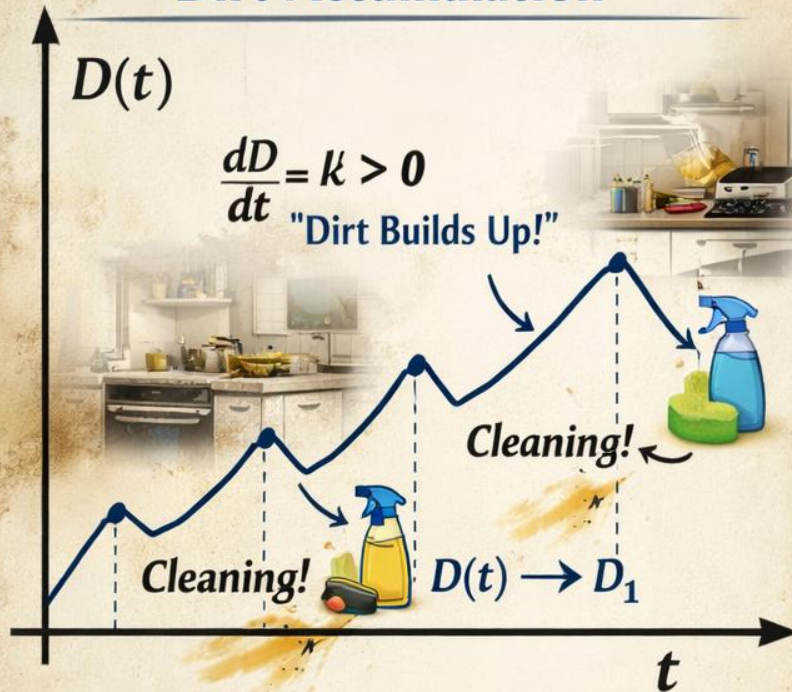


How Dirt Builds Up—and How Often to Clean

Dirt Accumulation



$$\int -k D(t) dt = \Delta D \Rightarrow "D(t_1 = D_1)"$$

Cleaning Resets the Dirt!

The Calculus of Cleaning

$$\frac{dD}{dt} = kD \text{ — Dirt Grows}$$

$$D(t_c) = D_1 \text{ — After Cleaning: } D_1 = D_{\text{tol}}$$

$$T \leq D_{\text{tol}}/k$$

Optimal Cleaning Interval

Example Cleaning Schedules



Busy Kitchen
Clean Daily



Light Use
Clean Every 2–3 Days

THE CALCULUS OF MORAL EXCELLENCE

IN ADMINISTRATIVE MANAGEMENT

INTEGRATE $\int$
STABLE VIRTUES

- Integrity
- Justice
- Temperance
- Courage
- Humility
- Respect
- Purpose

$\int$ Virtues dt

Moral Foundations

DIFFERENTIATE $\frac{d}{dx}$
ADAPTIVE ACTIONS

- Communication
- Decision Speed
- Conflict Handling
- Delegation
- Policy Application
- Emotional Expression
- Resource Allocation

$\frac{d(\text{Behavior})}{d(\text{Context})}$

STABLE VIRTUES × ADAPTIVE ACTIONS = ETHICAL LEADERSHIP · Ethical Adaptability

Moral Excellence = $\int$ Virtues dt + $\frac{d(\text{Behavior})}{d(\text{Context})}$

$$xf^2 = \left(\frac{x^2 - 1}{1 - x^2} \right) = \frac{x^2 - 1}{1 - x^2} = \frac{x^2 - 1}{1 - x^2} = 11$$

$$\frac{d}{dx} \left(\frac{x^2 - 1}{1 - x^2} \right) = \frac{2x(1 - x^2) - (x^2 - 1)(-2x)}{(1 - x^2)^2} = \frac{2x - 2x^3 + 2x^3 - 2x}{(1 - x^2)^2} = \frac{0}{(1 - x^2)^2} = 0$$