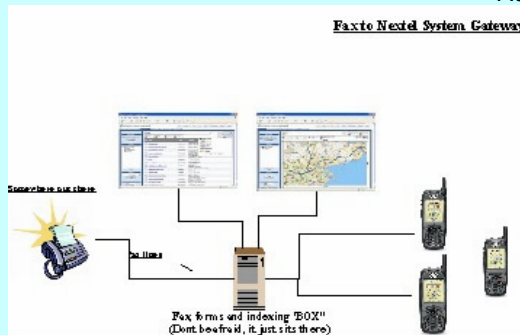


# “ThruDispatch”

A Service Oriented Architecture for Enabling Subscriber-based Mobile Dispatch and Work-Order Management Between Casually Affiliated Partners

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## Professional Bio

- From Technician, Service Manager, Product Manager, Technology Sector Analyst - to Wednesday Night auction block clerk !!
- Technical Docs and training specialist
- Created Fax to Wireless Data Mobile Dispatch System
- Inveterate Entrepreneur - always looking at the next thing - even when I don't want to.

## Introduction

- The best business models are the ones suggested by the future subscribers
- Nextel Serves 15.5 million mobile clients
- 5:1 Ratio of “Independent to Large Corporate Fleet mobile users” (BLS 2003)
- ~ 3-5 million Independent Small fleet Nextel users

## How it Happened

- I Created Interstate’s Fax to Nextel Gateway in order to service Professional Vehicle Fundraisers
- We required all independent wreckers to conform - which they did - without a word of protest
- Other drivers heard about this and volunteered to add mobile client at *their expense; without any promise of work !!*
- Several owner/operators requested us to “third party dispatch” for a fee.
- Several outside agencies asked me to do the same in reverse -
- A light bulb !! If the central dispatch mafia is ignoring this small fleet and virtual dispatch business - and the drivers are willing to pay....this must be a business !!
- I asked Interstate to develop - no - I asked mobile data gateway provider - no. They like to do what they already do.



## ThruDispatch Portal - what is it?

- An portal where independent mobile servicers (not limited to towing) enroll in the expectation of gaining new work
- A virtual dispatch system used with existing business, to optimize field management - plus the upside - and automation of the ThruDispatch model
- A fleet control solution that allows small businesses to operate remote fleets with full authority, and to partner with peers in order to team up on interstate/city jobs
- A better client project interface for job submitters - MS office tools or Web Interface
- An Open Market exchange where time/cost multicasting can be done without headache ...using ratings and profiles
- A selective vertical advertising channel targeted to the trade via incentives

### Layers

- Portal for enrolling Nextel Mobile users primarily service independents, tow - glass - lock - small delivery - one truck or small fleet fuel - plumbing - trades
- Second layer - Dispatch Management tools for our Mobile end users - Remote fleet -and Mirror of Central Dispatch with open job flow thru
- Portal, not necessarily in classic web sense, not a directory per se, way for business-business submitter to push and manage jobs - with or without preference for recipient. (geo - rating- code- capacity - type)
- Third layer is special services that build on above - enhanced for institutions and traditional users of fleet dispatch - automated, overflow, special fulfillment, Virtual fleets.
- Fourth layer is Ancillary Services - Credit Cards and billing
- Advert to handset -large revenue stream
- Pubserv emerg. and prio. dispatch from mobile app, etc.

## Affiliations

- Unaffiliated: Receiver may not know submitter, may give any response, including refusal, to job - accrues a completion rating
- Semi-Affiliated: Belongs to one or more virtual fleets by agreement - not likely to refuse jobs - no ratings accrued for these jobs (Virtual fleet composed by submitters)
- Casually Affiliated: Member of one or more fleets or general work pools, may leave or modify membership and availability - accrues ratings (in other words, virtual fleet composed by the mobile worker)

## State of the Industry

- Central Dispatch high capital cost bizint
- Mobile Dispatch over Cellular and PDA
- All are central based - your office to your fleet
- Most Nextel data gateways provide generic web interface - not a big hit for project based trades or those who aggregate independents
- Nextel makes available all the pieces for creating apps at low level
- Gateway providers make it all happen - Java App -web services - billing

## State of Industry continued...

- Gateway providers add value - and compete for central dispatch end-users. But they are good to go.
- Nextel handles billing for mobile app, and config services (download to handset)
- We can use either path -reseller for gateway or direct Nextel data partner
- Gateway takes recurring revenue from monthly bill
- Provides WSDL wrappers - some limits on functionality at extreme end
- Being own Nextel data partner is key for spin-off
- Nextel Data Sales Org. is Powerful
- Either way, we get our \$20/mo. from mobile users

## Technology in Abstract

- Web Services for Client / Mobile SOA enrolment
- If you understand content management and workflow - you can get this model
- Not a directory of services (although not precluded) it is a work order management portal that matches content to execution (ebay auto is a good example of where a directory might work well)
- Not a complex enterprise level project, but not trivial (maybe to Zope, it is trivial)

## Tech Objectives - briefly

- Multicast and real-time add-drop meta-exchange data by industry (this is not only for towing)
- Transparent agent interface - best client for job submission must include MS-Office suite macros for outlook - excel..(I know it hurts - it's what the auto dealers and state highway dispatchers use). Don't worry, we will always have a Web interface.
- Maximum automation for job submitter interface
- Back-end billing services for job consumers - excellent value added channel
- Self service partner turnkey dispatch portal interface
- Advertisement insertion system for opt-in clients
- Total Revenue Stream Visibility and Statistical Reporting and Integration
- These systems have to be robust and failsafe - their jobs are in our hands

## Lines of Business

- Turnkey ThruDispatch portals for owned fleets also open to external job submission
- Special fulfillment services for town, state, turnpike, highway, police, and commercial account coverage
- Remote fleet management
- Targeted ad revenue on site/on handset
- Down the road - link to QuickBooks and billing services management

## Industries

1. Towing and Recovery – includes auto-club, state highway, auto dealer, and repair business.. and millions of independent one and two truck operators
2. Mobile Locksmiths
3. Mobile Auto Glass Repair
4. Capital and Asset Recovery – HOT Industry (centralized around auto finance industry) prime submitter !! Special Mobile User Model
5. Plumbing, sewer, and drain
6. Fuel Delivery
7. Moving, light delivery, messenger (go to craigslist.com for “man with van”: wouldn’t you subscribe to ThruDispatch?)
8. Any Nextel carrying mobile service business dominated by independent owner/operators that play in the ‘time sensitive fleet service sector’
9. Any sub-industry sector where small independents have to compete with heavies by getting jobs anywhere, anytime.

## Technical Development Forward

- Find willing Mobile Gateway partner or do it native
- Create Snap-in portal architecture
- Integrate with system admin, back-ends, dispatch, account turn-up....
- Possible Mobile Portal for Authorized Public Service Direct dispatch
- Show a system that can capture and graphically display live traffic - and you have a winner!
- I have a detailed technical presentation post-engagement

# BizDev Forward

- Must capture mobile workers and job order supply - suggest start with towing/repo/lock/glass- well defined profile
- Provide submitters with best management tools at the trade shows
- Cultivate and capture advert accounts
- Create “selling services” collateral
- Spring 06’ - Industry media Comcast cable ads (that’s where they live after work)
- Fall - winter ’06 fully realized operations and partnerships - build out new sectors
- Look at PS Nextel accounts

Key Figures		One Year of Gross Revenue		\$8,395,800.00	
Nextel Ind. Service Subscribers	3500000	Basic fee.	19.99		Market Volume
Target Penetration	0.01	Base	35000		Realized Monthly Potential @ 1%
penetration / Month		1458.33	Revenue Per Block	\$29,152.08	
penetration / Q		4375.00	Revenue Per Q	\$87,456.25	
Advertising Opt-In Accounts	10				4Q Revenue
Price Account Impression	\$1.00				6Q Revenue
Total Impressions	175000	Once Per Subs/day			8Q Revenue
Total account rev.	175000				\$349,825.00
@Target Pen. Subs.	\$2,100,000.00	WOW!			\$524,737.50
Less 50 %Opted-out	\$1,050,000.00	Still WOW			\$699,650.00
<b>Cost to Evangelize Market</b>					
Internet Sponsored Search	5400				
Print Ads	54000				
Trade Shows	60000				
Collateral Sets	20000				
Kickoff Com/Cast regnl. campaign	250000				
Direct Mail	30000				
<b>Total 12 Months</b>	<b>419400</b>	Per Month		57025	
One Year Labor support (3)	112500	Deferred to Q4	Boston Area Campaign 10k	139800	1/3 of market expenditure spread
Pgm. Manager	122400	12 of 18	<b>Cost Per Account</b>	<b>68.43</b>	
Supply Side Pgm	30000	Contracted in Advance			
<b>1 Yr. total</b>	<b>264900</b>				
<b>Total of Labor and Marketing Costs</b>		684300			
<b>Revenue Y1 less costs</b>		<b>\$1,134,790.00</b>			
With Ads		\$2,184,790.00			
Less Subscriber Attrition		\$546,197.50			
Net total		\$1,638,592.50			



## Marketing Campaigns and Message

- National: “Stop waiting for AAA”
- Mobile Workers: “Jobs Falling From the Sky” “we have the jobs, do you have the 20 bucks?”
- Tow Drivers: “Get paid more for priority road service - get more work...period ” “Got Nextel, Get Jobs”
- Police and Highway: “Get Service when you need it -clear your roads fast!”
- Auto Dealers: “Manage Towing and mobile services without paying for costly dispatch solutions”
- You, your Web Browser, and an Army of Skilled Independents - anywhere, anytime
- Snow Emergencies - “oh yeah -you got it under control” (Public Service)

## The Secret Ingredient !!

- Sprint Nextel merger will create a plethora of new services needing ready made distribution modalities
- There may be municipal and state security applications (ask me why)
- A Proven Open Portal architecture will be a prime property to launch these services
- This should lead to OEM, hosting, partnering, and other opportunities
- I have a privileged relationship, until now held in reserve....

## The APCO Dilemma

- Nextel is steadily capturing an increasing share of the PS fleet market
- Simultaneously, the APCO digital communication standard for two-way trunked fleet mobile radios is maturing with significant growing pains
- Motorola owns both sides - provide IDEN network and terminal equipment for Nextel, are the premier supplier of APCO equipment and upgrades
- Some posit that the APCO scandals are of Motorola's making - it feeds the Nextel side and demand for IDEN products (sour grapes stories abound of problem ridden PS fleet systems)
- As such, more marginal PS fleets will use Nextel for voice and data, rather than enter the APCO fray - or will use (or are using) Nextel to enable a 'wait-and-see' dynamic
- ThruDispatch will grow proportionally in a value as more PS fleets depend on Nextel for management of independent mobile resources
- See: **Why do magazines keep pushing Commercial radio**  
[www.apcointl.org/theexchange/index.cgi?notrames:read=2773](http://www.apcointl.org/theexchange/index.cgi?notrames:read=2773)

## My Informed Conclusions

- The "Promise" will net a pent-up, immediate subscriber base, if the message is cast effectively
- Must provide sustainable work submissions to retain subscribers
- Though unintuitive, this means marketing efforts must be balanced between submitters and receivers

**Mo. 1-6 Phase #1 : Architecture**

1	Data dictionary.
2	Basic Portal Architecture
3	Submitter / receiver Profiles and Industry Schema
4	Reality and Virtual Dispatcher Logic Objects
4	Micro Document XML Exchange Wrappers and Tokens
5	Job Submission Pipelines and Logic
6	UI - Mobile and Client

**Mo. 7-13 Phase #2 : Trim, Tuck, and Test**

7	3 Trade Lock-IN Scemas - Glass Trade Ins. Ind Issues
7	Gather Seed Fleet NE - Initiate Submitter Outreach
8-9	Mobile data and custom wireless portal functions - Reverse Channel
10	Remote Fleet Interfaces - PIPs - Glass, Lock, and Dealer sectors
11	Admin.for Subscriber, and Client Account Interfaces
12	Card Services, Accounting Integration
13	Reseller Program - Internal and External

**Mo. 13--19 Phase #3 : Evangelism and Recruitment**

14	NE Job Submitter Direct Campaign
14	Draft Advertisements and Informational Collateral
15	Place Ads - Direct Mail -
16-17	Trade Shows - Other Industry Events
18	On-line Interaction demos, webcasts, DVDs
18	Cable Ads.
19	Support Hiring -

**Follow-On**

2007	Explore Parallel and Allied Trades for Repurposing of Technology
2007	Explore Licensing and OEM
2007	New Geographical Markets
2007	Spin-offs and other data hosting/harvesting for each client side

Portal Services

Applications

Interapplication Messaging (Job Request Broker)

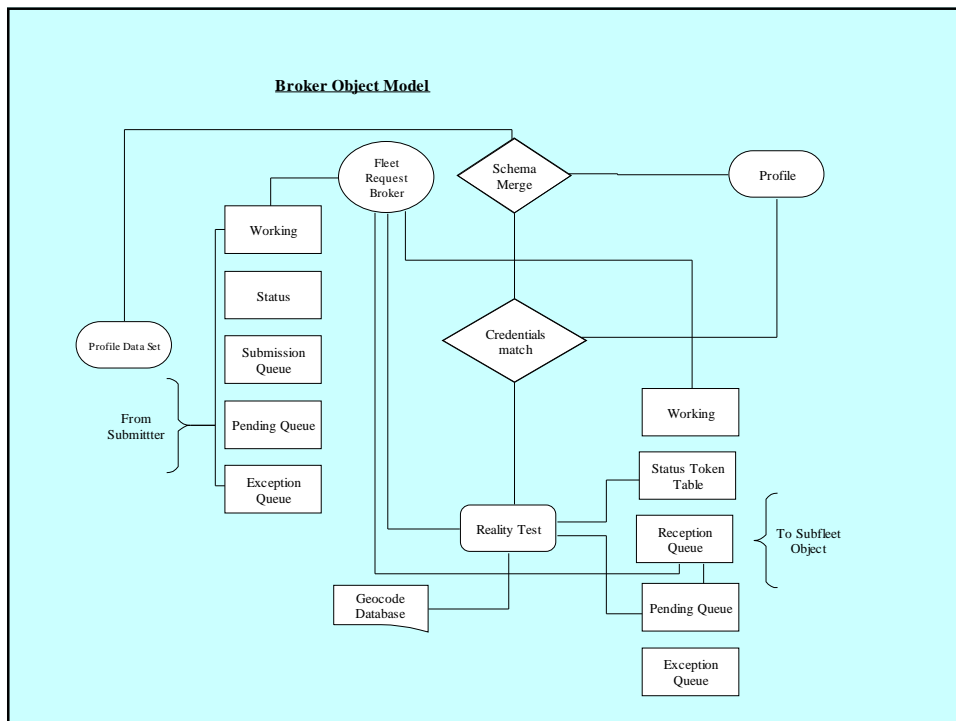
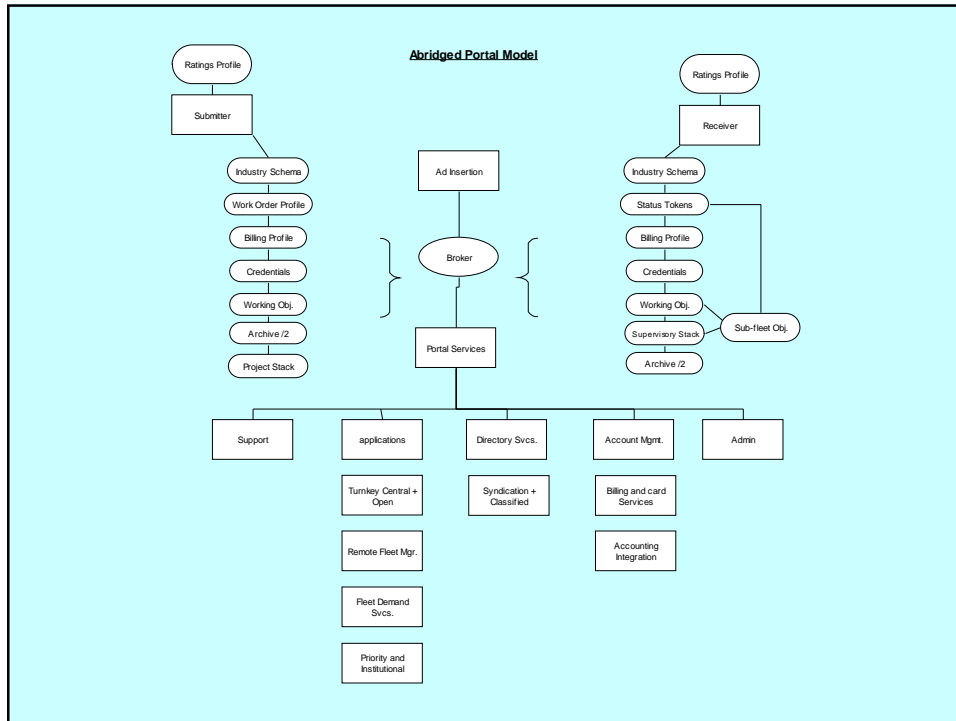
Workflow Layer (Reality + Virtual Dispatcher)

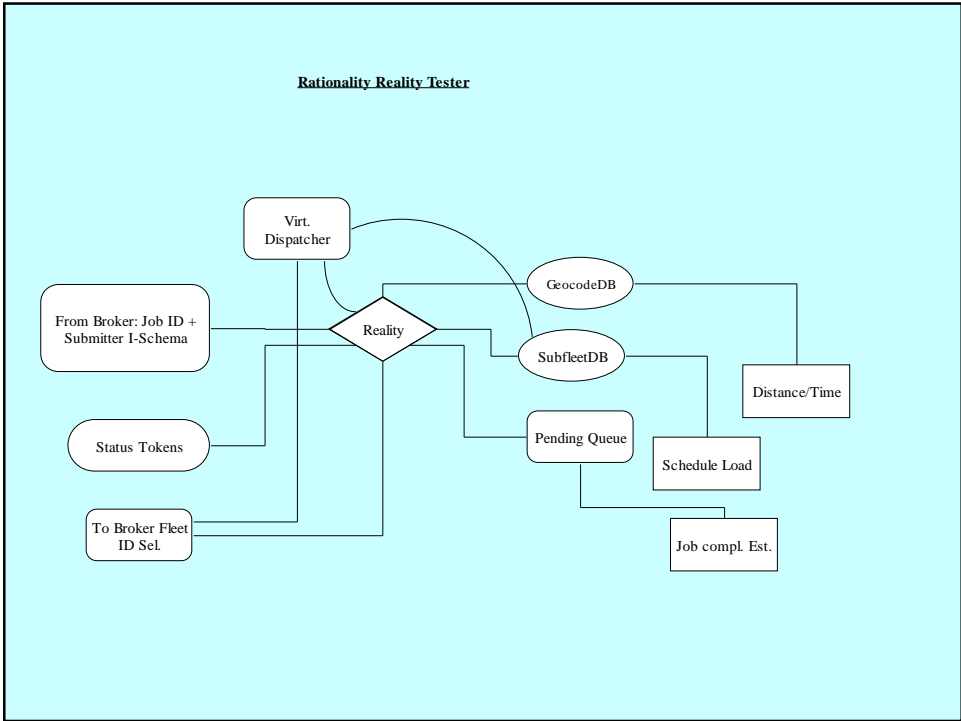
Subscriber Fleet Manager

Subfleet Obj. Manager

Mobile Application Manager

Network Messaging





Job Order #

Subscriber Fleet ID

Service	Location	Transient	Job	Reverse	Sub Fleet
On Duty	Current	Go-NoGo	Enroute	Message	Member
Type	Heading	Rejected	Arrived	Custom Status	Shift
Capacity	Route	Bid	Loaded	Codes	Clock
Standing	Dest.	Time	Rendered	Devices	Hours
Available	From	Hold	Refused	Images	Terr.
Services	Speed	Released	Billed	Reserved	Employee.
CurJobstat	Est.	ReAcq	Complete/inc	Reserved	Co-Fleetmem

