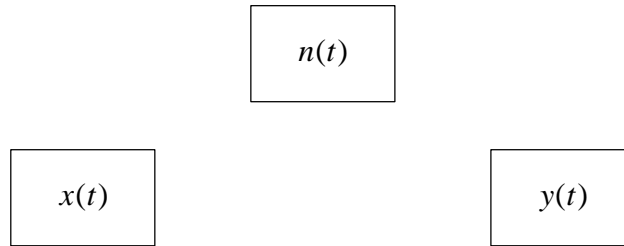


## Introduction

### A model



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

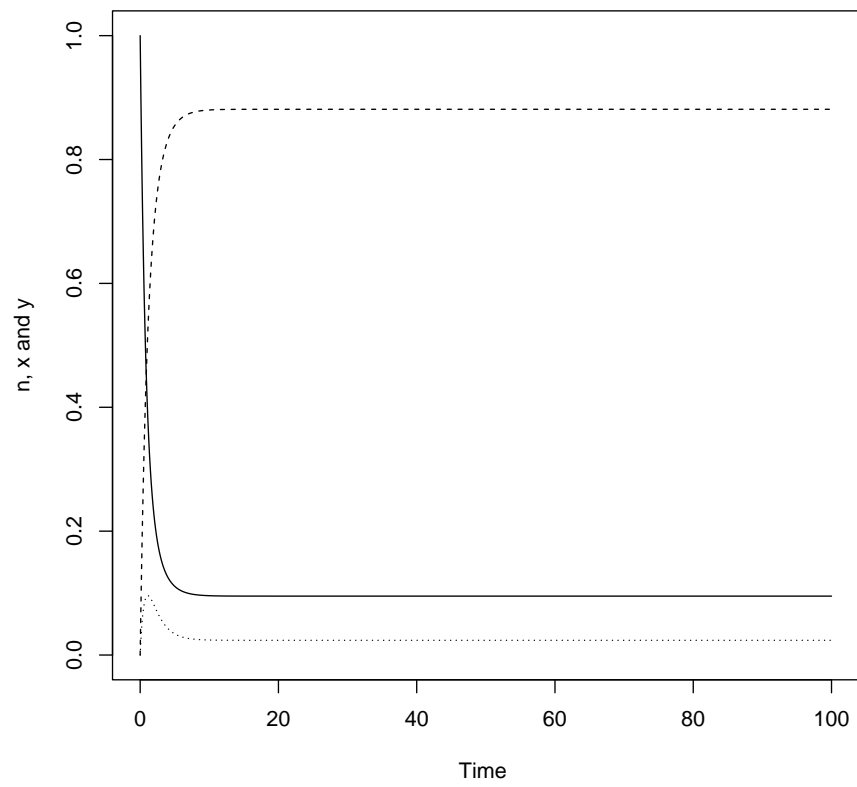
$$\frac{dn(t)}{dt} = -an(t) + by(t) + cx(t) - \beta nx(t) \quad (1)$$

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

$$\frac{dx(t)}{dt} = a(1-p)n(t) - cx(t) + \beta nx(t) \quad (2)$$

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

$$\frac{dy(t)}{dt} = apn(t) - by(t) \quad (3)$$



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