CLAIMS:

1. An apparatus for an amusement park, comprising:

   a bogie system configured to move along a ride path;

   a platform coupled to the bogie system, wherein the platform is configured to rotate about a guide axis with respect to the bogie system;

   a plurality of seats coupled to a surface of the platform and configured to rotate about the guide axis with the platform;

   a sensor configured to detect a position of a seat of the plurality of seats with respect to the platform; and

   a controller configured to control rotation of the platform based on the position of the seat of the plurality of seats.

2. The apparatus of claim 1, wherein the platform comprises a slot, and wherein the seat of the plurality of seats is configured to move along the slot with respect to the platform.

3. The apparatus of claim 1, wherein the seat of the plurality of seats is rotatably coupled to the platform.

4. The apparatus of claim 1, wherein the sensor is configured to detect a position of the platform with respect to the ride path, and wherein the controller is configured to receive feedback indicative of the position of the platform from the sensor.

5. The apparatus of claim 4, wherein the controller is configured to control the rotation of the platform about the guide axis based on the feedback from the sensor.

6. The apparatus of claim 1, wherein the seat of the plurality of seats is coupled to the platform via a gimbal system.

7. The apparatus of claim 6, wherein the gimbal system is configured to maintain a position of the seat of the plurality of seats with respect to the ride path.

8. The apparatus of claim 1, comprising:

an interactive component configured to be handled by a guest positioned the seat of the plurality of seats; and

a target positioned along the ride path and configured to be activated by the interactive component, wherein the controller is configured to:

receive feedback from the interactive component, the target, or both upon activation of the interactive component; and

control the rotation of the platform about the guide axis based on the feedback.

9. The apparatus of claim 1, wherein the platform comprises a plurality of slots, and wherein each seat of the plurality of seats is configured to move along a respective slot of the plurality of slots.

10. The apparatus of claim 9, wherein each seat of the plurality of seats is configured to move along the respective slot independent from other seats of the plurality of seats.

11. A system, comprising:

a bogie system configured to direct motion along a ride path;

a platform coupled to the bogie system, wherein the platform is configured to rotate about a guide axis with respect to the bogie system;

a plurality of seats coupled to a surface of the platform and configured to rotate about the guide axis with the platform;

a first actuator configured to rotate the platform about the guide axis;

a second actuator configured to rotate the platform about a tilt axis, wherein the tilt axis is oriented crosswise to the guide axis;

a sensor configured to determine a position of a seat of the plurality of seats with respect to the platform; and

a controller configured to control the first actuator, the second actuator, or both, based on the position of the seat of the plurality of seats with respect to the platform.

12. The system of claim 11, wherein the first actuator comprises a gear assembly driven by a motor.

13. The system of claim 11, wherein the second actuator comprises a pivot assembly having a pivot structure and a plurality of telescoping actuators coupled to the pivot structure.

14. The system of claim 11, wherein the controller is configured to control the first actuator and the second actuator based on a position of the platform with respect to the ride path.

15. The system of claim 11, wherein the seat of the plurality of seats is rotatably coupled to the platform.

16. The system of claim 11, wherein the platform comprises a third actuator configured to move the seat of the plurality of seats away from the platform, toward the platform, or both.

17. The system of claim 16, wherein the seat of the plurality of seats comprises a base having a telescoping segment coupled to the third actuator that enables the seat of the plurality of seats to move away from the platform, toward the platform, or both.

18. A system for an amusement park, comprising:

a track defining a ride path;

a bogie system coupled to the track, wherein the bogie system is configured to direct motion along the ride path;

a platform coupled to the bogie system, wherein the platform is configured to rotate about a guide axis with respect to the bogie system;

a first seat coupled to a surface of the platform and configured to rotate about the guide axis with the platform;

a second seat coupled to the surface of the platform and configured to rotate about the guide axis with the platform;

a sensor configured to determine a first position of the first seat, a second position of the second seat, or both with respect to the platform; and

a controller configured to control rotation of the platform based on the first position of the first seat, the second position of the second seat, or both.

19. The system of claim 18, wherein the track comprises a dead end, and wherein the bogie system is configured to move toward the dead end in a first direction and away from the dead end in a second direction, opposite the first direction.

20. The system of claim 19, wherein the platform is configured to rotate approximately 180 degrees with respect to the bogie system upon reaching the dead end.

21. A ride system for an amusement park, comprising:

a platform of the ride system configured to rotate about a guide axis along a direction of travel of the platform;

a motion system configured to drive movement of the platform;

one or more seats coupled to the platform, wherein the one or more seats are configured to move with the platform and relative to the platform;

at least one sensor configured to detect a position of at least one seat of the one or more seats and provide data indicative of the position; and

a controller configured to receive the data indicative of the position and control the motion system to rotate the platform about the guide axis based on the data indicative of the position.

22. The ride system of claim 21, wherein the one or more seats comprise a plurality of seats and wherein a first seat of the plurality of seats is configured to translate along the platform relative to a second seat of the plurality of seats.

23. The ride system of claim 21, wherein the at least one seat is coupled to the platform via a gimbal system.

24. The ride system of claim 21, comprising:

an interactive component configured to be controlled by a guest positioned in the at least one seat; and

a target positioned off of the platform within the ride system and configured to be activated by the interactive component.

25. The ride system of claim 24, wherein the controller is configured to:

receive feedback from the interactive component, the target, or both based on activation of the interactive component; and

control the motion system to reposition the platform based on the feedback.

26. The ride system of claim 24, wherein the controller is configured to detect activation of the target and assign points or a reward to the guest based on the activation.

27. The ride system of claim 26, wherein the one or more seats comprise a plurality of seats and the controller is configured to select the at least one seat from the plurality of seats based on the points or reward for detection of the position to control the motion system.

28. The ride system of claim 21, wherein the platform is configured to rotate about an additional axis, wherein the additional axis is transverse to the guide axis.

29. The ride system of claim 28, wherein the platform is configured to travel along a ride path of the ride system on a bogie, the ride path including a turn positioned adjacent a false extension of the ride path,

wherein the controller is configured to control the motion system to rotate the platform about the additional axis as the bogie traverses the turn.

30. The ride system of claim 21, wherein the one or more seats comprise a plurality of seats and each seat of the plurality of seats is configured to move along the platform relative to each remaining seat of the plurality of seats.

31. A ride system, comprising:

a platform configured to rotate about a first axis, tilt about a second axis, or both;

a first actuator configured to rotate the platform about the first axis;

a second actuator configured to tilt the platform about the second axis;

a plurality of seats coupled to the platform and configured to rotate about the first axis with the platform, move directionally with respect to the platform, move upwards or downwards with respect to the platform, rotate about a third axis with respect to the platform, or any combination thereof;

a sensor configured to detect a position of at least one seat of the plurality of seats with respect to the platform; and

a controller configured to control the first actuator to rotate the platform and control the second actuator to tilt the platform based on the position of the at least one seat with respect to the platform.

32. The ride system of claim 31, wherein the controller is configured to select the at least one seat from the plurality of seats for position-based control of the first actuator and the second actuator based on performance of an interactive component associated with the at least one seat.

33. The ride system of claim 31, wherein each seat of the plurality of seats is slidably engaged with the platform and configured to slide relative to each remaining seat of the plurality of seats.

34. The ride system of claim 31, wherein the first actuator comprises a gear assembly driven by a motor.

35. The ride system of claim 31, wherein the second actuator comprises a pivot assembly having a pivot structure and a plurality of telescoping actuators coupled to the pivot structure.

36. The ride system of claim 31, wherein the platform is configured to travel along a ride path of the ride system on a bogie, the ride path including a turn positioned adjacent a false extension of the ride path, wherein the controller is configured to control first actuator to rotate the platform about the first axis as the bogie traverses the turn.

37. The ride system of claim 31, wherein the controller is configured to control the first actuator and the second actuator based on a position of the platform within the ride system.

38. A ride system, comprising:

a platform configured to rotate about a guide axis;

a first seat coupled to the platform and a second seat coupled to the platform, wherein the first seat and the second seat are configured to rotate about the guide axis with the platform, move directionally relative to the platform, move upwards or downwards relative to the platform, rotate about an axis transverse to the guide axis, or any combination thereof;

a first sensor coupled to the first seat, wherein the first sensor is configured to detect a first position of the first seat;

a second sensor coupled to the second seat, wherein the second sensor is configured to detect a second position of the second seat; and

a controller configured to control the rotation of the platform based on the first position of the first seat, the second position of the second seat, or both.

39. The ride system of claim 38, wherein the controller is configured to control the rotation of the platform based on the first position and not the second position when a first performance value assigned to a first interactive component associated with the first seat exceeds a second performance value assigned to a second interactive component associated with the second seat.

40. The ride system of claim 38, wherein the controller is configured to cause the first seat to move relative to the second seat along the platform based on the first position, the second position, or both.