Vermontivate!

Fun!
Flexible!
Philosopher’s Stone?

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Co-Crafter

ACEEE: Behavior Energy and Climate Change,
Sacramento, CA, Nov 12th, 2012
Introduction - VEIC

- 501(c)(3), private, non-profit corporation founded 25 years ago
- Mission: Reduce the economic and environmental costs of energy use
- Provides energy efficiency and renewable energy consulting and implementation services at the national and international levels
  - 250+ employees, ~$80 million annual revenue, DC, VT, MA, NJ, OH

Principles

1. Goals
   Clear, Specific, Supporting Objectives
2. Mission Alignment
   Market Transformation
3. Motivation
   Smart, Performance-Based Compensation
4. Accountability
   Results Beyond Compliance, Reward
5. Flexibility
   Respond to Changing Markets
6. Stability and Sustained Effort
   Goals & Budgets
VT Demand Resource Plan
2012 – 2031

Energy Savings (MWh), % of Statewide Sales

33% Savings over 20 years

Aggressive, Long-Term Goals
Big Goal, Big Challenges

• Past Success/Diminishing Returns
  - Rising Federal and State Baselines

Already captured 10 year’s worth of savings

• Lower Avoided Costs? (Is cheap natural gas here to stay?)
Wait a minute… I thought this was supposed to be about a Game…

- Savings goals depend upon reaching and influence of customer actions through engagement
- The cost & effectiveness of engagement channels are the most important factors under a program’s control
- Game-based approaches have demonstrated best-in-class scalable engagement cost-effectiveness

[Insert “Game(s)” here? Yes!*]
Big Challenges, Big Opportunities

3 Key Change Drivers
- Internet Services
- Smart Grid
- Goals, Rules, Policy

Engagement Channels
- Direct
- 3rd Party Actors

More Complexity & Capability
More Measurable
Higher Expectations

Resulting Perceived Trends
Increasing
- Engagement
- Data & Feedback
- Reach/Targeting
- Bi-Directionality
- Flexibility/Scalability

Less Uncertainty
Increasingly Known
- Per Unit
- Per Conversion
- Risk
- Yield
- Per New Unit
- Cost

Decreasing
Social Games & Gamification

- A lot of buzz + hype
- Some High Profile Successes
- Many lower-profile “failures”
- Young industry
- Rapidly evolving
- More “art” than “science”
Vermontivate!

- State-wide, 5-week long, town-based, online/real world engagement competition for an ice cream Party

Vermontivate! is a playable prototype **community energy game** that **playsources** the elements of energy efficiency and **sustainability**.

Our atmosphere’s getting all gunky. And climate change makes us feel funky. But we’ll change our fate! Play Vermontivate! And celebrate with Chunky Monkey!

Wildly Exceeded Expectations.
Here’s the back story:
Started in 2010, with RD&D

- Long Term Yield $/MWh
- Near and Long-Term Yield Threats:
  - Rising Baselines (Market Transformation, Diminishing Returns)
  - Higher-Hanging “Fruit” (Hard to Reach Demo, Behavioral, etc.)
  - Customer Motivation (Non-energy “distractions”)

RD&D ➔ Non-Resource Acquisition Investment
 ➔ Can Game Tools & Insights Help Yield?

Improve Yield Outlook with Strategic Research, Development, and Deployment
Background:
Highlights from 2010-2011 RD&D

Playsourcing *could* be a valuable toolset to improve yields by shifting towards more intrinsic motivators:

- **Crowdsourcing**: Productive Contributions Through Voluntary, unpaid, participation of the “crowd” (example: wikipedia)
- **Playsourcing**: uses games to drive voluntary engagement to support crowdsourcing (example, Fold.it) to meet EE objectives:
  - Data, Information, Advice, Engagement, Emotions, Relationships, Visibility, Evaluation, Measurement and Verification, and many other hard and soft cost barriers to rapid and sustained progress
- **Energy efficiency work is good fit in theory, but:**
  - **Hard**, non-obvious, unproven in the energy sector
  - Massively Multi-Disciplinary, Art + Science: **success not guaranteed**

**Playsourcing:**
**Fun | More-Effective | Not a Walk in the Park |**
Background: 2011 Key Lesson Learned

Fruitions First and Foremost Follow Fun
Background: Fun is Fraught with Opportunity

- Gamification isn’t a Holy Grail; it is more like Alchemy:

<table>
<thead>
<tr>
<th>Alchemy</th>
<th>Gamification</th>
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<tbody>
<tr>
<td>Protoscience → Chemistry &amp; Medicine</td>
<td>Proto-business trend → Marketing Best Practices</td>
</tr>
<tr>
<td>Framework of Theory</td>
<td>Design Thinking</td>
</tr>
<tr>
<td>Experimental Processes</td>
<td>Playtesting</td>
</tr>
<tr>
<td>Included Philosophical Principles</td>
<td>Artisinal Crafting Techniques</td>
</tr>
<tr>
<td>Mixed Results</td>
<td>Mixed Results</td>
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</tbody>
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In Alchemy, the Philosopher's Stone is a mythical substance that supposedly could turn inexpensive metals into gold, and create an elixir of immortality
Allure of Alchemy: Turning Lead into Gold

- Lead of **Extrinsic** motivating factors can weigh down **Yield**
  - Incentives, Rebates, etc.
  - Labor, Admin expenses

- The Gold of **Intrinsic** Motivators can lift **Yields**:
  - Experience engages, not external “rewards”
  - Voluntary
  - Collaboration
Opportunity for a Small & Speedy Real-World Experiment:
Key Collaborators
• Tamarack Media – Bill Finnegan, TogetherGreen Fellow
• Local Community Activist – Kathy Blume, Creative Roustabout
Key Supporters
• Ben & Jerry’s, Front Porch Forum, Efficiency Vermont
Key Objectives
• Awareness & Empowerment through digital media
• Change the tone of the conversation

Epic Objective → Can we make it fun, scalable & sustainable?

Spring 2012: Vermontivate!

6 Weeks Development, No Cash Budget
Low-Risk, (High-Reward?)
Vermontivate! – Design Principles

Voluntariness  
Learning  
Balance

<table>
<thead>
<tr>
<th>Structure:</th>
<th>Exploration:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intrinsic Motivation)</td>
<td>(Problem Solving), (Structure and Exploration)</td>
</tr>
</tbody>
</table>

Structure: (Rules, Challenges)  
Exploration: (Freedom, Strategy)

Active Ingredients from Positive Psychology + Behavioral Economics

- **Positive emotion** (Fun)  
- **Engagement** (Optimum Challenge Curve)  
- **Relationships** (Social Network Effects)  
- **Meaning** (Beyond the game & oneself)  
- **Achievement** (Success Feedback Loops)

Coherency in Aesthetics, Rules, Challenges
Levels: Weekly Challenges from Game Master Characters

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**Lime:**

Learn about **how to use a paper towel**, try it out, and **tell me** if it really works. If it does, will you keep on workin' it?

*There used to be a bonus point multiplier for sharing with us any other cool, little-but-big things like this. Please still send 'em in! But for the rest of the competition, all guaranteed bonus points have been frozen to simplify judging and add a touch more assurance of impartiality.*

**Mint:**

Head on over to **EnergySavvy** and find out your **home's energy score** in about the same time as a youtube video.

(*This energy scorer isn't perfect, particularly if you live in an apartment, use wood heat, or other details. Just fill it out the best you can, add an asterix in your moment of play and let us know what the issues were*)

**Let me know** what you think about it! Any surprises?

**Emerald:**

Come up with, and **tell me** three new things you might pledge to do help to save energy for the next 4 weeks.

(*Need help coming up with ideas? Chat up your town teammates or visit your Guilds and stir the pot!*)
What play looked like:

- 800+ moments of Play
- 5,500+ unique visitors
- Average of 12 minutes/visit

The Paper Towel Challenge!

Submitted by Windham Evening... on Thu, 05/17/2013 - 20:31

The MultOps Room officially tried the Paper Towel Challenge today, and we all passed. We had some fun dancing with our hands, and we shocked our hands and sawing who could dry their hands the fastest and most thoroughly (my hands) with just one paper towel. As predicted, we also enjoyed making it fun on our friends. This challenge gets two totally dry hands up from us!

This is what we had to say:

7 year-old boy: "First you wash your hands, then you dry them, and then you shake your hands til 10 or 11 or 22 times and get a paper towel and when you're done you glub! Your hands get dry!"

2 year-old boy: "Rinse with soap and shake and dry off!" A teacher asked, "Does it work?" And he said, "Uh-huh!"

Green and Clean

Today Vermont, Tomorrow the World

Public Service in the form of a 2013-2014 "highlights" effort

They're on the way!
Vermontivate:
“An Antidote to Paralysis”

Governor Peter Shumlin stopped by this week to say thanks to all of you in the Vermontivate Community!

This week I’m respectfully offering up my jump line to the collection of Greens proffered by our esteemed Guest Host.

We’re thrilled that he’s game for the game!

It helps make up for our slight disappointment that he declined our special Vermontivate costume. Maybe he’ll cut loose and try on Color threads if he stops by the winning town’s ice cream party on June 30th.

Thanks for the luv, Guv!
Reflections From a Player

This game has become part of my everyday life both in terms of playing along and in changing how we live. You have educated me while I was having fun!! You have made this a multigenerational experience!!

You have built a community of people across the state, working together, supporting each other, and learning together.

What I loved the most about how you set up the game is that you had the perfect mix of challenges that made you explore, that made you make a change, that made you create, and that made you connect.

My outlook about the entire issue has developed into a lasting concern. While enlightening me you also keep me hopeful that we can make a difference instead of making me scared and feeling helpless.

“I am really looking forward to getting my next GMP bill.”
Key Findings: We Made Some Gold

- Making EE Fun is Hard, But Powerful
- Dynamics and Flexibility are Essential
- We need to walk before we run
- And stand before we try to walk
- There is no substitute for Playtesting.
- Just scratching the surface of integrated offering.

We Wildly Exceeded Modest Expectations. Now What?
For Discussion:

• What are the benefits and challenges to this type of approach with regards to:
  - Scalability?
  - Sustainability?
  - Measurability?

• How could this approach integrate with:
  - Smart Grid Consumption Data?
  - Dynamic Pricing Models?
  - Existing Program?

• What are the risks to this approach?
  - With great potential power comes great responsibility to do it right. How do you know if you’re doing it right?

Can the Science be Separated from the Philosophy?
Should it? If So, Where?
Thank You!

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