



Connecting Consumer with Product.

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Executive Summary

The Opportunity
Description of the Business
Competitive Advantage

The timed use of RFID reception allows ad-hoc 3D mapping of all RFID encoded products based on triangulation, using the pythagorean theorem and $D=RT$ to solve for distance from the emitter to the RFID encoded item. The known emitter locations are named and each reference a single point (called the North Star) to draw the ad-hoc mapping into the physical world via vectors. The "North Star" lists vectors for the event/commerce boundary and maps them repeatedly, providing realtime 3D ad-hoc mapping. This mapping is utilized for commerce 1) inventory control 2) inventory management 3) inventory security 4) commerce point of purchase ads & sales 5) event/store/commerce micro-navigation 6) inventory data pull for both consumer and enterprise 7) floor product placement & mapping 8) employee and consumer location. These services are enabled through a combination of proprietary software, enterprise software, and free-ware/internet services. Broadcasting this 'service' in-store and online allows for search functionality to be brought to the item level rather than the store location level; "connecting consumer to product."

The advantage is in the technology, products, and business requirement already established, yet combined in a unique fashion that extends the benefit of precise inventory control to the consumer. The market revenue model is proven. (Google Ad Service) Our assembly of the simplest and cheapest devices (paid for by the manufacturer) in a manner that provides both service and product in an intuitive fashion makes enterprise and consumer adoption easy, fast, and at massive scale (equipping entire chains such as Wal-Mart).

Target Market
Management Team
Brief Summary of the Financial Projections
Description of What the Business Needs
Exit Strategy

ePOP: Connecting Consumer with Product

The Opportunity

Have you ever had a simple project around the house, such as turning a guest room into a nursery for a baby on the way? A simple project that includes painting, a few new furniture items, and baby toys. Yet gathering the materials to complete the simple room, due in large part to the overwhelming size of popular stores' selection is often a daunting task. Finding the right products for the large room online is easier than in the store itself. Take IKEA for example... the reason there is a restaurant in a furniture store is because it is a daunting experience. The IKEA experience, not unlike any other mega-store, is often a half-day excursion with most of that time spent looking for what it is you would like to purchase. And for the average person, walking into a home improvement store to find a simple thing such as child-proof plastics, or paints, often takes an exploratory trek through the maze of mile-high aisles. It seems easier to just shop from home...

What if you could bridge the gap between online and in-store?

What if you could walk in to a store and be guided to the order you placed online by your smart-phone? Or place a small screen on your cart that could navigate you, in real time, to your project requirements with a few touches on the screen describing your needs --like Google Earth at a store inventory level. And when you neared the item, the screen dynamically senses your arrival, allowing you to browse the most popular items, most frequently purchased items, or even see what other people purchased while completing a similar project. This smart device even saves you a return trip to the store by reminding you to buy drop clothes and paint thinner. Yet you look at the Mother next to you with children quietly sitting in their cart, watching short cartoons and playing educational games while she shops in peace. Yet you turn to the teen next to you and see him check his smart phone one last time, and he has the same map you do on your screen. As you turn to leave, you notice others are simply walking out of the store without checking out in the long lines that have formed... You ask why the security man stands idly by. He explains that the Smart Show users

have the option of paying by simply leaving the store, which uses the product tags located in the cart to identify what has been 'purchased' and emails their receipt. What could possibly be so dynamic yet simple to use? Walking right to the products you need, and bypassing long lines in the store? Could such a product exist that serves up ads and information based on precise location --and by project category?

Yes.

The product is called "Smart Show," and the service is called "Onlife." It leverages a billion dollar ad industry with the simplest form of RFID tagging and ad-hoc navigation to deliver realtime 1) inventory management 2) inventory security 3) customer navigation and ad service 4) walkout-checkout for registered users 5) user history-based coupon software 6) online order for in-store navigation & order completion ("connecting consumer to product") 7) multi-platform display and 3rd party support (Google, Yahoo, Microsoft, etc) The combination of these services solves several major industry dilemmas making it an attractive addition as a management tool that also improves customer service. Best of all, it's completely scalable and uses proven physical technology (RFID tags) that is already being implemented into stores for static inventory management.

The service and product, by ONE (Oceanic Network of Enterprises) utilizes current and emerging wireless technology to dynamically create ad-hoc situation-dependent local navigation which delivers product placement within a dynamic range as a service. In other words, the shopper experiences a unique and relevant shopping experience in the store, just as one would expect online. The proximity of the Smart Show device to products on the isle generates requests for ads and information which promote the product traditionally, based on ad sponsor subscription. (Ads are purchased and served) The service and product generate increased sales for corporations that maintain large inventories such as IKEA, Wal-mart, Target, Lowes, and Virgin Records by enabling point of purchase sales --everywhere. The Smart Show device would be an off the shelf display available for purchase should a store want to limit or maintain a stylized or branded presence. The thin (5mm) Sony (or equivalent) OLED display is attached to the cart, encased in a replaceable plastic shield, and connected by wi-fi to content. The RFID placed on the display allows for it to be mapped as well, enabling the dynamic content and "walkout-checkout." The RFID enabled screen represents the greatest cost in the project, and is protected by it's own RFID range; too far away from the store and store security are alerted for recovery, along with a simple jogger's siren on the device.

Description of the Business

There are two software applications of the Smart Show product; Enterprise-level (SSE) and Consumer-level (SSC) as well as an optional hardware device known as the "Smart See." The use of all three is called "Onlife;" connecting consumer to product.

Enterprise: ONE will create a software application, named Smart Show, that gathers inventory location via RFID query and response, dynamically generates an inventory map relative to ceiling-based 'known points,' and matches the new map against a simple graphical user interface (GUI). The query and response is repeated several times per second, allowing for a moving image. (realtime GUI display) The Smart Show will then identify and display its own location to the location within the store, providing the service of a moving map display which 'calls' ad service based on location, historical user preferences and purchase propensity (matched to available inventory). This store-level enterprise-level software and consumer interaction through ad-hoc mapping is known as the Smart Show. The Smart Show software does not render current systems obsolete; the software will be integrated as a plug-in to allow for ease of adoption. The plug in simply adds a few more fields to the inventory database. (X,Y,Z, {location} V,A,J, {movement} & Time)

Consumer: ONE will create a separate software application that merges RFID tags, inventory, and store maps generated by the Smart Show enterprise-level software to generate a consumer-friendly store/ inventory map for use online, on a smart phone such as the iPhone, and/or for the Smart See tablet display (a display we will offer) to enable mass adoption without cost or learning curve for the consumer. This consumer side software will not replace the current online experience, it will simply be an additional level of information available for the consumer. For example, if you wanted to purchase a specific type of paint, you could search for that instead of for "Lowes" or "Paint" on Google and then track down the paint brand. This frees up resources for the corporation, and simplifies the consumers' chain of events to make a purchase. The availability is designed to show up on a Google-type map alongside the store name. This makes it attractive for the store to have this service, as well as for the consumer to easily go there and purchase the product.

The business model is to deliver "Smart Show" software and physical setup to corporations with high-volume store inventory over many locations. (IKEA, Lowes, Sears, Virgin Records, Walmart). The "Smart Show" will be customized by mapping the local store, pairing the inventory location with the local map, and arranging

for sponsors' ads to be delivered to the "Smart Show" database plug-in. A large manager's display will serve as the visual data hub.

An interactive screen reads location by RFID pings and highlights paid merchandising. In addition, a service is provided by allowing the consumer to map his/her location in the store and make direct searches for a product via GUI navigation.

Example: A consumer enters a home improvement store (such as Lowes), and requires paint, brushes, and a floor covering to protect their home. Unsure of where these products are due to the sheer size of the store, the consumer places a Smart Show touch pad on the cart handle and touches the interactive 5x7 GUI map displaying the macro categories (based on store layout) and navigates to locate paint, brushes, and plastic floor coverings. The store map then displays the consumer's current location over the topographical store map, as well as the location of the three products within the local store. As the consumer follows the map to the correct aisle, the location of the consumer is updated by known (fixed) RFID locations and provides the service of "location" relative to product to the consumer, thus saving time. In addition, as the consumer nears the location, sponsored brand names appear as "product placement" with current advertisements played for the consumer. Specifically, "Dutch Boy" brand paint may pay for a top-level ad that alerts the consumer that he/she has arrived as the shopping cart nears "Dutch Boy" paint products. In addition, while the cart is stopped, additional "product placement ads" may run based on similar product purchases while using paint -such as roller brushes, face masks, and paint thinner.

Competitive Advantage

First to market. Provides user service as well as product placement thus creating a win-win situation for the consumer, business chain, and products within the business. This also allows for local product shelf replacement, restock timeliness, and all-store help requests from the consumer to an employee. (No more dinging noises requesting help to the hardware department.) {A consumer can simply press a "Help Me" button that summons the appropriate department representative based on proximity or category.}

The value added is extremely high, yet the cost to deliver the product is extremely low, thereby creating an easy entry to the business sector.

Current Status and Requirements

Implementation:

1. Provide language interaction options as well as translation phrases for customer / employee interaction. (web services)
2. Integrate with electronic commerce so that as a product is scanned into the cart, the consumer 'checks out' as he/she shops. At the end of the shopping trip, the consumer doesn't wait in a line -- he/she simply leaves the store, or bags the goods and grabs an optional printed receipt. Based on a local (short range) RFID in the cart.
3. Integrate children's programming that entertains with short clips from networks such as Nickelodeon. Captive audience entertainment = opportunity for ad service. (eg: Cheerios near the cereal isle)

Scope:

What if?

1. What if the product was only an RFID placement and customized map, updated by google?
2. What if you created your list online and the "Smart Show" service helped you pick a store, and then guided you through that "Smart Show" enabled store?
3. What if the coupons were served up dynamically based on your propensity (or lack thereof) to purchase an item?

What else?

1. Hospitals can monitor patients, doctors, caregivers, as well as track medicine location, availability, and stock, as well as infer treatment based on a simple combination of doctor, medicine, and patient proximity matched to medical records. (As a safety to patient management). This could also be

- used as a safeguard device -for allergies or client taste in the event of sole male treatment for a female who has requested female supervision, or monitor.
2. Supermarkets could add Smart See service for food shopping, with an emphasis on product placements (ads) and entertainment for captive shoppers. (kids)
 3. Restaurant chains could replace 'beepers' with a display showcasing delicious menu items and ads promoting menu specials, or shops found around the restaurant location. When the table is available, a message is displayed, rather than flashing LED lights.
 4. Aviation industry could track parts on the flight line and direct maintainers to tools related to the part requiring maintenance. In addition, all tools are accounted for after the repair, eliminating foreign object debris (FOD) hazard and damage.

Management Team

Management Team Experience, Ability, Expertise

CEO Christopher Vasquez, MS Management & Information Technology
COO
CTO
CFO

Project Manager
Strategic Technology Lead
Tactical Technology Lead
Project Lead, ePOP
Project Lead, OnLife
Project Lead, Smart See
Project Lead, Enterprise Software Integration (SSE)
Project Lead, Consumer Software Integration (SSC)

Board of Directors

5: Technology, Industry, Commerce, Education, Investor / Finance

Composition of Advisors

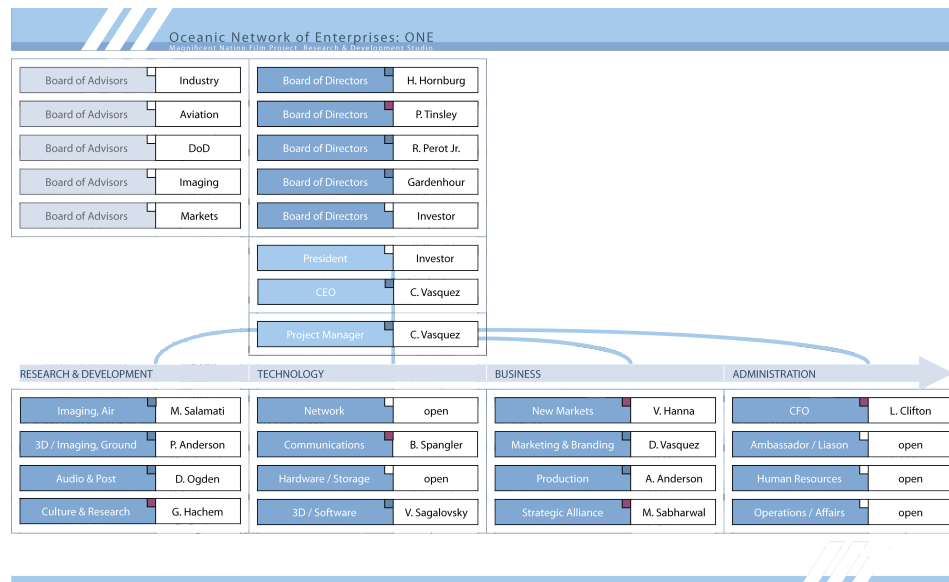
RFID
eCommerce
Industry
 Target, Walmart
 Home Depot, Lowes
Search
 Google
 Yahoo
 MSN
 Emerging
3D Navigation
3D Architecture

Key Professional Service Providers

Finance
Technology supply
Legal

Company Structure, Intellectual Property, and Ownership

Organizational Structure Chart and Description



Legal and Ownership Structure

Subchapter S Corp; California

Initial valuation TBD, shareholder based on valuation. Estimated at \$150K.

Intellectual Property (Patents, Trademarks, Copyrights)

Process Patent: The Smart Show software (SSE) will create dynamic situation-dependent 3D mapping based on ad-hoc information gathering via RFID, Wi-Fi, Blue-Tooth, and Cellular Phone Service referenced against GPS and geostationary points. This information will be mapped against a known GPS-based location and delivered via 3D GUI. The raw product data (item, location, item details, qty) will be offered to 3rd party search services such as Google, Yahoo, and MSN.

See: "How Onlife Works," and "How Ad-hoc Mapping Works," attached.

Process Patent: 3D Imaging (HFID and Optical) for use with cinematography by replacing 'motion capture' complexity with RFID tags to deliver scene depth, range, height motion data of all the camera's input. Camera location is matched to the artificial scene, and all data is made available for post production. This enables highly accurate depth mapping for 3D projects with only one camera.

Design Patent: The "Smart See" will be a lightweight yet rugged interaction device that wirelessly receives and displays information processed at an alternate location by "Smart Show" processing hubs.

Industry Analysis

Industry Description (Trends, Size, Growth, Profit Potential)

This is a first to market product that combines two major industries; commerce and RFID use.

Target Market with Description

The first target commerce market is Wal-Mart with 4100 facilities in the US, and an additional 3100 outside of the US generating \$345B in annual sales. Wal-mart mandated all products be RFID encoded, are able to test new concepts on a small scale before entering the Wal-mart chains (includes Sam's Club); early adoption by one store opens the entire chain. This process will be repeated with Target, and other 'big box'

stores such as Costco, before moving on to IKEA, and Home Improvement stores such as Lowes and Home Depot. There is no larger market in the world, and this technology application costs very little to implement.

Analysis of Competitive Position within Market

Strength: First to market, extremely low adoption cost (RFID is paid for, enterprise software solutions are already in place. Ads pay the way.)

Weakness: Unproven technology application. Too much information for current processors?

Opportunity: A strong start in the commerce sector opens unlimited opportunity in airports with improved security, hospitals with doctor / patient / care monitoring and verification, and in film with advanced motion capturing techniques using highly accurate 3D imaging.

Threat: Poor patent coverage and runaway project scope.

Marketing Plan

Product Feasibility and Strategy

Pricing Strategy

This is a business to business endeavor. Therefore, a free store install, and software tailoring services are provided until the adoption is seamless. Only visual tablets and hardware costs are passed on to the corporate customer. This encourages early trial and corporate adoption at the test level.

Income is generated in the same model as ad service; Oceanic income is generated off of sales from point of purchase enabled connections and walkout-checkout. For every ad served via RFID proximity, XX% percent is delivered to Oceanic, and if a sale is made due to an RFID ad serve, the percentage is raised to XX %.

Channels of Distribution

Software: SSC; Apple Application Store (iTunes), and each participating merchant. SSE-level software will be created in-house.

Hardware: the ePOP tablet will be designed after initial sales support a physical production. Initial estimate is a sony screen / product.

Promotions and Advertising

Business to Business promotions will be handled as a demonstration at each corporate headquarters. A demonstration store will be rigged and if the adoption is satisfactory, the chain of corporations will automatically be added as resources permit.

Business to Consumer promotions will be through corporate channels as an additional service they offer; promoting the ePOP is good for customer satisfaction, and provides many services beyond navigation to include price comparison, product comparison, and walkout-checkout.

Operations Plan

Method of Production

Software: Oceanic in house. Open source spin-off modules / functions.

Hardware: Design patent; open for production by independent contractor.

Availability of Qualified Labor Pool

Silicon Valley, CA

Business Partnerships

Evaluating Impinj and/or Microsoft, leaders in hardware and software in the RFID industry.

Quality Control

A quality control team will include a software, hardware, and commerce support specialist for each major chain (Wal-Mart / Target)

Customer Support

A highly specialized support team will be formed to adapt to the emerging needs of each commerce sector. They will be available within 4 hours, and physically available within 24 hours to any store in the US. They will be hand selected from the development team to carry the expertise necessary to solve complex commerce crises at macro and micro levels. When they are not responding to help requests, they will be working to further understand the needs of the 3rd party support platforms and commerce providers (Such as Target Online). A primary goal is seamless integration between online and real life commerce.

Financial Plan

Capital Requirements for the next 3-5 Years

- Research
- Development
 - Hardware
 - Software
- Integration
 - Commerce
 - Hardware
 - Software

Overview of Financial Projections

- Ad Service
- Walkout-Checkout

- Income Statements
- Cash Flow Projections
- Balance Sheets
- Payback and Exit Strategy

Critical Risk Factors

- Management Risks
- Marketing Risks
- Operating Risks
- Financial Risks
- Intellectual Property Infringement
- Other Risks

Physical RFID / HFID response time variation. Mitigate by learning brands and doing a time offset based on RFID response. (X brand responds for .01s, therefore, subtract .01 from all X brand RFID tagged products.)

Appendix

Supporting Documents (Resume, Images, Misc.)

- How Online Works
- How Ad-hoc Mapping Works

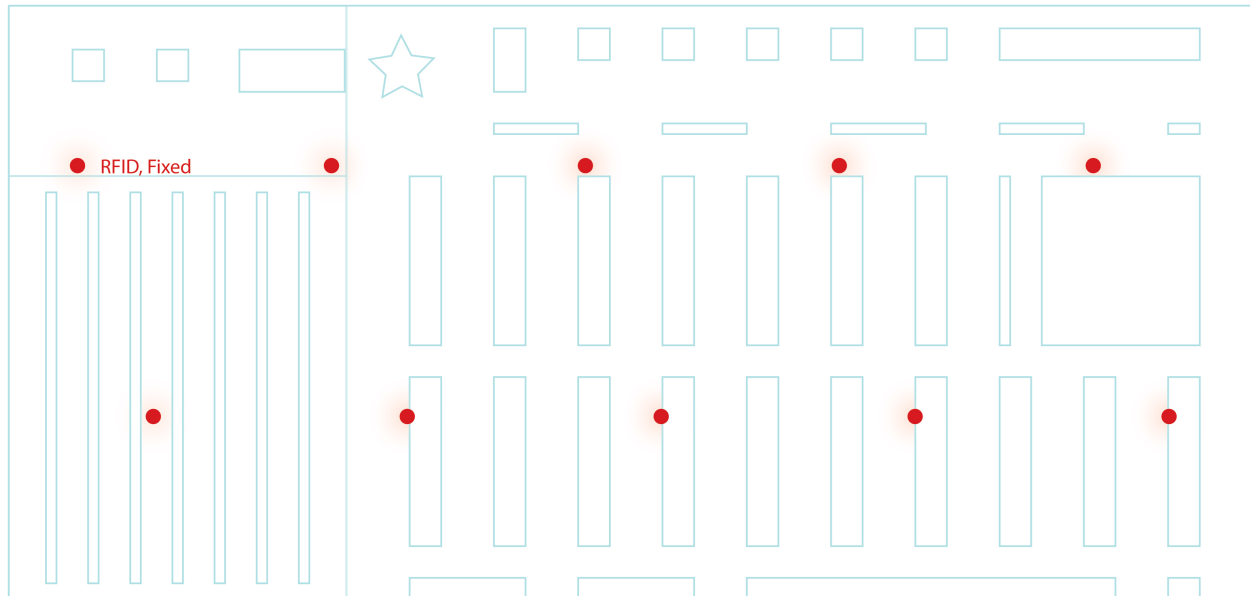
How Onlife / ePOP Works (everywhere point of purchase)

(with Smart Show display) (Example: Home Improvement Store)

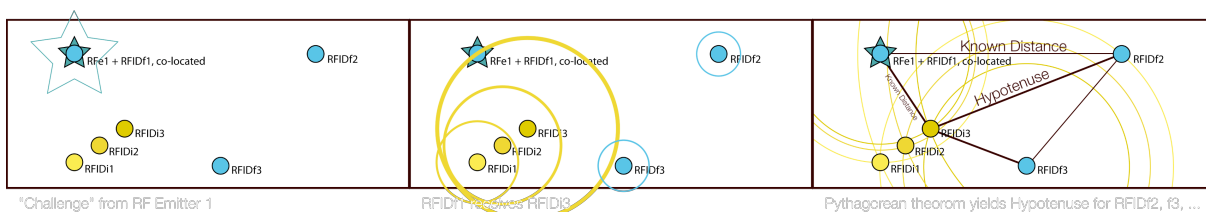
- 1) Smart See screen is picked up by consumer at front of store and placed on shopping cart.
- 2) OnLife is activated by consumer walking a few meters or touching a menu choice on the screen. A language is selected, with an English default.
- 3) Consumer is prompted to enter project type, keyword / phrase, or event.
- 4) Consumer selects phrase, and types "painting baby's room."
- 5) Onlife returns a screen that highlights materials associated with painting a room, to include paints, brushes, and the name of the paint specialist in the paint department ready to assist.
- 6) Consumer touches to select the products desired and then selects, "Take me there."
- 7) The Smart Show display then loads an inventory update, ads related to painting a room, and orients the map for the Consumer.
- 8) The Smart Show display speaks the command to "walk forward towards Aisle 2," as well as displays the fixed map highlighting where the Consumer currently is (based on the closest fixed RFID pings) and where the products selected are shelved.
- 9) As the consumer walks toward and nears the product, the *navigation mode* transitions to *selection mode*, and ads are served up, as well as coupons or incentives from the store. The consumer chooses an incentive from Brand X by touching the screen.
- 10) As the consumer arrives in front of the desired products, the Smart Show sounds an alert directly in front of Brand X, as well as audibly announces your arrival.
- 11) The Smart Show transitions from *selection mode* to *point of purchase mode* and displays top purchases, related products, ratings, and offers advice or help from the paint expert.
- 12) The consumer places the paint selection in the cart, and the Smart Show transitions from point of purchase mode to kiosk mode, which includes paint tips, simple tools for calculating the amount of paint required for a room, and an offer to purchase the items without having to check out.
- 13) The consumer chooses in this case to check out via Onlife which simply notes the RFIDs for the products that are placed in closer proximity to the Smart Show, and is confirmed by a deduction that the products are now moving at the same speed as the cart.
- 14) The consumer leaves the proximity of the paint and the Smart Show enters *Navigation Mode* again, showing the location of the next desired product, and how to walk directly there. The consumer is offered incentives for related products as he/she passes them.
- 15) The consumer completes his/her shopping experience and walks through the front doors of the building. The Smart Show transitions from *Navigation Mode* to *Payment Mode*, and offers to accept a credit card or login for credit access. The consumer swipes the credit card and is emailed a receipt, or offered a printed copy on his/her way out. The RFID's on the purchased products are authorized departure out of the store, and the consumer is thanked for his/her purchases.
- 16) The Smart Show is dropped off or hung on the charging wall for a recharge, and the consumer walks to his/her auto.

How Ad-hoc Mapping Works:

1) A set of RFID receivers and transmitters (RFIDf) will be placed on the ceiling of a store to query all RFID enabled inventory / participants. The known RFID locations (fixed) are matched to GPS coordinates. Sub-scaling / dividing GPS accuracy is done by mathematical inference between fixed points. This fixed series of collocated transmitter/receivers are collectively known as the “local constellation.” This local constellation is overlaid with a simple store layout / map.

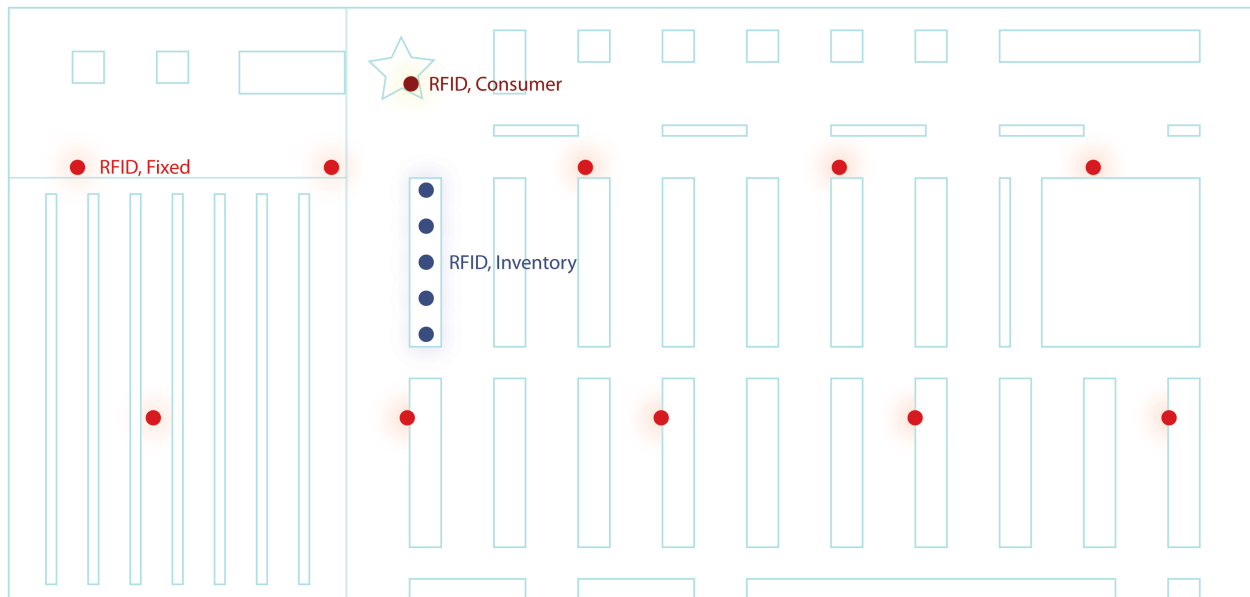


2) The uniquely named fixed points emit a query pulse and in return receive all unique RFID inventory ID within a set distance based on inventory density, movement propensity, and inventory value. Return pulse timing enables a simplified response measurement, while 1x overlap allows for failure. (open and shut receive limits amount of data; a set / clean EM wavelength will be divided by two to get the distance based on $D=R*T$, where Rate and Time are known.) Each RFIDf will compare inventory names (RFIDi) and matching names will be paired to compare the calculated distance. The three closest times and one control measure time will be used to fill in the Pythagorean theorem and complete the triangle between RFIDf1, RFIDf2, and RFIDf3. With 3 fixed points the RFIDi can be mapped to 3D space in regard to the RFIDf locations. The average of all three calculations provides the 3D-relative position (allows for small timing errors).

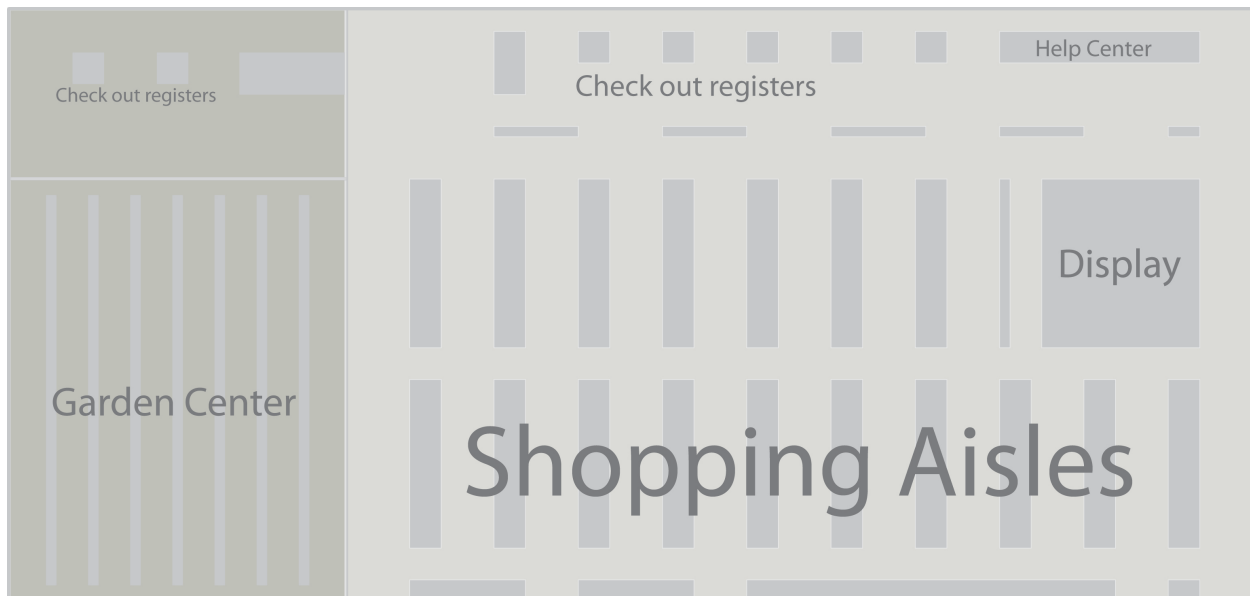


3) The inventory IDs gathered from the query and response are matched to the store's or manufacturer's database to build an inventory. The inventory is 'mapped' via X,Y,Z coordinates relative to a single "North Star" RFIDf location. The North Star will provide the vector for all products as a database point. Each emitter will have a unique pulse code / ID, so that when the product RFID is returned, the database collection will be able to parse times from each receiver and build a collection list based on the RFID object ID. (Each object ID is unique) At this point the software has a large database of Inventory location XYZ and is mapped to a time stamp. This major mapping is done only once per minute. (As processors increase in speed, more frequent mapping can be accomplished. The store map is shown below as a static 'snapshot' of all registered RFID points. This is not just for inventory, but for consumer shopping carts, store boundary markers, and event locations. (such as free samples, demonstrations, etc) It is also for employees, who can

be mapped, monitored, and directed to assist nearby consumers based on location, expertise, or work status.



4) The store map GUI is created in vector-based graphics and macro sections are labeled in order to allow for quick identification when an RFIDi is out of place or off the shelf.



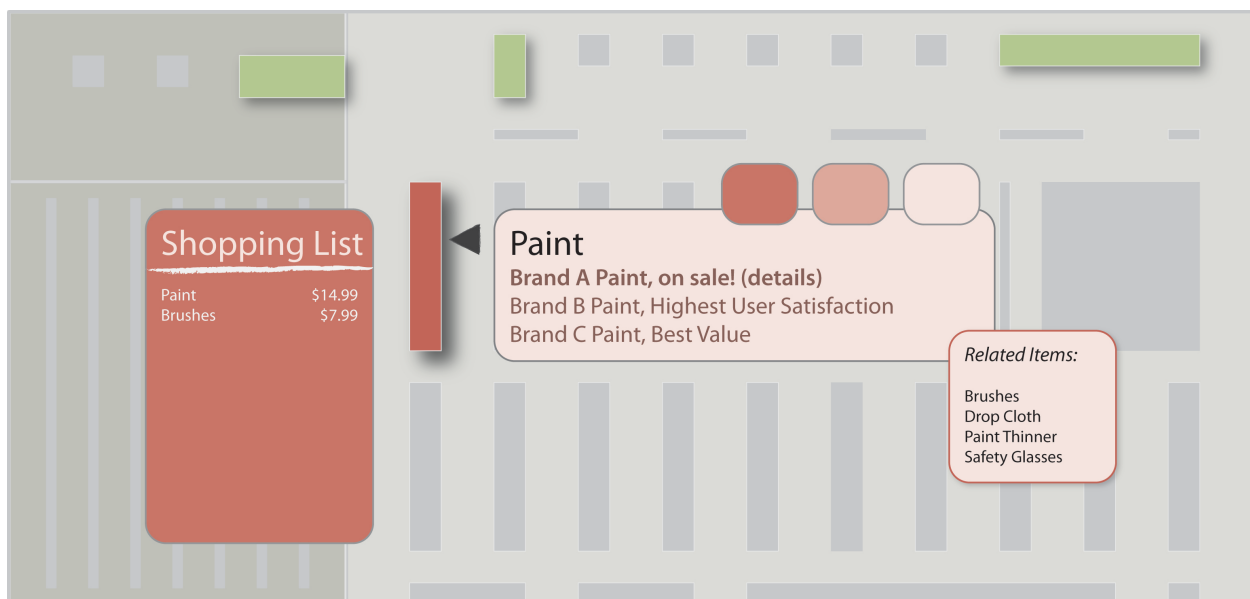
5) The RFIDf constellation pulses several times per second (limited by RAM, Processing power, and Disk Memory Space), and compares the previous RFIDi XYZ. If it is the same (within a small error of a few centimeters or less) the data will be discarded. If there is a change, the assumption is that there is product movement. Product movement will be 'discovered' by an X,Y, or Z difference, or by a new register on a new RFIDf (means the product RFIDi entered the RFIDf time gate). Just as the original location was processed ($D=R*T$ thence Pythagorean), a discovered XYZ (relative to the constellation) change will send the RFIDi to a 15+ per second analysis to discover velocity after one iteration, acceleration after two iterations, and jerk after three iterations. (V,A,J)

6) A rapidly refreshing database monitors the 'changes' in the inventory and maps only the changes. A map is built much the same way a motion capture stage captures an actor moving, and assigns graphic values to

a point in space. The moving item ID is associated with a small image file dynamically generated to represent the category of product. For example, a food product vice an electronic component. This provides a macro level 'avatar' for each category (based on the store). The store is built in 3D and rendered by a video game engine to provide a true recreation of the store in virtual space. This virtual store will have many levels of complexity matched to the user requirements. It will grow in complexity as profit allows. Eventually, a virtual store will look exactly like a real store, so that users can browse realtime from anyplace, in any store. The 1st generation of use, however, will be mapped and used like google, or any modern search engine, where simple avatars give way to jpeg or png graphics files provided by the manufacturer.

7) The mapped store (static and dynamic) is assigned to a simple GUI through 3D vector graphics, and served on a media server via wi-fi which blankets the store. GUI complexity and object fidelity will grow as processing power allows. The alternative information delivery system is blu-tooth. A highly detailed view is delivered based on access rights ranging from enterprise level administration to consumer level "arrival" and "orientation" view.

8) Registration at the consumer level is activated via credit card or login name. Phase 2 will be via thumb-print on the cart or product carrying device. Registration activates a host of routines and functions that combine realtime navigation with activity assistance and commerce. Simply stated, what began at home as research to paint a room is transferred to the store to enable, ease, and complete the transaction. A consumer can choose to pay at home, pay at the store, or simply use walkout-checkout if the store has been setup with RFID carts (Smart See, described above) and gates.



9) Simple Mode: Utilize only the order in which RFID tags were 'received,' to get a general proximity in the constellation. Analytic math applied to the inventory ID in reference to the constellation report will determine a generalized location, and differences in reception order will determine movement status. The data is compared to the store/event map and a best guess margin of error is displayed.

10) Track Mode:

11) Walkout-Checkout Mode: Provided a consumer registered with an e-commerce account through the participating store, or simply swiped their credit card, walkout-checkout mode is an advanced commerce option where the consumer can simply leave the store with the items in the basket without a physical checkout; avoiding lines and self-checkout hassle. The process begins as a consumer selects a cart and attaches the ePOP to the handle. The ePOP is a simple combination of protected screen, RFID, and magnetic / chip card (Europe) swipe point connected via wi-fi. The card swipe brings up saved online shopping lists, records, user preferences, and enables the walkout-checkout. As each item is placed in the RFID-tagged shopping cart, the cart registers the item via near field scan (ePOP). As well, the constellation scan (fixed emitters/receivers) detect co-movement of the cart and inventory. This combination of near field scan and constellation scan work together to assemble an electronic shopping cart list just like you would see on an e-commerce site. The double verification screens out erroneous data. Associated e-commerce features such as cost, tally, and price comparison are among the many to be delivered to the consumer as

he/she shops. As the cart nears the exit (standard RFID gate) the user is prompted to check the list for accuracy, and simply pick up a receipt on the way out or have one emailed. Creating distance between the gate, and the ePOP to the merchandise clears the ePOP transaction to prevent fraud or near-field scans of other customers. The ePOP is retrieved by store personnel and recharged.