

about the conversation and then goes back to future gaze...

Quality - Making Sound Decisions

Besides Value, CSQ3® Quality is the “Making of Sound Decisions.” How does a work effort team go about making sound decisions? What’s the CSQ3® methodology? The following is a methodology that has worked with work effort teams throughout the world. The methodology is the building of a Decision Quality Table.

Building a Decision Quality Table

The steps to building a Decision Quality Table are summarized in the following figure.

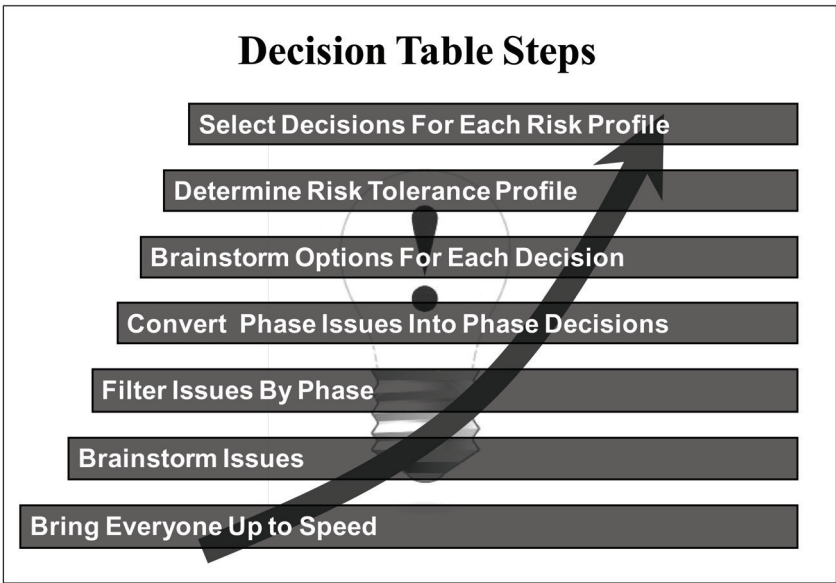


Figure 17

A Decision Quality Table is applicable to any phase. It is assumed that the core work effort team is formed and any personnel new to the team have settled in. The table is created as early as possible in a phase and is generally developed with the entire team in a workshop atmosphere. The purpose of creating the table is to establish the key decisions that the work effort team needs to make in the current phase.

First, Bring Everyone Up to Speed

The first part of the workshop is the sharing of information where all work effort team members and workshop participants are brought up to speed. Besides work effort teams members, other participants might include experts from within the organization, experts from outside of the organization, management, and/or facilitators. The sharing of information is generally by way of presentations. Work effort leaders provide background on the scope of the work effort, current phase, and key work effort accomplishments from the previous phases, as applicable. Next, key functional leaders in the work effort or individual team members provide presentations in their areas of expertise or participation. The purpose is to bring everyone up to the same level playing field.

Second, Brainstorm Issues

The next part is to brainstorm issues. There are no wrong or inappropriate issues. However, every issue must be in the form of a question and only one issue per question. Issues might include: Where will the facility be located?

Who will sign the contract? What's the mission of the task force? What's the voltage of the electrical system?



Perform the brainstorming as quickly as possible. The issues should be focused on the work effort. Issues related to any phase are appropriate.

If there is a pause in the action, throw out key words related to topics that may not have been touched such as, competition, regulations, financial, risk, etc. In addition, if there are departments or areas that are not represented, cover those areas, i.e. human resources, information technology, legal, accounting, operations, etc.

Third, Filter Issues by Phase

Filter the brainstormed issues by phase. Separate the issues into three categories: Previous Phase or Phases, Current Phase, and Future Phase or Phases.

Do not waste time on issues related to a previous phase or phases. Tell the workshop participants that it was covered in previous work or is outside of the workshop scope. If need be, take up the discussion after the workshop.

Do not waste time on issues related to a future phase or phases. If the work effort gets "Killed" the future phase issues won't matter. Concentrate only on the issues related to the current phase!!

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To determine if an issue is relevant to the current phase, ask the question “Would the issue effect the range in estimation accuracy?” (+/- 40% Concept, +/- 25% Structure, +/- 15% Detail).

Fourth, Convert Current Phase Issues into Phase Decisions

Convert current phase issues into current phase decisions. There are generally numerous issues related to each decision. The decision should reflect the general nature of the issues. The decision should be one or two words and placed in the top row of a Decision Table. Leave the first column of the table blank.

Normally, in a Decision Quality Workshop the current phase issues are separated into functional areas. The larger group is then broken down into their respective areas of expertise. The personnel assigned to particular areas will then review the provided issues and convert the issues into decisions.

As an example, the work effort is buying a new car and the following Detail Phase issues have been raised: Should we have a High Definition radio? What video systems are available? Do we need GPS? What about leather seats? Is there a larger engine?

The Detail Phase decisions for the above issues would be: Audio System, Video System, Navigation System, Interior Seats, Engine Options, respectively, as shown in the figure.

New Car Decision Table					
Controllable & Risk Mitigation Decisions for the Current Phase					
Risk Tolerance	Audio System	Video System	Navigation System	Interior Seats	Engine Options
	Option	Option	Option	Option	Option
	Option	Option	Option	Option	Option
	Option	Option	Option	Option	Option
	Option	Option	Option	Option	Option
	Option	Option	Option	Option	Option

Figure 18

Fifth, Brainstorm Options for Each Decision

For each decision brainstorm all reasonable and achievable options. Options should be unique and distinct from one another. Identify, roughly 4-6 options for each decision, if possible. Potential decision options for the new car example are shown in the figure below.

New Car Decision Table					
Controllable & Risk Mitigation Decisions for the Current Phase					
Risk Tolerance	Audio System	Video System	Navigation System	Interior Seats	Engine Options
	None	None	None	Standard	V6
	Standard	In Dash	Factory GPS	Leather	V8
	HD Radio	Overhead	Non-Factory GPS	Standard w Heating & Cooling	Hybrid
	HD Radio MP3, USB	Head Rest		Leather w Heating & Cooling	All Electric
	HD 1000 Watt Speakers	Universal Screen			

Figure 19

Note, decision options are normally identified by the respective functional personnel. Do not throw out wild options.

In fact, encourage wild options as long as they are reasonable and achievable. The purpose of the Decision Table is to identify critical phase decisions and all of the associated decision options.

Sixth, Determine Risk Tolerance

If a work effort team utilizes the phased approach, interacts with management, and makes sound decisions, the probability for a successful work effort is high. Consequently, the steps are in place for success. A critical variable is how much risk are you willing to take?

For example, if the work effort is your retirement plan, the amount of risk that you are willing to take will significantly affect the decisions that you make. If you have a conservative (low) risk tolerance, the majority of your investments would probably be in bonds. If you have a high risk tolerance (willing to take greater risks for higher rewards), the majority of your investment would favor stocks.

In a Decision Quality Workshop the entire team generally participates in the discussion on risk tolerance. The discussions can become time consuming. Fortunately, for most work efforts, only one risk profile is necessary. The Normal risk profile is a reflection on what the organizational culture would identify as an acceptable risk for the given work effort. It may be a feeling; it may be a reflection on what happens if things go bad; it may be based on

acceptable financial parameters and numeric probabilities, etc. Establish the risk tolerance profile or profiles for the work effort.

Exercise



What is your “Normal” Risk Tolerance with respect to making investments?

Finally, Select Decisions for Each Risk Tolerance Profile

A decision table can have more than one risk profile. For each risk profile, go through the decision table, and select the appropriate decisions. Some decisions will be the same, some will be different.

If there are multiple risk tolerance profiles, the work effort team is then faced with the additional burden of determining the best profile. In the case where there are multiple risk tolerance profiles, use economics to determine the risk – reward relationship and the best profile.

In the car example, let’s assume the person looking to buy the new car has no debts, no children, and just landed a great paying job after finishing college. What would the Decision Table for buying a new car look like?

Based on an assumed normal risk profile, the chosen decisions are highlighted in the figure on the next page.

New Car Decision Table					
Controllable & Risk Mitigation Decisions for the Current Phase					
Risk Tolerance	Audio System	Video System	Navigation System	Interior Seats	Engine Options
Normal	None	None	None	Standard	V6
	Standard	In Dash	Factory GPS	Leather	V8
	HD Radio	Overhead	Non-Factory GPS	Standard w Heating & Cooling	Hybrid
	HD Radio MP3, USB	Head Rest		Leather w Heating & Cooling	All Electric
	HD 1000 Watt Speakers	Universal Screen			

Figure 20

Decision Selection Streamlines Phase Activity

The making of sound decisions is applicable to every phase. Most decisions can be decided in a Decision Quality Workshop. Some decisions may require additional reflection, consultation with management, or risk mitigation calculations. However, making work effort decisions as early as possible in a phase, reduces work and simplifies the identification of tasks and activities that are necessary to complete the current phase.



Exercise

Your work effort is going on vacation (Concept Phase). Brainstorming issues have lead to the following two decisions: Location and Duration. What are the possible decision options for each?

CSQ3® Content Summary

CSQ3® CONTENT SUMMARY			
	Fundamentals	Optimum	Metrics
Work Efforts	✓		
Key Organizational Work Efforts		✓	✓
Work Effort Components			
Phases	✓	✓	✓
Decision Points	✓	✓	✓
Cost Estimates	✓	✓	✓
Schedule Estimates	✓	✓	✓
Quality - Value Estimates	✓	✓	✓
Quality - Decision Tables	✓	✓	✓
Includes Key Work Efforts		✓	✓
Established Scope		✓	✓
Empowered Teams		✓	✓
Assigned Personnel/Resources		✓	✓
Tracked Responsibility		✓	✓
Execution Plus®		✓	✓
Management Decision Points		✓	✓
Governance – Three Level System		✓	✓
Delivering Value			✓
Determine Work Effort and Level Scores			✓
Fundamental Appraisals			✓
Ultimate Appraisals			✓
Creating a Self Correcting Organization			✓
Training, Utilization and Capture			✓
Improving Work Efforts			✓
Improving Departments			✓
Governance – Performance System			✓

Definitions

Centers of Knowledge – Departments are created in order to manage functional groups and train personnel. Departments are “Centers of Knowledge” for the contained functional areas.

Concept Phase – is the “Big Picture” division of any work effort. Cost, Schedule, and Value estimates are +/- 40%.

Cost Estimate – is the estimated monetary cost for a work effort to reach the Operate Phase. Cost estimates are provided at the end on the Concept, Structure, and Detail Phases with accuracies of +/- 40%, +/- 25%, and +/- 15%, respectively.

CSQ3[®] - is Cost Schedule and Quality Raised to the Third Power.

CSQ3[®] Fundamentals - are basic CSQ3[®] concepts and methodologies that are applicable to all work efforts.

CSQ3[®] Metrics - is an organizational performance scoring system. The maximum organizational score is 10,000 points. Six thousand of the ten thousand points are dedicated to the delivery of organizational value. The remaining four thousand points are dedicated to the development of a self-correcting organization. “Organizational Excellence” is achieved, when an organization scores 9,000 points or more.

CSQ3[®] Optimum - is a multilevel organizational work flow system. Key organizational work efforts are contained in each level. The three levels are Strategic, Major Commercial, and Project. The system is applicable to any

organization. The system allows organizations to “Perform the Right Work, at the Right Time, with the Right People.”

CSQ3[®] Quality - is the “Delivery of Actual Value” and the “Making of Sound Decisions.”

Decision Point – is located in between work effort phases, where the decision is made to either stop, “Kill” the work effort or “Approve” the work effort to the next phase.

Decision Table – is a table containing the controllable and risk mitigation decisions and decision options considered by a work effort team. Decision options are chosen based on the risk tolerance of the work effort.

Detail Phase – is the “Meat on the Bones” division of any work effort. Cost, Schedule, and Value estimates are +/- 15%.

Execution Plus[®] - is a work effort documentation methodology that simplifies and standardizes the reporting requirements of work effort teams.

Functional Group – Personnel in a department that have specialized areas of expertise.

Functional Decisions – work effort decisions made by team members with specialized areas of expertise.

Fundamental Appraisal – Cost, Schedule, and Decision Quality review of a work effort.

Governance – is an organization’s internal procedures to manage and insure the integrity of the CSQ3[®] Optimum and CSQ3[®] Metrics systems.

Implement Phase – is the “Make It Happen” division of any work effort.

Key Organizational Work Effort - is a work effort that requires multi-department input or is a department work effort designated by management to be included in the CSQ3® Optimum workflow system. All key organizational work efforts are to be included in the CSQ3® Optimum workflow system.

Major Commercial Level - is the accumulation of all major work efforts that have a significant (economic, political, or sociological) contractual impact on an organization.

Management Decision Point – is located in between work effort phases and is a formal review with a work effort team where management either stops “Kills” the work effort or “Approves” the work effort to the next phase.

Operate Phase – is the “Manage the Results” division of any work effort.

Organizational Excellence – A CSQ3® Metrics score of 9,000 points or more in the 10,000 point organizational performance scoring system.

Phase – identifiable division of work activity in a work effort.

Risk Mitigation Decisions – work effort decisions made by team members to minimize the negative effects of an uncontrollable event.

ROI – is Return on Investment. ROI equals (Revenues minus Investment) divided by Investment. Include intangibles or goodwill in the revenue term, as appropriate.

Inclusion of intangibles or goodwill should be consistent among all key organizational work efforts.

Project Level - is the accumulation of all work efforts that result in the building, construction, or development of tangible end products.

Schedule Estimate – is the estimated time for a work effort to reach the Operate Phase. Schedule estimates are provided at the end on the Concept, Structure, and Detail Phases with accuracies of +/- 40%, +/- 25%, and +/- 15%, respectively.

Strategic Level – is the accumulation of all work efforts that establish organizational direction.

Structure Phase – is the “Framework” division of any work effort. Cost, Schedule, and Value estimates are +/- 25%

The Business Roundtable - (www.businessroundtable.org) is an association of chief executive officers of leading U.S. companies

Ultimate Appraisal – is an organizational review of a work effort in the Operate Phase with the intent of establishing the Actual Delivered Value of the work effort.

Value Estimate – is the estimated value of a work effort. Report value in monetary terms, such as Return on Investment (ROI). Value estimates are provided at the end on the Concept, Structure, and Detail Phases with accuracies of +/- 40%, +/- 25%, and +/- 15%, respectively. Include Operating Phase costs and revenues. Include goodwill or intangibles, as appropriate.

Work Effort – has a definable objective; a start and an end point; numerous tasks or activities; and measurable results or goals.