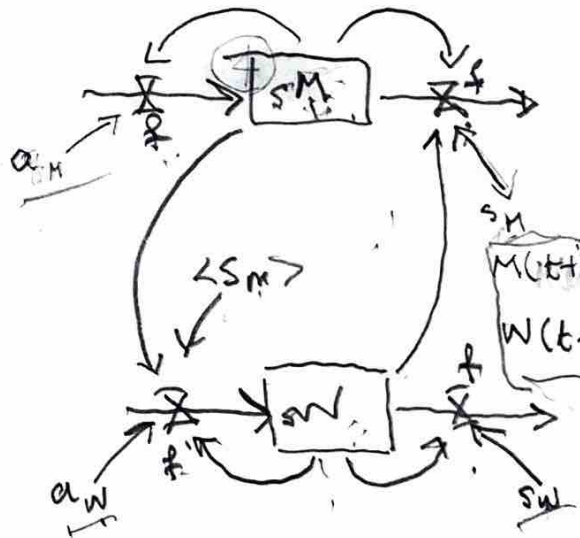


① What if
our customers
can choose between
Us or Them?

④



$$t: \Delta t = t_s - t_r$$

$$\frac{1}{\Delta t} \rightarrow t$$

$$\begin{matrix} t_r & t_s \\ t & t + \Delta t \end{matrix}$$

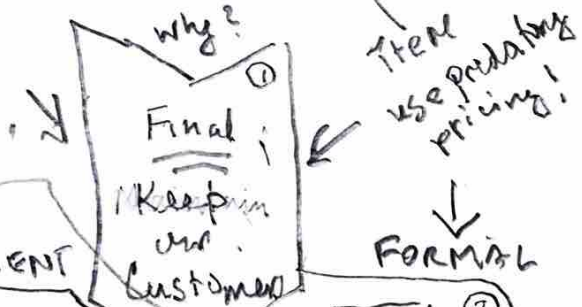
M or W: $\Delta M = M(t + \Delta t) - M(t)$
Let $\Delta t = 1$

$$M(t+1) = M(t) + a_M M(t) - s_M M(t) - W(t)$$

$$W(t+1) = W(t) + (s_M M(t)) a_W W(t) - s_W W(t)$$

CLEANMETRICS.COM

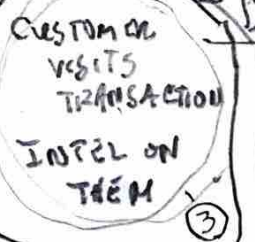
②



who EFFICIENT

TIME TO ADJUST?
MULTIPLIERS?

W WOLFEB
THEM = predators



MATERIAL

how + how much?

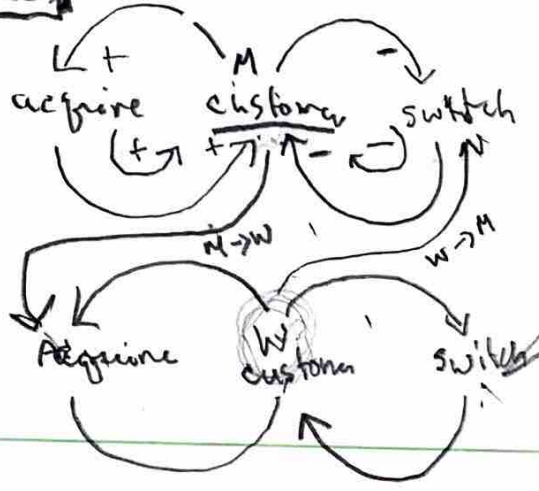
M US = prey
M 005500

customer acquisition
customer switch

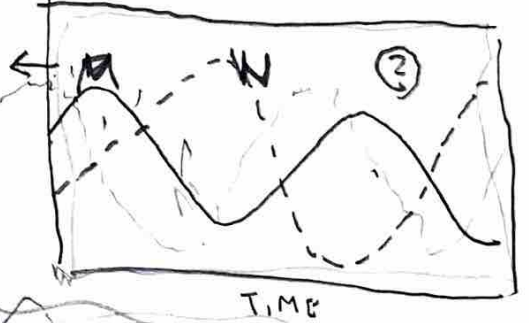
ANALOGICALLY
SYSTEMDYNAMICS101.COM

HBOs
Lynx
Hare / Pelt

CLD



⑤



⑥

System?
→ Collection?
→ Connected?
→ Coherent?

f Flux
 S Stock
 a auxiliary

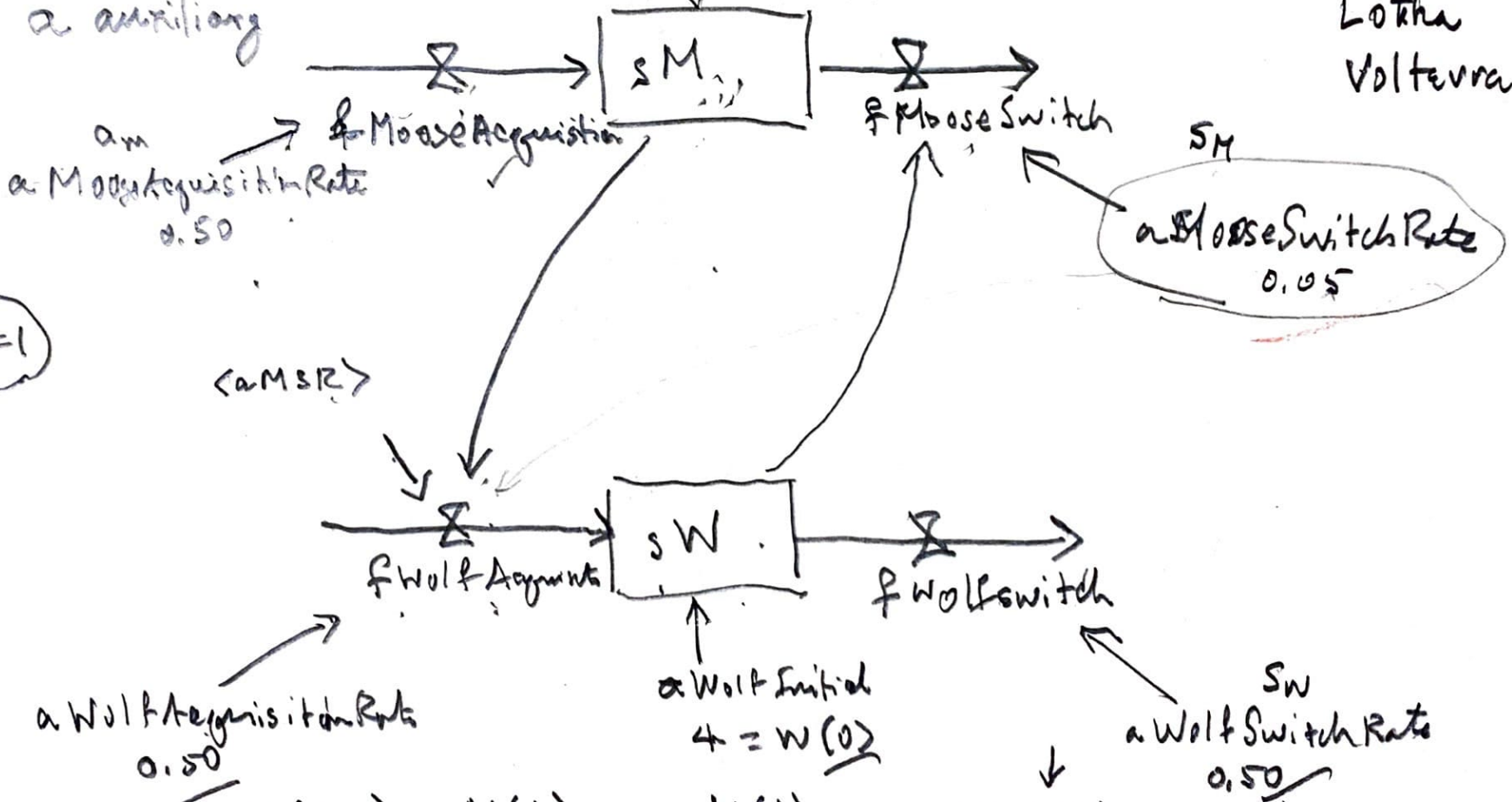
B-D

0 a Moose Initial $\downarrow 30 = M(0)$
 24 months

X MILE ^{rough}

Verhulst
 Lotka
 Volterra

$\Delta t = 1$



$$M(t+1) = M(t) + a_m M(t) - s_m M(t) W(t)$$

$$W(t+1) = W(t) + s_m a_w M(t) W(t) - s_w W(t)$$

Ex by hand
t=1 to 5