

CLAIMS

[Claim 1]

An information providing server apparatus comprising:
a network interface for connection with a network;
a processor for communication via the network interface;
and a storage unit that stores a content correspondence list describing a correspondence relationship between information presented by a ticket gate machine at a station and a passenger to whom the ticket gate machine is to present the information,
wherein the processor transmits, in each predetermined transmission time slot, the content correspondence list describing the correspondence relationship up to the start of the next transmission time slot to the ticket gate machine.

[Claim 2]

The information providing server apparatus according to claim 1,
wherein the content correspondence list describes the correspondence relationship between a behavior pattern at the time of the passenger passing through the ticket gate machine and the information that the ticket gate machine is to present to the passenger behaving in accordance with the behavior pattern.

[Claim 3]

The information providing server apparatus according to claim 2,
wherein:

the content correspondence list describes, as the behavior pattern, an entry/exit distinction at the time of the passenger passing through the ticket gate machine, the day of the week on which the passenger passes through the ticket gate machine, and a time slot in which the passenger passes through the ticket gate machine;
and

the content correspondence list further describes the correspondence relationship between the information and the passenger to whom the ticket gate machine is to present the information for each of the entry/exit distinction, the day of the week,

and the time slot.

[Claim 4]

The information providing server apparatus according to claim 2, wherein:

the content correspondence list describes, as the behavior pattern, a combination of a station entered by the passenger and a destination station or a combination of a station exited by the passenger and a departure station, and an inter-station route; and

the content correspondence list further describes, for each of the combination and the inter-station route, the correspondence relationship between the information and the passenger to whom the ticket gate machine is to present the information.

[Claim 5]

The information providing server apparatus according to claim 2, wherein the content correspondence list describes the correspondence relationship between the information and the passenger to whom the ticket gate machine is to present the information only with respect to the behavior pattern of which the frequency of occurrence is not less than a predetermined number.

[Claim 6]

The information providing server apparatus according to claim 4, wherein:

the processor, upon reception of information indicating the presence of disruption in train service, identifies from among the passengers described in the content correspondence list the passenger of whom the inter-station route includes a route having the disruption; and

the processor generates the content correspondence list associating service information about the line having the disruption and the identified passenger, and immediately transmits the content correspondence list to the ticket gate machine.

[Claim 7]

An information providing system comprising:
the information providing server apparatus according to claim 2; and
a center server apparatus that provides the content correspondence list
to the information providing server apparatus,

wherein:

the information providing server apparatus is installed at the station,
and the center server apparatus is connected to the information providing server
apparatus via the network; and

the center server apparatus generates the content correspondence list for
each station by extracting the behavior pattern from a utilization history of an IC card
ticket held by the passenger and transmits the content correspondence list to the
information providing server apparatus installed at each station.

[Claim 8]

An information providing system comprising:
the information providing server apparatus according to claim 4; and
a center server apparatus that provides the content correspondence list
to the information providing server apparatus,

wherein:

the information providing server apparatus is installed at the station,
and the center server apparatus is connected to the information providing server
apparatus via the network;

the center server apparatus determines that the station for which the
number of times of exit of the passenger is the greatest at night is utilized by the
passenger as the nearest station to home, that the station for which the number of times
of exit of the passenger is the greatest during daytime and for which the number of times
of entry of the passenger is the greatest in the evening or at night is utilized by the
passenger as the nearest station to work, or that the station for which the number of
times of exit of the passenger is the greatest on a holiday is utilized by the passenger as
a station for private purpose; and

the center server apparatus generates, according to the above determinations, the content correspondence list describing a station type classified by the purpose of utilization of the station by the passenger, and transmits the generated content correspondence list to the information providing server apparatus installed in the station matching the classification of the station type.

CLAIMS

[Claim 1]

An information providing server apparatus comprising:
a network interface for connection with a network;
a processor for communication via the network interface;
and a storage unit that stores a content correspondence list describing a correspondence relationship between information presented by a ticket gate machine at a station and a passenger to whom the ticket gate machine is to present the information,
wherein the processor transmits, in each predetermined transmission time slot, the content correspondence list describing the correspondence relationship up to the start of the next transmission time slot to the ticket gate machine,
wherein the content correspondence list describes the correspondence relationship between a behavior pattern at the time of the passenger passing through the ticket gate machine and the information that the ticket gate machine is to present to the passenger behaving in accordance with the behavior pattern.

[Claim 2]

The information providing server apparatus according to claim 1,
wherein:

the content correspondence list describes, as the behavior pattern, an entry/exit distinction at the time of the passenger passing through the ticket gate machine, the day of the week on which the passenger passes through the ticket gate machine, and a time slot in which the passenger passes through the ticket gate machine;
and

the content correspondence list further describes the correspondence relationship between the information and the passenger to whom the ticket gate machine is to present the information for each of the entry/exit distinction, the day of the week,

and the time slot.

[Claim 3]

The information providing server apparatus according to claim 1, wherein:

the content correspondence list describes, as the behavior pattern, a combination of a station entered by the passenger and a destination station or a combination of a station exited by the passenger and a departure station, and an inter-station route; and

the content correspondence list further describes, for each of the combination and the inter-station route, the correspondence relationship between the information and the passenger to whom the ticket gate machine is to present the information.

[Claim 4]

The information providing server apparatus according to claim 1, wherein the content correspondence list describes the correspondence relationship between the information and the passenger to whom the ticket gate machine is to present the information only with respect to the behavior pattern of which the frequency of occurrence is not less than a predetermined number.

[Claim 5]

The information providing server apparatus according to claim 3, wherein:

the processor, upon reception of information indicating the presence of disruption in train service, identifies from among the passengers described in the content correspondence list the passenger of whom the inter-station route includes a route having the disruption; and

the processor generates the content correspondence list associating service information about the line having the disruption and the identified passenger, and immediately transmits the content correspondence list to the ticket gate machine.

[Claim 6]

An information providing system comprising:
the information providing server apparatus according to claim 1; and
a center server apparatus that provides the content correspondence list
to the information providing server apparatus,

wherein:

the information providing server apparatus is installed at the station,
and the center server apparatus is connected to the information providing server
apparatus via the network; and

the center server apparatus generates the content correspondence list for
each station by extracting the behavior pattern from a utilization history of an IC card
ticket held by the passenger, and transmits the content correspondence list to the
information providing server apparatus installed at each station.

[Claim 7]

An information providing system comprising:
the information providing server apparatus according to claim 3; and
a center server apparatus that provides the content correspondence list
to the information providing server apparatus,

wherein:

the information providing server apparatus is installed at the station,
and the center server apparatus is connected to the information providing server
apparatus via the network;

the center server apparatus determines that the station for which the
number of times of exit of the passenger is the greatest at night is utilized by the
passenger as the nearest station to home, that the station for which the number of times
of exit of the passenger is the greatest during daytime and for which the number of times
of entry of the passenger is the greatest in the evening or at night is utilized by the
passenger as the nearest station to work, or that the station for which the number of
times of exit of the passenger is the greatest on a holiday is utilized by the passenger as
a station for private purpose; and

the center server apparatus generates, according to the above determinations, the content correspondence list describing a station type classified by the purpose of utilization of the station by the passenger, and transmits the generated content correspondence list to the information providing server apparatus installed in the station matching the classification of the station type.