Intelligent Swarming: Considerations for Starting Out

“Most people work just hard enough not to get fired... and get paid just enough money not to quit.”
- George Carlin
The Problem/Opportunity:

• 70% of the workforce is “dis-engaged” with the purpose, intent of the businesses they work for (Zuboff, Forbes)

• Companies use less than 40% of the skills they employ (Gallop, StrengthsFinder research)
Intelligent Swarming: Objectives

- Skills development
  - Dynamically create capability and capacity
- Optimize people’s ability to contribute (create value)
- Increase engagement and loyalty
  - For customers and employees!
- Improve customer success and realized value through improved problem solving, by increasing:
  - Reach (an unbounded network)
  - Relevance (based on profiles and reputation)
  - Diversity (to increase creativity and innovation)

Every interaction is an opportunity to improve the relevance of the next interaction!
The Shift….

The Current Model
Streaming

- Silos and hierarchies
- Directed
- Predefined, linear process
- Escalation based
- Measure activity

The Emerging Model
Intelligent Swarming

- Network
- Opt-in
- Emergent, loopy processes
- Collaboration based
- Measure value creation

Level 1
Level 2
Level 3
Realization

- People naturally collaborate on new issues (swarm)...
- ...often in spite of the support processes and structure.
- Can we optimize collaboration?
What’s Different About Swarming?

• Support organization functions as a single team of people with various skills who collaborate on resolving issues
  – No level 1/2/3
  – No escalations within support
• The person who takes the case owns it until it is resolved
  – Eliminate queue bouncing
  – Improve learning and skills transfer
• The first person to work on the issue is the most likely person to be able to resolve it
• Support Analysts can find the best available person to help
• Support Analysts can see work that is relevant to them
• Measuring the creation of value (not activity) by individuals and teams
• Managers as coaches – not judges and not “owners” of the teams
How Does it Work?

- Variety of ways to facilitate collaboration
- Some common themes:
  - Requires engaged and aligned people
  - Incident/case ownership is clear
  - Best if designed by support analysts/engineers
  - Iterating on the process (continuous improvement)
  - People profiles and reputations are a key enabler
  - Same “taxonomy” for work, people, and content
  - Exception detection and management
  - Performance assessment: from activity to value?
A Few Definitions

A Collaboration Group
- The group of people who could benefit from interaction

A Swarm
- Two or more people working to resolve an issue

Work
- “Work is work”, efficiently resolving customer issues is the goal

Intelligent Swarming
- Facilitating the connections between people with increasing relevance over time
**Who is Swarming?**

*Early Adopters*

- **Mostly Manual**
  - BMC
  - PTC
- **Highly Automated**
  - Red Hat
  - Microsoft
  - and
  - Cisco

For case studies, visit [www.serviceinnovation.org/intelligent-swarming](http://www.serviceinnovation.org/intelligent-swarming)
Early Adopters: Results

- **Improved Resolution**
  - Reduction in call backs
  - Reduction in time to resolve
  - Handled more cases with fewer headcount (through attrition)
  - Resolved multi-technology issues more quickly

- **Support Analysts Love It**
  - Increased employee satisfaction/loyalty/engagement
  - Skills growth, accelerated learning
  - Backlog down dramatically
  - Reduced new hire training time by up to 50%

- **Customers Love It**
  - Better customer experience, focused on customer success and value realization
  - Dramatically increased customer satisfaction numbers
  - A better way to deliver on company’s brand promise
Early Adopters: Lessons Learned

- Don’t over engineer the process or the tool
  - The people doing collaboration should be the ones to design and own the process

- Culture change
  - It’s ok to ask for help (Support Analysts, managers)
  - Balance of individual outcomes and team outcomes
  - 1st and 2nd line managers must shift mindset

- Consistency and communication
  - Hearing vs experiencing (internalizing)
  - Rate of change made it hard to keep everyone informed

- Collaboration
  - Not all issues are worthy of collaboration: 60-70% issues solved with initial swarm (the customer and a Support Analyst)
Is Intelligent Swarming Right for Your Organization?

• Some things to consider:
  – Identify a collaboration group (people who would benefit from shared experiences)
  – Size of the collaboration group
  – Location of the group members
  – Group’s average work minutes to resolve (complexity)
  – New vs. Known ratio
  – % resolved at each level of support
  – % of severity 1 and 2 issues
  – Maturity and culture of the group
A Maturity Spectrum

Transactions     Interactions     Teamwork     Collaboration

Distinguishing Characteristics

Weak          Strong

Engagement

Weak          Strong

Learning

Low          High

Trust

Simplistic     Dynamic

Structure/Roles
Tools for Assessing the Health of the Network

• Collaboration Health Survey
  – Structure
  – Trust
  – Conflict
  – Commitment
  – Accountability
  – Results

• ONA (Organizational Network Analysis)
  – Network map of who goes to who to solve issues
Critical Enablers

- Encouraging the Desired Behavior
- Process and Policy Changes
- Management Mindset
- People Profiles
- Tools and Integration
Key Questions for the Collaboration Process

• How are we going to get the best person on the case on the first touch?
  – Providing visibility to relevant cases?

• Request help – when someone needs help how do we find the best people to help them?

• Offer help – how do we allow people who can and are willing to help, to help?
# The Process Design Template

<table>
<thead>
<tr>
<th>Case Ownership</th>
<th>Request Help</th>
<th>Offer Help</th>
<th>Exception Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger</td>
<td></td>
<td></td>
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<tr>
<td>Ability</td>
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<tr>
<td>Motivation</td>
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</tr>
</tbody>
</table>
Seven Process Scenarios

- I need help (I have searched KB)
  - On a live call
  - Specific question
  - I know who could answer it

- I need help
  - On a live call
  - Specific question
  - I don’t know who could answer it

- I need help
  - On a live call
  - I have no idea about how to pursue resolution

- I need help
  - In research mode (off line)
  - Don’t know who could help

- I see a request for help
  - How do I know someone is asking for help in an area relevant to me
  - How do I respond?

- I see an issue/case (someone else has taken ownership for) that I know the answer to
  - How do I find the issue/case?
  - How do I help?

- How do I find or see open/available cases that are relevant to me?
Why Do We Care About People Profiles and Reputation?

• It *is* what makes swarming “intelligent”
  – Information that enables relevance of interactions
  – Learn from each interaction and improve the relevance of the next interaction

• Recognition of individual and team’s contribution and capabilities

• A better way to assess individual and team contribution? (long term)
Thoughts on Design Criteria

- Support/encourage desirable behaviors and the success of the people doing the work
- Alignment to the organization's purpose, mission, goals and values
  - Purpose, mission, and goals describe what we are trying to accomplish
  - Values describe the boundaries of acceptable behavior in how we accomplish it
- For individuals and teams
  - Teams should not be limited to the reporting structure: some teams will be cross-functional and cross-geographical
Key Questions to Consider: Designing People Profiles

- What results are we after?

- What behaviors/activities are we trying to encourage?

- What skills/competencies are important?

- What can we do to motivate and support (enable) those behaviors?
Elements of People Profiles

- My identity (*static, explicit*)
  - Name, contact info, language(s), location
- Interests (*static, explicit*)
- Preferences (*dynamic, explicit, & implicit*)
  - Modes of interaction (phone, email, chat)
  - Roles (maven, connector, evangelist (from *The Tipping Point*) or Support Analyst, consultant, marketing)
  - Relationship – existing and positive, based on past interaction
- About my competencies/skills (*dynamic, explicit, & implicit*)
  - Subject mater domain expertise
  - Soft/transferable skills, KM, CRM, customer interaction
- Reputation (*dynamic, explicit, & implicit*)
  - History of value created
Managing Identity and Privacy
The Layers of the Profile

Explicit
Implicit

My Identity
Reputation
Skills & Competencies
Preferences
Interests
Managing Identity and Privacy
The Layers of the Profile

My Identity
Skills & Competencies
Reputation
Preferences
Interests
Boundaries of Visibility
Public
Company
Team

ME
Importance of a Common Taxonomy

• In how we classify work, cases, knowledge, and people
  – A common taxonomy links people to content (for known issues) and people to people (for new issues)

• The challenge of how much detail
  – How do we decide how much detail to put into profiles?
  – Not enough detail won’t enable the necessary level of relevance, but too much detail creates unnecessary noise and irrelevant data
Degree of understanding about the problem impacts the size of the potential audience needed to fix it...

- Understanding of the problem
  - Small, little context about the issue and requestor
    - Potential audience of relevant content or people
      - Large number of potential helpers
  - Large, a lot of context about the issue and requestor
    - Potential audience
      - Small number of potential helpers
Indicators of Success of Swarming

- First Contact Resolution
- Reduced call back rate
- Lower work in progress
- Average time to resolve
- Average handle time (work min)
- Employee sat (ONA, Organization Network Analysis)
- Fewer customer escalations
- Contact/customer/month
Indicators of Value Creation for Individuals Who Are Swarming

- Frequency of use of analysts expertise (how often do we go to them?) ONA
- How long to ask for help (case open to raise hand)
  - Manual process to track for a period of time?
- Frequency of requests help from anyone
- Time to respond – how long for individual to respond
- Who responded
- Un-answered requests
- Feedback from recipient of help feedback from provider of help
- Ask for help from a specific person
- Unsolicited offers of help
Adoption

- Start with a pilot (identify a collaboration group)
  - Collaboration Health Survey
  - ONA
- Let the Support Analysts design the process
  - Triggers, ability, motivation for seven scenarios
- Iterate on the process
- Start with manual process and refine your requirements based on that experience
  - People profiles
  - Measures
Technology Requirements

• Ability to see all incidents/cases/work that are relevant to me
  – From any queue
  – Owned or available
• Ability to request help - raise my hand
• Ability to ask a specific person or small group of people a question
• Ability to join groups
• Ability to see and respond to requests for help that are relevant to me
• Ability to offer unsolicited help
Technology Requirements (continued)

- Ability to see others’ availability, status
- People profiles
  - Reflect my skills, interests, preferences, reputation
- Ability to see open requests for help and aged requests for help
  - Configurable by team
- Options on how to connect
- Ability to create unique, separate “collaboration space” for two or more people to work on an issue
Emerging Principles

• Alignment with the needs of the people doing the work AND alignment with the purpose and goals of the organization
  – Sweet spot - Intersection of employee’s skills and interests with the company goals and objectives
• Promotes collaboration (not competition - I can only win if you lose)
• Recognize diversity of skills/competencies (lots of them), all that are required to be successful
• Leverage the principles of:
  – Motivation elements of: accomplishment, recognition, interesting work (Hertzberg), mastery, autonomy (“Drive” Pink)
  – Flow: balancing skill and challenge (“Finding Flow” Csikszentmihalyi)
• Develop reputation through implicit means (people's behavior) rather than by explicit means (surveys and people's feedback) (Marc Smith)
• Based on abundance, not scarcity
Critical Success Factors

• Culture of collaboration
• Engagement in, alignment to the purpose/brand promise and the values of the company
• New indicators of organization health and value creation
• Transformation of Management’s role
  – 1\textsuperscript{st} and 2\textsuperscript{nd} line managers as coaches
  – Executive expectations (measures)
Intelligent Swarming Workshop and Design

• Phase I: Initial Qualification
  – Online questionnaire to assess relevance

• Phase II: Organizational Analysis
  – Conference calls, SNA and collaboration health surveys, data analysis, understanding the brand promise

• Phase III: Adoption Planning and Design
  – 3-5 day workshop and design session, onsite, heavy participation by Support Analysts/engineers

• Phase IV: Adoption Support
  – 6-9 months of ongoing support (conference calls)

• Offered by select KCS Certified Trainers
For more information, please contact
Consortium for Service Innovation
www.serviceinnovation.org
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• The Support Economy: Why Corporations Are Failing Individuals and the Next Episode of Capitalism by Shoshana Zuboff and James Maxmin
• The Future of Knowledge by Verna Allee
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