What is claimed is:

1. A location-based cognitive and predictive communication system comprising:

a network interface connected to sensors to receive transactional data for an individual measured by the sensors;

a memory to store the transactional data, wherein the transactional data is associated with a current travel path for the individual and includes a time and geographic location for the individual on the travel path; and

a prediction module to determine a current activity for the individual based on a prediction determined from the transactional data and to determine, by a processor, a choice set for the individual based on the current activity and based on predictions for a group for which the individual is a member, wherein the choice set includes choices associated with transportation for the current travel path of the individual, and wherein

the network interface is to transmit the choice set to an access device via network to present the choice set to the individual.

2. The system of claim 1, comprising a content module to determine content related to a current activity and a target activity related to a choice in the choice set, and the content is transmitted to the access device with the choice set.

3. The system of claim 2, wherein the content module is to determine a speed gap between the individual and a second individual, and transmit the content to the individual if the speed gap is less than a predetermined threshold, wherein the content includes content generated by the second individual.

4. The system of claim 3, comprising an integration module to facilitate a dynamic communication thread between the individual and the second individual.

5. The system of claim 1, comprising a cognitive state determination module to determine a cognitive state of the individual for a choice from the choice set executed by the individual.

6. The system of claim 5, wherein the cognitive state comprises a utility probability and the cognitive state determination module is to determine the cognitive state by determining choice set attributes for choices in the choice set, calculating a utility for each choice based on the choice set attributes and variables

associated with the choices, and determining the utility probability based on the utility, a probability of the individual being in a state at a particular time, and a multidimensional optimizing factor.

7. The system of claim 1, wherein the prediction module is to determine the choice set by accumulating cognitive states for individuals, modeling each individual as a quantum particle based on time and location, sheafing the modeled quantum particles to determine groups of the individuals, and determining the choice set based on predictions for the group for which the individual is a member.

8. A method of providing prediction-based travel choice set comprising:

determining transactional data from sensors, wherein the transactional data is associated with a current travel path for an individual and includes a time and geographic location for the individual on the travel path;

determining a current activity for the individual based on a prediction determined from the transactional data;

determining, by a processor, a choice set for the individual based on the current activity and based on predictions for a group for which the individual is a member, wherein the choice set includes choices associated with transportation for the current travel path of the individual; and

transmitting the choice set to an access device via network to present the choice set to the individual.

9. The method of claim 8, comprising:

determining a cognitive state of the individual for a choice from the choice set executed by the individual.

10. The method of claim 9, wherein the cognitive state comprises a utility probability and determining a cognitive state comprises:

determining choice set attributes for choices in the choice set;

calculating a utility for each choice based on the choice set attributes and variables associated with the choices;

determining the utility probability based on the utility, a probability of the individual being in a state at a particular time, and a multidimensional optimizing factor.

11. The method of claim 8, wherein determining a choice set comprises:

accumulating cognitive states for individuals;

modeling each individual as a quantum particle based on time and location;

sheafing the modeled quantum particles to determine groups of the individuals; and

determining the choice set based on predictions for the group for which the individual is a member.

12. The method of claim 8, comprising:

determining content associated with choices in the choice set based on the transaction data; and

transmitting the content to the access device via the network.

13. The method of claim 8, wherein determining content comprises:

determining a speed gap between the individual and a second individual; and

transmitting the content comprises transmitting the content to the individual associated with a choice in the choice set to the individual if the speed gap is less than a predetermined threshold, wherein the content includes content generated by the second individual.

14. The method of claim 13, comprising:

facilitating a dynamic communication thread between the individual and the second individual.

15. A non-transitory computer readable medium including machine readable instructions that are executable by a computer processor to:

determine transactional data from sensors, wherein the transactional data is associated with a current travel path for an individual and includes a time and geographic location for the individual on the travel path;

determine a current activity for the individual based on a prediction determined from the transactional data;

determine a choice set for the individual based on the current activity and based on predictions for a group for which the individual is a member, wherein the choice set includes choices associated with transportation for the current travel path of the individual; and

transmit the choice set to an access device via network to present the choice set to the individual.

CLAIMS

What is claimed is:

1. A location-based cognitive and predictive communication system comprising:

a network interface connected to sensors to receive transactional data for an individual measured by the sensors;

a memory to store the transactional data, wherein the transactional data is associated with a current travel path for the individual and includes a time and geographic location for the individual on the travel path; and

a prediction module to determine, by a processor, a current activity for the individual based on a prediction determined from the transactional data, wherein the prediction determined from the transactional data is a probability that the individual is enroute to a destination, and

the prediction module is to determine, by the processor, a choice set for the individual based on the current activity and based on predictions for a group for which the individual is a member, wherein the choice set includes choices associated with transportation for the current travel path of the individual, and wherein

the network interface is to transmit the choice set to an access device via network to present the choice set to the individual.

2. The system of claim 1, comprising a content module to determine content related to the current activity and a target activity related to a choice in the choice set, and the content is transmitted to the access device with the choice set.

3. The system of claim 2, wherein the content module is to determine a speed gap between the individual and a second individual, and transmit the content to the individual if the speed gap is less than a predetermined threshold, wherein the content includes content generated by the second individual.

4. The system of claim 3, comprising an integration module to facilitate a dynamic communication thread between the individual and the second individual.

5. The system of claim 1, comprising a cognitive state determination module to determine a cognitive state of the individual for a choice from the choice set executed by the individual.

6. The system of claim 5, wherein the cognitive state comprises a utility probability and the cognitive state determination module is to determine the cognitive state by determining choice set attributes for choices in the choice set, calculating a utility for each choice based on the choice set attributes and variables associated with the

choices, and determining the utility probability based on the utility, a probability of the individual being in a state at a particular time, and a multidimensional optimizing factor.

7. The system of claim 1, wherein the prediction module is to determine the choice set by accumulating cognitive states for individuals, modeling each individual as a quantum particle based on time and location, sheafing the modeled quantum particles to determine groups of the individuals, and determining the choice set based on predictions for the group for which the individual is a member.

8. A method of providing prediction-based travel choice set comprising:

determining transactional data from sensors, wherein the transactional data is associated with a current travel path for an individual and includes a time and geographic location for the individual on the travel path;

determining, by a processor, a current activity for the individual based on a prediction determined from the transactional data, wherein the prediction determined from the transactional data is a probability that the individual is enroute to a destination;

determining, by the processor, a choice set for the individual based on the current activity and based on predictions for a group for which the individual is a member, wherein the choice set includes choices associated with transportation for the current travel path of the individual; and

transmitting the choice set to an access device via network to present the choice set to the individual.

9. The method of claim 8, comprising:

determining a cognitive state of the individual for a choice from the choice set executed by the individual.

10. The method of claim 9, wherein the cognitive state comprises a utility probability and determining a cognitive state comprises:

determining choice set attributes for choices in the choice set;

calculating a utility for each choice based on the choice set attributes and variables associated with the choices; and

determining the utility probability based on the utility, a probability of the individual being in a state at a particular time, and a multidimensional optimizing factor.

11. The method of claim 8, wherein determining a choice set comprises:

accumulating cognitive states for individuals;

modeling each individual as a quantum particle based on time and location;

sheafing the modeled quantum particles to determine groups of the individuals; and

determining the choice set based on predictions for the group for which the individual is a member.

12. The method of claim 8, comprising:

determining content associated with choices in the choice set based on the transaction data; and

transmitting the content to the access device via the network.

13. The method of claim 12, wherein determining content comprises:

determining a speed gap between the individual and a second individual; and

transmitting the content comprises transmitting the content to the individual associated with a choice in the choice set to the individual if the speed gap is less than a predetermined threshold, wherein the content includes content generated by the second individual.

14. The method of claim 13, comprising:

facilitating a dynamic communication thread between the individual and the second individual.

15. A non-transitory computer readable medium including machine readable instructions that are executable by a computer processor to:

determine transactional data from sensors, wherein the transactional data is associated with a current travel path for an individual and includes a time and geographic location for the individual on the travel path;

determine a current activity for the individual based on a prediction determined from the transactional data, wherein the prediction determined from the transactional data is a probability that the individual is enroute to a destination;

determine a choice set for the individual based on the current activity and based on predictions for a group for which the individual is a member, wherein the choice set includes choices associated with transportation for the current travel path of the individual; and

transmit the choice set to an access device via network to present the choice set to the individual.

16. The non-transitory computer readable medium of claim 15, wherein the instructions comprise instructions to:

determine a cognitive state of the individual for a choice from the choice set executed by the individual.

17. The non-transitory computer readable medium of claim 16, wherein the cognitive state comprises a utility probability and wherein the instructions to determine the cognitive state comprise instructions to:

determine choice set attributes for choices in the choice set;

calculate a utility for each choice based on the choice set attributes and variables associated with the choices; and

determine the utility probability based on the utility, a probability of the individual being in a state at a particular time, and a multidimensional optimizing factor.

18. The non-transitory computer readable medium of claim 15, wherein the instructions to determine the choice set comprise instructions to:

accumulate cognitive states for individuals;

model each individual as a quantum particle based on time and location;

sheaf the modeled quantum particles to determine groups of the individuals; and

determine the choice set based on predictions for the group for which the individual is a member.

19. The non-transitory computer readable medium of claim 15, wherein the instructions are to:

determine content associated with choices in the choice set based on the transaction data; and

transmit the content to the access device via the network.

20. The non-transitory computer readable medium of claim 19, wherein the instructions are to:

determine a speed gap between the individual and a second individual; and

transmit the content comprises transmitting the content to the individual associated with a choice in the choice set to the individual if the speed gap is less than a predetermined threshold, wherein the content includes content generated by the second individual.