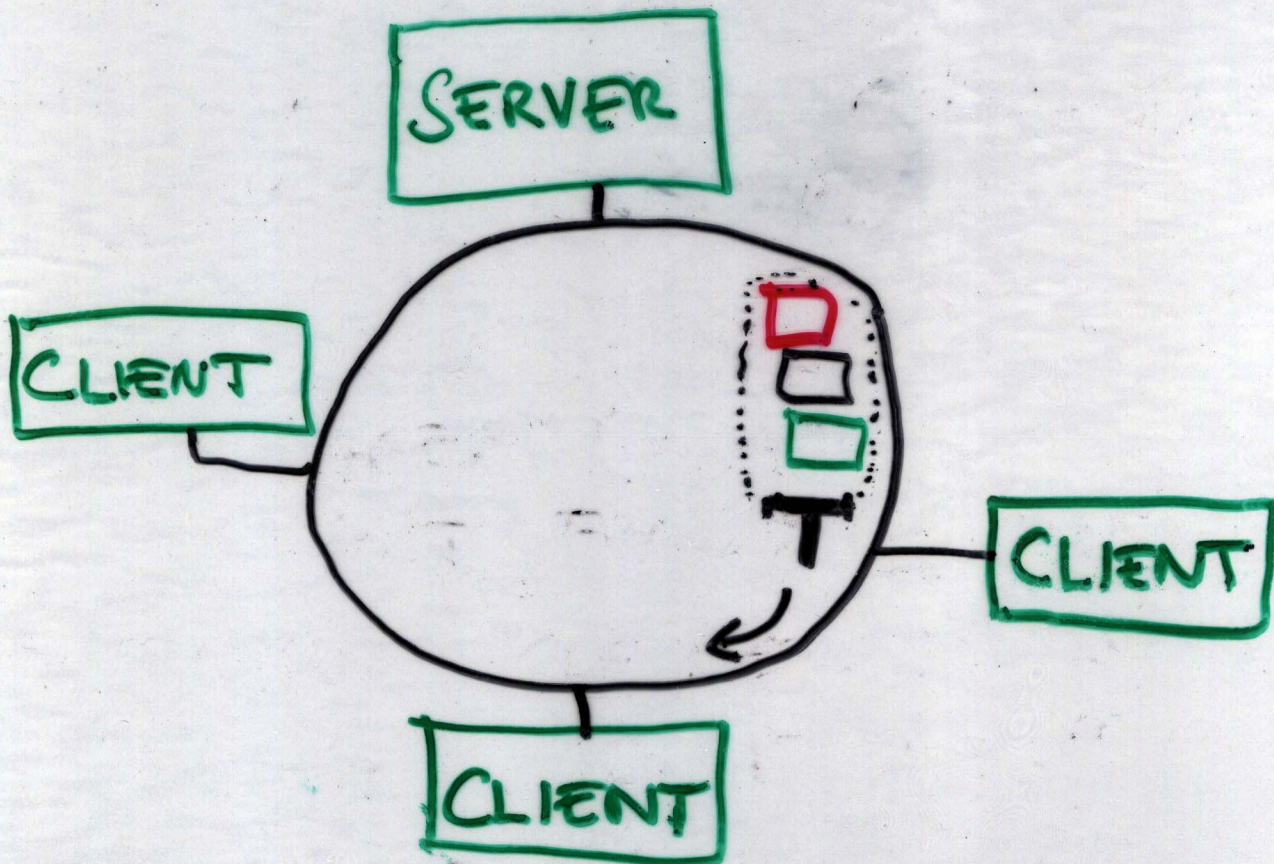
JEFF MOGUL  
COMPAQ WRL

# DIAGRAM OF WEBVAN DELIVERY NETWORK



T DROPS OFF FULL □ □s  
AT CLIENTS, PICKS UP  
THE EMPTYs.

# DIAGRAM OF WEBVAN DELIVERY NETWORK



T DROPS OFF FULL □ □s  
AT CLIENTS, PICKS UP  
THE EMPTIES.

UGH, LOOKS LIKE TOKEN RING  
-VAN SAYS THESE ARE BAD!

NEW INTERNET + LIKE

DESIGN FOR FOOD  
DELIVERY

NEW INTERNET + LIKE

DESIGN FOR FOOD  
DELIVERY

⊕ HOLLOW TUBES CONNECTING  
CLIENTS, SERVERS

NEW INTERNET + LIKE

DESIGN FOR FOOD  
DELIVERY

- ⊕ HOLLOW TUBES CONNECTING CLIENTS, SERVERS
- ⊕ FOOD CARRIED IN "PACKAGES" (CRATES BOUGHT FROM WEBVAN)

# NEW INTERNET-LIKE

## DESIGN FOR FOOD DELIVERY

- ⊕ HOLLOW TUBES CONNECTING CLIENTS, SERVERS
- ⊕ FOOD CARRIED IN "PACKAGES" (CRATES BOUGHT FROM WEBVAN)
- ⊕ TUBES CONNECTED BY "PACKAGE SWITCHES"

# NEW INTERNET-LIKE

## DESIGN FOR FOOD DELIVERY

- ⊕ HOLLOW TUBES CONNECTING CLIENTS, SERVERS
- ⊕ FOOD CARRIED IN "PACKAGES" (CRATES BOUGHT FROM WEBVAN)
- ⊕ TUBES CONNECTED BY "PACKAGE SWITCHES"
- ⊕ TO LIMIT CONGESTION, USE RED CRATES



# NEW INTERNET + LIKE

## DESIGN FOR FOOD DELIVERY

- ⊕ HOLLOW TUBES CONNECTING CLIENTS, SERVERS
- ⊕ FOOD CARRIED IN "PACKAGES" (CRATES BOUGHT FROM WEBVAN)
- ⊕ TUBES CONNECTED BY "PACKAGE SWITCHES"
- ⊕ TO LIMIT CONGESTION, USE RED CRATES
- ⊕ RETURN EMPTIES WITH PAYMENTS (I.E., "ACKS")

# RESEARCH CHALLENGES

⊕ DROPPED PACKAGES

- WHERE DO THEY GO?

⊕ DELAY + JITTER

- BROWN LETTUCE

- EXPLODING SODAS

⊕ NACKS - A FORM OF CHEATING?

⊕ MTU ISSUES

- HOW DO YOU FRAGMENT  
A LARGE FROZEN  
TURKEY?

⊕ VIRUSES

- YUCK!