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**Information technology - Capability maturity model for digital
twin**

信息技术 数字孪生能力成熟度模型

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

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1 Scope

GB/T 46237-2025 is the Chinese national standard covering grading how far a digital twin has actually got - from a static model through the connected, synchronised and predictive levels to one that acts back on the physical asset, with the criteria for each level and the assessment method. Most things sold as digital twins sit at the lower levels. First edition, in force from 1 May 2026. Issued on 5 October 2025, it has been in force since 1 May 2026.

This document outlines the structure of the digital twin capability maturity model, specifying maturity levels, capability domains, and capability requirements. This document applies to the planning, construction, and evaluation of digital twin systems.

2 Normative references

This document has no normative references.

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 target entity Real-world entities selected for digital mapping. [Source: GB/T 43441.1-2023, 3.2]

3.2 digital entity Digital mapping of the target entity. [Source: GB/T 43441.1-2023, 3.3]

3.3 digital twin Digitization of a specific target entity with a data connection that ensures synchronization between the physical and virtual states at an appropriate rate and accuracy. Express. [Source: GB/T 43441.1-2023, 3.4]

3.4 geometric model A model used to describe the shape, internal structure, size, and spatial location of a target entity.

3.5 physical model A model used to describe the physical properties and operating mechanisms of a target entity.

3.6 Behavior model A model used to describe the state transitions, attribute changes, and response mechanisms of a target entity.

3.7 rule model A model used to describe the patterns, rules, standards, criteria, and constraints related to a target entity.