Rhythm, Time and Improvisation

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As we interact with the world we find rhythm all around us. It manifests in natural phenomena such as tides, day-night cycle, lunar cycle, and seasons, but also in social structures such as in the flow of the working week, or the patterns of activity in the academic year. A growing interest in the study of rhythm in biology and neurobiology has washed over diverse fields such as sociology, psychology, child development, music theory, artificial neural networks, and organization studies. While this listing is not exhaustive it gives a sense of the pervasiveness of interest in rhythmic structures.

Rhythms in work life have changed significantly with the advent of rationalized work. It is commonly accepted that the work life of the peasant and even the craftsman in the early stages of the Industrial Revolution was adapted and conditioned to fit the natural rhythms of workers and their psycho-physical needs (Ferrarotti 1985). In the aftermath of the scientific organization of work (Taylor 1911) artisan production was replaced by the logic of the production cycle, resulting in a new type of rhythm, independent of the operators, adopted to guarantee the continuity and regularity of the task or job flow in the production system. The implementation of the scientific method at Ford plant in River Rouge resulted in 800 % improvements in productivity, rendering obsolete the craft factories of the early automotive industry (Womack, Jones and Roos 1991) and became the dominant design for organization of work in the mass production era. In rationalized work, the methods and time required for work are out of the workers' control, regular rhythms are emphasized, it »[...] bears the acquired consciousness of a permanent tension between calculation and feeling« (Ferrarotti 1985: 32). In the post-industrial period, the worker has regained some control over their work, and as Nadeem (2009: 23) stated: »One is tempted to ask whether the irregular working rhythm of the pre-industrial era have been recaptured in the flexibility of the post-industrial period?«

In this chapter we explore the concept of rhythm from an improvisational perspective. Managing time is a highly complex endeavor and has a high degree of uncertainty. Time is experienced in relation to points of emphasis and the

organization of time in the vacant spaces between points of emphasis is many times left to intuition and provides room for temporal improvisation. Temporal improvisation consists on improvising temporal dimensions of rhythm. We propose four rhythmic dimensions on which temporal improvisation can occur – sequential structure, duration, temporal organization, and rate of recurrence. Improvising each of the dimensions will have different implications for organizing.

By exploring rhythmic dimensions we hope to contribute to a better understanding of the implications of temporal improvising. Our question for this chapter is the following: How can improvisation alter rhythm, and what implications may these changes have to the organization?

The chapter is divided into three main sections. We will start by examining rhythm as a defining element in establishing order in organizations. Our analysis suggests that rhythm provides a temporal structure for flow, which aligns the energy of the people working on a group or organization. In a second section we will discuss the relationship between temporal improvisation and its implications for maintaining rhythm, and explain how rhythm is an important factor to create the enabling conditions of temporal improvisation. In the third section we look into the dimension of rhythm which can be improvised and assess the implications of their change for the functioning of organizations.

Time and Rhythm

Time is one of the dimensions through which individuals experience organizational life. In order to interpret time we use references to perceive difference, whether it's one more minute on a clock or the day turning into night. These points of emphasis, which may be created by clock-time (e.g. leaving work at 5 p.m.) or by an event (e.g., a deadline) are then interpreted not only as a succession of independent points, but also as a flow of experiences, in which events merge into one another and create a socially-constructed and collectively-shared time experience (Clegg et al. 2005). These points of emphasis allow us to organize the vacant spaces of time to create identifiable patterns. When these patterns are recurring they create a rhythm. The notion of rhythm has been used to explain the functioning of organizations (see e.g. Stewart and Raman 2007) and to describe timing decisions (see e.g. Albert and Bell, 2002). It can then be understood as interweaving the ideas of time, movement, and flow (Cunha 2008). Previous research indicates that individuals (Frost and Taylor 1996), teams (Gersick 1988, 1989), dyads (Bluedorn and Jaussi 2008), and organizations (Brown and Eisenhardt 1997) develop rhythmic processes as they organize.

In organization theory rhythm-type processes refer to the degree of regularity or consistency of organizational processes; to the pattern of variability in the intensity and frequency or organizational activities (Shi & Prescott 2007); typically characterized by periods of accelerated activity and slowed activity (Huy 2001).

Brown and Eisenhardt (1997) have demonstrated the role of rhythm in successful computer firms: »rhythm, which depends on a consistent ritual of uniformly recurring behaviors, enables people to pace their work, synchronize their energies with one another, and ultimately get into a flow. (213)« By providing a better understanding of rhythm we contribute to the evolving paradigm of organizations as processes highly sensitive to time (Langley et al. 2013).

Implicitly or explicitly, people make sense of, regulate, coordinate, and account for their activities via temporal structures. Like social structures in general, temporal structures simultaneously constrain and enable. Furthermore, the repeated use of temporal structures reproduces and reinforces their legitimacy and influence in organizational life. Because they are often routinely adopted, they tend to be taken for granted. In a planned or improvised way, more subtly or more openly, people can and do reinforce/modify their community's temporal structures over time (e.g., Zerubavel 1981; Ballard and Seibold 2004).

Social systems develop their own rigidities in terms of sequence, duration, timing or uniformity in recurrence of events (Zerubavel 1981) that influence their perception of rhythm. Perceptions of fast and slow are associated with skipping steps or ignoring the prompt to move to the next step after the end of an activity or an event (for instance an excessively long pause). Examples of the different forms of rigidity include the expectation of receiving an email with the agenda before a meeting, the idea of the proper duration of a meeting, the weekly schedule where events start at the hour or half hour. These rigidities build in due to our fear that activities would not be coordinated otherwise. We may have our offices cleaned when it's scheduled and not when it's dirty – metaphorically or not.

Much organizational activity relies on the synchronization of actions among independent agents. Several ways in which efficient coordination can be achieved have been explored, such as the use of institutions or mechanisms that allow agents to organize tasks and communicate prior to having to coordinate their actions. Rhythm provides a structure that aligns the energy of the people working on a group or organization. More recent studies suggest that coordination at the team level is achieved via implicit mechanisms such as shared mental models (Rico et al. 2008). By creating a shared temporal structure of events within organizational life, rhythms can be entrained, generating synchronization of action.

Rhythms for Improvisation

As is the case of rhythm, improvisation is a time-based phenomenon (Crossan et al. 2005). Cunha, Clegg and Kamoche (2012) presented it as ›real time foresight‹, in an illustration of the role of time in improvisation. In this section we will begin by pointing out the key dimensions of understanding improvisation (Crossan et al. 2005) and then problematize the relationship between improvisation and rhythm.

Definitions of improvisation seem to have two major dimensions, one of time, defined as ›spontaneity‹ (Crossan and Sorrenti 1997), ›on the spot‹ (Weick 1996), ›just-in-time‹ (Weick 2001) or, ›as it unfolds‹ (Cunha et al. 1999); and another of action, which refers to intuition and creativity. As pointed out by Crossan, Lane, White, and Klus (1996), improvisation represents the meeting point of planning and opportunity, comprising a blend of strategy formulation and implementation. In order to understand the way organizations improvise, Crossan et al. (2005) relate planning and improvisation to (1) uncertainty and (2) time pressure. It is from these two elements that we depart to explore the role of rhythm in supporting improvisation. Before proceeding it should be noted that in this chapter we are referring to forms of improvisation that are framed and stimulated by the organization rather than to those that occur outside the organization's scope of managerial attention (e.g., Cunha, Clegg, Rego & Story 2013; for a typology see Cunha, Neves, Rego & Clegg 2013a). In other words, we are mostly considering improvisations that purposefully aim to adjust the organization to environmental change – not those other forms occurring outside the formal organization's scope of empowerment (Cunha, Neves, Rego & Clegg 2013b).

Inherent to the characteristic of flow associated to rhythm is a strong sense of order. Order in organizations is thought of as resulting from the visible hand of managers (Chandler 1977) or the invisible hand of evolutionary processes (McKelvey 1997). Rhythm, as order, can be an imposed or emergent phenomenon, either internally or externally motivated. Ancona and Chong (1996) suggest that cycles of activities can become entrained. Entrainment refers to the process through which rhythm is modified and synchronized by an external influence. This occurs through external triggers, which serve as tangible synchronizers or pacing agents (Ancona and Chong 1996). Linking aspects of entrainment (Ancona and Chong 1996) to the experience of time, Cunha (2008) suggested that varying intensities of ›Kairos‹ and ›Chronos‹[1] lead to organizations with different rhythmic typologies.

As observed by Brown and Eisenhardt (1997), organizations may develop and cultivate internal rhythms. One important dimension of rhythm that contributes to the internalization of rhythm is repetition. Rhythm, by definition, requires some sort of repetition. If there were no repetition then there would be no rhythm, on the contrary, there would be arrhythmia – or lack of rhythm. It is these repeated patterns, which allow the use of rhythm to anticipate and prepare for future events. Rhythm can be viewed as a mechanism for linking past and future. At a higher level of abstraction, rhythm can only exist if past and future are present as it is the continuity in time, which makes the rhythm perceivable. What we perceive as rhythmic is that which abides to a certain temporal order, linking past and

1 | These views of stem from the Greek vision of time: ›Chronos‹ can be viewed as objective, or clock time. ›Kairos‹ on the other hand is the psychological perception of time, thus evading from the ›intellectual straightjacket‹ of Newtonian time (Davies, 1995).

future, in a cyclical manner. Rhythm can therefore be seen as a construction of an expectation based on past experience, paradoxically creating flow and rigidity. Past experience may be a good indicator of future events but it cannot grasp the complexity of reality, and as such, there will be deviations between ›expected‹ rhythm and expressed rhythm. Accurately predicting the duration and timing of planned events or constructing precise temporal contingency plans for unexpected events poses a significant challenge. When a deviation occurs it can be argued that rhythm creates unwritten rules for the management of time. Rhythm creates the perception of the future in the present. With rhythm it is possible to anticipate the future. The perception of an interruption of rhythm creates, in the absence of a contingency plan, the need to improvise.

Improvisation focuses on ›in the moment‹ actions, which are guided in an intuitive, non-scripted way. There are many rich examples of improvisation in organizations; however, they tend to focus on procedural actions of organization and tend to overlook the temporal aspects of improvisation. If for instance an organization receives an unexpected order from a client the organization will probably not improvise the way the order is processed. The organization may however have to improvise in time. The organization is forced to make an intuitive decision about how to reorganize in time in order to face this unexpected temporal demand. But the argument above is still short for creating the enabling conditions for improvisation – (1) uncertainty, and (2) time pressure. In the example above we are assuming that the organization does not have a clear script to deal with reorganization of time and as such it must draw upon its' intuition to make an ›in the moment‹ decision of how to deal with the time constraint, and second, it is assumed that the organization will respond with urgency to the client's demands. Uncertainty is created if, when there is a deviation from what was scheduled, there is no planned way to respond. In effect, planning time in more creative tasks is a very demanding and complex ordeal and time is often unscripted. To make sense of time a structure based on points of emphasis emerges or is imposed, and then much of the organization of time is improvised through vacant spaces. For instance, if an order must be processed by 3 p.m., and there is an incoming phone call, or an urgent email to reply, the expected temporal process associated with the order will be altered and therefore there is the need for an adaptation of the temporal structures, be it by changing sequence, duration, temporal location, or rate of recurrence (Zerubavel 1981). If there is no clear plan to readjust the temporal process it is left to the individual's discretion to do so. However, there is only a need to improvise if there is time pressure. In the example above, time pressure is created by the 3 p.m. deadline. But organizations could have different interpretations of deadlines dependent on the cultures, procedures and routines. An individual may receive the order and put it ›in a stack‹ to be dispatched later on. In that case there is no time pressure and there is no altering of the temporal structures associated with filling the order and no interference with other rhythmic levels (e.g. daily rhythm). It is thus important to understand that time urgency

may be derived from the expectations of what should be done, and by when. At an organizational level one can look for instance at hypercompetitive organizations. These compete in »an environment characterized by intense and rapid competitive moves, in which competitors must move quickly to build advantages and erode the advantages of their rivals.« (D'Aveni 1994: 57). These organizations may have to intuitively change their temporal structures, either by reprioritizing or enacting periods of higher and lower levels of intensity to face the pressures of the market.

Rhythm allows organizations to create meaning though time in order to link the past to the future in a recognizable pattern, which may then be accepted as parts of culture (Cunha 2008). Dikel, Kane and Wilson (2001) pointed out with regard to software architecture that a shared rhythm helps autonomous groups »to work together across organizational boundaries because it helps establish shared assumptions about when and how key events will occur« (183). This shared rhythm facilitates the coordination between stakeholders and their integration at each stage of the productive process. Rhythm also contributes to create the sense of urgency by creating the expectation of points of emphasis. For instance, Gersick (1988: 32) found that »at their calendar midpoints, groups experience transitions – paradigmatic shifts in their approaches to their work – enabling them to capitalize on the gradual learning they have done and make significant advances«. One should also consider entrainment as an important aspect of determining the points of emphasis as entrainment acts as coordinating mechanism with the environment, or even one rhythm may potentially ›capture‹ other rhythms (Bluedorn & Jaussi 2008). Shi and Prescott (2012) suggest firms do best when they time their alliance schedule to their competitors.

Cunha's (2008) typologies of pressed and pulsed organizations present a contrast between organizations which are reactive and are managed by their environment, and those whose internal rhythms allow them to keep track with the pace of market changes while maintaining their inner established temporal logic. As noted by Ancona and Chong (1996), everyday life in organizations has a rhythmic component. These rhythmic structures paradoxically constrain and enable action by creating a predictable pattern between past and future. The organization will thus already have prepared itself for a particular future, before it happens. Brown and Eisenhardt (1997) suggest that organizations can create semi-structures and sequenced steps to link time horizons. Organizations poise themselves on the edge of chaos, creating a paradoxical mix of structure and freedom (Cunha, 2008). When an unexpected event occurs, the organization will adapt the sequential structure, duration, temporal location, or rate of recurrence, as a corrective measure to get back in rhythm. The rhythm and enactment of time in relation to points of emphasis may thus be key factors to understand the creation of time urgency.

Above we have discussed rhythm as a temporal structure, which may create the enabling condition for temporal improvisation to occur – uncertainty and time pressure. Complementarily to this, we argue that it is through improvisation

that a rhythmic order is maintained. It is interesting to note that it is temporal improvisation, which allows rhythms to be stable over time. If there were no improvisation it would not be possible to reorganize or adjust time in order to maintain the same points of emphasis. Take for instance the case where a machine in the production line breaks down and takes one hour to fix. The organization will then have to decide how to recover or if it is necessary to recover from this event. The organization can choose to accelerate the production process to make up for the lost time, or may maintain speed but work overtime. These are examples of rhythmic alterations, which allow the organization to readjust to the regular rhythm in the next cycle. Conversely, an organization may choose not to adapt to the external demand and obey an inner logic, which is loosely coupled from the environment. Shi and Prescott (2012) suggest that in environments where alliances and acquisitions happen frequently, the best-performing firms strike a balance between being predictable and opportunistic, signifying changes in rhythm may be desirable in order to take advantage of market opportunities. In the absence of a plan, temporal improvisation is the mechanism through which unexpected temporal complexities, either by external demands or internal adjustments are regulated. These adjustments momentarily alter rhythm until it can be reverted to its original state. Temporal improvisation is a conservative force, acting as a countermeasure to maintain temporal order when facing unplanned phenomena.

Managing the Improvisational Dimensions of Rhythm

In the previous section we have discussed the relation between rhythm and improvisation. It was argued that rhythm is a critical factor in enabling improvisation and that improvisation is a critical aspect of rhythm. In this section we break down some aspects of organizational rhythms which may be adjusted, and provide examples of how they may alter the functioning of organizations. We argue these are the dimensions in which improvisation takes place. By focusing on the different dimensions we try to better understand what may be the implications of temporal improvisation in an organization. We argue that adjusting different temporal elements may have different organizational impacts.

Zerubaval (1981) considered the major dimensions of the temporal profile of a situation or event include the sequential structure or order, their duration, temporal location, and rate of recurrence. By looking closer into these dimensions we can break down the aspects of rhythm, which can be being improvised. Improvising any of these dimensions will temporarily change the rhythm. We explain each of the dimensions and provide some examples in order to understand the implications of changing each of the dimensions. Although we focus on each dimension individually it is likely that more than one of these factors will change simultaneously.

Sequential structure represents the order in which events or activities happen in a timeline. For example, even if two companies showed the same pace in their internationalization processes, each one could adopt different sequences regarding the entry process. Two interviewers can interview five candidates in five hours, one per hour. But each one can interview candidates in different sequences and ask questions in different orders, and this may not be irrelevant for the selection outcomes. Changing the sequential structure will fundamentally alter the rhythm and create different points of emphasis, which may lead to different interpretations of time. Brown and Eisenhardt (1997) discussed the notion of ›sequenced steps‹, which are the recipe by which these organizations are created over time, as a core capability of successful companies. They argue that this creates advantages, which are more difficult to replicate as imitating requires both knowledge of process and of sequence in time. Regularity in sequence may create routines, which lead to more efficiency and competitive advantages yet it may also constrain adaptation, change and renewal. *Improvising in sequence may act as an experiment for the evolutionary process and lead to new, more efficient sequences.*

Duration refers to the time period between the beginning and the end of an activity or event. This concept is tightly associated with pace, which refers to the density of events or activities per unit of time (Huy 2001). For example, if company A creates ten subsidiaries in five years, and company B creates twenty in the same period, the pace of internationalization of the first company is lower than that of the second one. Maurice Ravel's *Bolero* is an interesting story from a temporal perspective. Ravel claims to have written the one movement orchestral piece for a 17-minute duration. His recording however has 15 minutes and 40 seconds. Other interpretations of Ravel's *Bolero*, depending on the conductor, have spanned from 12 minutes to 19 minutes. The meaning and experience of time varies, even in a well-scripted piece of music. Different organizations create unique timescapes, which once in place, these timescapes become one ingredient of the organization's cultural fabric (Cunha 2008). As an example of altering the duration of events, Wilms et al. (1994) describe the Toyota and General Motors assembly plant (NUMMI) whose production line obeys a preset speed known as the *takt* time (the German word for meter or musical rhythm). Managers are responsible for determining the length of time, which a team member has to perform his or her task, which in turn keeps the production line under continuous tension. Inadequate pacing may at an organizational level lead to detachment from the environment and negatively affect firm performance and, at an individual level, act as a source of stress, affecting motivation, job satisfaction, and burnout.

Given the uncertainty associated with timing activities, improvising duration is a normal part of everyday functioning of individuals and organizations. However, if taken to extremes (too fast or too slow) it can distort the functioning of the organization. At an organizational level this may have implications on firm performance, and at an individual level, over motivation, job satisfaction, stress, and burnout.

Temporal location refers to the moment an event or activity happens or is planned to happen (the timing) in a sequence of related events or activities (Huy 2001). It refers to the fact that an event or activity is done when it should be done. Without a schedule, successful execution requires a shared perception that the temporal location of an activity is adequate. You don't tell a musician to start playing at a specific temporal location during a concert. In change interventions, for example, good timing captures windows of opportunity so that the intervention can profit from better receptivity to change and more bountiful resources.

Timing is also important when supervisors give feedback to their subordinates or when a certain organization launches a new product, enters a market or a business. In an operational setting we may know what routines to apply, and even the order in which they are performed, but the practical question that often requires practice and experimentation is when to take action, when to transition from one action to the other, and how much action is required at a specific time. Brown and Eisenhardt (1997) suggest that transitions provide the continuity and tempo of change. Transitions keep organizations relentlessly and sometimes even rhythmically moving from the past to the present and forward into the future, helping ›to promote change without pain‹ in the organization (Abrahamson, 2004). This transition requires practice and learning as in a child learning how to ride a bike or practicing the timing of hand closure to catch an object.

Experts in infant development suggest that natural rhythms play a large role in enabling movement control, as response replication would be unreliable without a rhythmic tagging system (Ashton 1976). Social interaction is viewed as a process of adapting rhythm between agents, requiring coordination in time and space to produce a smooth rhythm. Effective sequencing relies, in part, on appropriate timing of every intervention, in a given sequence of events, activities, and decisions. These events shape the organizational rhythm, as organizations are forced to design structures and sequence their actions to respond to them. The synchronization of humans' natural rhythms to those of social structures, is usually explained in terms of high level time markers in the environment, such as the calendar or weekly schedule, that generate hidden rhythms (Zerubavel 1981).

Improvising transitions may be important to create smooth rhythms and be able to effectively respond to threats and take advantage of unforeseen opportunities in the market.

Rate of recurrence represents the repetition of the event over time. Time and events are not entirely separable, as events shape temporal structures of individuals and organizations (Staudenmayer et al., 2002). A corporation with a meeting that is scheduled weekly or monthly creates different points of organizational emphasis, which in turn create different rhythmic processes.

The case of Unilever offers a good example of changes in this dimension when it abolished quarterly reporting in order to provide a more long term approach to the organization (Polman 2012). An organization may also alter the rate of

recurrence temporarily, in order to accommodate a threat to the organizational rhythm. For instance, on a busy day a worker may not go on a break with the same regularity as in a normal day to face the increasing pressures, thus altering the rate of recurrence of events within a rhythmic cycle (i.e. the day).

In addition to the structure of time, it is important to understand these dimensions as interpretation time. Markers or points of emphasis are filled with vacant time spans, which in turn are filled with significance by human actors. The organizing of rhythm evolves into a unique rhythm of organizing. High and low recurrence of events will generate different perceptions of pace and of repetition.

Another dimension of recurrence is the focus of the markers. Rhythmic structures occur simultaneously at different levels. By changing the focus between levels organizations and individuals can speed up or slow down time and create more repetitive or more flexible time. For instance in a factory setting, if a line worker puts emphasis on the individual items being packaged, there will be a very rapid and repetitive cycle. If points of emphasis are at a higher level (e.g. between break times) the focus will shift to a slower, less repetitive cycle and may have different implications for motivation and effectiveness. A similar distinction occurs when equating short versus long-term perspectives in organizations, the shift in these perspectives may drastically redefine the meaning of an organization (e.g. Unilever, see Polman 2012).

Improvising with the rate of recurrence will typically be less common given that a change to the rate of recurrence will probably be a planned event. However, what may be more common is the shift in focus between different rhythmic levels, which may create a different experience and new meaning for individuals and organizations.

Table 1: Temporal Dimensions of Rhythm

Dimension	Explanation	Implications	Illustration
Sequential structure	The order in which events or activities happen in a timeline.	Different order or sequence of events will lead to different outcomes.	Improvising in this case may emerging in the form of experimenting with new, more efficient sequences.
Duration	The time period between the beginning and the end of an activity or event. Tightly associated with pace, which refers to the density of events or activities per unit of time.	Inadequate pacing may lead to detachment from the environment and negatively affect firm performance as well as negatively affecting motivation, job satisfaction, stress and burnout.	Improvising duration, at an organizational level may have implications on firm performance, and at an individual level, on motivation, job satisfaction, stress and burnout. Improvisation may offer opportunities to reestablish rhythm in an appropriate way.
Temporal location	The moment an event or activity happens or is planned to happen (the timing) in a sequence of related events or activities.	Improvisation is often a response to events. Deciding which is the best moment to respond is a critical improvisational skill.	Improvising transitions may be important to create smooth rhythms and be able to effectively respond to threats and take advantage of unforeseen opportunities in the market.
Rate of recurrence	The repetition of the event over time. The rate of recurrence must be related to a particular cycle (e.g. a year or a product life cycle)	Changes in rate of recurrence, at an organizational level, will shift the focus of the organization. Focusing on cycles of different levels create a different experience for organizational members.	Improvisation helps organizations to define recurrence as it gives temporal flexibility within established organizational rhythms.

Conclusion

Throughout the chapter we have explored the relation between rhythm and improvisation; determined the dimensions of rhythm, which can be improvised; and discussed the implications of improvising rhythm, where we argue that adjusting different temporal dimensions may have different impacts on the organization.

Rhythm creates a predictable pattern, thus creating expectations, which guide agents through vacant spaces of time. When there is a deviation from the expectation, agents will improvise – via the altering of one of the rhythmic dimensions – to bring the rhythm back to its normal state. Rhythm is thus kept relatively stable over time through improvisation. Although improvisation may be an »in the present« characteristic, it may have a long-lasting effect on the organization. Through temporal improvisation the organization may also discover new ways of organizing which may produce rhythmic mutations. Still with a narrow focus on efficiency and a scientific approach to time, organizations may not experiment with temporal structures often enough, and may be missing out on opportunities to construct new meanings and experiences for organizations and their members. By not improvising organizations may also be missing out on market opportunities. As Prescott (2013) pointed out »it's not that you will be unsuccessful if you have a regular-paced rhythm. You'll just be less successful because you'll be missing opportunities«. In more competitive environments firms accept the need for improvising in the present (Brown and Eisenhardt 1997) and incorporate that need when establishing rules and processes. For example, establishing rhythms via cycles of goals and organizational calendars, combined with simple rules, may free individuals to act in an improvisational way that facilitates coordination without harming freedom and real time adjustment. In a sense it offers a combination of order with a »yes to the mess« (Barrett 2012) type of attitude. More aware of the impacts that improvisation in different dimensions may have, managers may opt to use each the dimensions in their favor when responding to the unexpected.

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