[0011] According to a first aspect of the present disclosure, there is provided a computer-implemented method, including: collecting a data set for training a machine-learning model to predict response messages, wherein collecting the data set includes storing one or more previous messages included in a previous communication session between a network device and a terminal device associated with an agent; facilitating a communication session between a terminal device and a network device, wherein the communication session enables the terminal device and the network device to exchange one or more messages; receiving a new message during the communication session; evaluating the new message using the trained machine-learning model, wherein evaluating the new message includes evaluating any messages exchanged before the new message was received; predicting a response to the new message, wherein predicting the response includes using a result of the evaluation to determine which previous message to select from the data set as the predicted response to the new message; and facilitating displaying the predicted response at the terminal device, wherein when the predicted response is selected, the predicted response is automatically transmitted to the network device during the communication session.

[0012] According to a second aspect of the present disclosure, there is provided a system, including: one or more data processors; and a non-transitory computer-readable storage medium containing instructions which, when executed on the one or more data processors, cause the one or more data processors to perform operations including: collecting a data set for training a machine-learning model to predict response messages, wherein collecting the data set includes storing one or more previous messages included in a previous communication session between a network device and a terminal device associated with an agent; facilitating a communication session between a terminal device and a network device, wherein the communication session enables the terminal device and the network device to exchange one or more messages; receiving a new message during the communication session; evaluating the new message using the trained machine-learning model, wherein evaluating the new message includes evaluating any messages exchanged before the new message was received; predicting a response to the new message, wherein predicting the response includes using a result of the evaluation to determine which previous message to select from the data set as the predicted response to the new message; and facilitating displaying the predicted response at the terminal device, wherein when the predicted response is selected, the predicted response is automatically transmitted to the network device during the communication session.

[0013] According to a third aspect of the present disclosure, there is provided a computer-program product tangibly embodied in a non-transitory machine-readable storage medium, including instructions configured to cause a data processing apparatus to perform operations including: collecting a data set for training a machine-learning model to predict response messages, wherein collecting the data set includes storing one or more previous messages included in a previous communication session between a network device and a terminal device associated with an agent; facilitating a communication session between a terminal device and a network device, wherein the communication session enables the terminal device and the network device to exchange one or more messages; receiving a new message during the communication session; evaluating the new message using the trained machine-learning model, wherein evaluating the new message includes evaluating any messages exchanged before the new message was received; predicting a response to the new message, wherein predicting the response includes using a result of the evaluation to determine which previous message to select from the data set as the predicted response to the new message; and facilitating displaying the predicted response at the terminal device, wherein when the predicted response is selected, the predicted response is automatically transmitted to the network device during the communication session.

[0014] Advantageously, the increasingly dynamic nature of data ingested into and processed by systems (e.g., routing systems, the communication server described herein, and other suitable systems) introduces complexity into network environments. Executing bot scripts to autonomously and automatically process tasks involving the complex ingested data can cause undue burden on processing resources in the systems (e.g., incorrect routing of messages may cause servers or queues to be overloaded). Embodiments of the present disclosure provide