

GEARS OF INDUSTRY

PERSONALIZED CARD GAME



Ben Cheung, PhD



20 min per player



2-4

NUMBER OF PLAYERS 2-4

TIME TO PLAY 20 min per player



7+

AGES 7+

COMPONENTS 54 cards (The Tech Deck)

RULES VERSION 4 / Mar 28, 2022

THE TECH DECK

Playing cards were created in China in the 9th Century with printing. In 1370, cards came to Europe from Mamluk, Egypt. By 1377, the French used cards with Hearts, Tiles (diamonds), Clovers (clubs) and Pikes (spades). The Tech Deck introduces a modern version of classic playing cards bringing them into the 21st century. The Tech Deck supports any game you could play with classic playing cards and introduces card effects to spice up any game. It is a game platform.

THE DOMAINS (SUITS) OF THE TECH DECK

There are 4 domains (suits) in the TECH DECK:



KNOWLEDGE (BOOK) INFORMATION TECHNOLOGIES

Knowledge is 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, physics) study nature. Social sciences are economics, psychology, and sociology. Formal sciences develop 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) NON-GOODS INDUSTRIES, PUBLIC & PROFESSIONAL SERVICES

Services are the integration of knowledge, science and technology to create products to benefit consumers. Service industries include communications, retailing, professional services, and government services.

PERSONALIZED GAMES – INTRODUCTION


Minecraft and *Dungeons & Dragons* are examples of games which give players the opportunity to personalize their play experience. D&D paved the way for a new genre of gaming in role-playing. *Magic the gathering* in 1993 introduced a game where players could personalize their decks that they brought to the table. Many other customizable games have followed suit.

OBJECTIVE & WINNING THE GAME

OBJECTIVE OF THE GAME – Players compete with Poker hands in each of two “markets” using cards they play to the markets, two neutral cards in each market, and one of their factory cards. On their turn, players can play card(s) into the markets. When the active player has three cards in a market that player can trigger a market clash (poker hand competition). Winning players score 1 point for hands up to a three of a kind, 2 points for higher ranked hands.

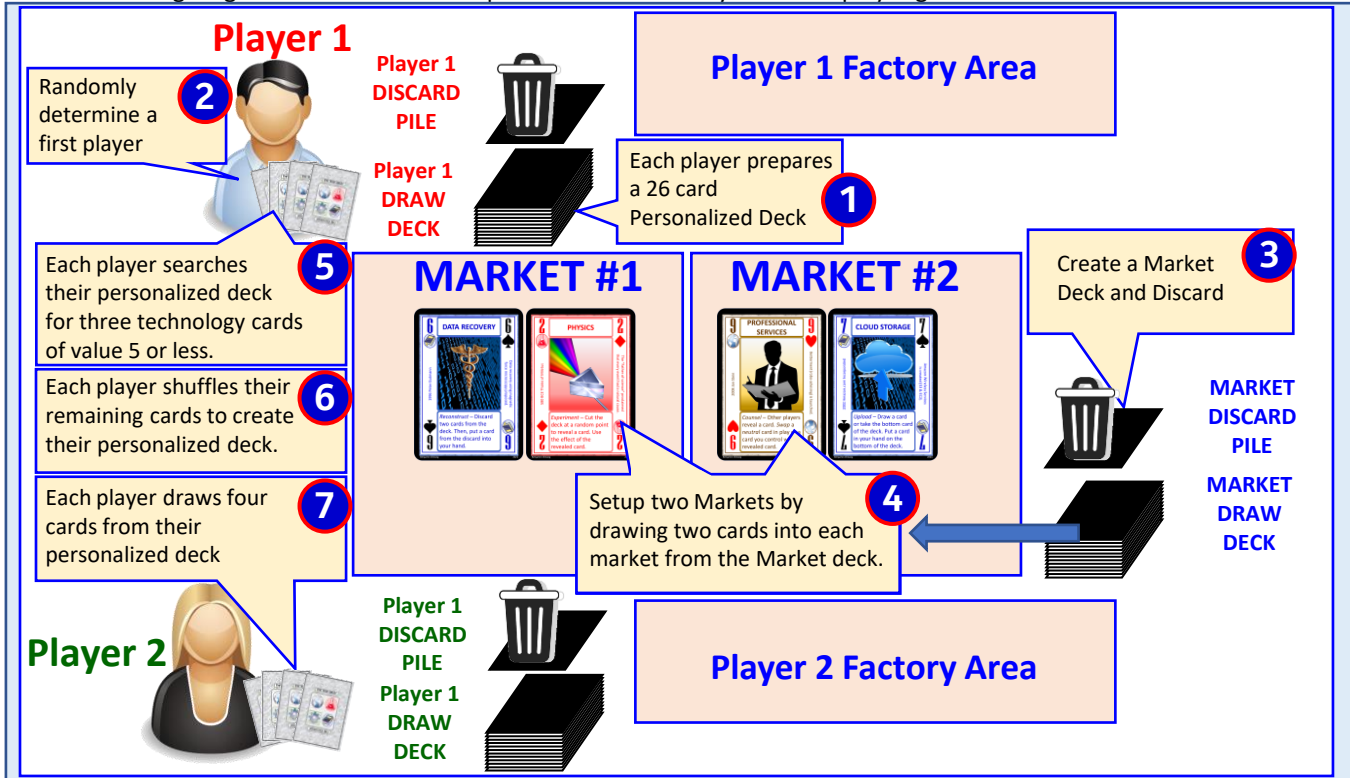
WINNING THE GAME – The first player to reach 7 victory points wins the game. If there is a tie, use the sum of the values of their market and factory cards as a tie-breaker. If they are still tied, they share the victory.

GEARS OF INDUSTRY GAME SETUP

- 1 PERSONALIZE DECKS** – Each player prepares a 26-card personalized deck using cards from a Tech Deck in the basic game and two Tech Decks in the advance game. Expel all Wild Cards. Each player selects 26 cards they would like to use for their personalized deck from their pool of Tech Deck cards. Card sleeves can be used to differentiate the cards owned by different players.
- 2 DETERMINE A FIRST PLAYER/TEAM** – If playing with 4 players, form two teams of two players. Randomly determine a first player/first team.
- 3 MARKET DECK & DISCARD** – Take the Tech Deck cards not being used by the players. Remove the Technology cards. In the basic game, randomly take 30-cards to form a communal Market deck. In the advanced game, each player contributes 15 cards towards a communal Market deck. Shuffle the Market deck.
- 4 SETUP TWO MARKETS** – There are two Markets in the play area shared by all players, you can use a mat or piece of paper to show the two markets. The markets each start with two cards drawn from the communal Market deck.
- 5 START WITH THREE TECHNOLOGY CARDS** – Each player may search their personalized deck for three Technology () cards of value 5 or less and adds it to their hand. Technology cards in this game are called *factory cards*.
- 6 DECK & DISCARD** – Each player shuffles the remaining cards of their personalized deck and places it their player area. Their personal discard pile is next to it. Game effects played from their deck that refer to deck & discard relate to their personalized deck & discard.
- 7 DEAL CARDS TO PLAYERS** – Each player draws four cards from their personalized deck.

GEARS OF INDUSTRY GAME SETUP

The following diagram illustrates the setup for Gears of Industry for a two-player game:




GEARS OF INDUSTRY – PHASES IN A ROUND

Each Round is composed of the following phases performed by the active player on their turn:

DRAW A CARD – Draw a card from the player's personalized deck. Skip this step on the first turn of the game.

PLAY FACTORY CARDS – Play one Technology domain () card from hand into their factory area in any orientation. These are called *factory cards*.


FACTORY CARDS – Vertically oriented factory cards (upright or upside-down) can boost a market (poker hand) during a market clash. Horizontal facing factory cards (right-facing or left facing cards) each produce 3-factory output, or they can be used to play a market card of that factory card's value. A factory card may not be used both as a market boost and to pay for a market card during the same turn. However, it may still be rotated more than once in a turn.

ENTER THE MARKET – Play up to two cards into one or both of the two markets. Only non-technology cards can enter a market. Play market cards that sum equal to or less than the active player's factory output. Factory points cannot be saved. Instead of producing factory points, a factory card can be used to play a market card matching the value of the factory () card. For example, a 12-technology can be used to play any 12-value card. Any factory cards used to pay for market cards must be rotated clockwise 90°. Other horizontal factory cards of the active player maybe rotated clockwise 90°. You can replace a market card if you have three cards in the market already.

USE A CARD EFFECT – Use a game effect on a Market card owned by the active player, or a neutral Market card. Effects such as Draw, Discard, Replace, or Search from a player's market card refers to the active player's personalized deck and discard. Likewise, game effects from a neutral Market card refer to the Market deck and Market discard.

MARKET CLASH – Wherever the active player has three cards in a market, that player may trigger a market clash:

(a) **POKER HANDS** – All players compete with the best poker hand using the cards they have in that market, the two neutral market cards, and one upright or upside-down factory card (market boost). Two different factory cards can participate in two different market clashes in a turn. The same factory card may not be used in two different clashes.

(b) **SCORING** – After evaluating poker hands, the winner scores 1 point for a hand of three-of-a-kind or less or 2 points () for hands better than a three-of-a-kind.

(c) **UPDATE MARKET** – The player to the left of the winner chooses to discard one of the winner's market cards and may discard a neutral market card in that market.

(d) **ROTATE CARDS** – All players may rotate any of their upright or upside-down factory cards clockwise 90° even if a market clash was not triggered by the active player that turn.

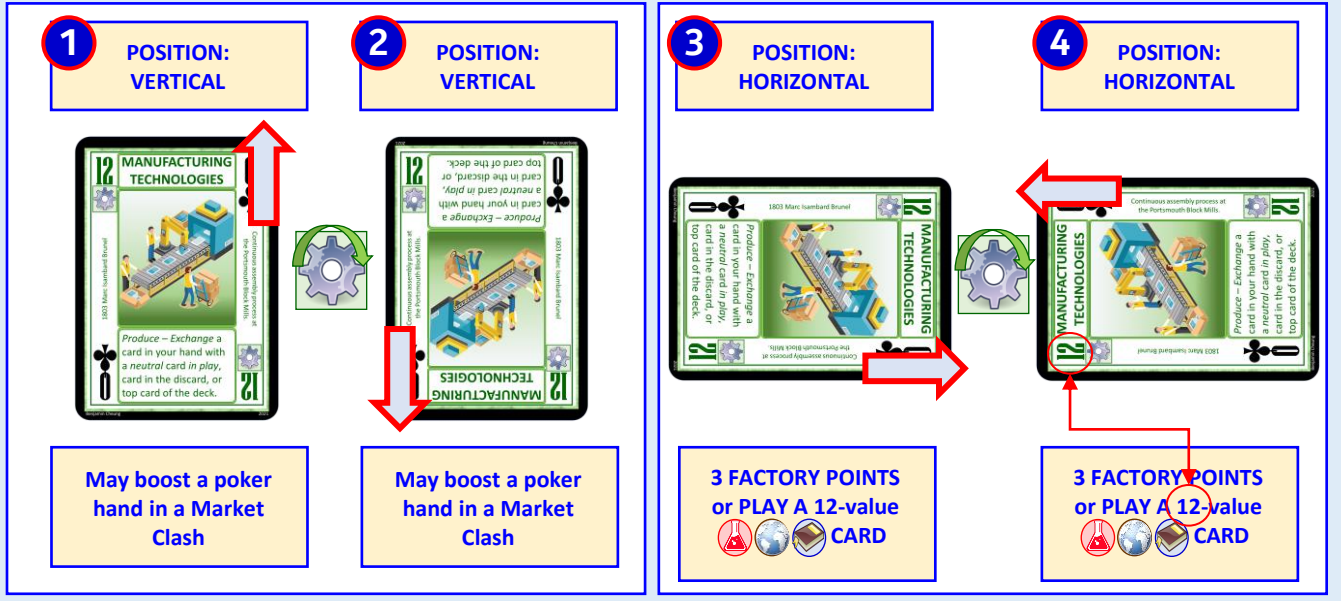
DISCARD DOWN TO SEVEN – The active player discards down to 7 cards in hand. Then play passes to the next player.

CLEAN UP PHASE and END OF GAME – If any player has reached 7 points, they win the game. If there is a tie, use the sum of the values of their market and factory cards as a tie-breaker. If they are still tied, they share the victory.

GEARS OF INDUSTRY FACTORY CARDS

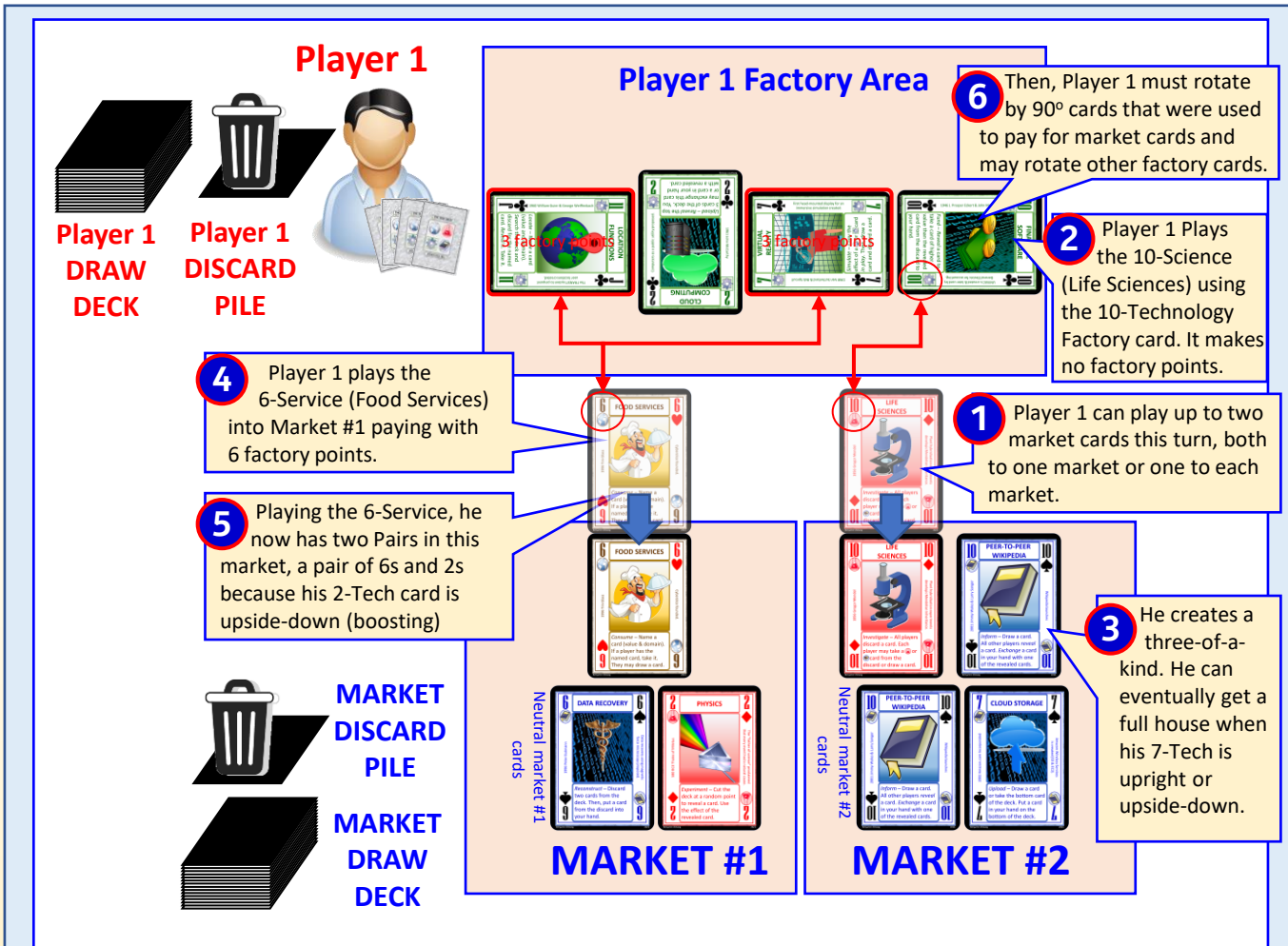
The following diagram illustrates how factory cards work

Factory Cards produce effects based on their orientation



PLAYING CARDS INTO THE MARKET (ENTER THE MARKET)

The following diagram illustrates an example of playing cards into the market (showing only Player 1)



ORDER RANK OF HANDS (POKER RANKS)

HIGH CARD

You have none of the other hands, the highest value card wins. Breaks ties by value, then suit. Use the domain (suit) ordering: Service (Highest), Tech, Science, Information (lowest)

PAIR

Two cards of the same kind, for example, two fives. Ties are first broken on value of the pair. Then, the highest value card(s) from the rest of the hand are used to break ties. Then use suit.

TWO PAIR

Two sets of two cards of the same value. For example, two sixes and two eights. The hand is completed with another (kicker) card. Ties are broken on value of the pairs, kicker then domain.

THREE OF A KIND

Three cards of the same value. For example, three sevens. The hand is completed with two other cards. Ties are broken on the value of the three matching cards.

STRAIGHT

A series of five cards in ascending numerical order. The cards can be of different domains (suits). For example, a five through nine. Ties are broken with the highest card in the straight.

FLUSH

Five cards that are all the same suit. The value on the cards are used to break ties. On a tie, the highest value card(s) win.

FULL HOUSE

A combination of a three of a kind with a pair. The full house hand that has the highest three of a kind card wins amongst other full houses.

FOUR OF A KIND

Four of the same value card. The hand is completed with another indifferent kicker card. Ties are broken on the value of the matching cards.

STRAIGHT FLUSH

Five consecutive cards that all share the same domain (suit). This is similar to a straight, but the cards share the same domain (suit).

ROYAL FLUSH

A straight flush with numerical values from 9 to 13.

	13 	7 	6 	5 	2 
	5 	5 	8 	3 	2 
	6 	6 	8 	8 	4 
	7 	7 	7 	2 	5 
	5 	6 	7 	8 	9 
	2 	5 	7 	10 	13 
	5 	5 	5 	12 	12 
	2 	2 	2 	2 	8 
	5 	6 	7 	8 	9 
	9 	10 	11 	12 	13 

USING A CARD EFFECT

USING CARD EFFECTS – Use the card effect of your Market card or a neutral Market card.

DECK RUNNING OUT OF CARDS – If the deck runs out of cards, or a player needs to reveal more cards than are in the deck, resolve as much as possible. Then, shuffle the discard into the deck and perform the rest of the effect. If there are still not enough cards in the deck to reveal the requested number of cards reveal as much as possible.

CORNER CASES – If a game effect has multiple effects, but any of them are unresolvable, do as much as possible. Each market has two *neutral* cards. Player market cards and factory cards are all *controlled* and *in play*. Game effects last until the end of the turn if not specified on the card. It is possible that a game card effect will be used again because of a copy effect. Whenever an effect causes “all players” to do something, the active player starts first. Then, the effect passes to the next player on the left.

EXAMPLE OF A MARKET CLASH

An example of resolving the Market Clash in a two-player game.

Player 1

Player 1 Factory Area

1 Factory cards that are upright or upside-down can boost player market cards. In this case Player 1's 2-Tech and Player 2's 2, 7 and 9 of Tech.



Market Boosting

4 Player 2 would win a clash in Market #2 but not in Market #1. Player 1 would trigger a market clash in Market #2 on his turn.

2 Player 1 has two pairs in Market #1: a pair of twos and a pair of sixes. He has a Three of a kind 10's in Market #2.

Player 1 market #1 card

Player 1 market #2 cards



3 Player 2 has a three of a kind 2's in Market #1. She has a three of a kind 9's in Market #2. Note: only either the 9 or 7 could enter Market #2 not both.

Neutral market #1 cards



MARKET #1



Neutral market #2 cards

MARKET #2

Player 2



Player 2 Factory Area

5 After winning a clash, Player 2 would choose one of Player 1's market cards to discard and may discard a neutral market card. Discarding cards (X).

GENERAL RULES

- RESHUFFLE** – To draw or reveal card(s) in a deck with not enough cards, shuffle the discard pile to form a new deck.
- LOOKING AT PILES** – Any player may look through the discard. This is public information.
- REVEALING** – To reveal card(s), expose the card(s) for all to see. Then, returned them preserving their order.
- EXPELING** – A card that is expelled is permanently removed from the game.
- EXCHANGING** – Exchanging two cards causes them to swap places with each other.
- REPLACE** – To replace a card, discard it and put the replacing card in its place.

TERMS & DEFINITIONS

- DISCARD** – Discarded cards go to the discard.
- DOMAIN** – One of the four suits in the game (information, technology, science, services).
- Domain symbols** – The four domain symbols are equivalent to suits.
- EXCHANGING** – Exchanging two cards causes two cards to swap places putting one where the other card was.
- PICK** – The act of selecting something. For example, a player or a card.
- SUIT** – A term used inter-changeably with domain. The traditional suits (club, heart, spade, diamond) are also printed on the cards in the Tech Deck to help you acclimate to domains.

FOR MORE INFORMATION

See the Boardgamegeek.com entry, Youtube.com (Walk-through videos), or visit cheung.interzone.com

CREDITS

Designer, Developer Benjamin Cheung
 Play Testers Sherman D. Cheung, Steven O. Chew, Clifton Field, Kenji B. Kaneshiro, Rich Kopacz, Eugene Ku, Vincent Mondaro, Lillian Mondaro, Pedro T. Ortiz, Henry K. Young


GEARS OF INDUSTRY

PERSONALIZED CARD GAME



GEARS OF INDUSTRY 1-PAGE RULES SUMMARY


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- 7 DEAL CARDS TO PLAYERS** – Each player draws four cards from their personalized deck.


GEARS OF INDUSTRY – STEPS IN A PLAYER'S TURN

The active player performs the following steps on their turn:

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PLAY FACTORY CARDS – Play one Technology domain () card from their hand into their factory area in any orientation. These are called *factory cards*.


FACTORY CARDS – Vertically oriented factory cards (upright or upside-down) can boost a market (poker hand) during a market clash. Horizontal facing factory cards (right-facing or left facing cards) each produce 3-factory output, or they can be used to play a market card of that factory card's value. A factory card may not be used both as a market boost and to pay for a market card during the same turn. However, it may still be rotated more than once in a turn.

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(c) **UPDATE MARKET** – The player to the left of the winner chooses to discard one of the winner's market cards into the winner's personal discard pile. Then, they may replace a neutral Market card in that market.

(d) **ROTATE CARDS** – All players may rotate any of their upright or upside-down factory cards clockwise 90° even if a market clash was not triggered by the active player that turn.

DISCARD DOWN TO SEVEN – The active player discards down to 7 cards in hand. Then play passes to the next player.

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GEARS OF INDUSTRY 1-PAGE RULES SUMMARY CONTINUED

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WINNING THE GAME – Play to 7 points.

ORDER RANK OF HANDS (POKER RANKS)

RANK ORDER OF POKER HANDS – Gears of Industry Market Clashes use poker hands in this order (low to high):

HIGH CARD – Lowest hand, none of the other hands. A market clash high card poker hand scores 1 victory point.

PAIR – Two cards of the same kind. Ties are broken by pair value then high card(s)/suit from the rest of the hand.

TWO PAIR – Two sets of two cards of the same value. Ties are broken on value of the pairs, kicker then domain.

THREE OF A KIND – Three cards of the same value. Ties are broken on the value of the three matching cards.

STRAIGHT – A series of five cards in ascending numerical order. The cards can be of different domains/suits. 2VP

FLUSH – Five cards that are all the same suit. The value on the cards are used to break ties. Scores 2 victory points.

FULL HOUSE – A combination of a three of a kind with a pair. Highest three of a kind card wins ties. Scores 2 VPs.

FOUR OF A KIND – Four of the same value card. The hand is completed with an indifferent kicker card. Score 2 VP.

STRAIGHT FLUSH – Five consecutive cards that all share the same domain/suit. Scores 2 victory points (VP).

ROYAL FLUSH – Highest hand. A straight flush with numerical values from 9 to 13. Scores 2 victory points (VP).

USING A CARD EFFECT

USING CARD EFFECTS – Use the card effect of your Market card or a neutral Market card.

DECK RUNNING OUT OF CARDS – If the deck runs out of cards, or a player needs to reveal more cards than are in the deck, resolve as much as possible. Then, shuffle the discard into the deck and perform the rest of the effect. If there are still not enough cards in the deck to reveal the requested number of cards reveal as much as possible.

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GENERAL RULES

RESHUFFLE – If a game effect requires you to draw or reveal card(s) and there are not enough cards in the deck to do so, shuffle the discard pile with what is left of the deck to form a new deck.

LOOKING AT PILES – Any player may look through the discard. This is public information.

REVEALING – To reveal card(s), expose the card(s) for all to see. Then, the cards are returned from where they came, preserving the order that they had. A player who looks at a card *may* choose to divulge the information.

EXPELING – A card that is expelled is permanently removed from the game.

EXCHANGING – Exchanging two cards causes them to swap places with each other. For example, exchanging from the top of the deck with a card in hand causes the top card of the deck to change places with a card from hand.

REPLACE – To replace a card, discard it and put the replacing card in its place.

FOR MORE INFORMATION

Visit my homepage cheung.interzone.com, Boardgamegeek.com or my Youtube.com channel for rules, watch intro and play guide videos. Explore other Tech Deck Games: Tech Grid Poker, Tech City, Tech Exchange, Tech Chess.



CREDITS

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