HUMANgrid

Case Study 1: **Team Performance**

Using HumanGrid™ to
Manage Team Performance

Ideation Brainstorming Sessions

Design and Goals

Four teams consisting of engineers in various job functions within a global engineering company were constructed with the goal of examining performance based on composition. Primarily using the iO™ factor of Ideation, it was hypothesized that team performance with regard to idea generation would correlate with the personality of individuals on the team; Specifically the more Pioneering a team is, the more ideas it would generate *outside* of the existing problem definition and the more Builder a team is the more ideas it would generate *within* the problem definition.

Ultimately, demonstrating the relationship between HumanGrid™ supported team composition and performance illustrates that the HumanGrid™ Platform may be used in predictive capacities as an input tied to team design.
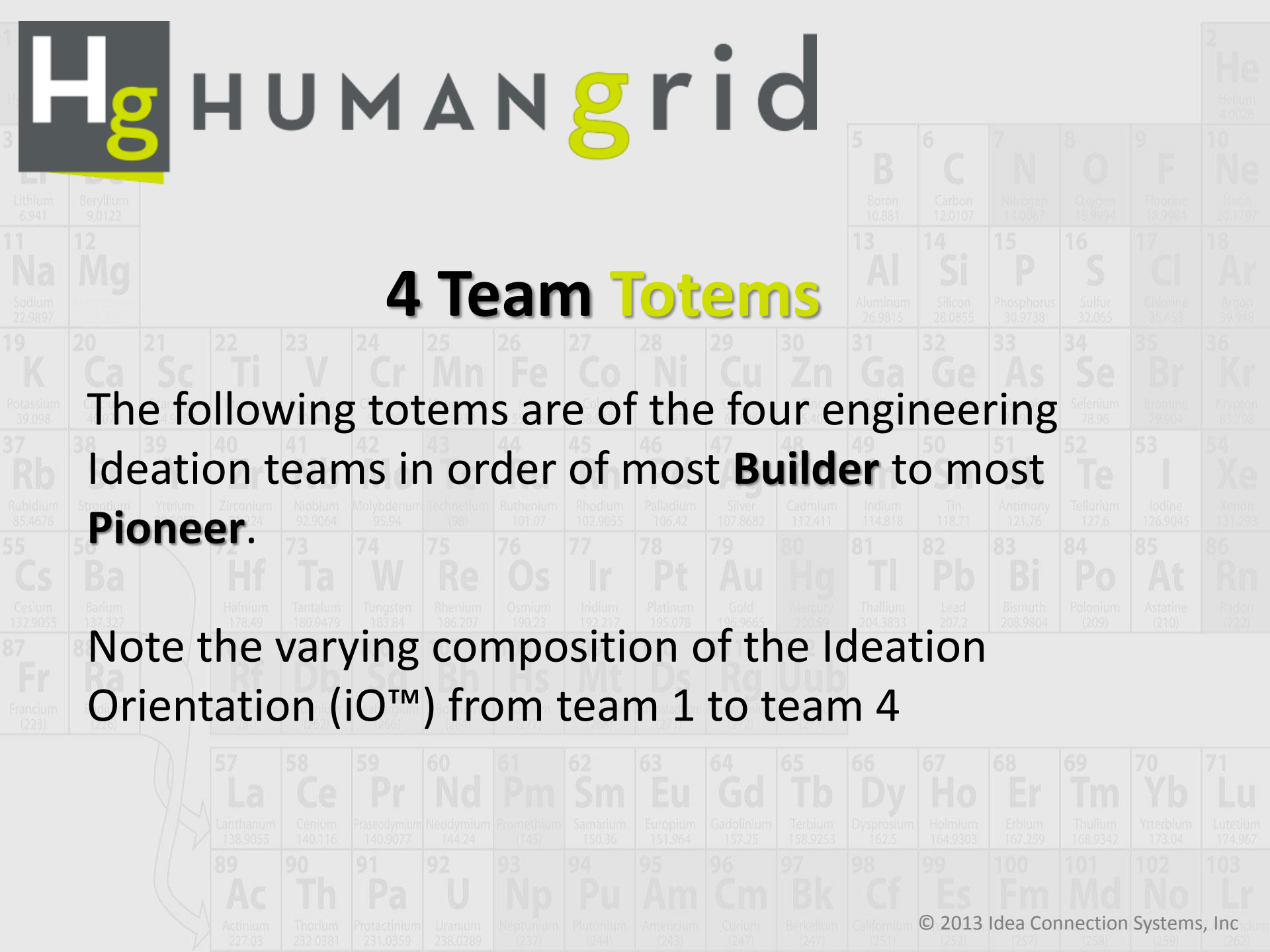
4 Team Totems

The following totems are of the four engineering Ideation teams in order of most **Builder** to most **Pioneer**.

Note the varying composition of the Ideation Orientation (iO™) from team 1 to team 4

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Team 1: Primarily Mid-Builders/Mid-Pioneers; All Mid-Range:

	XB	DB	MB	MP	DP	XP
Overall	0%	0%	60%	40%	0%	0%
Ideation	0%	0%	40%	60%	0%	0%
Risk	0%	0%	20%	80%	0%	0%
Process	0%	20%	60%	20%	0%	0%

iOM®

Control	No	Flex	Yes
I Initiate	20%	80%	0%
Others Initiate	20%	60%	20%

Relationship	No	Flex	Yes
I Initiate	40%	40%	20%
Others Initiate	0%	60%	40%

Networking	No	Flex	Yes
I Initiate	20%	80%	0%
Others Initiate	0%	20%	80%

	Concrete	Flex	Visionary
Input	20%	80%	0%

	Converge	Flex	Diverge
Flow	40%	60%	0%

	Prudent	Depends	Action
Passion	40%	60%	0%

	Head	Flex	Heart
Output	40%	40%	20%

	Self	Flex	People
Energy	20%	60%	20%

Team 2: All Mid-Pioneers:

	XB	DB	MB	MP	DP	XP
Overall	0%	0%	0%	100%	0%	0%
Ideation	0%	0%	0%	100%	0%	0%
Risk	0%	0%	0%	75%	25%	0%
Process	0%	25%	25%	25%	25%	0%

iOM®

Control	No	Flex	Yes
I Initiate	0%	50%	50%
Others Initiate	25%	50%	25%

Relationship	No	Flex	Yes
I Initiate	25%	25%	50%
Others Initiate	0%	50%	50%

Networking	No	Flex	Yes
I Initiate	0%	75%	25%
Others Initiate	0%	25%	75%

	Concrete	Flex	Visionary
Input	0%	50%	50%

	Converge	Flex	Diverge
Flow	25%	75%	0%

	Prudent	Depends	Action
Passion	0%	100%	0%

	Head	Flex	Heart
Output	0%	100%	0%

	Self	Flex	People
Energy	25%	25%	50%

Legend
- 68-100%
- 33-67%
- 20-32%

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Team 3; Mix of Mid-Pioneers and some Overall Pioneers:

	XB	B		MP	P	XP
Overall	0%	0%	0%	80%	20%	0%
Ideation	0%	0%	0%	40%	60%	
Risk	0%	0%	0%			0%
Process	0%	0%	20%	60%	20%	0%

iOM®

Control	No	Flex	Yes
I Initiate	0%	60%	40%
Others Initiate	20%	40%	40%

Relationship	No	Flex	Yes
I Initiate	20%	60%	20%
Others Initiate	40%	60%	0%

Networking	No	Flex	Yes
I Initiate	0%	80%	20%
Others Initiate	0%	100%	0%

	Concrete	Flex	Visionary
Input	0%	60%	40%
	Converge	Flex	Diverge
Flow	80%	20%	0%
	Prudent	Depends	Action
Passion	0%	40%	60%
	Head	Flex	Heart
Output	20%	80%	0%
	Self	Flex	People
Energy	40%	40%	20%

Team 4; Primarily Pioneers (Pingers):

	XB	B	M	IP	P	X
Overall	0%	0%	0%	0%	80%	0%
Ideation	0%	0%	0%		80%	20%
Risk	0%	0%	0%	40%	60%	
Process	0%	0%	40%	60%	0%	0%

iOM®

Control	No	Flex	Yes
I Initiate	0%	20%	80%
Others Initiate	20%	60%	20%

Relationship	No	Flex	Yes
I Initiate	40%	20%	40%
Others Initiate	0%	60%	40%

Networking	No	Flex	Yes
I Initiate	20%	40%	40%
Others Initiate	20%	40%	40%

	Concrete	Flex	Visionary
Input	0%	40%	60%
	Converge	Flex	Diverge
Flow	60%	20%	20%
	Prudent	Depends	Action
Passion	0%	40%	60%
	Head	Flex	Heart
Output	20%	60%	20%
	Self	Flex	People
Energy	0%	40%	60%

Legend

(red)	68-100%
(orange)	33-67%
(teal)	20-32%

Process and Application

The teams were given directions to separate rooms in which to operate for approximately 4 hours. Each team was given a set of questions for which they were to come up with solutions. They were asked to come up with as many ideas as possible and informed that unconventional ideas were welcome.

Facilitators visited each room periodically to assess various behaviors during team development.

The 4 teams in this study were intentionally homogeneous to amplify natural tendencies of each **iO™ Ideation style**. The illustration on the upcoming slide is an example of dynamics on a heterogeneous team in which members are unaware of how to leverage differences in approach to problem-solving:

Process Documentation

It was documented that:

- Builder/Mid-Range teams (1 and 2) found the room on time and began working on the solutions right away.
- Builders/Mid-Range (Team 1) dedicated approximately 20 minutes per idea and generally moved on to maintain efficiency.
- Team 1 produced 15 solutions that included much more detail than the more Pioneering teams. Ideas were also ranked.
- The Pingger/Pioneer team (team 4) found the room much later and did not maintain easily identifiable patterns of discussion once in session.
- Team 4 also exceeded 40 solutions which were very broad in scope, most unconventional and least detailed.
- Each room formed their own culture during the four hours.

Pioneer (Pingger™)....　　　　　　　　**Builder(Pongger™)....**

Illustration from Center for Creative Leadership – Used with Permission

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Ideation Style: Builder

- With the Ideation Orientation of a Builder, problem-solving is directed toward resolving problems quickly rather than looking for them.
- Their preference is to make things better, rather than do things differently. The Builder will improve something in established ways or, when stuck, will always look for a precedent.
- Builders also tend to generate what they feel are a sufficient number of well-chosen and relevant solutions, rather than what they deem to be unmanageable numbers of ideas, including those that "break" the existing patterns completely.
- Because Builders like to solve problems in under-stood ways, they would see no need to question existing assumptions; they prefer to improve established solutions rather than experiment with pattern-breaking ones. They like to follow set routines when looking for solutions to old problems and tend to focus on one problem at a time.
- While seeking out stable situations, Builders will question the necessity for doing things differently; they like the comfort of predictability, thereby supplying stability, order, and continuity in organizations. When evaluating novel ideas, they rely on external norms and precedents.

Ideation Style: Pioneer

- With the Ideation Orientation of a Pioneer, problem-solving is directed at breaking paradigms, looking at things uniquely, and being **more concerned with doing things differently than with doing them better.**

- **Pioneers produce large numbers of ideas**, many of which may be neither obvious nor acceptable to others. Their outpouring of ideas often contains those that have great promise for "cracking" complex problems if they can be isolated from the many solutions generated.

- Pioneers have fresh perspectives on old problems, would sooner create something than improve on it, and like to vary set routines. **When stuck, they will always think of something and may start in a direction with no set idea of how to deal with the consequences until faced with them.**

- When evaluating new situations and ideas, **Pioneers are able to stand alone in disagreement against a group of equals or seniors.**

- The ability to toy with elements and concepts allows those with Pioneer Ideation Orientation to handle several new ideas and problems at the same time. In fact, they may prefer to work on many problems at one time, may need the stimulation of frequent change, and prefer change to occur quickly.

- Pioneers are described as "stimulating," which means that their tangential thinking and unexpected approaches to things can be provocative, refreshing, and colorful.

Ideation Pathways: Builders & Pioneers

Ideation Pathways: Builders & Pioneers
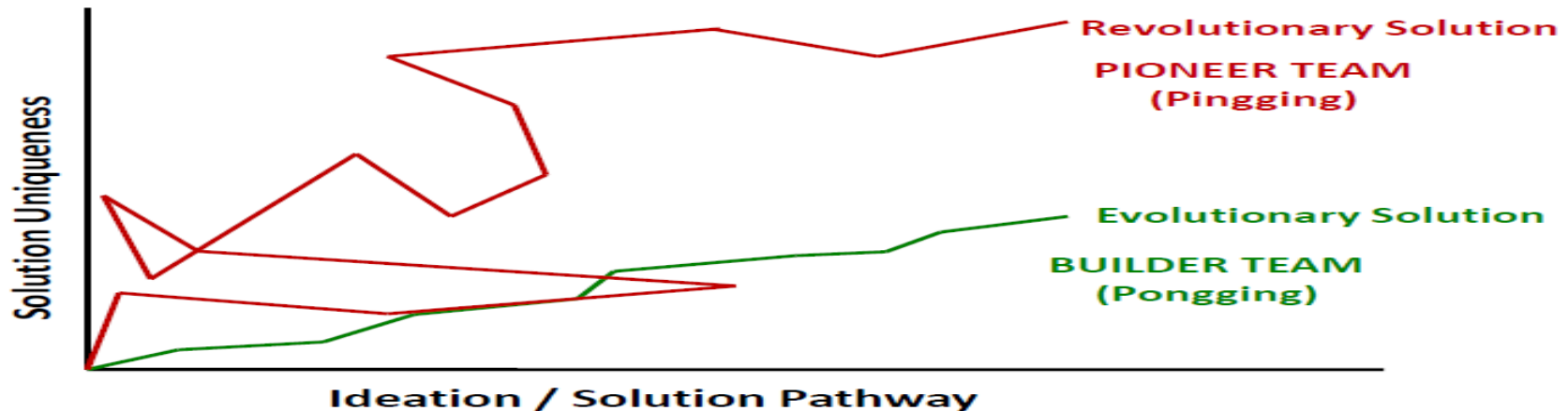
- **The Pioneer team can seem unpredictable at times and does not move linearly.**
- **The Builder team is generally predictable and very linear.**
- **Both teams are productive when engaged at the right times for the right projects.**

Results and Discussion

As expected, both teams displayed behaviors that might be expected based on their ISPI™ profiles. Teams that were more Builder-based generated less ideas that were detailed, ranked and tended to focus on solving the problem as it was presented. The more Pioneer-based teams on the other hand spent much more time generating solutions that both fit and did not fit the specific problem definition. Pioneers also generated more ideas overall.

A team self-rating of idea generation satisfaction was gathered and it indicated that all teams were fairly confident that their ideas "pushed the boundary" and could be seen as unconventional.

Results and Discussion

While assessing the solutions of each team, it became apparent that despite the fact all teams felt they took risks and viewed their solutions as unconventional, the solutions of the more Builder teams were much more conventional than those of the more Pioneer teams.

The Builders had a much greater tendency to operate "within the box" and the Pioneers "outside of the box". This indicates that the HumanGrid™ Platform allows one to identify and select participants on a continuum based on preferences that is desired for a phase of a project or a project in its entirety.

Discussion and Understanding

The HumanGrid ™ Platform is not a process in and of itself, rather it is a key component in designing teams and improving processes built around people. To construct a successful team, first a problem or goal must be identified. Once this is defined, the HumanGrid ™ Platform of tools can be leveraged to construct appropriate teams or utilize various team compositions. In order to use the HumanGrid ™ Platform in this capacity, one must be confident in its ability to measure what it intends to measure and in its ability to contribute toward quantifiable gains based on those measurements. The purpose of these case studies is to demonstrate how the HumanGrid ™ Platform of tools has succeeded at this.

The Ideation Brainstorming Study, Innovation Challenge Week and Annual Productivity Session are all HumanGrid ™ case studies that reinforce this confidence in a practical setting. Team design was successful in each scenario due to the inclusion of the HumanGrid ™ Platform of tools.