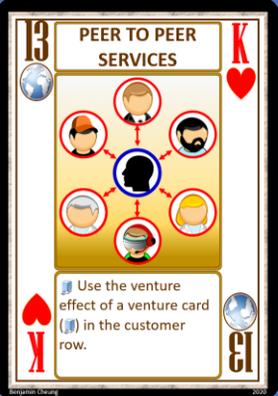


20-60 m

1-6

7+

# PEER TO PEER



## Ben Cheung

## THE TECH DECK

The 52-card Playing Deck. The first playing cards were created in China in the 9<sup>th</sup> Century. Playing cards were imported into Europe from Mamluk Egypt in 1370. By 1377, the French used playing cards with Hearts, Tiles (diamonds), Clovers (clubs) and Pikes (spades). The Tech Deck introduces a modern version of the classic playing cards. Bringing playing cards into the 21<sup>st</sup> century. Integrated into the design of the Tech Deck is the Peer-to-Peer game.

## THE DOMAINS (SUITS)

There are 4 domains (suits) in the DECK:



### KNOWLEDGE (BOOK) INFORMATION TECHNOLOGIES

Knowledge are facts and information accumulated by science. It is the theoretical and practical understanding of a subject foundational to science and technology.



### SCIENCE (BEAKER) RESEARCH & DEVELOPMENT

Science is organized knowledge with testable explanations. The natural sciences (biology, chemistry, and physics) study nature. The social sciences (economics, psychology, and sociology) focuses on societies. The formal sciences (logic, mathematics, and computer science) is for abstract concepts.



### TECHNOLOGY (GEAR) INDUSTRY, MANUFACTURING

Technology is the application of scientific knowledge for practical purposes. Engineering is the creative application of science and math to the design and construction of machines, systems, and processes.



### SERVICES (GLOBE) MARKETING

The integration of knowledge, science and technology to create a product to benefit consumers. Services provide a benefit or product for a customer.

## THE PEER-TO-PEER GAME

In the 21<sup>st</sup> century, many power to the people technologies have arisen. In the late 1990's, nobody would have gotten into a stranger's car. Now with Uber and Lyft, people pay complete strangers to drive them around! In the 1768, the Encyclopedia Britannica was established. By 2000, Nupedia, which eventually became Wikipedia, is a peer-to peer-encyclopedia that overtook traditional paper encyclopedias. In many other industries from retail (eBay, Etsy) to hotel accommodations (AirBnB), to videos (Youtube) technologies are empowering people. Peer to Peer (P2P) lending, file sharing, ride-sharing, and e-learning are just a few of the areas that peer-to-peer services have developed. In this unique team deck-building game, players team-up together to build a "team" deck by gaining cards and assisting customers (represented by cards). Each player also has a venture, composed of tech deck venture cards, which have special effects that give each player unique abilities that can grow and change over time. Peer-to-Peer can also be played head to head (1 vs 1) or solo-play as well.

## BASIC INFORMATION



**20-60 m**

**NUMBER OF PLAYERS** 1-6

**TIME TO PLAY** 20-60 min



**1-6**

**AGES** 7+ (requires Addition, Reading)



**7+**

**COMPONENTS** 54 cards (The Tech Deck)

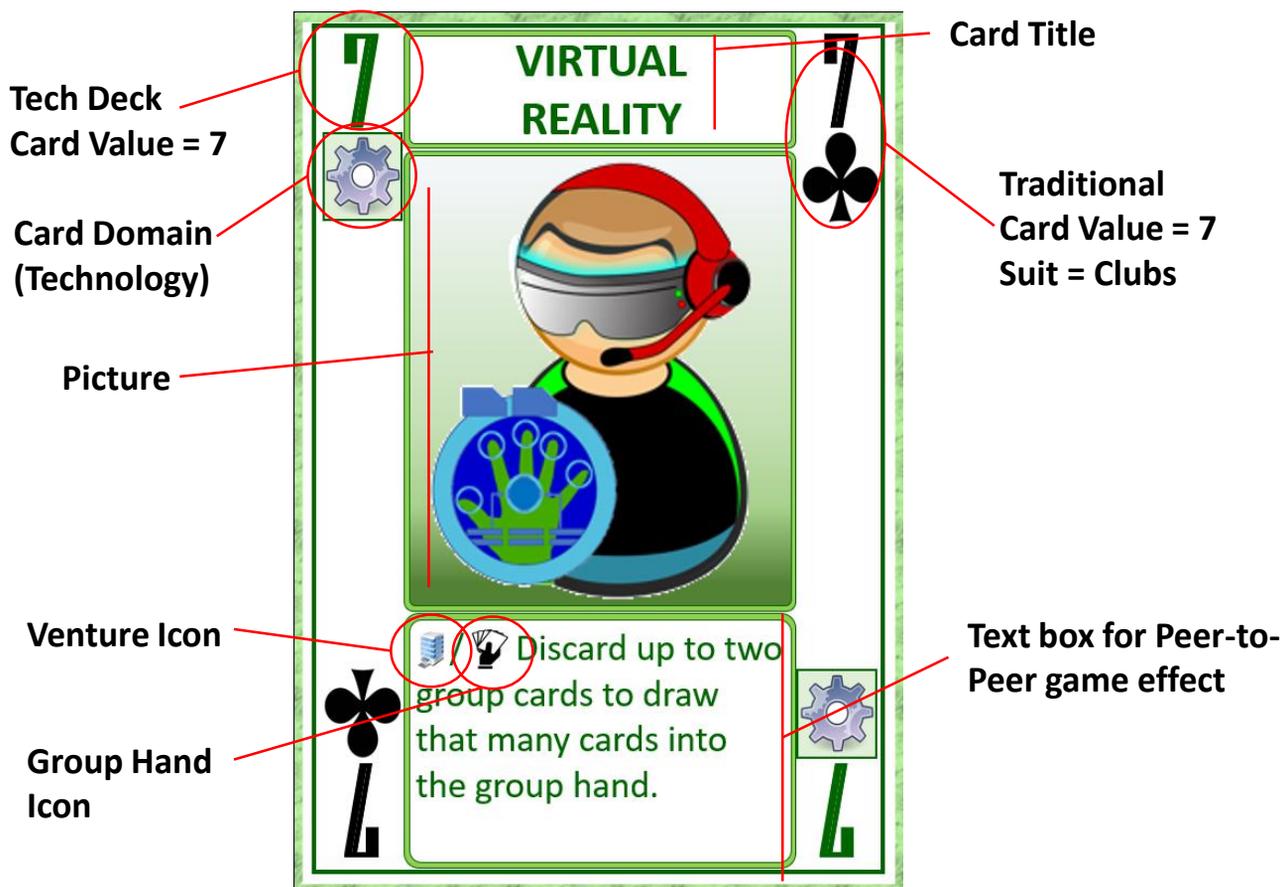
## THE PEER-TO-PEER GAME SETUP

- 1. CREATE TEAMS** – For a 1 player solo game there is just 1 team. For a 2, 4, or 6-player game randomly divide the players into two groups forming 2 teams. For a 3 or 5-player game, there are still two teams but one team will have an extra player. The team with 1 fewer player will control an extra venture to balance the game.
- 2. DEAL TEAM CARDS** – Shuffle the deck. Deal out cards until you reveal two venture cards for each player in a team, then repeat for the second team. Then each player selects one venture card to start the game with. Venture cards have the  symbol in the game text box. Shuffle the rest of the cards with the group symbol () back into the deck. For example, in a 5-player game. Each team deals out cards until they reveal 6 venture cards. Then, each player selects one venture card to start the game with.
- 3. CREATE TEAM GROUP DECKS** – Create the team group decks according to the following chart. Each group deck will start with 5 cards in it. The starting cards are marked with a “S” in the lower right. Shuffle the cards and put them face down in front of each team. The group deck is shared and used between all the players in a team.

# PLAYERS	TEAM GROUP DECKS
1	Start with two 1s, one 2, one 3 and one 4 of all different domains (for example e.g. 1-Svc, 1-Info, 2-Sci, 3-Tech, 4-Svc). Then, Remove remaining 1s, 2s and 3s from the customer deck
2 – 6	TEAM #1: 4-Service, 1-Technology, 2-Science, 3-Info, 1-Info TEAM #2: 3-Service, 4-Technology, 1-Science, 2-Info, 1-Service

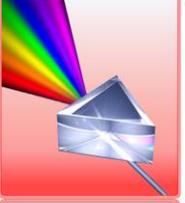
- 4. INITIAL GROUP HANDS** – Draw the initial group hand. Draw 4 cards from the group deck to form the group hand. Thus, to start with there will be 1 card left in the group deck. Each team has a group hand, group deck, and group discard. The group cards are shared between the players on the team.
- 5. CREATE CUSTOMER DECK & CUSTOMER ROW** – The remaining cards are shuffled to form the Customer Deck. Place the customer deck between the two teams. Deal out two cards into the Customer Row next to the customer deck. This represents the customers that need to be assisted at the start of the game.
- 6. FIRST TEAM MARKER** – The first team marker is randomly assigned to a team.

## PEER-TO-PEER CARD ANATOMY

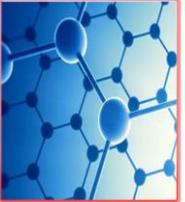


# PEER-TO-PEER STARTING GROUP DECKS

## TEAM #1 STARTING GROUP DECK

<p><b>4 CONSTRUCTION SERVICES</b></p>  <p>When this card is used to <i>assist</i>, the assisted customer card may be added to the group discard.</p>	<p><b>1 INTERNET OF THINGS</b></p>  <p>When this card is used to <i>assist</i>, the assisted customer card may be added to the group discard.</p>	<p><b>2 PHYSICS</b></p>  <p>Another card in the group hand may be used to <i>assist</i> a customer as a  card.</p>	<p><b>3 CRYPTO-CURRENCY</b></p>  <p>Reveal the top card of the group deck. A group card may be exchanged with the revealed card.</p>	<p><b>1 DATA MINING</b></p>  <p>Draw a card then discard a card.</p>
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## TEAM #2 STARTING GROUP DECK

<p><b>3 DELIVERY SERVICES</b></p>  <p>When this card is used to <i>assist</i>, the assisted customer card may be added to the group discard.</p>	<p><b>4 CYBERSECURITY</b></p>  <p>When this card is used to <i>assist</i>, the assisted customer card may be added to the group discard.</p>	<p><b>1 MATERIAL SCIENCES</b></p>  <p>When this card is used to <i>assist</i> a customer, it may count as a  or  card.</p>	<p><b>2 THE INTERNET</b></p>  <p>Draw a card then discard a card.</p>	<p><b>1 E RETAILING</b></p>  <p>When this card is used to <i>assist</i>, the assisted customer card may be added to the group discard.</p>
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# PEER-TO-PEER GAME LAYOUT

First team marker



Team #1 Player 1

Team #1 Player 2



Player Venture



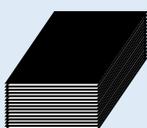
Player Venture



Team #1's Group Hand



Group HAND



Group DECK



Group Discard



Group Score Pile

CUSTOMER ROW



Customer DECK

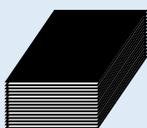


Unhappy Customers

Team #2's Group Hand



Group HAND



Group DECK



Group Discard



Group Score Pile

Player Venture



Team #2 Player 3



Team #2 Player 4

Player Venture



## PHASES IN A TURN

Each round is composed of phases:

1. **NEW CUSTOMERS** – Deal new customers into the row from the customer deck.
2. **USE VENTURES & GROUP EFFECTS** – Players may use game effects from their venture and group cards.
3. **ASSIST CUSTOMERS** – Teams use group cards from their group hand to assist customers.
4. **USE VENTURES & GROUP EFFECTS** – Players may use game effects after the assist customers phase if they still have any effects available to use.
5. **REFRESH THE GROUP HAND** – Discard any remaining unused cards in the group hand and redraw 4 cards.
6. **END OF ROUND PHASE** – Game end trigger is checked. First team marker is passed.

## NEW CUSTOMERS PHASE

1. **NEW CUSTOMERS** – Put new customers into the customer row drawn from the customer deck. The number of customers put in the row depends on the number of players and team score: For a 1 player game put 1 customer per turn until you score 2 customers thereafter add 2 customers per turn. For a 2-4 player game, put 2 new customers in per turn until one team scores 2 assisted customers. Thereafter, put in 3 new customers per turn. For a 5-6 player game put 3 new customers in per turn. Add new customer cards to the customer row by drawing new cards from the customer deck adding them to the right-most side of the customer row, sliding the existing cards to the left. The customer row can hold 4 customers.
2. **UNHAPPY CUSTOMERS** – If a 5th customer would be added to the row, remove the left-most customer and it becomes an unhappy customer. If there are too many unhappy customers, the game ends during the end game check phase.

## USE VENTURES & GROUP CARDS EFFECTS PHASE

1. **USING VENTURE EFFECTS** – Cards with this symbol:  indicate that it is a player venture effect that must be part of a player venture in order to be used. Each player may use game effects from their venture cards once a turn. Venture effects may be used before, during and after assisting customers. Venture effects are optional, never mandatory. Starting with the team that has the first team marker, they use and resolve a venture or group card effect. Then, the other team has a chance to play an effect. Continue until neither team wishes to play any further effects.
2. **USING GROUP CARD EFFECTS** – Teams may also use group card effects of group cards in the group hand. These are denoted by the  symbol in the text box. The effect of a group card can be used once a turn. Thus, if you choose to use it in the effects phase before assisting customers, you may not choose to use that card again later in the turn. If the card effect states a phase when it can be used, then it must be used in that phase. A card may only be used once a turn, even if it leaves the group hand and later returns to the group hand. You can flip over or tap cards that have been used to keep track. Some cards have both a  and  symbol which allows the card to be used either when it is part of a venture or in the group hand.
3. **PHASES** – Typically, a venture effect will describe what phase it can be used. If it is not specified, then it can be used during the use card effects phase. For example, a game effect may specify that it triggers when assisting customers, this would mean it would be used during the assist customers phase.
4. **CHAINING ABILITIES** – It is possible to chain abilities. After one ability is used, it may open the opportunity to use new game effects during a turn. For example, a card returned from the group discard could be used immediately. If there are multiple effects that may take place at the same time, the team may choose the order in which effects are resolved. Effects cannot interrupt another effect in progress.
5. **DO AS MUCH AS POSSIBLE** – If a game effect is unable to be completely executed, do as much as possible. For example, if a game effect has you draw two group cards then discard two group cards (12-Information / News & Reviews). If you can only draw one card, because there is only one card in the group deck and none in the discard, you would draw one card then discard two cards.

## ASSISTING CUSTOMERS PHASE

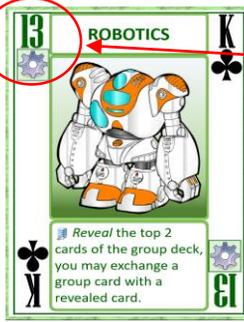
Following these sequence of steps during the assist customers phase:

- 1. PLAY GROUP CARDS TO ASSIST CUSTOMERS** – Both teams play group cards face down with the intention to assist a customer card in the customer row. To assist a customer, one or more group cards must sum exactly to the value of the customer card and at least one of those cards must match the domain (suit) of the customer card. For example, to assist a 12-*Technology* card, a 9-*Information* and a 3-*Technology* card could be used assist that customer. Note: the only way that a single card could be used to assist a customer is a game effect that changes the domain of a card.
- 2. REVEAL GROUP CARDS** – Starting with the team that DOES NOT have the first player marker, that team reveals their group card(s) and declares which customer they are going to assist. Then the other team reveals their group card(s) and announces which customer they want to assist.
- 3. USE GAME EFFECTS** – If there are venture or group hand effects that occur when assisting customers, they occur at this time. Game effects may only be used once per turn, you can flip or tilt the card to assist you remember that its effect has already been used.
  - A. VENTURE EFFECTS** – Venture  effects may only be used when the card is part of a venture. If a player venture has a game effect that happens while assisting a customer, it takes place in step 3.
  - B. GROUP HAND EFFECTS** – Some cards have this symbol:  which means it can be used while the card is in the group hand. If a group hand effects occurs while assisting a customer, it happens in step 3.
- 4. CONTESTED CUSTOMERS** – If both teams want to assist the same customer, the customer is contested. To resolve the conflict, compare the group cards of both teams. The team with the highest value group card wins the customer. If that is tied, then compare the next highest value group card. If all card values are tied, the following domain orders, ranked highest (left) to lowest (right), are used to resolve the tie:    
- 5. DEVELOP GROUP DECK** – Successfully assisted customers are normally scored into a team's score pile or venture. If you have a game effect that lets you add a successfully assisted customer to the group deck, group hand, or group discard it is used in step 5. Otherwise, you may NOT add an assisted customer into the group deck, hand or discard.
- 6. DEVELOP PLAYER VENTURES** – The *group* cards used to assist a customer are be placed into the winning team's *group* discard. Successfully assisted customers may be moved to the venture of one team player. In a 1-4 player game, any player's venture can support up to three venture cards. In a 5-6 player game, a player's venture can support 2 venture cards. If the venture limit would be exceeded, the venture is added and then one of them is moved into the team score area. A card added to a player's venture may be used later in the same turn.
- 7. SCORE CUSTOMERS** – If the assisted customer card is not placed into a player venture, then it is placed into the winning team's assisted customer score pile.
- 8. RETURN GROUP CARDS** – If there was a contested customer, the losing team's group cards are returned to the losing team's group hand. They have a chance to use those group cards later to assist any remaining customers in the customer row.
- 9. USE GROUP & VENTURE EFFECTS** – Teams have a chance to use group and venture effects in between assisting customers. The addition of cards to the group discard and new venture cards may open up the possibility to use new effects.
- 10. REPEAT PROCESS** – Repeat steps 1 through 9 to assist remaining customers in the customer row until neither team is able to further assist customers.

# PEER-TO-PEER ASSISTING A CUSTOMER

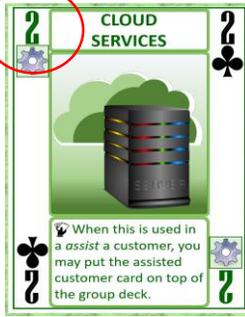
Example of Assisting a customer

Customer Card in row



These two cards add to a value of 13, with at least one of them being a Technology (🔧) card.

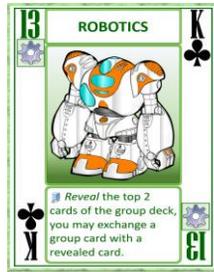
Group Cards



# PEER-TO-PEER AFTER ASSISTING A CUSTOMER

AFTER successfully assisting a customer ...

## Assisted Customer



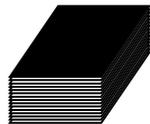
AFTER ASSISTING THE CUSTOMER CARD CAN GO TO:

- (1) Player Venture, or
- (2) Group Score Pile, or
- (3) Group Discard (by effect)

Group Cards go to Group Discard



Group HAND



Group DECK

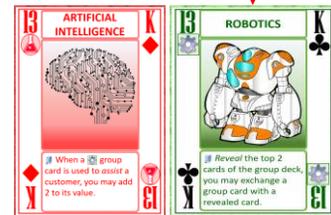


Group Discard



Group Score Pile

Player Venture



Team #2 Player 4

## REFRESHING THE GROUP HAND PHASE

- DISCARD AND REDRAW THE GROUP HAND** – Any cards still in any group hand are discarded to their respective group discards. Then, 4 new group cards are drawn into each group hand for each team. If there are not enough cards in the group deck, shuffle the team group discard to create a new group deck. Have the other team cut your deck after shuffling. Then, continue drawing cards until there are 4 cards in the group hand.

## END OF ROUND PHASE

At the end of round phase checks for the end of game.

- END GAME TRIGGER** – The game ends with all players and teams losing if when there are a number of unhappy customers in the play area according to the following:

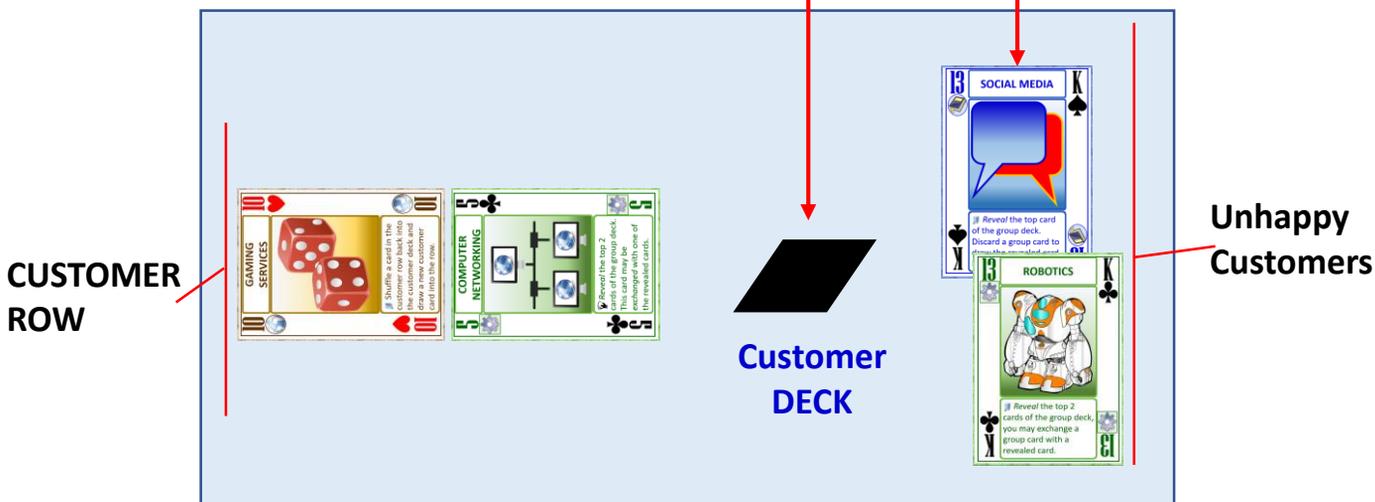
NUMBER OF PLAYERS	UNHAPPY CUSTOMERS
1	4
2	3
3-4	2
5-6	1

- END OF GAME TRIGGER** – If there are no cards in the customer deck during the end game trigger check, then the game ends and proceed to End Game Scoring.
- END OF GAME SCORING** – The team that scored the most successfully assisted customers in their score pile wins. Each successfully assisted customer scores 1 point. If there is a tie, sum the value of all of your scored customers as a tie-breaker. If there is still a tie use the domain rank as a tie breaker: 🌐 (highest) ⚙️ 🧪 📖 (lowest)
- PASS THE FIRST TEAM MARKER** – The first team marker is passed to the other team.

## PEER-TO-PEER END OF GAME TRIGGER

The game ends when ...

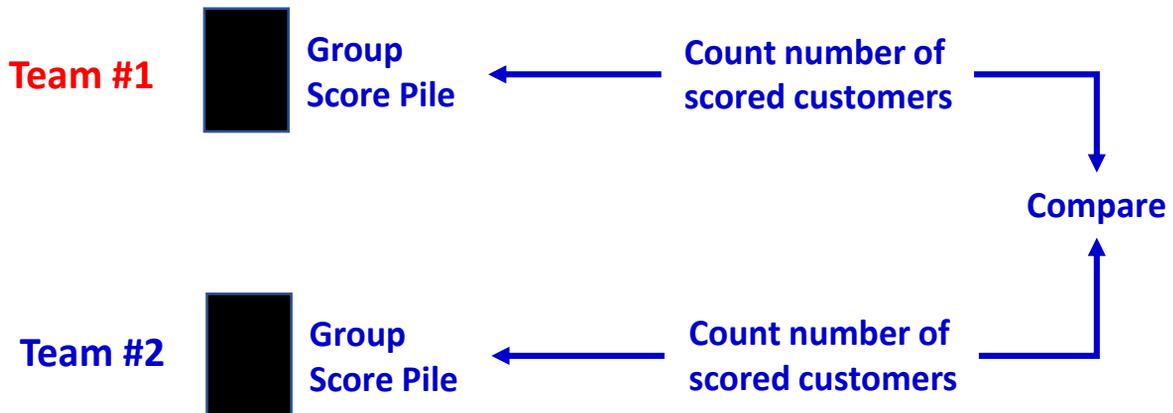
- (1) There are too many unhappy customers \*, or
- (2) The customer deck runs out



\*For a solo game = 4 unhappy customers, 2 Players = 3 Unhappy customers; 3-4P = 2; 5-6P = 1

# PEER-TO-PEER END GAME SCORING

Each team counts their number of scored customers, the team with the most scored customers win. Resolve ties by summing all card values.



## GENERAL RULES

- RESHUFFLE** – If a game effect requires you to draw or reveal card(s) and there are not enough cards in the group draw deck to do so, shuffle the team group discard pile together with what is left of the group deck to form a new group deck. For example, if you need to reveal 4 cards in the group deck but there are fewer than 4 cards in the group deck, create a new group deck then reveal cards (as many as you can). Then, continue with the game effect. If there are still not enough cards in the group deck to reveal the requested card(s) reveal as many as possible.
- GROUP TALK** – Group discussion and collaboration is encouraged. Players may discuss what the best strategy and plays are given the current group hand, the other team’s ventures and the customer cards in the customer row. Teams may coordinate and make deals or choose not to. No deal is binding, and you do not have to say the truth.
- LOOKING AT PILES** – Any player may look through either team’s group discard or assisted customer score pile. This is public information.
- REVEALING** – When you reveal a card, turn them over and expose the card(s) for all players to see. After game effects resolve, the revealed cards are returned from where they came, preserving the order that they had. If a card allows you to look at something (not *reveal* to all players), a person/team may choose to divulge the information. A *revealed* card is turn over long enough for all players to acknowledge they saw card, but does it not have to be re-revealed later.
- EXPELING** – A card that is expelled is removed from the game.
- EXCHANGING** – Exchanging two cards causes two cards to swap places putting each where the other card was. For example, exchanging from the top of the customer deck with a card in the group hand would cause the top card of the customer deck to change places with a card from the group hand.

## SOLO PLAY

The only special rules for solo play are in the initial deck composition! You just have one venture to work with and you make all of critical decisions. Because you have fewer game effects that you might use you are allowed to have more unhappy customers. Solo play allows you to discover the deeper strategy of the game.

## INDIVIDUAL DECK VARIANT

Peer to Peer can also be played with a variant where each player has their own deck (2-6 players). You will need one Tech Deck for every person playing and one for the customer deck. Setup the “group deck” of each player the same as a solo game, except that they also start with any 2 cards of their choice from their personal Tech Deck in their personal group deck. The group deck of each player will start with 7 cards. Players also choose any 2 venture cards from their personal Tech Deck to start the game with. Play as with the semi-cooperative game, except that each player has their own personal “group” deck they are building up. An alternative is that you can shuffle together multiple tech decks and have all the players draft cards leaving at least 40 cards for a customer deck.

## STRATEGY TIPS

1. You do not necessarily need a very large group deck. The theoretical minimum winning solo-play group deck size is 6 cards scoring a maximum of 43 points (assisted customers).
2. When you put customer cards into the group deck, generally mid to lower value cards are more useful. Try to gain cards that have useful and synergistic group effects. A variety of domains and values will help you assist different kinds of customers in the customer row.
3. The player venture effects are important. Try to establish a useful venture for every player. Find game effects that complement with each other.
4. Remember this is a semi-cooperative game there will be times where it is necessary to cooperate so that not everyone loses. But watch out, it is also possible for one team to start pulling ahead by scoring customers. There is a balance between developing your group deck and ventures and scoring customers.
5. The information-domain card effects typically relate to drawing, revealing and arranging cards. The science cards affect card values and domains. The technology cards affect the group deck and hand. The service cards deal with customer cards.

## CREDITS

Designer, Developer	Benjamin Cheung
Play Testers	Rich Kopacz, Vincent Mondaro, Lillian Mondaro, Ben Torcivia, Pedro Ortiz, Mike Linkowski, Matthew David, David Fu, Clifton Field, Eugene Ku, Gabriel Horan, Holdan Horan, Stephen Takach, Michael Kornytchuk, Joe Kwiatek, Henry Young, Craig Koeppen
Video Production Crew	Ed Arnold-Berkovits, Isaac Arnold-Berkovits, Andrew Parks, Rich Kopacz, Michael Kornytchuk, Pedro Ortiz

## TERMS & DEFINITIONS

1. **ASSIST** – When group cards are used to try to score or put customers into player ventures during the assist customer phase. To assist, group cards must exactly equal the value of a card in the customer row and have one card match the domain (suit).
2. **CARD** – An individual card which has a value, a domain (suit) and a game effect.
3. **CONTESTED CUSTOMER** – A contested customer is one that both teams wish to assist.
4. **DISCARD** – Discarded group cards go to the group discard.
5. **DOMAIN** – One of the four suits in the game (information, technology, science, services).
6.  (**Domain symbols**) – The four domain symbols are equivalent to suits.
7. **EXCHANGING** – Exchanging two cards causes two cards to swap places putting one where the other card was.
8. **EXPEL** – A card that is expelled is removed from the game.
9. **PICK** – The act of selecting something (a player, card, venture, token).
10. **PHASE** – One of the parts of a round.
11. **REDRAW** – Redrawing causes cards to be drawn equal to the specified number in the game effect. Redrawing occurs after discarding cards during the refresh phase.
12. **REFRESH** – The refreshing phase causes the group hand to be discarded and a new group hand to be redrawn.
13. **REVEAL** – Turning over card to expose them for all players to see. After game effects resolve, the revealed cards are returned from where they came, preserving the order that they had.
14. **ROUND** – A complete set of operations performed by the player(s). It is composed of phases. The game is played in a series of rounds.
15. **SCORE PILE** – The pile of customer cards that have been previously successfully assisted.
16. **SCORED CUSTOMER** – Customers that have been previously successfully assisted that were scored by a team into their assisted customer score pile. Each customer will count for 1 victory point at the end of the game.
17. **SUIT** – A term used interchangeably with domain. Suit is used because of the familiarity people have with a traditional 54-card deck.
18. **PLAYER VENTURE** – The card(s) that represent a company. Each player may have one venture they control. In a 1-4 player game a player venture may have 3 cards. In a 5-6 player game a player venture may have 2 cards.
19. **WILD CARD** – A wild card is a card which has an immediate effect and then is expelled. It is also possible that the Wild Card might be drawn into the group hand, if so, apply its effect and then expel it.