CI Sponsors Meeting Thursday, 30 March 2000 Afternoon Session

Company Presentations

STOP & SHOP [ROYAL AHOLD] Haj Enjoji

Stop & Shop has 200+ stores in MA, CT & RI, earning \$6 Billion a year. It has 5 sister companies in the US, comprising 1000+ stores and earning \$20 Billion a year. The parent company, Royal Ahold, earns \$45 Billion a year, worldwide.

Stop & Shop would like to position itself as a storefront to the new frontier. The problems facing it are: the internet; selling produce over the web; competition with other media which sell. They would like to make the shopping environment friendlier - make it a place where you <u>want</u> to go, instead of <u>have</u> to go.

One of their interests is "Anyplace, Anytime Shopping". For example, pervasive computing like PDAs so that people can order from Stop & Shop no matter where they are. They are looking for horizontal partners in this endeavor. One idea is to have one phone for all retailers.

The best shoppers spend 40 minutes and \$150 in the store three times a week. The stores need to be more interactive, easier and more fun. RF cards could make a display light up to let the customer know that something is on sale. Data Mining, so that the store could know what to recommend for you or alert you if you are buying something which will cause an allergic reaction to the medication your get from the pharmacy.

Like Marks & Spencer, Stop & Shop would like to have Counter Intelligence have a space within the store, so that people can see what is coming down the pike. Allston is the test store. It's a good area to talk about appliances.

The old grocery paradigm needs to change. What worked in the 1950s will not work now. Stores are being attacked by ecommerce. Online competitors are eating into the grocery market in every way except for soft goods (people still like to squeeze their tomatoes).

What are the global dimensions? Nicholas' vision of ecommerce being 50% US, 10% Europe, 10% Japan, 5% Korea and 25% the rest of the world is wrong. The actual figures will probably be 50% the rest of the world and 10% US. As infrastructure costs go down, producers will be able to deliver directly without the middle men.

Example: you'd be able to order your Pashmina sweaters directly from craftsmen in the Himalayas. However, there are some bugs to work out of this scenario: delivery; how to get payment to them; cultural climates. The US phone infrastructure and lack of sales tax for goods sold on the web and Fedex and other delivery services is what made the US explode to the forefront of ecommerce. Stop & Shop and other retailers already have solved the inventory, customs and other problems of this nature and could act as "importers".

Where will the supermarket be in 10 years? Presently, people think that it will be less. However, if we can point and click for the drudge commodities that you <u>have</u> to buy (toilet paper, detergent, etc.), then you can go to the store for what you <u>want</u> to buy - and don't wish to buy online (meat, produce, wines, etc.).

The store's biggest resource should be <u>people</u>, not land. A store should be a third space, encouraging human interaction. However, most people at supermarkets are inaccessible. For example, the pharmacist if barriered behind plexiglas. Who are you designing the store for? <u>That</u> is the important question. Don't forget that kids pattern their store preferences young.

Other ideas are having an online expert (or in-store expert - like a farmer's market or wine store) who can pick the right cantaloupe or merlot for you. We could also create the community when you shop online. What's the latest gossip? Who's online with you? Why can't a butcher be online? You could learn to cook at the store. Have a restaurant where you cook your own food. A cooking show at the store. Entertain people online. Be nice to your regular customers (Hey! Your cartful of food is on Stop & Shop today!).

BEST BUY Mike London Gerald Nanninga

Best Buy is based in Minneapolis, MN and is a public corporation with 415 stores of 45,000 square feet and serving 80% of the US population.

They think in terms of "Cans, String, Content". The Cans are the products they sell, which provide no profit. The String is connectivity, which provides profit. And Content is what people will pay for. Best Buy is looking at a different profit model than the one they have now and they need new partners (AT&T, Cisco, Intel, etc.) to get there.

Customer relations are important. They send out 50 Million circulars a week. They would prefer to have that kind of access without the waste of paper. However, the internet connectivity would need to be seamless.

Best Buy's present value is their size, their floor space and their consumers. They would like to change the game, look at the consumer, break mental models and provide solutions.

As we know, the US appliance manufacturers are not innovative or exciting. But people view their products as a good value. As a result, they are missing the digital revolution and haven't taken the brown goods model of sharing revenue streams. They need a new model where <u>all</u> are participating in a good revenue stream.

The customer has a high level of expectations.

Scope: what do we want to do?

Structure: the industry is currently structured wrong to make innovation happen. Consumer: either wants to abdicate or enhance their experience.

When someone decides "what's for dinner", they usually do so about 90 minutes before. And their average prep time is 20 minutes. Hamburger Helper used to be a time saver, now it is touted as real cooking - because it takes a skillet and 20 minutes. The expectation time on appliances is 15-35 years. People who get their sense of self-worth from the kitchen has gone down.

In an average week, people get take out 2-3 days, whip together whatever in 20 minutes on 3 days and actually cook on 1 day. Thus, cooking has become a hobby.

The C's people want: Control Cooking Choice Communication Cleaning (something people <u>don't</u> want to do) Create (be creative instead of cooking being a necessity) Connection - how does all this stuff work? Appliance Calls Being able to turn appliances on/off remotely from work Content, Content, Content Family: How connect with everyday life.

In the future, money will be made not on the box, but in the content. The value chain as it stands now is no good. In the future, Intel may well be the true appliance manufacturer (as "Intel Inside" did with PCs). But manufacturers don't get excited.

Technology+Retail+Manufacturers: we need to all work together.

Ten years ago, Merloni started doing "The C's" described above. Their reasons for doing so were energy management and cost reduction. While energy management is not presently a consideration in the US, deregulation is coming - when you will buy power by the hour or minute. So, connection was important. Consumers needed to understand and negotiate energy needs.

The industry has changed readically. Ten years ago, there were 50 manufacturers. Now, there are 15, with only 4 in the US.

Cost consciousness has been addressed by more features, etc. Merloni has its technology component within its manufacturing component and decided that this would kill technology. That is why they spun off their technology section in Wr@p.

What is Wr@p? It is the part of Merloni which is developing technology within appliances. What the appliance is doing; has done; diagnostics; history; etc. and tranferring this out to manufacturing, service, etc. Wr@p is <u>not</u> about appliance control - it <u>is</u> about information.

Merloni understands that it is <u>not</u> enough just to put communications capabilities into machines, it is the <u>information</u> you build which is important. Wr@p will deal more with software than hardware. For example, Merloni's new washing machine line offeres 20 different washers. However, for each of them the <u>hardware</u> is the same; it is the <u>software</u> which makes the differences.

At the product level, what is meaningful content? What is a compelling reason? Service, among others. There is an advantage to retailers, too, in this. Service calls are very expensive. Information, for another. Manufacturers can discover how their machines are used and build a better machine next time. You can find how a consumer uses their appliances. While this raises privacy issues, it can also let the manufacturer procide feedback to the consumer if they are using the machine incorrectly.

Leonardo is a power management appliance. For example, email warnings if your refrigerator is losing cold. Or offer electricity bill discounts for using your washer during off-peak hours during heat waves. Your washing machine could pay your electric bill. \$50 off if it knows to go on at 2:00 in the morning during energy drains. Or instead of buying a new washer, you can download an upgrade for \$25.00.

What are the modalities for connection? The power lines (dirty). A Gateway dialup. Look at residential nodes. One string cannot serve everyone's needs. We need to allow for a choice of bus (firewire, etc.). Wireless, Echelon (works), X10 (doesn't). Firewire - no one wants to rewire their house. What's needed is a parallel high

network. Broadband, but not wireless yet. Low bandwidth for now, but options to use high bandwidth later. What do we need for the kitchen? Wavelan, Bluetooth, 1349 all conflict with each other and are on the same RF frequency.

Other content ideas: your online store knows what is in your house and can recommend rather than you having to go to the store. The service standard may change. The ebb and flow of goods <u>and</u> services.

SCHOTT GLAS Peter Naß Hans-Jürgen Lemke

Schott makes special glass and high-tech materials: from pyrex and stovetops for your kitchen to optical and scientific glassware. They earn 1.5 Euros a year and have 18,300 employees.

In the kitchen, they do glass doors and vertical freezers for commercial use, fireplace glass, room heater systems, radiant gas burner systems, coffee pots, cooktops, oven doors, microwave doors, refrigerator shelves and panel touch controls.

Schott has found that they have to push appliance manufacturers to implement the innovations Schott has developed. Merloni was one of their first partners in the kitchen.

They have glass which is 30 microns thin and make fabulous touch panels which are more robust than polycarbonite surface and a black glass refrigerator door with a light so that you don't have to open the door to see what is inside.

WRAPUP

Partners we would like in CI: Cisco, IBM, Sun, Microsoft GE, Maytag, Whirlpool Sears

Process:

Home Technology Working Group Ideas for new students

Projects:

Kitchen/Restaurant Auto ID/Packaging Home/Retail XML for Food & Consumer needs/interests Technologies/standards Ethnology --> Real Homes