

1

The Discipline and Doctrine of Proactive Dispute Management (PDM)



Readers' Learning Objectives and Outcomes

- 1) *Understand the discipline and doctrine of proactive dispute management (PDM) as it applies to the industry.*
- 2) *Define concepts of dispute prevention, avoidance, and dousing—dispute prevention, avoidance, and dousing (D-PAD).*
- 3) *Distinguish PDM from partnering, alliancing, integrated project delivery (IPD), alternative dispute resolution (ADR), and litigation.*
- 4) *Outline the common sources and triggers of disputes that can be handled with PDM in a nonconfrontational approach to project contract and delivery management.*

1.1 Introduction

The construction industry and related sectors exist in a complex and competitive environment with many participants of conflicting interests, priorities, principles, policies, and procedures. People and companies of different capacities, views, and knowledge of the construction process work together on a project. They have their own goals and expectations, which are often discordant. Attitudes among people vary as they come. Conflicts are inevitable in such a scenario, and if not proactively handled and managed effectively, they may result in disputes that can cause significant delay in the achievement of the triumvirate project goals of delivering on time, within budget, and to the expected level of quality.

There is a difference between conflict and dispute (Fenn et al. 1997), but many use them interchangeably and indiscriminately (Acharya et al. 2006; Moore 1989). Conflict applies where interests, views, and approaches are discordant and incompatible. If conflicts are not addressed and resolved, ultimately they will lead to disputes. Disputes (unresolved conflicts) can prevent the successful delivery of a project on time, within budget, and to quality. Fenn et al. (1997) went further to state that conflict can be managed, possibly to the extent of preventing a dispute resulting from the conflict, whereas a dispute is associated with distinct justiciable issues that require resolution, which lends itself to third-party intervention. In other words, disputes can be negotiated, mediated, arbitrated, or litigated, but the fact that they can be prevented, avoided, or doused (see definitions below) is not the practice of the day. They see conflict and dispute as pathological states whose causes and treatment are worth studying. They went on to ask the following questions: What then are the causes of disputes? Is it possible to identify the causal factors? If so, the construction industry's actors might seek to avoid or forestall them. However, they drove back into the usual resolution solutions—binding and nonbinding—while concluding that research into other causal factors of disputes beyond contracts may allow the development of a predictive model, allowing the parties to be aware of, and perhaps avoid, factors that cause disputes.

1.2 Distinguishing PDM from Partnering, Alliancing, IPD, ADR, and Litigation

Proactive dispute management (PDM) is a distinct, novel approach to handling disputes by aspiring ahead of conflicts and disputes to prevent, avoid, or douse them so that they are nondisruptive and either nonexistent for resolution, or don't escalate to resolution. PDM anticipates disputes and runs ahead of them by putting structures and processes in place to prevent, avoid, or douse them before they escalate and require resolution by private negotiation (relating to privity of contract

between parties—owner and contractor or subcontractors and suppliers, and contractor and subcontractors and suppliers), mediation, arbitration, or litigation. By contractors, we mean general contractors (GC) or prime contractors—those who have won bids and signed contracts to take over and be responsible for overseeing projects from start to finish.

The doctrine of privity of contract in common law provides that a contract cannot confer rights or impose contractual obligations on someone who is not a part of or a party to that contract. In the privity of contract between the owner and the contractor, the word “parties” refers to the owner and the contractor. On the same hand, in the privity of contract between the contractor and the subcontractor or the supplier, the word “parties” refers to the contractor and the subcontractor or the supplier. Also, in the privity of contract between the subcontractor or the supplier and the sub-subcontractor, the word “parties” refers to the subcontractor or the supplier and the sub-subcontractor. However, we won’t be considering the third privity of contract (i.e., that between the subcontractor or the supplier and the sub-subcontractor) here due to the mechanics lien law that limits lien rights to only second-tier relationships. It means that the contractor and the subcontractor can lien on the owner’s project, but sub-subcontractors and others cannot. Sub-subcontractors can lien on the property of the contractor and the subcontractor, but not on the owner’s property.

Generally, disputes in the building and construction industry tend to be reactively addressed through the expensive and time-consuming use of alternative dispute resolution (ADR), and sometimes litigation. Other third-party-facilitated solutions, such as partnering¹ and alliancing,² have been attempted, with limited success. “Lean construction”³ and novel delivery approaches such as integrated project delivery (IPD)⁴ are partly aimed at minimizing disputes despite most of their root causes being behavioral or attitudinal. Unlike other industries and businesses, the building and construction industry does not fare well after a few contested disputes, inasmuch as the industry relies heavily on the reputation of the

1 As defined by the U.S. General Services Administration, partnering is a formal management process in which all parties to a project voluntarily agree at the outset to adopt a cooperative, team-based approach to project development and problem resolution to eliminate, or at least reduce, conflicts, litigation, and claims.

2 As defined by PricewaterhouseCoopers (PwC) Australia, alliancing is a cooperative form of contracting where the participants enter into a relationship (alliance) that is designed to align the commercial interests of the participants. Each participant in the alliance will share in the success or failure of the project and in decision-making and risk management.

3 As defined by Lean Construction Institute, lean construction is a project delivery process that uses lean methods of maximizing stakeholder value while reducing waste.

4 As defined in Wikipedia, IPD is a construction project delivery method that seeks the efficiency and involvement of all participants through all phases of design, fabrication, and construction. IPD combines ideas from integrated practice and lean construction.

participants. Entities with a reputation for disputes will be avoided, which will ultimately lead to the demise of their business.

Due to the nature of the industry, anchored significantly on human relations, such connections tend to be dramatically weakened or severed by contested disputes. Thus, there is a significant interest in avoiding disputes both for the present project and for future business. It is not surprising to see the larger companies in the industry retaining attorneys, not merely to deal with their contested disputes like other industries, but rather to prevent them from ever getting into disputes that will be contested up to litigation or ADR. Essentially, ADR, litigation, and related approaches are after-the-fact damage control, or what may be termed, “medicine after death.” By the time they come on board, the damage has been done, and the scars remain and build up, growing into resentment and damaging a reputation inimical to business relationships, survival, and success. While the bigger entities can afford to hire attorneys to prevent their disputes from escalating to ADR or litigation, the expense of an attorney may not be a viable option for a smaller entity that runs on tight margins.

Hence, the nature of the building and construction industry calls for a different proactive approach to dispute that can save contracting parties the little time they have for ADR or litigation, or the tedium of partnering or alliancing, and other minimally effective contractual approaches. The contractual approaches are in the mix, perhaps, because Clegg (1992) tacitly argued from a sociologist’s perspective that contracts cause conflicts, and intuitively, some contracts could cause more disputes than others. In contrast, the approach offered here is the evolving discipline and doctrine of PDM using its three critical concepts of dispute prevention, avoidance, and dousing—D-PAD. PDM is augmented by predictions with artificial intelligence (AI), which will be discussed in a later chapter.

PDM is an internal conscience and constant due diligence process used to prevent, avoid, and/or douse disputes rather than waiting for them to happen and then trying to resolve. PDM is distinct from partnering or alliancing, which involves a third-party facilitator between the parties to a contract. Partnering and other solutions, such as IPD, tend to dwell heavily on contracts, which are not the only sources of disputes. Hence, the parties to the contract have to be involved in partnering, or alliancing, and IPD.

PDM here focuses principally on the contractor organization and is fluid, even though subcontractors and owner organizations can also have their own independent, internal PDM process. It takes two to tango in any dispute; when one party in a potential dispute scenario does not bring the fire (in this case, due to the contractor organization embracing PDM concepts [D-PAD] best practices *ab initio*), the probability of a contested dispute arising is minimal or nonexistent. While PDM considers the totality of the project, including its owner, it does not force other project participants and stakeholders to engage in team integration

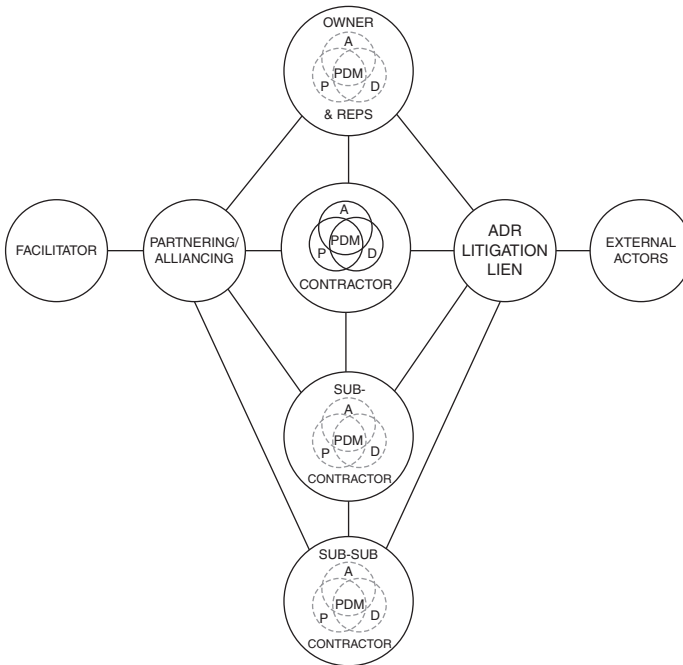


Figure 1.1 Proactive dispute management (PDM) ecosystem. *Source:* Ilozor (2019).

practices often codified in contracts and associated approaches, such as IPD, partnering, or alliancing. Rather, PDM is an internal philosophy and a paradigm shift that is holistically practiced by individuals and organizations to proactively moderate and mitigate disputes from arising. However, emphasis in this book is central on the contractor organization, as its personnel have the greatest opportunity to make an impact on the dispute climate of a project (Diekman et al. 1994). Hereunder is an illustration of PDM's ecosystem from the lead author's collection of illustrations (Figure 1.1).

1.3 Defining the Three Critical Concepts of PDM–D-PAD

The three critical PDM concepts are as follows:

- 1) Dispute prevention is an organizational cultural initiative that refers to the steps that are consciously and continuously taken by an entity to prevent disputes from arising. Dispute prevention strategies include a strategic or longer-term culture of working with comprehensive planning and detailed

design, ample and effective communication, unambiguous and explicit contracts, proactive risk analysis and assessments of projects, imbibing of total quality management (TQM), quality assurance (QA), and quality control (QC) principles, six sigma principles, dispute reputation rating (DRR), openness to collaborative approach, and effective document handling, distribution, and interpretation. A culture of thorough value engineering, and especially project constructability analysis to hash out and clear all construction bottlenecks, is a potent measure in the dispute prevention toolbox.

- 2) Dispute avoidance, taking the elephant in the room analogy, refers to actions to keep or navigate away from extant potential dispute flashpoints and not do anything to agitate them in the project delivery process. Due to the ever-presence of Murphy's law, even with our best intentions and efforts, things that can go wrong will go wrong. Dispute avoidance strategies include both a priori and a posteriori knowledge and experience in the management of the construction process, such as cement curing and setting, that may delay some sequence of the schedule and the works. Projecting and envisioning such potentially disruptive aspects of the project enables the ability to navigate around them and keep the work moving forward with minimal or no disruptions, which can avoid conflicts and disputes. Again, planning ahead and thorough prior analysis of the project for such risks are key to avoiding consequential conflicts and disputes from them. Hence, Disputes Potential Index (DPI)—as piloted by a study sponsored by Construction Industry Institute's (CII) Disputes Avoidance and Resolution Task Force to predict contract disputes (Diekmann et al. 1994)—and other dispute-predicting tools and technologies can be essential measures in the dispute avoidance toolbox.
- 3) Dispute dousing is engaged when dispute prevention and dispute avoidance fail, and it involves the deployment of quick actions to neutralize and extinguish emergent disputes before they deteriorate into costly and time-consuming ADR or litigation. Dispute dousing can be achieved by continuous close monitoring of the process to ensure early identification of budding dispute issues, open communication channels with the parties and participants, encouragement of collaborative solutions to emerging issues, and clear task and responsibility assignments and leadership. Charisma and probably some conflict handling and resolution training—as well as intermittent and regular audits and reviews—are helpful within the dispute dousing toolbox.

Most experienced industry professionals are aware of what leads to disputes, or what potential triggers and areas are susceptible to disputes, or what can generate them. It means that most of these disputes are predictable, and measures can be put in place to prevent or avoid them, and if both steps fail, then swift action is taken to douse them quickly before they escalate to a degree that requires resource-consuming resolution. Hence, identifying, isolating, and managing

them early, ahead of possible occurrence, are the efficacious steps to D-PAD. This purpose is achieved through early internal dispute risk analysis before commencement of the construction project. Much like TQM, QA, and QC on any job, engaging in an internal PDM process prior to construction can avoid third-party involvement such as partnering or alliancing, ADR, and litigation, thus eliminating expense, lost time, owner involvement, and risk of loss of reputation and future business.

Besides the dispute types offered under Table 12.1, one of the most comprehensive categorizations of common causes of disputes was given by Cakmak and Cakmak (2014) as extracted in Table 1.1. PDM through D-PAD cannot be effectively deployed without appreciating where and how these common disputes originate.

Table 1.1 Common causes of disputes by categories.

Category of disputes	Causes of disputes
Owner related (A)	1. Variations initiated by the owner (A1) 2. Change of scope (A2) 3. Late giving of possession (A3) 4. Acceleration (A4) 5. Unrealistic expectations (A5) 6. Payment delays (A6)
Contractor related (B)	1. Delays in work progress (B1) 2. Time extensions (B2) 3. Financial failure of the contractor (B3) 4. Technical inadequacy of the contractor (B4) 5. Tendering (B5) 6. Quality of works (B6)
Design related (C)	1. Inadequate/incomplete specifications (C2) 2. Quality of design (C3) 3. Availability of information (C4)
Contract related (D)	1. Ambiguities in contract documents (D1) 2. Different interpretations of the Contract provisions (D2) 3. Risk allocation (D3) 4. Other contractual problems (D4)
Human behavior related (E)	1. Adversarial/controversial culture (E1) 2. Lack of communication (E2) 3. Lack of team spirit (E3)
Project related (F)	1. Site conditions (F1) 2. Unforeseen changes (F2)
External factors (G)	1. Weather (G1) 2. Legal and economic factors (G2) 3. Fragmented structure of the sector (G3)

Source: Cakmak and Cakmak (2014) / with permission of Elsevier.

Table 1.2 Conflict and dispute in construction from the literature.

Research	Sources of disputes from the literature
Bristow and Vasilopoulous (1995)	Five areas: unrealistic expectations; contract documents; communications; lack of team spirit; and changes
Conlin et al. (1996)	Six areas: payment; performance; delay; negligence; quality; and administration
Diekmann et al. (1994)	Three areas: people; process; and product
Heath et al. (1994)	Seven areas: contract terms; payment; variations; time; nomination; renomination; and information
Hewit (1991)	Six areas: change of scope; change conditions; delay; disruption; acceleration; and termination
Kumaraswamy (1996)	Two areas: root causes and proximate causes
Rhys Jones (1994)	10 areas: management; culture; communications; design; economics; tendering pressures; law; unrealistic expectations; contracts; and workmanship
Semple et al. (1994)	Four areas: acceleration; access; weather; and changes
Sykes (1996)	Two areas: misunderstandings and unpredictability

Source: Fenn et al. (1997) / with permission of Taylor & Francis.

Fenn et al. (1997) provided a literature collection of conflict and dispute causes in construction, as shown in Table 1.2.

1.4 Conclusion

Contractual parties’ desire to avoid litigation from disputes has pushed them toward different deliveries and contracts besides the lump-sum approach. Innovations in construction delivery processes and methods have seen more collaborations between designers and builders, as well as all participants and stakeholders. Despite these new welcome developments and the availability of many dispute minimization and long-practiced resolution methods in construction and related industries, disputes between parties still remain of great concern to the participants and stakeholders. Conflicts and disputes abound where two or more parties have to work together on a project or projects, and their potential rises even more in a field such as construction and related industries with many players and parties on a common situs. The choice is ours as to how to handle or manage these conflicts and disputes: either reactively and through third-party and contractual involvement, as in the case of ADR, litigation, partnering/alliancing,

and IPD; or proactively, as with PDM concepts such as D-PAD. Reactive, contractual, and third-party-moderated approaches have been adopted as the norm over many years, and we have accepted them. However, we don't have to live with them anymore with the PDM concept now available, as continuing with the old ways will continue to be damaging in terms of time and cost, and will damage relationships, reputation, and competitiveness.

The opportunities in construction are limitless with the advancement of time and technology. The industry spans from residential projects to commercial, industrial, and civil/heavy/highway engineering projects, which have all grown in size and complexity. Many people work in the industry, and with this scenario comes the potential for conflicts and disputes. Managing conflicts and disputes so that the business of construction is not disrupted or shortchanged is of great benefit to all parties and participants. PDM provides new solutions unencumbered by contracts, onerous processes, and third-party interventions.

In summary, the construction industry builds the nation, making up as much as 10% of some nations' gross domestic product (GDP). Many parties and participants from the construction industry are involved in project delivery, including owners; professionals like architects, engineers, and construction managers; contractors and the trades (subcontractors, sub-subcontractors, suppliers, and vendors); and regulatory authorities. This scenario breeds the potential for conflicts and disputes. When two or more are gathered together, or working together, the probability of conflicts and disputes rises. The participants and players portend their own conflicts and disputes. Knowing about the types of conflicts and disputes associated with each participant and situation is important, as are the means to handle or resolve them. However, far more important and profitable is recognizing the flashpoints and triggers of conflicts and disputes beforehand, and figuring out a way to prevent, avoid, or douse them before they flare up and cause disruption to work, or cost time and money, or cause disaffection among the parties. We will look at the dispute flashpoints and triggers associated with different participants, players, and situations through the lens of PDM. This approach allows us to identify ways to prevent, avoid, or douse these triggers from the contractor's perspective, thereby saving the contractor's time and money. Furthermore, it helps prevent strained business relationships and loss of competitiveness that can arise as a consequence of even the best resolved disputes. The dispute flashpoints and triggers calling for PDM will be presented here in three chapters, namely:

Chapter 2: Owner-related dispute flashpoints,

Chapter 3: Contractor-related dispute flashpoints, and

Chapter 4: Miscellaneous dispute flashpoints that include:

- a) Subcontractor and supplier-related dispute flashpoints,
- b) Construction documents-related dispute flashpoint,
- c) Contract-related dispute flashpoints,

- d) Attitude and disposition-related dispute flashpoints,
- e) Nature and uniqueness of project-related dispute flashpoints, and
- f) External factors-related dispute flashpoints.

1.5 Case

Dispute Dousing:

- 1) *Case shared by Granger's President, Dennis Carignan:* We were selected to construct a student recreational facility to be paid for via a student fee that was being charged immediately (before the facility was available for use). This reality created a strong sense of urgency to get the facility designed and constructed. We were hired after the design team, primarily because we demonstrated a sense of urgency and had a good track record of delivering on our promises for fast-track projects. Once hired, we began pulling early work ahead to both show progress and create a more realistic construction duration and still achieve the desired completion date. The entire team was clear about the plan and committed to the dates. We worked intensely with the design team. Site preparations, under-slab utilities, building foundations, and slab on grade were all pulled ahead of winter conditions, allowing for steel erection to take place through the winter months. Unfortunately, some combination of limited resources, competing priorities, some envelope changes, and a bit too much optimism contributed to a slew of structural steel RFIs, which delayed delivery by nearly two months. Given the political nature of the project, a stern letter of concern was sent to both the designer and the builder (same letter). It is very tempting to formally defend your position when this happens. After a brief discussion, we realized the predicament that the administration was in and decided that a rebuttal of facts, no matter how true they were, was not going to improve the situation. Administration wanted to feel heard, and calling out project partners would only drive a wedge in the team at a time when we needed even more cooperation. We instead met with the designers and key trades, agreed on a joint response with assurances that we understood, had analyzed the contributing factors, that we had a very good and clear path forward to prevent any further delays, and reiterated our commitment to the completion date. Though it was not easy to swallow our pride in the moment, we reinforced team trust with our partners, satisfied the owner's concerns, and went on to fully recover the lost time through adjusted details, sequencing of the work, and minor selective overtime. We consider this team-first philosophy essential in proactive dispute management.
- 2) *Case shared by Granger's President, Dennis Carignan:* The second example is the occupied/phased extension of a dental school. This was a \$125M project for

a university. Our scope was to completely replace the electrical and mechanical systems for the entire building while sequentially renovating each space and maintaining egress, wayfinding, temperature, and dust control, and maintaining noise levels to accommodate ongoing patient care, research activities, and teaching class schedule. Each area's schedule was critical to be completed before the occupants could relocate and the next phase could begin. Many of the phase start dates were linked to the academic calendar, so missing them by even a week was not an option. The risk of additive/cumulative delays was extremely high. During the first phase (main infrastructure replacements that allow future phases to commence), previously concealed existing conditions were found to be substantially different from the design documents. Time lost to resolving discrepancies, adjusting the scope, and resequencing activities all had to be made up via overtime and shift work during an extremely tight labor market. Tensions ran extremely high for far too long. The management team agreed to meet the needs and reengineered meeting rhythms and agendas. Monthly team culture meetings were scheduled to vent frustrations to/with each other and agree on adjustments and renew commitments to each other. The as-built conditions continued to vary from those that were anticipated, which required a few interim milestone date adjustments, but in the end, the project finished exactly on its original substantial completion certificate. Through \$24M of change management over four years of extraordinarily tense conditions, not a single subcontractor claim had to be escalated to any formal ADR measures. Even more impressive was that despite the difficult working conditions that appeared to have no end in sight for years on end, not a single Granger employee on that project exited the company during the project. The project went on to win a Build Michigan and a Build America Award for its perseverance in overcoming so many challenges to reach a successful outcome.

- 3) *Case shared by Anthony Sparkling, Ph.D. (former Granger Project Manager):* The project was a new \$100M enterprise data center with myriad stakeholders and project participants. It was delivered using Design-Build (DB) with early specialty contractor (i.e., electrical and mechanical contractors) involvement. Due to the complexity of the build, the owner hired an experienced consultant to manage quality, drive decisions, and to challenge the design—their primary function being to ensure that the design and construction team were working assiduously to achieve Uptime Tier 3 certification (i.e., a data center with multiple paths for power and cooling and systems in place to update and maintain it without taking it offline—concurrent maintainability). These types of data centers are designed with an expected uptime of 99.982% (1.6 hours of downtime annually).

As the project underwent final commissioning (Cx) and approached owner turnover, unexpected flashpoints would arise and were quickly doused. One such

instance involved a bypass pipe that needed to be installed between two chilled water loops feeding the data hall's cooling systems to prevent stagnation from occurring in the normally closed tie pipe. The mechanical engineer provided an architect's supplemental instruction (ASI) with enough detail for the mechanical contractor to complete the additional work. After completing the work, the consultant challenged the effectiveness of the installation and its adherence to the design intent.

To avoid escalation and additional rework costs, we decided to bring all the relevant stakeholders to the field to discuss the situation. The owner's team, including the consultant, end-user groups, project management staff, and the facility operators, met with the contractor team (i.e., GC, mechanical subcontractor, and design engineers). Once we started reviewing the installation and discussing the work, the situation immediately became contentious. I asked everyone to stop for one minute so we could approach things objectively and allow everyone to add shared knowledge to the discussion. I worked my way around to each of the stakeholders that would be affected by the current installation or involved in rework. With clear consensus and agreement from the design engineer and construction team, maintaining that the installation met the design intent, the facility operators lauded how they thought the installation was better than the changes proposed by the consultant. They went on to say that "the design exceeded the requirements of their internal design specifications for small pipe sections." After these last comments, the consultant acquiesced to the will of the majority and the core owner team, who suggested that we move on.

And while countless flashpoints like this occurred throughout the final Cx and closeout phases, none of them led to arbitration or litigation. With diligence and our attentiveness to the owners' concerns, we were awarded their redundant \$140M enterprise data center project that was continuously being designed and budgeted for via a change order.

References and Suggested Further Reading

- Acharya, N.K., Lee, Y.D., and Im, H.M. (2006). Conflicting factors in construction projects: Korean perspective. *Journal of Engineering, Construction and Architectural Management* 13 (6): 543–566.
- Bristow, D. and Vasilopoulos, R. (1995). The new CCDC 2: facilitating dispute resolution of construction projects. *Construction Law Journal* 11 (2): 95–117.
- Cakmak, E. and Cakmak, P.I. (2014). An analysis of causes of disputes in the construction industry using analytical network process. In *Second World Conference on Business, Economics and Management – WCBEM 2013. Procedia – Social and Behavioral Sciences* 109: 183–187.

- Clegg, S. (1992). Contracts cause conflict. In: *Construction Conflict: Management and Resolution* (ed. P. Fenn and R. Gameson), 128–144. London: Chapman & Hall.
- Conlin, J., Langford, D., and Kennedy, P. (1996). The relationship between construction procurement strategies and construction contract disputes. *CIB W92, North Meets South*, Durban, South Africa, 14–17 January 1996.
- Diekmann, J., Girard, M., and Abdul-Hadi, N. (1994). Disputes potential index: a study into the predictability of contract disputes. Construction Industry Institute, Source Document 101, The University of Texas, Austin, TX.
- Fenn, P., Lowe, D., and Speck, C. (1997). Conflict and dispute in construction. *Construction Management and Economics* 15 (6): 513–518. <https://doi.org/10.1080/014461997372719>.
- Heath, B., Hills, B., and Berry, M. (1994). The origin of conflict within the construction process. *Proceedings of the First Plenary Meeting of TG15*, Publication 171. Rotterdam, The Netherlands: CIB.
- Hewit, J. (1991). *Winning Construction Disputes – Strategic Planning for Major Litigation*. London: Ernst and Young.
- Ilozor, B.D. (2019) Dispute prevention, avoidance, and dousing – DPAD: A discipline and philosophy of proactive dispute management. Unpublished manual presented to Vice President & General Manager, Turner Construction Company at Eastern Michigan University, USA.
- Kumaraswamy, M. (1996). Conflict, claims and disputes in construction. *Engineering and Architectural Management* 4 (2): 95–111.
- Moore, C. (1989). *The Mediation Process*. San Francisco, CA: Jossey Bass.
- Rhys Jones, S. (1994). How constructive is construction law? *Construction Law Journal* 10 (1): 28–38.
- Seiple, C., Hartman, F., and Jergas, G. (1994). Construction claims and disputes: causes and cost/time overruns. *Journal of Construction Engineering and Management ASCE* 120 (4): 785–795.
- Sykes, J. (1996). Claims and disputes in construction. *Construction Law Journal* 12 (1): 3–13.

Chapter Review Questions

- 1) Which of the following statements is *true* about PDM?
 - a) It is an in-house dispute handling process.
 - b) It is a dispute resolution method.
 - c) An independent third-party facilitates the process and ensures equitable dispute handling.
 - d) It has been in use in the industry for as long as ADR, IPD, partnering, and alliancing.

- e) All of the above.
- f) None of the above.
- 2) The potential for conflicts and disputes in the industry will reduce with the advancement of time, innovations, technology, and collaborations. True/False?
- 3) Conflicts and disputes are the same and can be used interchangeably. True/False?
- 4) Which dispute handling and minimizing method(s) is/are nonreactive and doesn't/don't require third parties? (Choose the right answer[s])
 - a) Litigation
 - b) IPD
 - c) ADR
 - d) PDM
 - e) Partnering
 - f) Alliancing
- 5) PDM application is binding on the parties to a contract to prevent, avoid, and douse disputes before they escalate to the need for resolution. True/False?
- 6) Resolving disputes tends to strengthen human relations and promote business growth and success among participants and parties of the construction and related industries. True/False?
- 7) A formal management process in which all parties to a project voluntarily agree at the outset to adopt a cooperative, team-based approach to project development and problem resolution to eliminate, or at least reduce, conflicts, litigation, and claims. This statement refers to _____.
 - a) Litigation
 - b) IPD
 - c) ADR
 - d) PDM
 - e) Partnering
 - f) Alliancing
- 8) _____ is a construction project delivery method that seeks the efficiency and involvement of all participants through all phases of design, fabrication, and construction.
 - a) Litigation
 - b) IPD
 - c) ADR
 - d) PDM
 - e) Partnering
 - f) Alliancing

- 9) _____ is a cooperative form of contracting where the participants enter into a relationship that is designed to align the commercial interests of the participants.
- a) Litigation
 - b) IPD
 - c) ADR
 - d) PDM
 - e) Partnering
 - f) Alliancing
- 10) A business with a reputation for well-resolved disputes (low DRR) will be successful among competitors. True/False?
- 11) PDM is applicable only to general contractors of the construction industry. True/False?
- 12) PDM concepts include _____.
- a) Dispute prevention
 - b) Dispute avoidance
 - c) Dispute dousing
 - d) All of the above
 - e) None of the above
- 13) _____ refers to the steps that are consciously and continuously taken by an entity to prevent disputes from arising.
- a) Dispute prevention
 - b) Dispute avoidance
 - c) Dispute dousing
 - d) All of the above
 - e) None of the above
- 14) _____ refers to actions to keep or navigate away from extant potential dispute flashpoints and not do anything to agitate them in the project delivery process.
- a) Dispute prevention
 - b) Dispute avoidance
 - c) Dispute dousing
 - d) All of the above
 - e) None of the above
- 15) _____ refers to the deployment of quick actions to neutralize and extinguish emergent disputes before they deteriorate into costly and time-consuming ADR or litigation.
- a) Dispute prevention
 - b) Dispute avoidance
 - c) Dispute dousing
 - d) All of the above
 - e) None of the above

- 16) PDM can be applicable to other industries outside of construction. True/False?
- 17) Which dispute handling process(es) may not require third-party involvement? (Choose the best answer[s])
 - a) Litigation
 - b) IPD
 - c) ADR
 - d) PDM
 - e) Partnering
 - f) Alliancing
- 18) Which dispute handling process(es) may be unconnected to the contracts between the parties? (Choose the best answer[s])
 - a) Litigation
 - b) IPD
 - c) ADR
 - d) PDM
 - e) Partnering
 - f) Alliancing
- 19) Contracts cause disputes, as argued by a sociologist, Clegg, in 1992. True/False?
- 20) Some contracts could cause more disputes than others. True/False?

Exercises

Exercise 1.1 Identify a contractor or an owner in your community and inquire about any past projects; discuss dispute issues that happened and how they were handled effectively or otherwise. Ask if they think that any/some/all of the disputes could have been better handled differently and how.

Exercise 1.2 Research prominent past projects in which there was litigation in the news, and articulate the disputes that led to litigation resolution.

Discussion

- 1) When compared to other fields, construction and related industries are prone to conflicts and disputes. Do you agree or disagree? Discuss why on either side of the argument.
- 2) What attributes of a business that earn a good DRR are deemed favorable to owners and ensure its competitiveness?