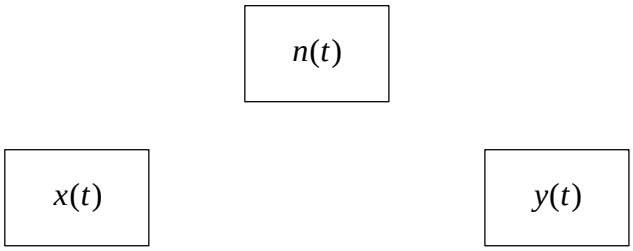
Introduction

A model



The number of potential customers at time t is $n(t)$

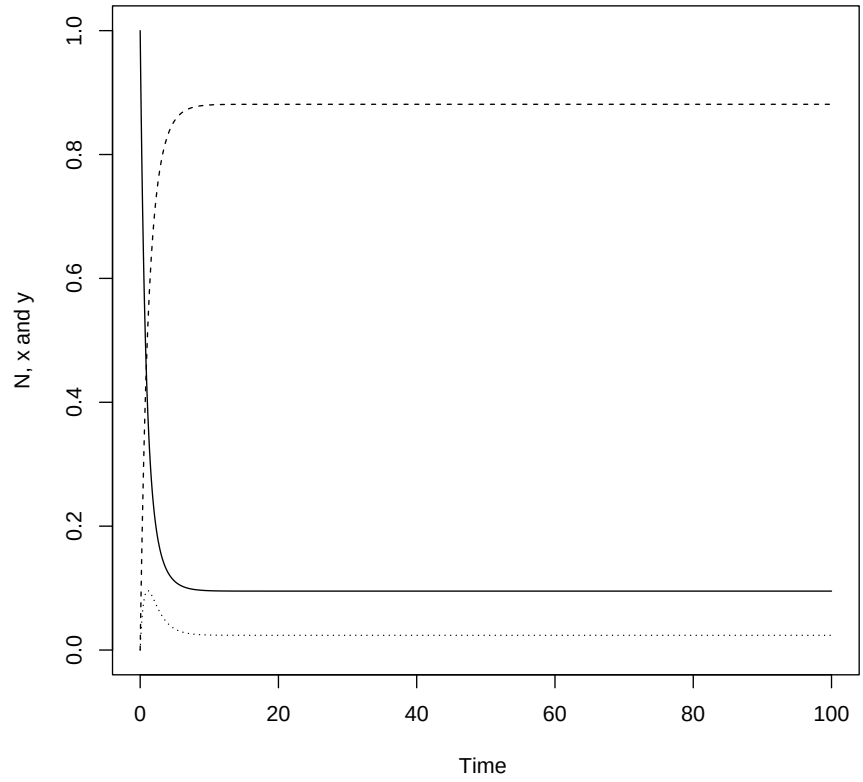
$$\frac{\mathrm{d}n(t)}{\mathrm{d}t} = -an(t) + by(t) + cx(t) - \beta nx(t) \tag{1}$$

and $x(t)$ is the number of customers who actually hate the coffee machine,

$$\frac{\mathrm{d}x(t)}{\mathrm{d}t} = a(1-p)n(t) - cx(t) + \beta nx(t) \tag{2}$$

whereas $y(t)$ is the people who like the coffee machine

$$\frac{\mathrm{d}y(t)}{\mathrm{d}t} = apn(t) - by(t) \tag{3}$$



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