A Fictionalized Business Model

Originally Published on HalfBakery.com by Paul Bostwick

Anne-Sophie Arrowroot was not inclined toward paranoia. She had never worried about Big Brother invading her privacy, or anyone else's privacy, for that matter. But recently, this tawny sophomore at the University of Wisconsin-Madison has had the uncanny sense that there is a robotic doppelganger in a neighboring city who is following, somehow, in her footsteps. A fembot, if you will, with identical tastes in groceries and sundries. While she knows this is impossible (not the least for there being no way in which a robot could be said to have "taste") nevertheless, the feeling has settled in and is now strangely comforting. Her Blog catalogs her changing feelings on the subject and started a bit of a sensation in the fembot-blogosphere.

What Ms. Arrowroot has been feeling turns out to be not so much metaphorical as just plain true: right down to the Fembots. Strange as it may seem, in the small town of Verona, outside Madison is the Montague Apothecary Digital Distribution Access Shipping and Handling Infrastructure Network, MadDashinTM for short. A company which employs Fembots to mirror the shopping behaviors of Ms. Arrowroot and other frequenters of the Nasher's Pantry and dozens of other convenience stores.

Mad DashinTM represents the 5th generation in Just-In-Time inventory and delivery solutions. They have been in operation for just 3 months and have already had to expand twice to meet the demand of their convenience store customers.

Mad DashinTM serves the convenience stores by monitoring each order as it is checked out at the register. Instantaneously a signal is sent via high-speed digital lines under Lake Mendota to the offices of Montague Apothecary. These digital lines are heavily shielded from the radio interference generated by Lake Mendota's subtle but mineral rich tides. This signal is decoded and broadcast over WiFi routers throughout the warehouses of the Mad DashinTM facility.

Once broadcast into the dark, cool warehouses, tireless fembots roam the aisles and gather an exact replenishment for precisely the items purchased by each customer in each store. Since the Fembots move quickly along an optimized path, they often compose the replacement order faster than the Ms. Arrowroot's of Madison complete their ATM PIN entry.

The pulled items are placed in powder pink plastic bins labeled with the barcode and human readable signs indicating which store the items are to replenish. Finally, depending on the service level agreement the boxes are loaded onto trucks based on one of the following restock plans:

- An hourly basis (top tier)
- Full before leaving basis (a set weight of items triggers a delivery)

- Credit limit basis (dollar value of items)
- A daily basis (easiest to understand)

The system then becomes fairly low-tech as the fembots hand-off their bins to the doting delivery drivers. In the odd Montague argot they are called Store Larder Amendment Packages or "SLAPs" as in "go get your SLAPs from the fembot before the ice cream melts, thou dog faced loon!"

The delivery drivers load these boxes into their trucks and when they arrive at the client stores, depending on the service ordered by the client store, the driver either simply delivers a SLAP or two and removes the prior delivery's boxes or stays to unload the products and take care of stock rotation and the, ever rarer, spoilage removal.

The benefits of this system are many. The number of vendor visits that the store owner has to deal with goes down dramatically. The nearly instantaneous replenishment means the stores can carry a wider variety of items at lower counts. A fully optimized order could specify, for instance, that the store owner wants to be at 200% of the average customer's purchase on any given item that is usually bought only once a day. The freshness factor was among the most compelling issues. By replenishing frequently, stores can carry even more perishable products without taking on the increased spoilage risk.

Finally, the retailer has access to the sales data in real time and can, within their credit limit, tweak the inventory-refresh profile for each product he or she carries from the distributor.

In his thick Veronese accent, the pugnacious proprietor of Capulet's Corner Cabinet holds court over a stack of newspapers and a CornNutTM display. Benvolio Montague (no relation he assures us, unbidden) rings up his customers and describes in salacious detail the comings and goings of the Fembots he saw during his tour of the warehouse. A tour that transformed his business in a matter of weeks. When we got him back to business talk, he warmed to that subject as well, "Soon I'm going to get shallower shelves, I think I can add an entire new isle to my small store. It is like getting more real estate at the same address. My customers expect me to have more variety... I save them a trip to the big stores... I have what they are looking for." When asked about the downsides he jokes that he is still, "waiting for the Fembots to drive the trucks too." But, on a more serious note, he has noticed a "paranoidy' vibe" from customers that have been with him since before the advent of Mad Dashin'TM, "they say, 'it is creepy' how close we come to having everything they want."