



VARZA SCHOOL · THE FOUNDATIONAL 100

Measuring Work in Progress: Completion, Accrued Cost, Deferred Revenue, and Recognition

Chapter 74 · Track 8 — Project, Service, Labor, and Contract Finance

THE QUESTION IT ANSWERS

How can a project or service business measure partially completed work without confusing cost spent, invoice issued, cash received, and value transferred?

CONCEPTS DEFINED

Work in progress · Percentage of completion · Accrued project cost · Deferred revenue or contract liability · Performance obligation · Revenue recognition · Estimate at completion · Customer acceptance

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Varza promise: clear enough for a first-time learner, exact enough for a professional conversation, and practical enough to support a real decision.

Why this chapter matters

This track treats projects, services, labor, and contracts as time-based financial systems. Scope, schedule, cost, billing, cash, obligations, and performance must be integrated; otherwise a project can appear successful in one view while failing in another.

Central question: How can a project or service business measure partially completed work without confusing cost spent, invoice issued, cash received, and value transferred?

Work in progress sits between activity and completion. Reliable measurement identifies the performance obligation, progress method, cost incurred, accrued cost, billings, advances, and contract balances. Cost percentage is useful only when it faithfully depicts performance.

Varza approaches the subject from life to ledger and from ledger to decision. We begin with what actually happened, identify the rights, obligations, resources, timing, and uncertainty, and only then choose the correct term, calculation, document, or account. This order protects the learner from a common error: learning a label without understanding the economic reality that the label is supposed to describe.

Learning outcomes

- Define and distinguish work in progress in plain and professional language.
- Define and distinguish percentage of completion in plain and professional language.
- Define and distinguish accrued project cost in plain and professional language.
- Define and distinguish deferred revenue or contract liability in plain and professional language.
- Apply the concepts to a numerical case and explain the result rather than only calculate it.
- Identify evidence, workflow, controls, and Varza entities required for reliable use.
- Recognize when jurisdiction-specific or licensed professional advice is required.

The Varza mental model

A financial concept becomes decision-ready when six questions have answers: **what, who, when, how much, based on what evidence**, and **under which assumption or rule**. A seventh question—**what should happen next**—turns knowledge into management.

This chapter uses internationally recognized terminology, but it remains jurisdiction-neutral unless explicitly stated. Accounting standards, tax rules, contract law, consumer protection, labor requirements, and investment regulation can produce different legal outcomes in different countries. The global foundation gives the learner a stable map; local collections must add the binding rules.

Core concepts

1. Work in progress

Working definition. Work in progress is partially completed goods, services, or project activity that has consumed resources but is not yet fully completed or transferred.

WIP can describe physical production, cost accumulation, contract activity, or billing status. Define the measure and accounting basis. A non-specialist can understand this by separating the object, the timing, and the consequence.

Simple example. A custom machine is 60% physically complete with materials and labor accumulated in WIP.

Decision test. Who can influence the result, and who only reports it? A reliable answer should state the unit, date or period, scope, evidence, and uncertainty. When one of these is missing, the concept may still be useful for discussion, but it is not yet decision-ready information.

2. Percentage of completion

Working definition. Percentage of completion is a measure of progress toward satisfying a performance obligation or completing work, based on an appropriate input or output method.

Choose a method that faithfully depicts transfer or performance. Cost incurred can mislead when significant uninstalled materials or inefficiency exists. The concept should be measured at the smallest level that still supports a real action.

Simple example. Verified survey quantities show 40% of contract output completed.

Decision test. Does the item affect cash now, later, or not at all? A reliable answer should state the unit, date or period, scope, evidence, and uncertainty. When one of these is missing, the concept may still be useful for discussion, but it is not yet decision-ready information.

3. Accrued project cost

Working definition. Accrued project cost is project cost recognized for goods or services received or work performed before the related supplier invoice or payroll posting is complete.

Accruals prevent understated cost and false margin. Estimate basis and reversal should be explicit. The number alone is not enough; its definition determines whether comparisons are valid.

Simple example. Subcontract work completed in March is accrued although billed in April.

Decision test. What is being measured, and what has been left outside the boundary? A reliable answer should state the unit, date or period, scope, evidence, and uncertainty. When one of these is missing, the concept may still be useful for discussion, but it is not yet decision-ready information.

4. Deferred revenue or contract liability

Working definition. Deferred revenue or contract liability is an obligation to transfer goods or services for which consideration has been received or become due before related revenue is recognized.

The label depends on framework and facts, but the core point is that cash or billing can precede performance. This is where operational activity and financial reporting meet.

Simple example. An annual maintenance prepayment is recognized as the service is provided.

Decision test. When did the underlying right, obligation, benefit, or sacrifice arise? A reliable answer should state the unit, date or period, scope, evidence, and uncertainty. When one of these is missing, the concept may still be useful for discussion, but it is not yet decision-ready information.

5. Performance obligation

Working definition. Performance obligation is a promise in a customer contract to transfer a distinct good or service, or a series treated as one obligation under the applicable standard.

Revenue analysis begins by identifying promises from the customer's perspective rather than by following invoice headings. In Varza language, the concept becomes useful when it changes a decision.

Simple example. A software contract may contain a license, implementation, and ongoing support as separate or combined obligations.

Decision test. Which document or observation would allow another person to verify it? A reliable answer should state the unit, date or period, scope, evidence, and uncertainty. When one of these is missing, the concept may still be useful for discussion, but it is not yet decision-ready information.

6. Revenue recognition

Working definition. Revenue recognition is the controlled determination of when and at what amount revenue is recorded as promised goods or services are transferred to a customer.

Billing, collection, and recognition are related but distinct. The applicable framework and contract substance determine the accounting. The professional term matters because it prevents two different realities from being recorded as though they were the same.

Simple example. An annual prepayment is recognized over the service period rather than entirely on receipt.

Decision test. How would a different assumption change the result? A reliable answer should state the unit, date or period, scope, evidence, and uncertainty. When one of these is missing, the concept may still be useful for discussion, but it is not yet decision-ready information.

7. Estimate at completion

Working definition. Estimate at completion is the current forecast of total project cost at completion.

Choose the forecasting method that matches the expected persistence of performance, remaining risks, and latest bottom-up knowledge. A non-specialist can understand this by separating the object, the timing, and the consequence.

Simple example. A simple EAC using budget divided by CPI assumes current cost efficiency continues.

Decision test. Who can influence the result, and who only reports it? A reliable answer should state the unit, date or period, scope, evidence, and uncertainty. When one of these is missing, the concept may still be useful for discussion, but it is not yet decision-ready information.

8. Customer acceptance

Working definition. Customer acceptance is evidence that a customer has acknowledged that specified delivery or performance conditions were satisfied.

Acceptance can be substantive, protective, explicit, deemed, or disputed depending on the contract and facts. It should not be assumed from silence without support. The concept should be measured at the smallest level that still supports a real action.

Simple example. A milestone invoice becomes billable after the customer signs the acceptance certificate.

Decision test. Does the item affect cash now, later, or not at all? A reliable answer should state the unit, date or period, scope, evidence, and uncertainty. When one of these is missing, the concept may still be useful for discussion, but it is not yet decision-ready information.

How the concepts connect

The concepts in this chapter are a system, not a vocabulary list. Work in progress, Percentage of completion, Accrued project cost, Deferred revenue or contract liability, Performance obligation, Revenue recognition, Estimate at completion, and Customer acceptance describe different parts of the same decision. Confusing them usually creates one of three failures: the wrong amount is measured, the right amount is assigned to the wrong period or person, or a correct report is used for a decision it was never designed to support.

A useful analysis therefore preserves both **classification** and **relationship**. Classification tells us what an item is. Relationship tells us what caused it, what it affects, and what could change it. Varza should store both. A report that shows only totals may be suitable for orientation; a controlled decision requires traceability to the underlying relationships.

Formulas and quantitative relationships

Cost-based progress

Progress % = Eligible cost incurred to date ÷ Current total eligible expected cost

The input method can depict performance when resource consumption correlates with transfer.

Boundary: Exclude or adjust items that distort performance under the applicable standard, and use current EAC.

Cumulative revenue

Revenue to date = Transaction price allocated to obligation × Valid progress %

The calculation applies measured progress to allocable consideration.

Boundary: Variable consideration, modifications, loss contracts, and legal or accounting rules require specialist assessment.

Worked case — Billing is ahead of earned revenue

A CU 1.2 million service contract qualifies for over-time recognition. Current expected cost is CU 800,000. Eligible cost to date is CU 320,000, while the customer has been billed CU 600,000 and paid CU 500,000.

Item	Amount or observation
Progress	$320,000 \div 800,000 = 40\%$
Cumulative revenue	$40\% \times 1,200,000 = \text{CU } 480,000$
Billing to date	CU 600,000
Billing ahead of revenue	CU 120,000 contract liability or related balance under facts
Cash	CU 500,000; separate from both

Calculation and reasoning

1. Verify that the cost method faithfully depicts performance and that current EAC is complete.
2. Recognize cumulative revenue of CU 480,000 under the simplified facts.
3. Because billing is CU 600,000, the contract position includes CU 120,000 billed ahead of earned revenue, subject to presentation requirements.
4. Cash of CU 500,000 leaves CU 100,000 billing receivable while still not determining revenue.
5. Update progress, EAC, billing, and cash schedules together but preserve their distinctions.

What the result means

One project can simultaneously have 40% progress, CU 480,000 revenue, CU 600,000 billing, and CU 500,000 cash. A mature system does not force these different truths into one percentage.

The case is deliberately compact. In practice, Varza would preserve the supporting documents, currency, dates, counterparty, project or cost center, approvals, and links to the resulting records. The lesson is not merely to reach a number; it is to make the path to that number reviewable.

Practical workflow

1. **Define the decision, responsible person, economic unit, period, and acceptable uncertainty.** Define the owner, required evidence, status, date, and exception route. Do not allow the next step to erase the record of the previous one.
2. **Identify whether performance is recognized over time or at a point in time under applicable rules.** Define the owner, required evidence, status, date, and exception route. Do not allow the next step to erase the record of the previous one.
3. **Select an input or output progress method that depicts transfer.** Define the owner, required evidence, status, date, and exception route. Do not allow the next step to erase the record of the previous one.
4. **Complete cost cut-off and update total expected cost.** Define the owner, required evidence, status, date, and exception route. Do not allow the next step to erase the record of the previous one.
5. **Calculate cumulative revenue and compare with billing and cash to determine contract balances.** Define the owner, required evidence, status, date, and exception route. Do not allow the next step to erase the record of the previous one.
6. **Reconcile the result to source evidence and investigate exceptions rather than forcing agreement.** Define the owner, required evidence, status, date, and exception route. Do not allow the next step to erase the record of the previous one.
7. **Approve the decision or record at the authority level required by value, risk, and legal consequence.** Define the owner, required evidence, status, date, and exception route. Do not allow the next step to erase the record of the previous one.
8. **Monitor the outcome, compare it with the original assumption, and retain the learning for the next cycle.** Define the owner, required evidence, status, date, and exception route. Do not allow the next step to erase the record of the previous one.

How this concept should appear in Varza

The minimum Varza data model for this chapter includes contract, performance_obligation, progress_measure, cost_to_date, accrued_cost, estimate_at_completion, revenue_to_date, billing_to_date, contract_asset, contract_liability. These names are not merely interface labels. Each entity should have a stable identifier, status history, responsible owner, applicable currency or unit, effective dates, evidence links, and access controls.

A useful Varza screen should answer four questions without forcing the user to reconstruct the story manually:

1. **What happened or is expected to happen?** Show the operational event, obligation, or decision in plain language.
2. **What changed financially?** Show cash, asset, liability, equity, income, expense, commitment, or risk effects.

3. **Why should the user trust it?** Show source documents, calculations, approvals, and revision history.
4. **What requires attention now?** Show exceptions, due dates, thresholds, and the next responsible action.

The Varza design principles most relevant here are:

- Attach every important number to a source, period, currency, entity, and responsible person.
- Prefer a traceable estimate with stated assumptions to an impressive number with hidden assumptions.
- Use automation to strengthen evidence and consistency, never to remove accountability.

Varza AI may explain, classify, compare, simulate, and prepare a proposed action. It should not silently change a legal record, post a material transaction, close a period, release a payment, or make an investment decision on the user's behalf. Material actions require visible evidence, permissions, validation rules, and an accountable human approval path.

Controls and professional boundaries

1. **Independent progress certification for material contracts.** The control should be proportionate to value and risk, documented clearly, and tested often enough to detect failure before the consequence becomes irreversible.
2. **Uninstalled material, abnormal waste, and inefficiency review.** The control should be proportionate to value and risk, documented clearly, and tested often enough to detect failure before the consequence becomes irreversible.
3. **Cost-to-complete update before percentage calculation.** The control should be proportionate to value and risk, documented clearly, and tested often enough to detect failure before the consequence becomes irreversible.
4. **Billing and revenue schedules reconciled but not forced to match.** The control should be proportionate to value and risk, documented clearly, and tested often enough to detect failure before the consequence becomes irreversible.
5. **Stable definitions, versioned assumptions, and consistent units across plans, records, and reports.** The control should be proportionate to value and risk, documented clearly, and tested often enough to detect failure before the consequence becomes irreversible.
6. **Traceability from every material total to evidence, calculation, owner, and change history.** The control should be proportionate to value and risk, documented clearly, and tested often enough to detect failure before the consequence becomes irreversible.
7. **Access and approval rights aligned with responsibility and the possible consequence of error or misuse.** The control should be proportionate to value and risk, documented clearly, and tested often enough to detect failure before the consequence becomes irreversible.

A control is effective only when it operates in practice. A policy that everyone can bypass is a statement of hope, not a control. Likewise, a control that blocks ordinary work without distinguishing

low-risk and high-risk cases encourages hidden workarounds.

Common mistakes and better responses

Mistake 1: Using invoices as the progress measure

Better response. Reconstruct the underlying event, state the definition being used, obtain the missing evidence, and recalculate before making a decision. Correct the process as well as the current number so the same error does not become routine.

Mistake 2: Dividing cost incurred by original budget after forecast cost changes

Better response. Reconstruct the underlying event, state the definition being used, obtain the missing evidence, and recalculate before making a decision. Correct the process as well as the current number so the same error does not become routine.

Mistake 3: Counting customer advances as profit

Better response. Reconstruct the underlying event, state the definition being used, obtain the missing evidence, and recalculate before making a decision. Correct the process as well as the current number so the same error does not become routine.

Mistake 4: Using cost input when major purchased materials do not represent equivalent performance

Better response. Reconstruct the underlying event, state the definition being used, obtain the missing evidence, and recalculate before making a decision. Correct the process as well as the current number so the same error does not become routine.

Mistake 5: Using a technically correct number outside the period, entity, currency, or decision boundary for which it was calculated

Better response. Reconstruct the underlying event, state the definition being used, obtain the missing evidence, and recalculate before making a decision. Correct the process as well as the current number so the same error does not become routine.

Mistake 6: Accepting an automated result without reviewing the evidence, assumptions, exceptions, and required professional judgment

Better response. Reconstruct the underlying event, state the definition being used, obtain the missing evidence, and recalculate before making a decision. Correct the process as well as the current number so the same error does not become routine.

Decision checklist

- ☐ Can I explain work in progress in plain language and in professional terms?
- ☐ Can I explain percentage of completion in plain language and in professional terms?
- ☐ Can I explain accrued project cost in plain language and in professional terms?
- ☐ Can I explain deferred revenue or contract liability in plain language and in professional terms?
- ☐ Have I stated the entity, currency or unit, date or period, and decision boundary?
- ☐ Can another person reproduce the number from retained evidence?
- ☐ Have I separated actuals, estimates, commitments, and scenarios?
- ☐ Have I tested timing, liquidity, risk, and at least one adverse outcome?
- ☐ Is the required approval proportional to the possible loss or legal consequence?
- ☐ Does the final output lead to a specific action, owner, and review date?

Practice lab

1. **Explain it.** Describe Work in progress to a person who has never studied finance. Then add the professional definition and identify one boundary your simple explanation omitted.
2. **Classify it.** Create five examples from your household or a small business and classify each using Percentage of completion. State any assumptions.
3. **Calculate it.** Rebuild the worked case with amounts 20% higher. Identify which conclusions change and which remain structurally true.
4. **Challenge it.** Describe a situation in which Accrued project cost could be measured correctly but still lead to a poor decision because timing, risk, or incentives were ignored.
5. **Design it.** Sketch a Varza screen or report for this chapter. Include fields, evidence links, status, owner, exceptions, and one AI-assisted action.

Answer guidance

A strong answer uses consistent definitions, reveals assumptions, distinguishes fact from estimate, and connects the result to an action. More than one conclusion may be reasonable when the learner clearly states the decision objective and uncertainty. The worked-case recalculation should preserve the method even when the numbers change.

Varza AI knowledge capsule

This capsule is intentionally explicit so that a retrieval system can distinguish canonical teaching points from examples and commentary.

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    "Accrued project cost: project cost recognized for goods or services received or work performed before the related supplier invoice or payroll posting is complete.",
    "Deferred revenue or contract liability: an obligation to transfer goods or services for which consideration has been received or become due before related revenue is recognized.",
    "Performance obligation: a promise in a customer contract to transfer a distinct good or service, or a series treated as one obligation under the applicable standard.",
    "Revenue recognition: the controlled determination of when and at what amount revenue is recorded as promised goods or services are transferred to a customer.",
    "Estimate at completion: the current forecast of total project cost at completion.",
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Suggested questions for Varza AI

- Explain this chapter using an example from a household, a shop, and a service business.

- Ask me five diagnostic questions before applying this concept to my situation.
- Show the difference between cash effect, accounting effect, and decision effect.
- Recalculate the worked case using my currency and assumptions, but preserve the original definitions.
- Identify which parts require local accounting, tax, legal, labor, or investment rules.

Sources and standards horizon

This chapter is original Varza educational content. It paraphrases and synthesizes concepts; it does not reproduce a standard or third-party article. The following sources were used to establish terminology, scope, and current professional context:

- **S114 — IFRS Foundation, *IFRS 15 Revenue from Contracts with Customers*.** 2026 standards set. Principles for recognizing revenue from customer contracts. Source: <https://www.ifrs.org/issued-standards/list-of-standards/ifrs-15-revenue-from-contracts-with-customers/>
- **S117 — IFRS Foundation, *IFRS for SMEs Accounting Standard*.** third edition 2025; effective 2027. Simplified global reporting framework for eligible small and medium-sized entities. Source: <https://www.ifrs.org/issued-standards/ifrs-for-smes/>
- **S208 — U.S. Government Accountability Office, *Cost Estimating and Assessment Guide*.** 2020-03-12. Reliable estimating, work breakdown structures, assumptions, risk and estimate updates. Source: <https://www.gao.gov/products/gao-20-195g>
- **S209 — U.S. Department of Energy, *Earned Value Management*.** accessed 2026-08-31. Integrated measurement of scope, schedule and cost. Source: <https://www.energy.gov/projectmanagement/earned-value-management>

Standards horizon. Reviewed through 2026-08-31. IFRS 18 and the third edition of the IFRS for SMEs Accounting Standard are included as transition knowledge where relevant; both have mandatory effective dates beginning in 2027, with early application permitted under their respective requirements.

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