DUMPSBOSS.

Certified Pega Data Scientist 8.8

Pegasystems PEGACPDS88V1

Version Demo

Total Demo Questions: 16

Total Premium Questions: 163

Buy Premium PDF

https://dumpsboss.co

support@dumpsboss.co

support@dumpsboss.co
dumpsboss.co

Topic Break Down

Topic	No. of Questions
Topic 1, Data Management	4
Topic 2, Decision Strategies	37
Topic 3, Predictive Analytics	66
Topic 4, Adaptive Analytics	55
Topic 5, Mix Questions	1
Total	163

QUESTION NO: 1

A data scientist reviews an adaptive model after a substantial change in customer behavior.

Which two observations can indicate that the model requires further investigation? (Choose Two)

A. A decline in model performance

B. A significant change in important predictor performance

C. An increase in the number of configured actions

D. A change in the position of a strategy component on the canvas

ANSWER: A B

Explanation:

A **decline in model performance** can indicate that the model is no longer distinguishing positive and negative outcomes effectively. A **significant change in the performance of important predictors** can indicate that customer behavior, data quality, or the meaning of the underlying data has changed.

Regular monitoring helps data scientists identify such changes early and discuss corrective actions with business stakeholders when needed. The number of configured actions and the visual placement of components on a strategy canvas do not indicate adaptive-model health. See Pega documentation on monitoring adaptive models.

QUESTION NO: 2

From two churn models with the similar performance, we chose the one the_____

A. Highest churn rate

B. Highest number of predictors

C. Most evidence

D. Fewest number of predictors

ANSWER: D

Explanation:

The correct choice is **Fewest number of predictors**. This follows the principle of parsimony in predictive modeling: when competing models provide comparable predictive performance, select the simpler model. In this context, simplicity is commonly represented by using fewer predictor variables while preserving the model's ability to distinguish likely churners from non-churners. A parsimonious churn model is generally easier for business users and data scientists to understand, validate, govern, and maintain as customer behavior and source data evolve. It also reduces operational dependencies, because fewer data elements must be available, accurate, and consistently populated when the model is run. In Pega Customer Decision Hub, model evaluation considers predictive performance and the practical suitability of a model for deployment. When performance is similar, favoring a model with fewer predictors supports a robust and manageable decisioning solution without sacrificing meaningful predictive value. This selection approach helps ensure that the model remains interpretable and sustainable throughout its lifecycle. See Pega Academy's discussion of evaluating predictive models and the general modeling concept of parsimony.

QUESTION NO: 3

You can use various data types in adaptive analytics. Some of these require preprocessing before being used as a potential predictor. Others can be used directly. Which two data types require no preprocessing? (Choose Two)

A. Text data such as Twitter messages

B. Dates with absolute time/date values, such as birthdays

C. Event stream data, such as recent transactions

D. Symbolic data with up to 200 distinct values, such as products bought previously

E. Numeric data such as customer age and income

ANSWER: B E

Explanation:

Dates with absolute time/date values, such as birthdays, and numeric data such as customer age and income can be supplied directly as predictors to adaptive analytics. Numeric predictors already express an ordered, measurable quantity. Adaptive models can therefore evaluate relationships between the numeric value and the modeled outcome without requiring the value to be categorized, tokenized, or otherwise transformed first. Typical examples include age, income, balance, tenure, and transaction amount.

Absolute date and time values are also supported directly as predictor values. The adaptive model can use the date/time information when determining predictive patterns, so a date property such as a birthday can be configured as an eligible predictor without a separate preprocessing stage. This enables decisioning applications to incorporate available customer and interaction data efficiently while the model continuously learns from response behavior. Predictor configuration and the handling of customer data are part of Pega Customer Decision Hub's adaptive modeling capabilities. See the Pega documentation on adaptive models and the Pega documentation on predictors.

QUESTION NO: 4

Which two factors do you inspect to access the general health of the adaptive models in Prediction Studio? (Choose Two)

A. Performance of the models

B. Number of responses

C. Number of decisions

D. Model transparency

ANSWER: A D

Explanation:

Performance of the models and Model transparency are the appropriate factors for assessing the overall health of adaptive models in Prediction Studio. Model performance indicates how effectively an adaptive model distinguishes between outcomes as incoming customer behavior produces responses and the model continuously learns. Reviewing performance helps a data scientist determine whether the model remains predictive enough to support reliable, relevant next-best-action decisions.

Model transparency complements performance by showing the predictors and predictor groups that influence the model's outcome. This visibility helps a data scientist understand the drivers behind the model's behavior, assess whether its reasoning is meaningful in the business context, and identify potential issues such as an unexpected dependence on particular customer attributes. Together, predictive effectiveness and visibility into influential factors provide a practical assessment of whether an adaptive model is both working well and behaving in an understandable, governable manner. Prediction Studio presents these model-monitoring insights so that teams can evaluate and manage adaptive decisioning models throughout their operational life cycle. See Pega documentation on predictions and Pega Academy: Prediction Studio.

QUESTION NO: 5

A strategy designer calculates an expected-value property for every eligible action and then wants to present the actions from highest expected value to lowest expected value.

Which two configuration choices are required in the Prioritize component? (Choose Two)

A. Use the expected-value property as the prioritization expression

B. Sort in descending order

C. Sort alphabetically by action name

D. Sort in ascending order

ANSWER: A B

Explanation:

The Prioritize component must use the **expected-value property as the numerical prioritization expression** and sort the results in **descending order**. This places the action with the highest expected value at the top of the ranked list.

Prioritize orders propositions by a numerical value. It does not sort actions alphabetically, and ascending order would place the lowest expected-value action first. See Pega Academy: Prioritizing actions.

QUESTION NO: 6

To build a predictive model, use_____.

A. Pega Customer Service

B. Pega Marketing

C. Pega Decision Management

D. Pega Platform

ANSWER: C

Explanation:

Pega Decision Management is the correct choice because it provides Pega's decisioning and predictive-analytics capabilities for creating, training, validating, and deploying predictive models. In Pega, these capabilities are available through Prediction Studio and related decisioning artifacts, where data scientists can define predictors, select an outcome to predict, train a model using historical customer data, assess model performance, and make the resulting prediction available to decision strategies. The model can then support real-time, data-driven decisions, such as determining the next best action or estimating a customer's likelihood of a particular behavior.

Predictive models are a core part of Pega's adaptive decisioning approach. Their outputs, including a predicted propensity or score, can be combined with business rules, customer context, eligibility criteria, and engagement policies in a decision strategy. This lets an application consistently use analytical insight at the point where a decision is needed. Pega documentation describes Prediction Studio as the workspace for developing predictive models and describes Decision Management as the capability that applies analytics and strategies to business decisions. See Pega documentation on predictive analytic models and Pega Academy: Prediction Studio.

QUESTION NO: 7

U+ Bank introduces a new credit card that has no historical customer behavior data. U+ Bank wants to offer this credit card on the personalized web portal. Given the scenario, which rule type must you use?

A. Decision table

B. When rule

C. Adaptive model

D. Pega machine learning model

ANSWER: C

Explanation:

Adaptive model is correct because it is designed to make and continuously improve predictions when a proposition, such as a newly introduced credit card, does not yet have sufficient historical customer-response data. In Pega Customer Decision Hub, an adaptive model starts learning from live interaction outcomes. As customers are shown the credit-card offer on the personalized web portal and subsequently accept, reject, or ignore it, the model captures those responses and updates its predictors and performance automatically.

This supports the cold-start situation described in the question: the bank can begin presenting the offer immediately while Pega learns which customer characteristics and behavioral signals correlate with a positive response. The model then produces an evolving propensity score that can be used by next-best-action decisioning to prioritize the new card for customers most likely to respond favorably. Adaptive analytics is specifically intended for real-time, self-learning decision strategies and can improve as additional customer interactions occur, without waiting for a separately trained, static predictive model. See Pega Academy's Adaptive models topic and the Next-Best-Action learning resources.

QUESTION NO: 8

The standardized model operations process (MLOps) lets you replace a low-performing predictive model that drives a prediction with a superior one.

When you place the new model in shadow mode in the production environment, the current model_____

A. uses the outcomes of the new model as predictors

B. is automatically replaced

C. drives the prediction

D. no longer drives the prediction

ANSWER: C

Explanation:

When a new predictive model is deployed in shadow mode, the current model **drives the prediction**. Shadow mode is a controlled production-validation stage in Pega MLOps: the challenger model receives the same incoming data as the active model and produces results in parallel, but its results are not used to make customer-facing decisions or determine the prediction outcome. This enables the organization to observe and compare the candidate model's real-world performance against the established model under equivalent production conditions. Because the current model remains the active model, business operations continue without disruption while evidence is collected to determine whether the new model performs sufficiently well for promotion. After the shadow evaluation supports deployment, the new model can be activated to take over prediction responsibility through the MLOps lifecycle. This approach helps validate model quality using live data while retaining the active model as the decision-making model until the replacement is approved. See Pega Academy's MLOps topic and the Pega documentation on model operations.

QUESTION NO: 9

When building a predictive model, in which development step is the regression model created?

A. Model Export

B. Data Analysis

C. Model Analysis

D. Model Development

ANSWER: D

Explanation:

Model Development is correct because this is the stage in Pega's predictive-modeling workflow where the model configuration is defined and the model is built from the prepared data. After selecting the modeling approach, such as regression, the data scientist identifies the predictor fields and outcome, configures relevant modeling settings, and runs the model-building process. Pega then creates the regression model and calculates the statistical relationships between predictors and the target outcome.

This step follows the initial exploration and preparation of the data and precedes the assessment of model quality and the operationalization of the completed model. Building the regression model during Model Development produces the model artifacts and performance results needed for subsequent review, validation, and deployment decisions. This separation supports a disciplined predictive-modeling lifecycle: understand the data, develop the model, assess its predictive performance, and then make it available for use. Pega's Decisioning documentation describes Prediction Studio as the environment for creating and managing predictive models, while its predictive analytics resources cover the modeling lifecycle and model-building capabilities. See Pega documentation on predictive modeling and Pega Academy: Predictions.

QUESTION NO: 10

How does a prediction help in proactive retention?

A. The prediction selects the next best action

B. The prediction suggests the best offer

C. The prediction predicts the customer's churn risk

D. The prediction identifies successful offers in past interactions

ANSWER: C

Explanation:

The prediction predicts the customer's churn risk. In Pega Customer Decision Hub, a prediction uses historical customer data and predictive analytics to estimate the likelihood that a customer will experience a future outcome. For proactive retention, that outcome is typically churn: the likelihood that a customer will leave, cancel, become inactive, or otherwise reduce their relationship with the business. The resulting churn-risk score enables the business to recognize customers who may need retention treatment before the churn event occurs. This score can then be used as an input to decision strategies and engagement policies, helping prioritize appropriate retention actions for customers with elevated risk. Pega distinguishes this predictive assessment from the decisioning process that determines the next best action or arbitrates among eligible offers. The prediction supplies the propensity or risk estimate that makes proactive, data-driven retention possible. Pega documentation describes predictions as models that calculate customer behavior propensity and explains their use in customer decisioning. See Pega documentation on predictions and Pega documentation on customer retention.

QUESTION NO: 11

Next-Best-Actionensures that communication between the business and the customer is_____and_____. (Choose Two)

A. timely

B. uniform and generic

C. contextual

D. free of jargon

ANSWER: A C

Explanation:

Next-Best-Action ensures that customer communications are **timely** and **contextual**. Timely communication means that an organization selects and presents an action when it is most relevant to the customer's current situation, rather than relying solely on a fixed, preplanned campaign schedule. For example, a customer's recent interaction, lifecycle stage, or response to an earlier offer can affect when an outreach should occur. Contextual communication means that the proposed action is informed by the customer's profile, behavior, needs, eligibility, and the current interaction context. Pega Customer Decision Hub uses customer data together with business policies, predictive analytics, and arbitration to identify the most appropriate action for an individual customer at a given moment. This approach helps organizations deliver a consistent, personalized experience across inbound and outbound channels while aligning each interaction with business objectives. Pega describes next-best-action decisioning as the process of determining the most relevant action for a customer in real time. See Pega Academy: Next-Best-Action and Pega: What is next-best-action?.

QUESTION NO: 12

A data scientist prepares historical data to build a predictive model that identifies customers who are likely to cancel a subscription.

Which two data elements are required in the historical data set? (Choose Two)

A. Predictor values

B. Known outcome values

C. Future outcome values

D. Action priority values

ANSWER: A B

Explanation:

Predictor values and **known outcome values** are required to train a predictive model. Predictor values describe the characteristics that might influence the behavior, such as tenure, product usage, payment history, and recent service interactions. Known outcome values identify what occurred historically, such as whether each customer cancelled the subscription.

The model learns relationships between the predictors and the known outcome. After training, it can score new customers for whom the outcome is not yet known. See Pega Academy: Predictive modeling and Pega Documentation.

QUESTION NO: 13

A retail organization configures an adaptive model to predict whether a customer will accept an offer.

Which two properties are appropriate candidate predictors for this adaptive model? (Choose Two)

A. The customer's recent purchase history

B. The channel of the current interaction

C. The customer's name

D. The final outcome of the offer

ANSWER: A B

Explanation:

The customer's recent purchase history and **the channel of the current interaction** are appropriate candidate predictors. Recent purchase history can indicate a customer's product interests and buying behavior, while the current

interaction channel can influence the likelihood of responding to an action. Both properties can be available at decision time and can plausibly help predict acceptance.

A customer name is generally an identifier rather than a meaningful behavioral characteristic. The final offer outcome must not be used as a predictor because it is the behavior that the model is intended to predict. See Pega Academy: Adaptive models and Pega Documentation.

QUESTION NO: 14

A service application receives customer emails that describe issues with products and services. The business wants to use a text prediction to derive structured information from the messages.

Which two types of analysis can a text prediction perform? (Choose Two)

A. Entity extraction

B. Sentiment analysis

C. Database normalization

D. Customer segmentation

ANSWER: A B

Explanation:

Entity extraction and **sentiment analysis** are text-analysis capabilities that can convert unstructured customer messages into structured results. Entity extraction identifies specific information in text, such as product names, locations, dates, or account identifiers. Sentiment analysis determines the emotional tone of a message, such as positive, negative, or neutral.

The resulting information can be used in case processing, reporting, routing, and decisioning. For example, a strongly negative email that mentions a particular product can be routed to an appropriate service team. See Pega Documentation and Pega Academy: Pega NLP overview.

QUESTION NO: 15

Which statement about Pega AI is correct?

A. Pega AI is primarily based on models newly build in Prediction Studio

B. Pega AI is restricted to models newly build in Prediction Studio

C. Pega AI is restricted to self-learning models

D. Pega AI is primarily based on self-learning models

ANSWER: D

Explanation:

Pega AI is primarily based on self-learning models because Pega's decisioning capability is designed to continuously learn from customer behavior and business outcomes as interactions occur. In particular, adaptive analytics models update their predictive behavior from incoming response data, allowing customer decisions such as offers, actions, and treatments to become more relevant over time. This continuous learning is central to Pega Customer Decision Hub's approach to next-best-action decisioning: the system uses observed outcomes to improve the propensity estimates that inform future decisions.

Self-learning does not mean that every model must be created in one specific tool or that only one modeling approach is available. Rather, it identifies the principal AI capability used to support real-time, outcome-driven decisioning. Pega also supports predictive models and other analytical techniques, but its adaptive, self-learning models are a foundational part of

how Pega AI learns from live customer interactions and helps optimize decisions. See Pega's overview of Pega AI and the Pega Academy material on adaptive models.

QUESTION NO: 16

Which adaptive model output is automatically mapped to a strategy property?

A. Performance

B. Score

C. Propensity

D. Evidence

ANSWER: C

Explanation:

Propensity is correct because it is the primary prediction produced by a Pega adaptive model and is automatically exposed as a strategy property when the model is used in a decision strategy. Propensity expresses the model's current estimated likelihood that a customer, in the supplied context, will produce the modeled positive outcome for an action. Decision strategies can use this value directly in subsequent components, such as filters, prioritization logic, or calculations, without separately defining a mapping for the model result.

Adaptive models continuously update their predictions from incoming response data. As new customer behavior is captured, the model uses the predictor context and observed outcome to refine the propensity estimate. This makes propensity central to Pega Customer Decision Hub's real-time, next-best-action decisioning: it provides a standardized numerical prediction that can be combined with business rules, customer eligibility, value, and contact-policy constraints. Pega documentation describes adaptive models as producing predictions from behavioral evidence and making the resulting propensity available for decision logic. See the Pega Adaptive Model documentation and Pega Academy material on adaptive models.