In the Hotseat: ReLuminous LLC

September 23-25, 2013
Turnberry Isle Miami
Chris Brust, Co-founder
Chris Brust

• Former VP of Business Intelligence at Archstone.

• Responsible for
  – Business Intelligence function
  – Pricing & Revenue Management
  – Enterprise Analytics
  – Market Research
Lanny Grosse

- Senior Business Intelligence Architect at Archstone.

- Senior Database Architect for EMC’s Microsoft Practice
Our Back Story

• We represent what was the core Business Intelligence and Analytics functions at Archstone, both from a business and technical perspective

• We spent 6 years refining our BI development process, training programs, vendor relationships, and analytic templates
Our Purpose

To provide companies in the real estate industry an opportunity to outsource all (or a piece) of their business intelligence function to a team of BI professionals with years of practical, *internal* experience at Archstone.
(2)
To provide consulting services in the areas of:

- Data Strategy
- Data Modeling & Data Warehousing
- Enterprise Reporting
- Dashboards/ Performance Scorecards
- Predictive Analytics
- “Power user” training
Our Value

• A deep understanding of the business and of the nuances that make companies unique
• Mastery of BI technologies and the talent to effectively apply these technologies to business problems
• “Purple People” to bond the technology teams to the business teams
• Experience developing “BI Competency Centers” to engage power users and promote effective use of BI across the organization.
For More Information Please Contact:

Chris Brust

cbrust@reluminous.com
(720) 515-7703
www.reluminous.com
RentPush.com ® by Spherexx.com®

September 23-25, 2013
Turnberry Isle Miami
INTRODUCING RENTPUSH.COM

BEYOND REVENUE MANAGEMENT

► RentPush.com Performs Revenue Management, Asset & Operations Optimization

► Spherexx.com is an Award-Winning Internet Marketing & Software Service provider since 2000.

► RentPush.com is a natural progression of Spherexx.com’s software expertise from website design to creating demand analysis in a sophisticated CRM, and business intelligence through developing competitive market analysis software.
130 Collective Years of Property Management Leadership

- PhDs in Computational Intelligence & Operations and Operations Research
- Three Experienced Multifamily Property Management Executive CPM®s and HCCP
- MS in Electrical Engineering & Finance
- Asset Manager
- MS Finance
- Real Estate Broker
- Multifamily IT Director
- Real Estate Agent
- Multifamily CFO
- Leasing & Training Consultant
- Expert Programming Architects
RentPush.com is a science-based algorithmic income optimizer that has the intrinsic ability to interpret pertinent data into our clients’ specific performance goals and objectives.

RentPush.com is not just about rent – it considers multiple performance factors including turn costs, refined renewal objectives, personnel performance and compliance. It touches every aspect of property management.

True, unit-level amenity analysis, high-level customization and upgrade ROI Calculator, as opposed to roll-up summary data.

Real Time Case Study performance analysis available daily.

Executive Summary incorporates all property management operations: Return on Investment Capital, Net Income Analysis, Debt Coverage Ratio and Asset Valuation.

We make success simpler with sleek, flexible, dashboards for all users, residents, and prospects.

Experienced Asset Management Overseeing Pricing
Product Overview and Demonstration at  www.rentpush.com/arm
Case Studies reveal 5.6% to 6.9% to actual average rent increase.

For More Information Please Contact:
Becca Wilson, President and CEO
Spherexx.com
Bwilson@Spherexx.com
866.491.7500
LRO Student
Amar Duggasani

September 23-25, 2013
Turnberry Isle Miami
Revenue Management does not work for Student Housing
I am told why Revenue Management does not work for Student Housing

- Students are very price sensitive; do not appreciate different prices
- Leasing period is short; system cannot react quick enough
- A bad decision can haunt you for the whole year; miss the boat & bed goes empty
- It is highly competitive; info sharing is common, but knowledge is uncommon
- Preleasing at more than 100% occupancy to accommodate cancelations
- Renewals are key to good leasing season
These problems have been already solved in Revenue Management in other industries

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Not this generation
Quicker than airlines and hotels?
Cruise ships......
Where MFH was a decade ago ......
Did you say overbooking?
Integral in MFH RM also
Revenue Management does not work for Student Housing.
# Student Housing differs from conventional multifamily housing in many aspects

## Student Housing
- Stream of demand dictated by academic calendar
- Demand pool dictated by school enrollment
- Limited supply
- Most new and renewal leasing activity far in advance of actual move in
- “Drop dead” date

## Multifamily Housing
- Continuous stream of demand, w seasonal influence
- Large demand pool
- Large supply
- New and renewal leasing activity typically within 60 days of move in.
- Continuous activity
LRO Student is built ground up to meet specific needs of Student Housing

- Demand statistics and lead time curve calculated weekly
- Significantly longer time horizon for statistics
- Price movements derived from leasing pace and YOY demand realization
- Demand forecast considers changes to student body/housing policies
- Competitor rents
- Demand forecast considers changes to competitive inventory (when available)
LRO Student is a graphical tool with powerful analytics.
For More Information Please Contact:

Amar Duggasani
aduggasani@LetItRain.com
contact@LetItRain.com
678.578.5775
Rentlytics

September 23-25, 2013
Turnberry Isle Miami
Rentlytics is based in San Francisco, CA and employs only the best software engineers and real estate visionaries in the industry.
Rentlytics is backed by some of the best minds in real estate technology and enterprise software.

At Rentlytics, our investors are also our partners, providing us the resources to build a great company and deliver the best product to our customers.
The Problem
<table>
<thead>
<tr>
<th>ROLE/TITLE</th>
<th>FUNCTION</th>
<th>TIME REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Manager</td>
<td>Data Input</td>
<td></td>
</tr>
<tr>
<td>Regional Manager</td>
<td>Data Checking</td>
<td></td>
</tr>
<tr>
<td>Financial Analyst</td>
<td>Data Compilation</td>
<td></td>
</tr>
<tr>
<td>Asset Manager</td>
<td>Portfolio Tracking</td>
<td></td>
</tr>
<tr>
<td>Vice President</td>
<td>Forecasting Data</td>
<td></td>
</tr>
<tr>
<td>COO</td>
<td>Portfolio Reporting</td>
<td></td>
</tr>
</tbody>
</table>
Lost opportunities for NOI growth

Time lost

Delayed decision making

Lack of insight into problems as they occur
Apartment Intelligence
Visualize Your Entire Portfolio

Derive Insights From Your Data

Built Specifically For Multifamily

Easy To Use Interface
Rentlytics Is A Cloud Based Solution

Rentlytics Is Real Time

Security Is Our Top Priority
## Rentlytics

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Properties</th>
<th>Units</th>
<th>Avg Square Feet</th>
<th>Location</th>
<th>Contact</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entire Portfolio</strong></td>
<td>Villas at Potrero</td>
<td>244 Units</td>
<td>738 Avg. SF</td>
<td>San Francisco, CA</td>
<td>(303) 944-2871</td>
<td><a href="http://www.fairlaneeast.com">www.fairlaneeast.com</a></td>
</tr>
<tr>
<td></td>
<td>Oakland Town Center</td>
<td>210 Units</td>
<td>723 Avg. SF</td>
<td>Oakland, CA</td>
<td>(303) 944-2874</td>
<td><a href="http://www.fairlanetc.com">www.fairlanetc.com</a></td>
</tr>
<tr>
<td></td>
<td>Park Highlands</td>
<td>156 Units</td>
<td>785 Avg. SF</td>
<td>Palo Alto, CA</td>
<td>(303) 944-2871</td>
<td><a href="http://www.parklaureate.com">www.parklaureate.com</a></td>
</tr>
<tr>
<td></td>
<td>Parkside Apartments</td>
<td>345 Units</td>
<td>897 Avg. SF</td>
<td>San Francisco, CA</td>
<td>(303) 944-2871</td>
<td><a href="http://www.parkwayapts.com">www.parkwayapts.com</a></td>
</tr>
<tr>
<td></td>
<td>Riverbank Apartments</td>
<td>665 Units</td>
<td>738 Avg. SF</td>
<td>Sacramento, CA</td>
<td>(303) 944-7871</td>
<td><a href="http://www.riverapts.com">www.riverapts.com</a></td>
</tr>
<tr>
<td></td>
<td>The Woodlands</td>
<td>236 Units</td>
<td>738 Avg. SF</td>
<td>Folsom, CA</td>
<td>(303) 944-2871</td>
<td><a href="http://www.thewoodlands.com">www.thewoodlands.com</a></td>
</tr>
</tbody>
</table>
### Rentlytics Dashboard:

**PORTFOLIOS**

<table>
<thead>
<tr>
<th>Entire Portfolio</th>
<th>600</th>
<th>758</th>
<th>95.1%</th>
<th>90.2%</th>
<th>43.2%</th>
<th>$1,146</th>
<th>$18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sacramento</td>
<td>Units</td>
<td>Avg. Square Feet</td>
<td>Occupancy</td>
<td>Net Leased</td>
<td>Current Renewal</td>
<td>Effective Rent</td>
<td>Delinquency / Unit</td>
</tr>
</tbody>
</table>

**PROPERTIES**

- Villas at Pomeroy
- Oakland Town Center
- Park Highlands
- Parkside Apartments
- Heritage Apartments
- The Woodlands
- Dry Creek Apartments
- Crimson Ranch
- Greenway Apartments

**Sections**

- Overview
- Traffic
- Occupancy
- Renewals
- Revenue
- Expenses
- Cash Flow

**Dates:** Aug 23, 2012 - Aug 24, 2013
### Occupancy Detail (Portfolio View)

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Avg. Occupancy</th>
<th>Move-ins</th>
<th>Move-outs</th>
<th>Occupancy Change</th>
<th>Average Days Vacant</th>
<th>Occupancy %</th>
<th>Net Occupancy %</th>
<th># of MMUs</th>
<th>Units on Notice</th>
<th>Pending Move-ins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairlane East</td>
<td>94.0%</td>
<td>22</td>
<td>22</td>
<td>-0.0%</td>
<td>10</td>
<td>93.5%</td>
<td>93.0%</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Fairlane East</td>
<td>94.0%</td>
<td>22</td>
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<td>93.5%</td>
<td>93.0%</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>94.0%</td>
<td>101</td>
<td>95</td>
<td>0.0%</td>
<td>10</td>
<td>93.5%</td>
<td>93.0%</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

### Average Occupancy by BR

- **1/1**: 94.0%
- **3/1**: 94.0%
- **3/2**: 94.0%

### Occupancy Change by BR

- **1/1**: 0.0%
- **3/1**: 0.0%
- **3/2**: 0.0%

### Rent Roll as of 7/6/2012

<table>
<thead>
<tr>
<th>Unit</th>
<th>BR/BA</th>
<th>Tenant Name</th>
<th>Status</th>
<th>Future Status</th>
<th>Market Rent</th>
<th>Effective Rent</th>
<th>Lease From</th>
<th>Lease To</th>
<th>Previous Lease</th>
<th>Days Vacant</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>1/1</td>
<td>John Smith</td>
<td>Month to Month</td>
<td>-</td>
<td>$1,400.00</td>
<td>$1,350.00</td>
<td>9/30/12</td>
<td>7/30/12</td>
<td>$1,350.00</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>1/1</td>
<td>Mike Thomas</td>
<td>Notice</td>
<td>Rented</td>
<td>$1,400.00</td>
<td>$1,350.00</td>
<td>5/30/12</td>
<td>5/30/12</td>
<td>$1,350.00</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>1/1</td>
<td>Justin Planes</td>
<td>Notice</td>
<td>Rented</td>
<td>$1,400.00</td>
<td>$1,350.00</td>
<td>5/30/12</td>
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<td></td>
</tr>
<tr>
<td>104</td>
<td>1/1</td>
<td>Phil Klans</td>
<td>Occupied</td>
<td>-</td>
<td>$2,200.00</td>
<td>$2,150.00</td>
<td>6/30/12</td>
<td>6/30/12</td>
<td>$2,150.00</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>1/1</td>
<td>Warren Warren</td>
<td>Occupied</td>
<td>-</td>
<td>$2,200.00</td>
<td>$2,150.00</td>
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<td>$2,150.00</td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>2/2</td>
<td>Vacant</td>
<td>Occupied</td>
<td>-</td>
<td>$2,500.00</td>
<td>$2,450.00</td>
<td>9/30/12</td>
<td>9/30/12</td>
<td>$2,450.00</td>
<td></td>
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<tr>
<td>107</td>
<td>2/2</td>
<td>Vacant</td>
<td>Vacant</td>
<td>-</td>
<td>$2,500.00</td>
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<tr>
<td>112</td>
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<td>Occupied</td>
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<td>$2,200.00</td>
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<td>6/30/12</td>
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<tr>
<td>113</td>
<td>1/1</td>
<td>Vacant</td>
<td>Rented</td>
<td>-</td>
<td>$3,500.00</td>
<td>$3,450.00</td>
<td>9/30/12</td>
<td>9/30/12</td>
<td>$3,450.00</td>
<td></td>
</tr>
<tr>
<td>114</td>
<td>1/1</td>
<td>Vacant</td>
<td>Vacant</td>
<td>-</td>
<td>$3,500.00</td>
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<td></td>
</tr>
<tr>
<td>119</td>
<td>2/2</td>
<td>Warren Warren</td>
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<td>$2,450.00</td>
<td>9/30/12</td>
<td>7/30/12</td>
<td>$2,450.00</td>
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</tbody>
</table>
For More Information Please Contact:

justin@rentlytics.com
626-390-0007

Facebook.com/rentlytics
Linkedin.com/company/rentlytics
Angel.co/rentlytics
Twitter.com/rentlytics
September 23-25, 2013
Turnberry Isle Miami
YieldStar Update

- Consistent, validated 3-7% revenue outperformance since 2005
- Serving 1.4m units across over 4,000 assets 200+ markets
- First deployment of Revenue Management in Canada
- Continued Student Living expansion since 2009
- YTD 90 new partners added, including expanded affordable assets
- 75% growth year over year in service and development teams
- Continued 98% partnership retention since inception
Platform Extensions

- Revenue Forecaster, with full budgeting integration
- Performance Analytics with transaction based benchmarking
- Probabilistic renewals: Enhanced expiration management
- 3DOptimization: Confluence of pricing, risk and marketing
- Acquisition platform including current and forecasted revenues
- Pre Development platform with “post IC” risk monitoring
- Activity Based Forecast: industry first “quality scored traffic”
Revenue Forecaster

- Value: Reduced investment risk
- 5 year unit type level on demand revenue forecast
- Convergence of assets DNA and submarket expectations
- Leverages MPF Research’s 50 years of expertise in forecasting
- Includes external supply, macro economics and internal dynamics
- Monte Carlo analysis “stress tests” the asset and anticipated outcomes
- Includes extensive analysis of internal dynamics
- Provides for customizable scenario analysis
Performance Analytics

- Value: Real time insight across critical performance metrics
- Removes the “wait for monthly financials” lag in performance adjustment
- Produces insight otherwise unavailable within multifamily
- Unit type granularity to drive focused assessment
- Provides for aggregation by geography, or custom group
- Expansion to provide 360 operational view (marketing, expense, demand)
- Advancement to include lease transaction based benchmarking
- Leverages RealPage’s 4M units of lease transaction insight
For More Information Please Contact:
Keith Dunkin
Keith.Dunkin@realpage.com
972-897-2329
Orion Business Intelligence

September 23-25, 2013
Turnberry Isle Miami
• Trends in BI
  – Mobile
  – In-Memory Databases & Big Data
  – Empowering Self Service
  – Application Embedding
• Factors in BI Adoption
  – Ease of Implementation & Use
  – Fast Query & Analysis
  – Integration with ERP & CRM
  – Total Cost of Ownership
• Built for Managers & Executives
• Mobile – Safari, Chrome, Firefox, IE
• Amazingly Fast
• Comprehensive – Horizontal AND Vertical
  – Financials
  – Operations
• Rich Ad-hoc Analysis
• Robust Out of the Box Product
  – Configurable
  – Customizable
  – Extensible
- User Specific Dashboards
- Configurable KPI Targets & Thresholds
- Robust Reporting
- Portfolio, Detail, Ad-hoc & Custom
• Applicable to Companies of All Sizes and Ownership Structures
  – Powerful and Intuitive
  – Lower Cost of Ownership

• An Integrated BI Solution will be a Critical Success Factor in the Multi-Family Industry
For More Information Please Contact:

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Michael.Gaeta@Yardi.com

Blaine Davis
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Blaine.Davis@Yardi.com