

# 15. 352

## Selecting User Innovations for Investment

Patrick Koppula

GarageBand



# Patrick Koppula

- B.A. in Environmental Science and Public Policy, focus on System Science
- Worked in municipal finance and capital markets focus on option analysis and risk
- Began at GarageBand as the Executive Producer of GarageBand.com
- Arranged employee buy-out of the previous investors with help of new investor
- Interested in creative financing structures, strategic planning, self managing communities/ecosystems, game theory and, the democritization of capital.

# Garageband - the world's largest community of musicians and their fans



**Current Top 5 Dance**  
[full chart](#) | [all-time chart](#)

1	<a href="#">Solarstorm</a> by <a href="#">2-trance</a>	
2	<a href="#">Misinterpreted</a> by <a href="#">Gavinizer</a>	
3	<a href="#">Shine</a> by <a href="#">Gavin Borg</a>	
4	<a href="#">Sweet Sweet Summer</a> by <a href="#">Jamini</a> Featuring <a href="#">Eddie La</a>	



**UPCOMING GIGS NEAR YOU**

Sat	10/11	<a href="#">A TRIP</a> at <a href="#">The Quarte..</a>	Sunnyvale	Funk
Sat	10/11	<a href="#">KARMA</a> at <a href="#">Monterey S..</a>	Monterey	Pop/R
Sat	10/11	<a href="#">plā (pop lovers anonymous)</a> at ..	San Fran..	Pop/R



## New music

the definitive charts of the best independent music in every genre

## Local scene

the most comprehensive calendar of live gigs and music events

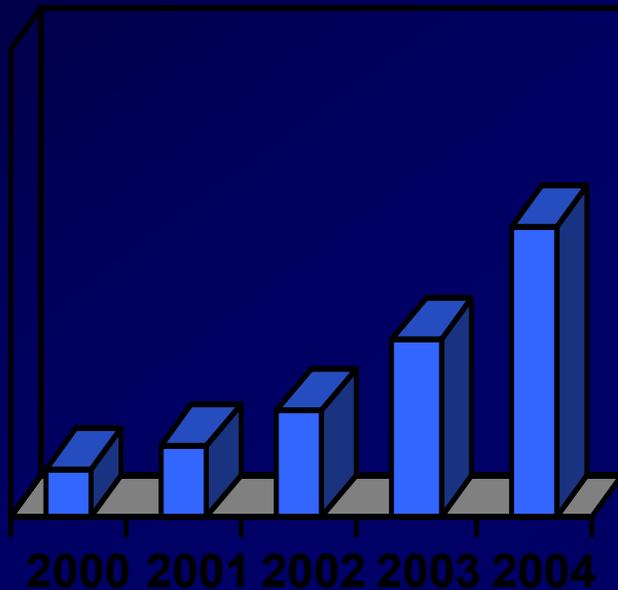
## Community

online tools to help people meet each other and exchange ideas

## Key Asset: Review System

A Darwinian system where only the fittest songs survive.

# GarageBand - vibrant and growing



## Membership

- “the last happy haven for unsigned or amateur musicians.” - NYTimes May 2003
- 500,000 members
- 130,000 bands
- almost 50% growth every year!
- 3,000 new songs per month

# The problem in the music industry

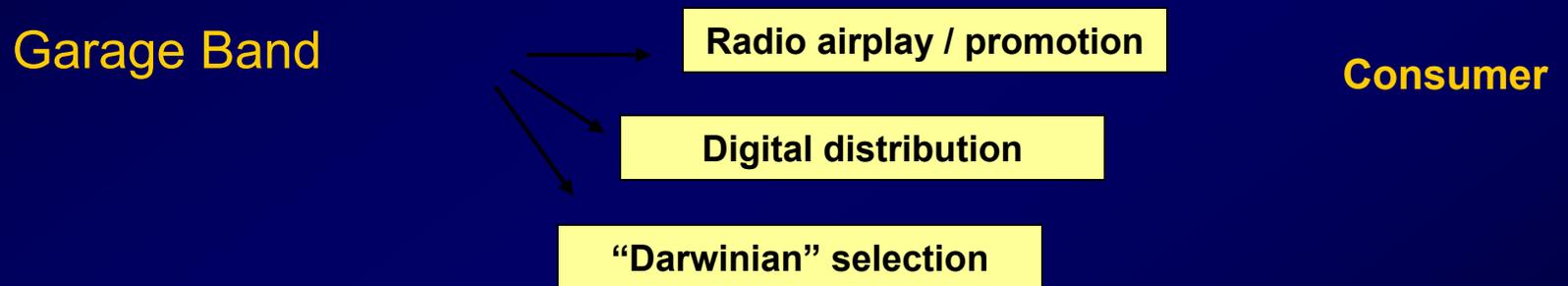
When consumers demand digital downloads instead of CDs, record labels can't recoup their investments.



## The problem in the music industry

- Executive and experts select **musicians**
- Enormous upfront investment in creating product
- High marketing costs
- High chance of failure (Cave's "Nobody Knows" problem)
- Loss recoupment leads to high cost to listeners and low payments to musicians
- Need to create superstars to generate a profit

# The GarageBand solution



Recording & production

*independently-created*  
music

Musician

Consumers get affordable music and artists retain more independence.

Labels get artists with established fanbases, proven track records.

# The GarageBand solution

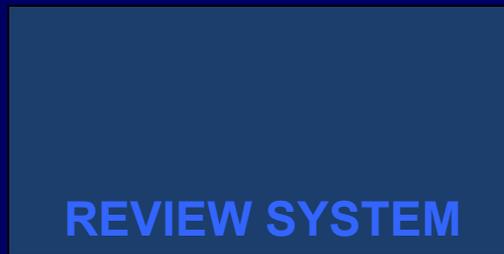
- Musician self-invests in creation of product
- Market-based selection of **product** by the musicians themselves
- Staged/targeted marketing Investment as product succeeds in sequentially expanding markets (begin with digital)
- Lower chance of failure ('cause you do know)
- Lower cost to listeners and greater payments to musicians, without loss of margin
- Agnostic to whether there are a few superstars or many smaller successes

# A “Darwinian” system where the best songs survive

2. To submit a song, first you need to review 30 songs by other bands.



3. Listeners are randomly assigned to review every new song.



SCORE	★★★★★ 5.0
CONTEST RANKING	Active contest: #1 of 129 in Blues

The best-rated songs climb the charts, getting exposure and recognition.

1. Musicians write and record songs on their own.

4. The bands get unbiased feedback.



# Alternatives to the GarageBand approach

- Call-out research
- Collaborative filtering
- Data mining

# Call-out research - Hit finding

- Survey takers call selected listeners
- Play 30 sec clips of songs for respondents
- Collect response data

# Collaborative filtering - Taste matching

- Collect usage data (listens, purchases, etc.) per user
- Overlap individual usage data with the usage data of all users in the system
- Predicts that data points with the strongest relationship to the overlap set are a good fit for the user

## Customers who bought this title also bought:

- [Hot Fuss](#) ~ Killers ([Rate It](#))
- [Franz Ferdinand](#) ~ Franz Ferdinand ([Rate It](#))
- [Contraband \[EXPLICIT LYRICS\]](#) ~ Velvet Revolver ([Rate It](#))
- [Songs About Jane](#) ~ Maroon 5 ([Rate It](#))
- [Good News For People Who Love Bad News](#) ~ Modest Mouse ([Rate It](#))
- [Love, Angel, Music, Baby](#) ~ Gwen Stefani ([Rate It](#))
- [Chuck](#) ~ Sum 41 ([Rate It](#))
- [Dookie](#) ~ Green Day ([Rate It](#))

▶ **Explore Similar Items:** [20 in Music](#), [19 in Books](#), and [19 in DVD](#)

# Data mining - Grassroots discovery

- Identify target demographic
- Extract relevant search query data (Band name searches)
- Analyze patterns in the data

Leaders					Movers		
Rank	Prev.	Subject (Days on Chart)	Move	Score	Rank	Subject	1-Day Move
1	▲ 3	<a href="#">Britney Spears</a> (932)	+20	153	1	<a href="#">Chuck Berry</a>	166.52%
2	▼ 1	<a href="#">50 Cent</a> (111)	-33	115	2	<a href="#">Brian Head Welch</a>	157.01%
3	▲ 4	<a href="#">Usher</a> (111)	-21	80	3	<a href="#">Melissa Etheridge</a>	137.43%
4	▲ 5	<a href="#">Beyonce Knowles</a> (111)	+3	66	4	<a href="#">Willa Ford</a>	132.02%
5	▲ 16	<a href="#">Ashlee Simpson</a> (145)	0	61	5	<a href="#">Bono</a>	125.32%
6	▲ 18	<a href="#">Kelly Clarkson</a> (74)	+4	58	6	<a href="#">Korn</a>	96.96%

# GarageBand Review System accomplishes all three (and then some)

- Mines the largest grassroots community of independent musicians
- Songs are evaluated for hit potential in a rigorous survey format in a real listening context
- Each song has a profile that can be matched to well known artists, radio stations, and collaborative data
- Incentives are internal to the system
- System is organic, responsive and flexible
- Creates promotional capital at the same time it creates data