

STABILITY™

An ITSM training game of agile incident, problem, and change management

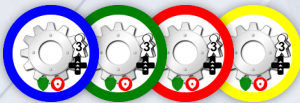
by Nigel Hopkins

STABILITY is a euro-style business simulation game set in the challenging world of IT service delivery and improvement. The gameplay progresses in a series of sprints. At the end of a sprint there may be additional disruption brought about by life-cycling of one of the supporting technical platforms.

Each team is managing their own service as well as working on other, jointly maintained services, leading to a semi-cooperative approach in the game-play. The players must develop new releases, address user concerns, resolve any incidents and create increasing stability to generate business value. Furthermore, they must be ready to cope with platform life-cycling.

WHAT'S IN THE BOX?

4 action markers
(1 per player colour)



40 Player Discs
(10 per player colour)



20 Resources
(5 per player colour)



1 Progress tracker



6 Instability trackers



20 incident markers



12 Backlog markers
(3 per player colour)



28 Stability markers
(7 per player colour)



28 Knowledge markers
(7 per player colour)



8 Release markers



14 Customer improvement markers



6 Platform LCM tiles



Main board



4 dice



4 Managed service mats

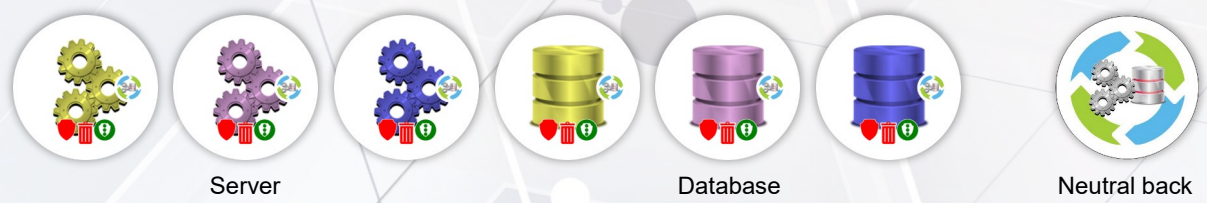
STABILITY

The Tiles and Markers

Platform LCM tiles

There are six platform LCM (life-cycle management) tiles representing the infrastructure platforms that underpin the services. There is a server and database in each of 3 colours, yellow, purple, and blue. Each service is delivered through a system built on four platforms.

Over the course of the game, these platforms are life-cycled according to the current platform tile. Each tile has a neutral back to keep the platform secret until it is revealed.



Incident markers

The incident markers have one side that indicates a major incident with the other indicating a minor incident. To the left and right of the markers are resource icons. The one on the left indicates that 2 resources are used to resolve. The one on the right indicates that an additional resource can be spent to add knowledge in the current node by updating the wiki. The icon at the bottom of the marker indicates that once

the incident is resolved, it is removed from the board and placed back in the general supply.



Customer improvement marker

The customer improvement markers represent an urgent change requested by the customer and is placed on a determined node.

Customer improvement request phase

On a shared service, any marker still in play is removed and returned to the supply.

New improvement requests are then added from those on the player mat, taking the lefty-most available marker.

To the right of the marker is a resource icon indicating that 3 resources are needed to implement the change. When implemented, the amount of instability on the corresponding technical platform is increased, if not already at its maximum. Also, stability is increased at the associated node on the player's board, unless already having 2 stability.

Scoring phase

The player mat will show any penalty points that need to be scored.



Backlog markers

There are 3 backlog markers in each player colour. The markers are placed on the player board with the condition side showing (as shown below left). The condition is met once the number of knowledge markers in the player's colour, meets or exceed that shown on the backlog marker. Once the condition is met, the marker is flipped

revealing the active side (as shown below right). To the right of the active side is the resource icon indicating that it costs 1 resource to implement the backlog improvement. Once completed, the backlog marker is removed from the board, revealing the business value gained from the improvement. This is scored in subsequent scoring phases.

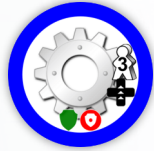


Action markers

Each player has one, two-sided action marker. This represents two actions that the player can take to improve their stability; Root cause analysis and improvement (change).



Root cause analysis



Improvement

When a player elects to take either of these actions, the marker is placed at the corresponding node; above the node for Root cause analysis, and below the node for Improvement.

NOTE: A marker can only be placed on an empty space.

Knowledge markers

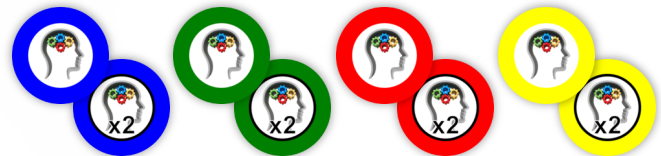
Knowledge markers represent updates to the wiki corresponding to each node in the system. Knowledge can be added when an incident is resolved at the node or by conferring with the guilds to gain insight.

The initial knowledge is added showing the single knowledge side. Later this may be increased to the double knowledge side.

If a node, corresponding to a platform that is being life-cycled, has double knowledge, it is reduced to a single

knowledge.

When a root cause analysis is performed at a node, the knowledge is reduced by 1.



Stability markers

Each player has 7 stability markers which are available to be placed on a node where the stability has been improved.

The stability markers are double sided with one side representing a single stability and the other representing double stability.

Each node has a space for the knowledge markers and the stability marker, above and below the node icon.

Any one node cannot have more than 2 stability. Stability is gained through completing system improvement activities. It is lost when the corresponding technical platform is life-cycled or when a new release is deployed with insufficient testing.

If, on a shared service, a player increases the stability at a node with another player's stability marker already present, they replace the marker with one of their own, with the double stability side showing.

If stability is lost at a node with a stability marker it is either moved from double to single stability (flipped) or removed from the board, if it was initially a single stability.

A loss of stability where none exists will generate an incident at the node.



Release markers

Each player has two release levels to which they can further develop their systems. At the start of the game, these release levels are each covered with a release marker.



Once the development has been completed sufficiently to allow release, the release marker can be removed during a scheduled service release phase



Mats and boards

Managed service mats

Each player has one or two (in a 2-player game) managed service mats.

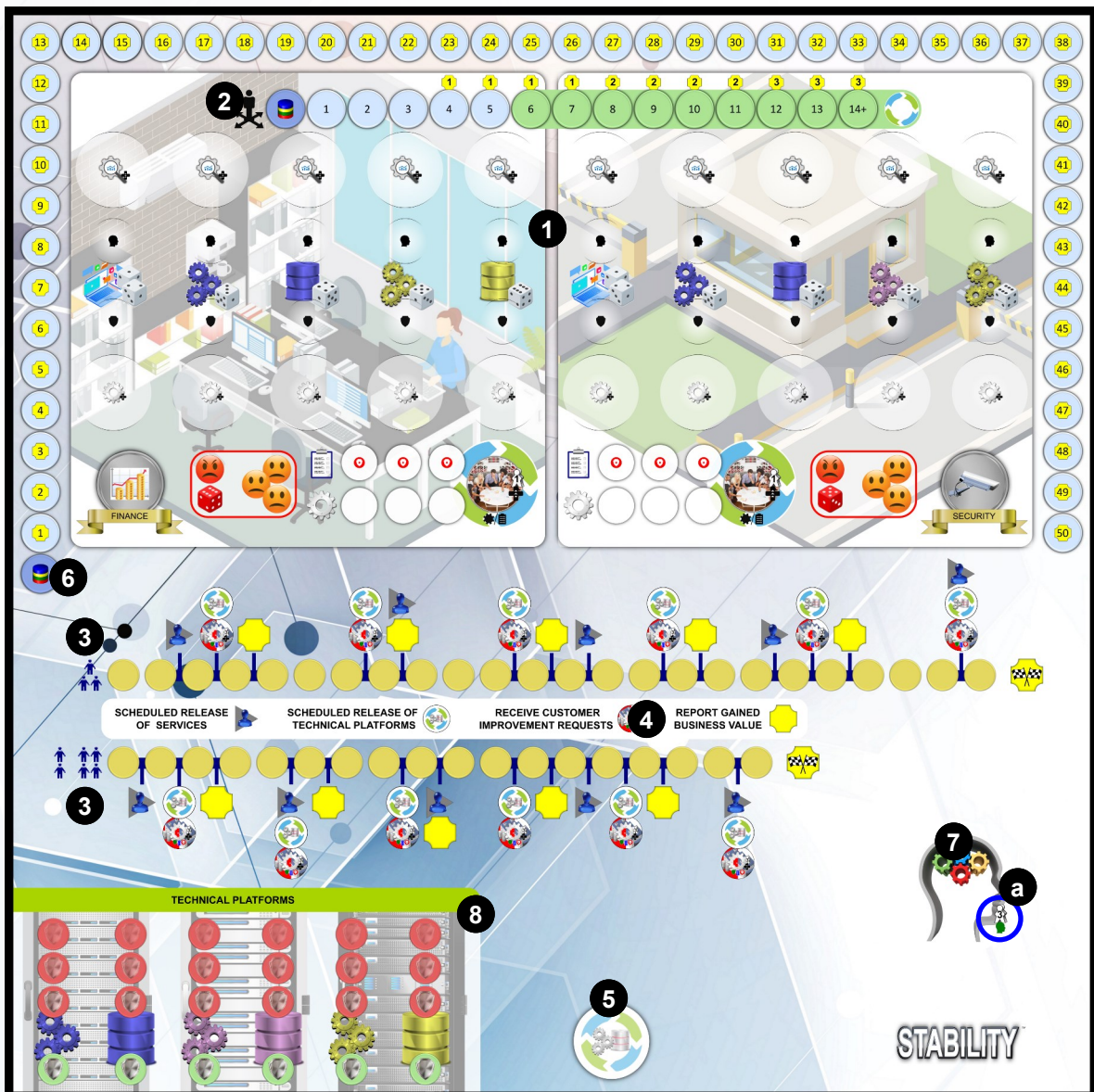
1. Name of service and its associated image.
2. The Service information panel is on the customer area of the mat. The left side shows the dice roll which, if equalled or exceeded, will result in a major incident. Any major incident must be immediately resolved. The number of minor incidents shown on the right, indicates the maximum number allowed on the service, any more must be urgently resolved. Unused incident markers are kept to the right of the service information panel (2a). Also part of the customer area is the location for unused customer improvement markers (2b)
3. Each service is supported by a system comprising of an application and four technical platforms, represented by an icon, referred to as nodes. The nodes are associated with values on a white dice with 1 and 2 indicating the application and 3-6 indicating the supporting technical platforms.
4. Above each node's icon is a spot for knowledge that can be created and extended during the game. Unused knowledge markers are kept to the right of the mat (4a)
5. Below each node's icon is a spot for the stability marker to represent the level of stability at the node.
6. Any incidents, or Root cause analysis action markers, are placed in the space immediately above the knowledge marker positions.
7. Player and customer improvements are placed immediately below the stability marker positions.
8. Along the bottom are backlog items that are revealed during the game as you gain knowledge about your system. These locations start off covered by a marker which, once implemented and removed, reveals the business value gained.
9. The system starts off at release level I and through the game you have the chance to bring that up to release level II and then to III. To the bottom left are two tracks showing your development (lower) and testing (upper) progress. The two spots to the right are initially covered and only revealed once a release is implemented, earning the associated business value.
10. Bottom left is the position for the resources. Initially only 4 resources are placed her with a fifth being released once 5 or more knowledge has been gained (10a)
11. When not in use, the action marker is stored to the left of the resources (11)



Centre board

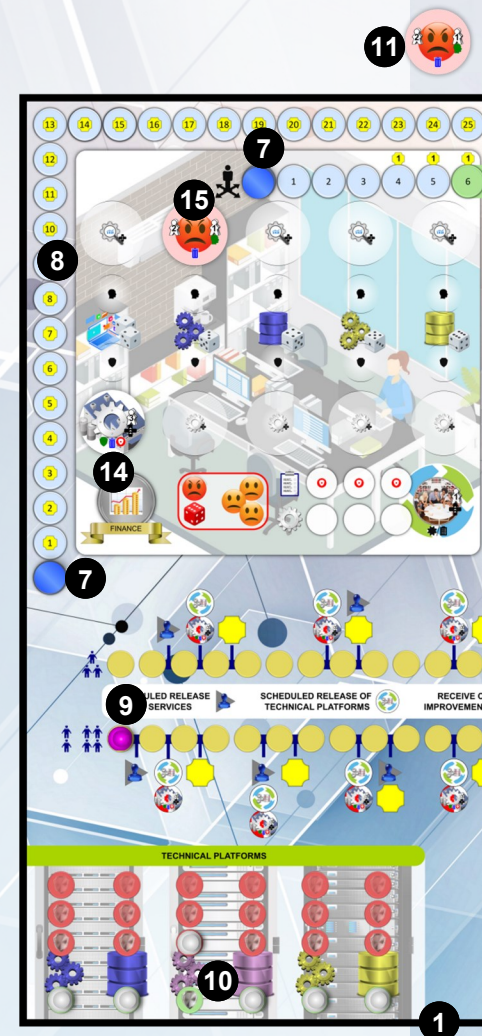
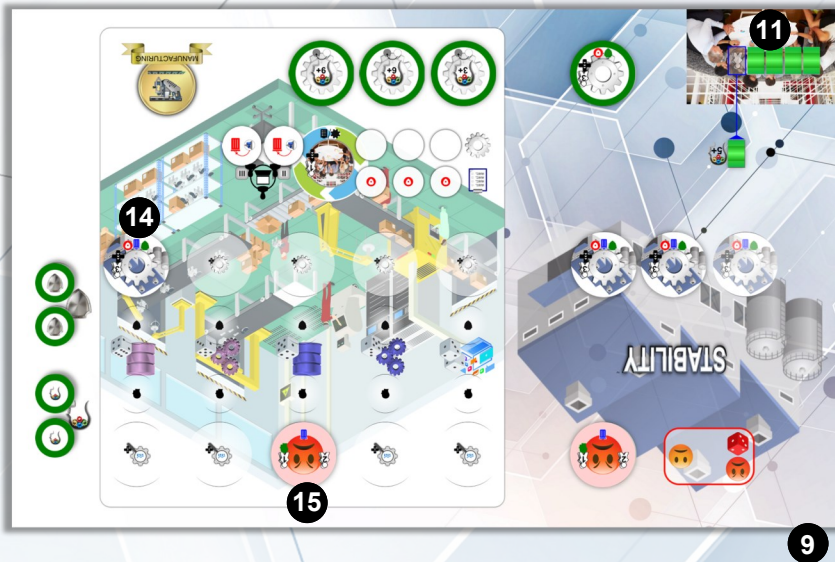
The centre board contains the shared services and is used to track various aspects of the game.

1. The top of the board contains the two shared services which are managed jointly by all players. These services are similar to the players' services except for two differences; there are no backlog items, and development is only tracked in terms of player contribution (no releases).
2. Overlaying the two shared services is the influence track. From the sixth position onwards the green spots indicate that any player in this region can start to contribute to the development and testing of the shared services.
3. There are two alternative sprint tracks. The upper track is used for a 3-player game and the lower track for a 2- or 4-player game.
4. The tracks have a number of icons indicated various phases performed between the sprints. These are defined in the section between the game tracks.
5. Bottom centre of the board is the position for the six platform LCM tiles.
6. Business value generated by each player is tracked around the top half of the board.
7. In the bottom right quadrant of the board is the knowledge area, where players can improve their knowledge about their system. Three resources will earn a knowledge marker (a).
8. The bottom left section of the board contains the technical platforms and is used to track the degree of instability in each platform.



SETTING UP

1. The main board is placed in the centre of the game space with easy access to all player.
2. Each player selects a managed service and places the corresponding board within easy reach:
3. Each player chooses a colour and places the following associated game pieces next to their board:
 - a. 8 discs
 - b. 4 resources
 - c. 1 additional resource
 - d. 7 knowledge markers
 - e. 7 stability markers
4. Each player places their Backlog markers on the spaces at the bottom of their mat with the "3+" on the left "6+" in the centre and "9+" on the right.
5. Each player places a release tile over each of the two service release positions as shown.
6. Each player places two customer change markers onto their mat in the centre and right slot.
7. The remaining player discs are placed at the start of the business value track and the influence track - one disc per player to form a stack at each location.
8. Find the purple server platform LCM tile and set aside. From the remaining 5 tiles, select one at random, this will be the first platform to life-cycle. Take the remaining four tiles and recombine the purple server tile and shuffle. Form a face-down stack and place on the board, at the position shown, with the final tile (the first platform to life-cycle) placed face up on top of the stack.



9. The progress tracker is placed at the beginning of the sprint track corresponding to the number of players (either 2/4, or 3).
10. Place an instability tracker in the stable spot (green) position of each of the technical platforms. Place the stability marker for the purple server technical platform to the first level of instability (as shown).
11. The incident markers, for the shared services, are placed next to the main board to form a general supply.
12. The customer change markers, for the shared services, are placed in a supply next to the centre board.
13. The four dice are placed in reach of all players.
14. **Place initial customer change requests:** For each of the services (shared and managed) roll the white dice and place a customer change marker on the

corresponding node. Place it so that the side with the white background is up.

15. **Place starting incidents:** At the start, each service has suffered some disruption and has incidents that require attention.

16. For each of the 6 services, roll the white and red dice. The white dice indicates which node is affected by the disruption (A). The red dice indicates the severity of the generated incident. If the value is the same or more than the value shown on the service information panel (B) you must place a major incident marker on the previously determined node. Otherwise place a minor incident marker.

For example, on the Warehousing service below, a roll of 3 or more would generate a major incident and a 2 was rolled. The white dice roll of 3 identifies the purple server as the affected node.

NOTE: in a 2-player game, each player manages 2 services with two sets of pieces.



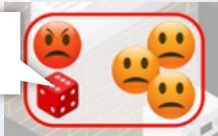
SEQUENCE OF PLAY

Start of sprint - Preparation

Check for incidents: For each service, including the shared services, compare the total instability of the technical platforms supporting the service with the total stability of the service. If the instability is **greater than** the stability there will be disruption resulting in an incident. Determine the location of the incident by rolling the white dice and referring to the nodes on the board. If there is already an incident at the node it must be set as major.

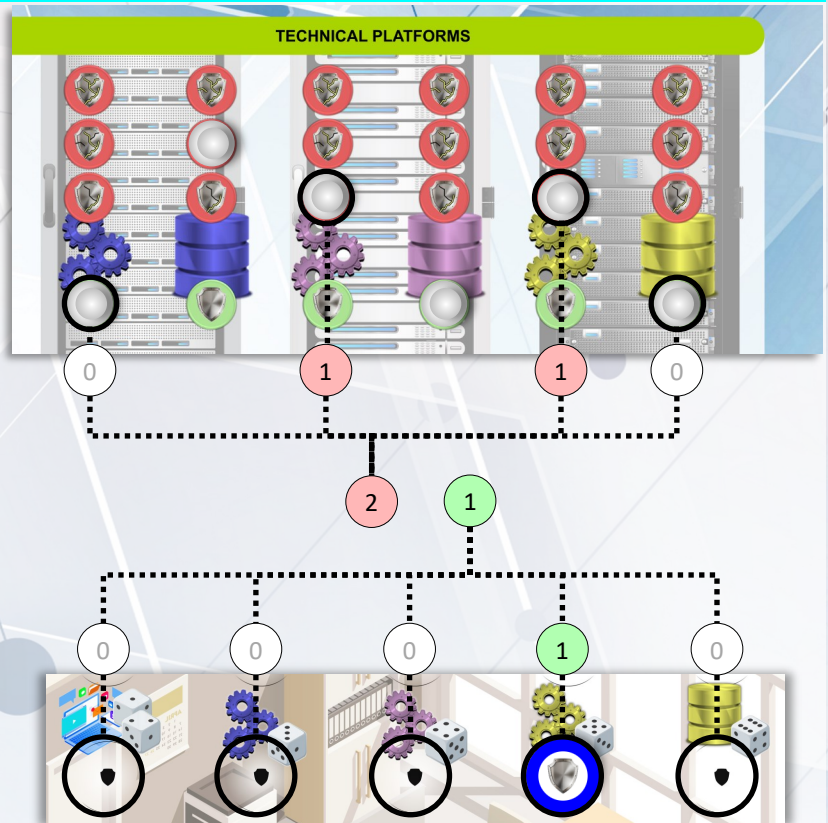
If a new incident is to be added, roll a red dice. This indicates the severity of the generated incident. If the value is the same or more than the value shown on the service information panel you must place a major incident marker on the previously determined node. Otherwise place a minor incident marker.

Here a roll of 6 or more will generate a major incident



NOTE: at the start of the game, the instability of the technical platforms is greater than the stability of the services and so incidents are created on all services.

In this example, the total instability of the technical platforms supporting the service is 2. The total stability of the service is 1. Therefore, an incident needs to be added.



Plan sprint

Each player has 4 resources available to plan if they have placed fewer than 5 knowledge on their managed service board, otherwise they have 5 resources.

All players plan the current sprint with their available

resources at the same time. There may well be discussion and negotiation between the players whilst the planning is under way. Once the planned resources are set, the players' influence is adjusted as needed (see page 10).

Perform actions

The actions are performed in player business value order. The player with the highest business value and lowest in the stack (if more than one has the same value) goes first. The order progresses from bottom of

stack to top and from highest business value to lowest. When an action is completed, the resources are returned to the corresponding player's supply.

End of sprint - Release

There are 5 release phases over the course of the game. Complete any release phase first.



When a release phase is reached, and after all activities have been completed for the sprint, At the discretion of the owning player, release markers are removed where sufficient development has been done, revealing the business value available in the next score phase.

Releasing without full testing:

Instability may be increased for every step not tested. For each untested step in your release, roll a white dice to see whether a technical platform is affected. No technical platform is affected on a roll of 1 or 2, otherwise the technical platform corresponding to the rolled node is affected, as per the platforms supporting the player's managed service. Increase the instability of the associated technical platform for each dice roll. If the platform's instability is already at maximum, no impact is felt.

Recover discs:

The release is completed by removing the release marker to reveal the bonus. Finally, all discs used in the release are returned to the players' supplies.

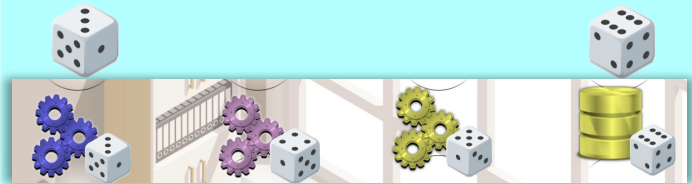
In this example, Helen, the blue player managing the Administration system, goes into the release phase with 4 development steps (1). This means that only one testing step has been performed and that releasing at this stage will mean up to two platforms may suffer



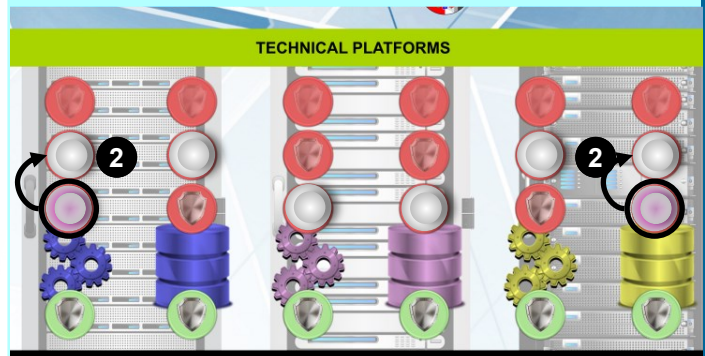
increased instability.

Helen decides to go ahead with the release and test for any resulting instability, so that she can gain the business value in the subsequent scoring phases. She rolls two white dice to determine which, if any,

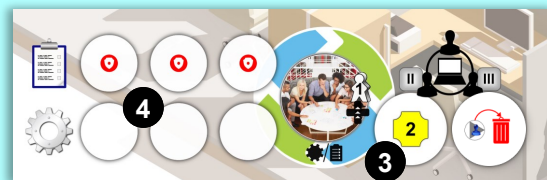
platforms are impacted and gets a 3 and 6. This means that both the blue server and yellow database platforms will have to increase their instability.



Both of these platforms increase their instability (2).



She removes the first of her release markers (3), revealing that she will receive an additional 2 business value points in all future scoring phases. Finally she recovers her four discs (4).



If Helen had been managing the Logistics service, instead of Administration, she would have revealed an influence icon instead of a business value (8). In this case, she would have received an extra influence at each future scoring phase.

End of sprint - Life-cycle technical platform

There are 6 life-cycling phases over the course of the game.



When a life-cycle phase is reached, and after any release activities have been completed, the life-cycling activity is performed. The platform tile on the top of the stack indicates which platform is to be life-cycled.

🛑 Losing stability:

All services (managed and shared), having the featured platform, lose stability at the corresponding node. The stability is reduced or removed at that node. This only affects stability that has been created by the player so if there is no stability there is no impact.

🧠 Losing knowledge:

If there are 2 knowledge at an affected node, the knowledge is reduced to 1 by flipping the marker.

🔧 Resetting the technical platform:

On the main board, the life-cycled technical platform has all its instability removed and the marker placed in the stable slot below the platform icon.

Next platform:

The current platform tile is removed and the next one is revealed. If there are no more platform tiles to reveal, nothing is done, you are nearing the end of the game.

End of sprint - Customer change request

There are 6 customer change request phases over the course of the game.

Recover customer change requests: Any customer change markers on the shared services are collected and returned to the supply

Refresh customer change markers: For each of the services (shared and managed) roll the white dice and place the left-most customer change marker from your supply, onto the corresponding node. Place it so that the side with the white background is up.

If there is already a customer change marker at the node, no further action is taken.



End of sprint - Score

There are 6 scoring phases over the course of the game with the last one being at the very end of the game.



When a scoring phase is reached, and after all other activities have been completed for the sprint, scoring is performed with the results being added and removed from the business value track and the influence track.

Influence:

Receive one influence, if applicable, for the initial release of the Logistics service. Take influence before business value.

Business value:

Take bonus points, including those for development (releases and backlog items), and customer changes. Lose penalties incurred by missed customer changes.

In this example, since two customer improvement request have been placed out, there is a penalty of -1 business value unit



End of sprint - Housekeeping

Skip if already at the end of the sprint track and go straight to **End of game**

Backlog items: If a player has reached or exceeded the amount of knowledge shown on the back of a backlog item, the corresponding marker is flipped and the backlog item is available for development.

Additional player resource: If a player reaches or exceeds 5 knowledge, they permanently receive their fifth resource from the supply.

Sprint track: Advance one step along the sprint track.

End of game

At the end of the game each player calculates their final score from the following:

After the final scoring phase, each player earns an additional business value point for each development action they have undertaken in support of the shared services.

The player with the most total knowledge scores 3 business value points, with 1 point per player if tied.

The player with the most total stability in the shared services scores 3 business value points, with 1 point per player if tied.

For their managed service, each player calculates the difference between the instability on the technical platforms and the stability on their service. This is taken

as business value points. The points will be positive if the service stability is more than the instability of its technical platforms. The points will be negative if the service stability is less than the instability of its technical platforms. Where the instability and stability are the same, no points are received.

In a 2-player game, each player colour is scored separately and the average is determined (rounded down)

Any tie is awarded to the player with the greater influence

Gaining and spending Influence

Players move up and down the influence track as they gain or spend influence. At, and above, 6 influence points, a player receives an extra action option to help develop one of the shared services.

From 4 onwards, players earn business value during scoring phases.

Where a single player provides sufficient resources to accomplish an action on a shared service, that player receives an influence. Actions on shared services with more than one player contributing the resources does not generate influence



Where a player donates a resource to another player for use on their own service, the receiving player trades one of their influences with the donating player.


A player is not allowed to use the bonus shared service development action if they subsequently fall below 6 influence during the course of the current turn.

ACTIONS

SOLVE INCIDENT (2 resources)


This action is mandatory, either for a major incident or where there are more minor incidents than are permitted by the service.

Planning phase

 Place two resources onto the incident tile.

Action phase

Recover your resources.


 Remove the incident marker, returning it to the supply.



ADD KNOWLEDGE (1 resource)


Whilst solving an incident, you have an opportunity to document the knowledge you have gained. This action is an extension to the Solve incident action (shown above) and must be planned at the same time and by the same player.

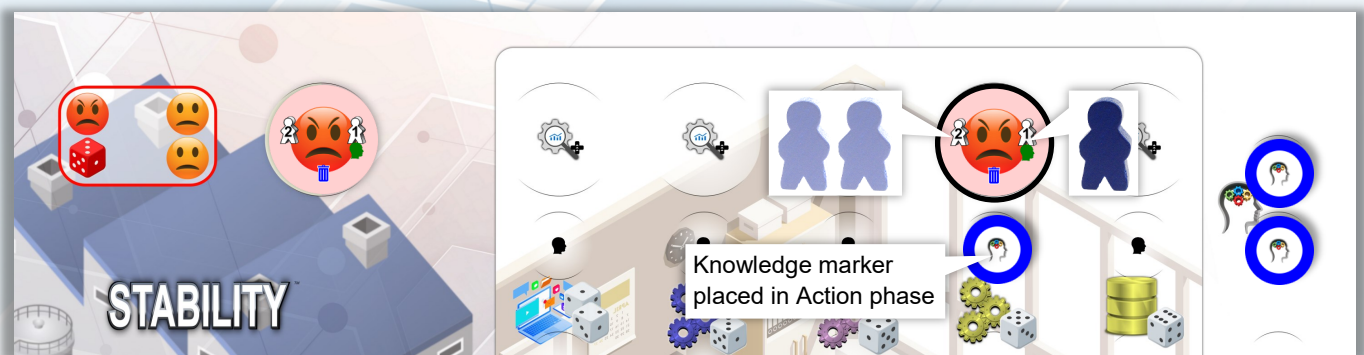
Planning phase

 Place an additional resource onto the incident tile, along with the two already placed to solve the incident.

Action phase

In parallel with the solve incident above, recover your resource.

 A knowledge marker is added at the affected node. If there is already a knowledge marker in place, it is



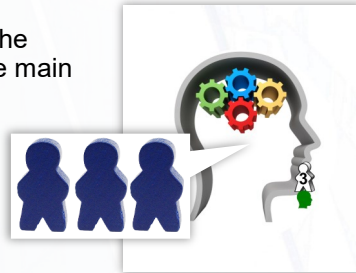
GAIN INSIGHT (3 resources)

By spending time reviewing information about your system and discussing with the engineers, insight can be gained that will allow you to increase the knowledge on your service.

Planning phase



Place 3 resources on the Knowledge area on the main board



Action phase

Recover your resources.

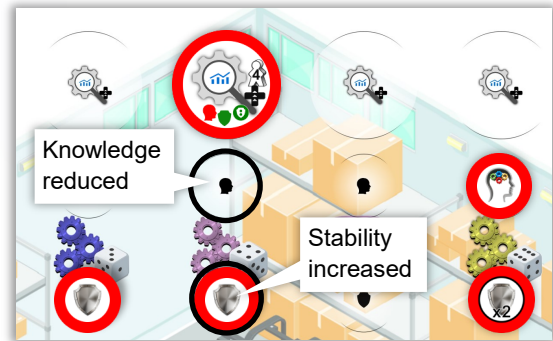


Increase your knowledge in the selected platform

ROOT CAUSE ANALYSIS (4 resources)

Root cause analysis can be performed for any node with knowledge and no active incident.

Root cause analysis increases the stability of the chosen node and also reduces the instability in the associated technical platform.



Planning phase



Place the Action marker, with the Root cause analysis face up, at the chosen node. In this example, the purple server node has been chosen. Note, there must be knowledge at the chosen node.

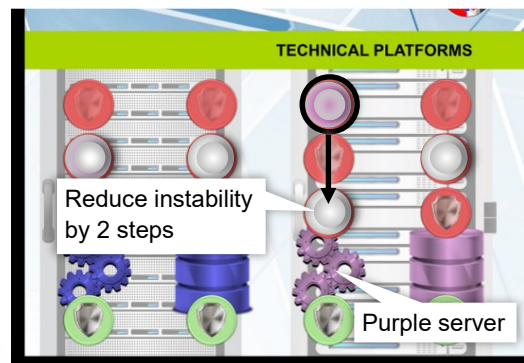
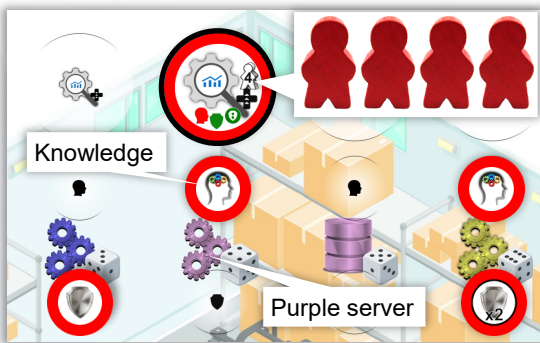
If you have improved your application node, roll a white dice to see whether a technical platform is affected. No technical platform is affected on a roll of 1 or 2, otherwise the technical platform corresponding to the rolled node is affected.



Place 4 resources onto the action marker.

Reduce the instability of the associated technical platform by up to 2 steps.

Recover your resources and action marker.



Action phase

Reduce the knowledge at the node by 1. If the current knowledge is 2 then flip the knowledge marker, otherwise remove the knowledge marker.

Increase the stability at the node by 1 either by adding a stability marker or, if one is already present, flipping it to the "x2" side.

IMPROVE (3 resources)

Improve system is available in any node where there is no incident.

Improve system generates stability for your service, however, in your eagerness to improve, you also create instability in the corresponding technical platform. Improvements may be done in response to a customer change request.

Planning phase



If improving independent of a customer change request, place your action marker with the improvement face up, at the node you intend to improve.



Place 3 resources onto the action marker. Alternatively, place 3 resources onto a customer change request.

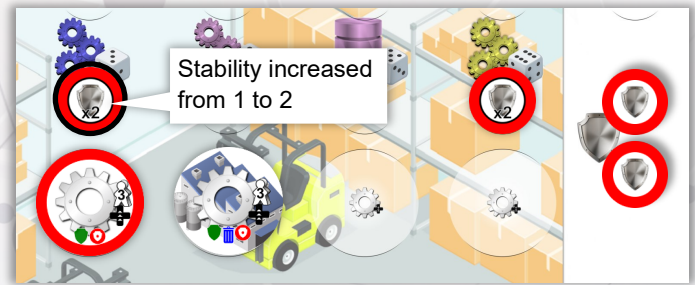


Action phase

Increase the stability at the node by 1 either by adding a stability marker or, if one is already present, flipping it to the "x2" side.

In our example the existing stability marker would be flipped.

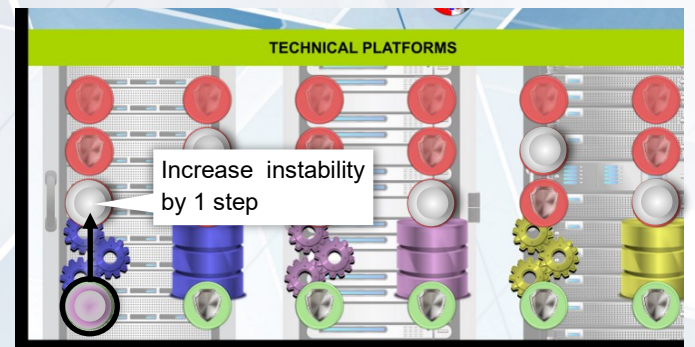
If you have performed the action at your application node, roll a white dice to see whether a technical platform is affected. No technical platform is affected on a roll of 1 or 2, otherwise the technical platform corresponding to the rolled node is affected.



The instability for the affected technical platform (on the main board) is increased one step.

In the example below, the instability tracker on the blue server is moved from the 0 position to 1.

Recover your resources and action marker, or customer change request.



DEVELOP - Backlog items (1 resource)

Backlog items are revealed over the course of the game, as a player's knowledge improves with the first one being reveal once you have 3 or more knowledge (1).



Planning phase

Place a resource onto the backlog item



Action phase

Recover your resource

Remove the backlog item, revealing the business value which you will received in future scoring phases.

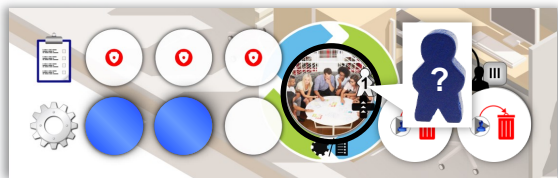


DEVELOP - New release (1 resource per step)

New releases take a number of steps to complete. When developing towards a release, each development step is registered by placing a disc onto the next available space. Complete the lower development row first and then the upper testing row. Once the development row is completed you can choose to release at the next release phase. Each testing step reduces the instability. So, all three testing steps must be completed to avoid instability.

Planning phase

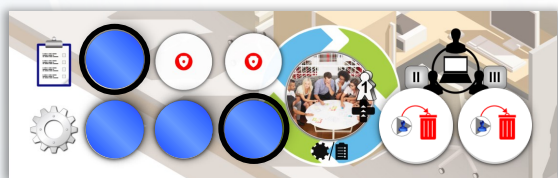
Place your development resources onto the development area. You can choose to place as many as you wish in one turn.



Action phase

For each resource, place one disc onto the next available space. So, if you placed 2 resources, you will place 2 discs.

Recover your resources.



End of sprint - Release

Account for any instability caused due to a lack of testing (2 in our example). Refer to page 8 for more information on increasing instability.



Remove the next release marker, revealing the business value which you will received in future scoring phases.

Recover your discs.



NOTE:

No development steps are performed on a managed service once both releases have been performed.

Developing a shared service

For a shared service, there is no release, only development steps. You need to have 6 or more influence to develop a shared service. Many players can develop the same service, using their own discs to indicate their contribution.

ICON KEY



Required resources:

1-4 resources

Affecting a node on your service board:



Gain Stability



Lose Stability



Gain Knowledge



Lose knowledge

Affecting one of the technical platforms:



Increase instability by 1 step



Reduce instability by up to 2 steps



Reduce instability by up to 3 steps

Affecting a marker or tile



Remove from play



Return to the supply