Monetrarist theory of money

One of the simplest economics model it is also one of the most far reaching, advocated by Milton Friedman and, at least in public, believed by Margaret Thatcher and Ronald Reagan.

$$M \times V = P \times T$$

Where, in any given time period:

M = the quantity of money in circulation

V = the velocity of circulation

P = the price of all goods

T = number of transactions

Spending is: money multiplied by the speed at which it changes hands, this must be equal to all the goods sold in the same time period at their prevailing price. Obvious really when you think about it, everything we spend must equal everything we buy.

Hence, if we increase the amount of money in the system, *all other things being equal* (velocity and number of transactions remain constant) prices must raise – inflation, q.e.d.

Again, this is an idealised model and ignores little factors like savings, investment and what actually constitutes money but the idea is clear. Some elements of reality can be abstracted away to show the central concept. More complex models used by banks, firms and governments peek into the future, each of these makes assumptions, each has some mathematical model at its heart which, almost by definition, is inaccurate.

At heart both Christaller's and the Monetarist models are attempts to reason about information and systems which is not that different to what we do when we write a design a system.