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Navigating multiple contexts to integrate system transformation programs

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A R T I C L E I N F O

A B S T R A C T

This paper unpacks how actors navigate the multiple organizational, interorganizational and industry contexts that are associated with system transformation programs for addressing wicked, societal problems. Because system transformation programs can only succeed when changes are implemented by multiple organizations, an increased understanding of integrating programs in multiple contexts is needed. We draw on a qualitative field study of an interorganizational program designed to help transform the Dutch healthcare system. We identified three practices of context navigation that actors used to integrate the program into multiple parent organizations and address emerging incongruencies among contexts. These are *aligning* contexts, *prioritizing* contexts, and *adding* contexts. Over time, these navigating practices promoted progress towards program objectives via multiple parallel collaborative paths. Our findings shed new light on the role of breakdowns and decoupled collaborative paths in programs oriented at contributing to system transformation.

1. Introduction

There is a growing consensus that system-level transformations are needed for our societies to address the complex problems in such areas as healthcare and urban safety, for example. System-level transformations are fundamental changes in how systems are organized and how actors collaborate and coordinate core activities. Such transformations cannot be organized and realized unilaterally by any individual actor, but rather, critically rely on interorganizational collaboration (George, Howard-Grenville, Joshi & Tihanyi, 2016; Gray & Purdy, 2018; Saz-Carranza & Ospina, 2011).

Interorganizational programs are particularly suited to supporting system transformations as they bring together actors from multiple organizations and enable them to collectively build and implement a capacity for transformation (Winch & Maytorena-Sanchez, 2020) in relative isolation from parent organizations, which maintain focus on ongoing activities. Unbothered by daily affairs, transformation programs enable exploring new ways of working and collaborating that fundamentally depart from current organizational structures and practices (Lehtonen & Martinsuo, 2009; Turkulainen, Ruuska, Brady & Artto, 2015; Willems, van Marrewijk, Kuitert, Volker & Hermans et al., 2020). However, the separation of transformation programs from their parent organizations may also complicate integration of the changes inside the respective parent organizations and the deployment of core capabilities

of the participating organizations, both of which are of critical importance if the overarching transformation goals are to be achieved.

How transformation programs are integrated into multiple parent organizations remains poorly understood, as scholars have mostly focused on program integration within a single parent organization (e.g., Lehtonen & Martinsuo 2009, Turkulainen et al. 2015, Vuorinen & Martinsuo 2018). System transformation programs need to be integrated into a number of already existing contexts, including parent organizations, interorganizational networks and wider industry systems, which can have constraining and enabling effects (Lehtonen & Martinsuo, 2008; Manning, 2008). Recent studies on interorganizational programs suggest that contexts may introduce conflicting demands for integration (Frederiksen, Gottlieb & Leiringer, 2021; Stjerne, Söderlund & Minbaeva, 2019) and dynamically affect transformative programs over time (Hetemi, van Marrewijk, Jerbrant & Bosch-Rekveldt, 2021). A scholarly examination of how the integration process unfolds dynamically over time is clearly needed (Martinsuo & Geraldi, 2020).

It is challenging to integrate a program within several contexts, especially when the organizations involved are heterogeneous. Due to the wicked nature of societal problems (Rittel & Webber, 1973), system transformation programs are highly emergent and uncertain. Thus, it is often unclear exactly which specific contexts might play a role in program development and execution, and how, and when. Similarly it is often unclear how contexts will impact integration of the transformation

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program among all organizations concerned (Hilbolling, Deken, Berends & Tuertscher, 2021), especially since contexts may change over time (Hetemi et al., 2021), or relate to the program in changing ways due to program dynamics (Stjerne & Svejenova, 2016). In this paper, we focus on unraveling the *process* of navigating multiple (possibly unknown) contexts when multiple organizations integrate a system transformation program. We address the following research question: *How do actors navigate multiple contexts over time and integrate new ways of organizing into their respective parent organizations as they aim to contribute to system level transformation?*

We adopt a qualitative process approach (Berends & Deken, 2021; Langley, 1999; Langley, Smallman, Tsoukas & Van de Ven, 2013) to study the micro-actions actors use to integrate new organizing practices dynamically, over time, into multiple contexts. Our focus on actors' micro-actions and decisions and how these unfold over time fits well with the growing consensus that program management cannot be studied only from the perspective of single parent organizations (Martinsuo & Geraldi, 2020) but, rather, should be studied as a highly dynamic, unpredictable, messy process (Floricel, Bonneau, Aubry & Sergi, 2014).

Through an inductive field study based on observations, interviews, and documents, we captured the unfolding of an interorganizational program in healthcare. The landscape of program embeddedness was highly complex due to the multiple organizations involved (Pettigrew, 1990). We analyzed events at several embedded levels of analysis as suggested by Sydow and Braun (2018). Our findings reveal that actors pursued program integration into multiple organizational contexts by three recurring practices of navigation: (1) aligning contexts, (2) prioritizing contexts, and (3) adding previously uninvolved, "new" contexts. These navigating practices enabled an increasing number of organizations to implement new ways of working and collaborating, thereby contributing to their collective system transformation goals. That integration, however, occurred along multiple parallel paths that fanned out rather than by tightly coordinated joint activity. Our results offer novel insights to the literature on change program management (Martinsuo & Hoverfält, 2018) by highlighting the importance of breakdowns and decoupled collaborative paths when pursuing integration of transformation programs with multiple organizations.

2. Literature review

2.1. Program–parent integration

The integration of transformation programs into the very structures they aim to change is vital to their success. While organizational change programs implement change only within the four walls of an organization (Lehtonen & Martinsuo, 2009), system transformation programs require changes in how *multiple* organizations operate in parallel. Existing research has discussed the dynamic and delicate nature of the program–parent integration process inside single parent organizations (Lehtonen & Martinsuo, 2009; Vuorinen & Martinsuo, 2018). One thing it has shown is that a certain degree of program autonomy is needed to effectively develop a transformation program (Lehtonen & Martinsuo, 2008); not being bothered by day-to-day business clears the way for program planning and development. Nevertheless, organizational members and organizational units do need to be involved to enable successful implementation of proposed transformations (Lehtonen & Martinsuo, 2009).

There is growing consensus among project management scholars that program–parent integration requires a skillful combination of isolation and integration over time. Lehtonen and Martinsuo's (2009). study of two complex organizational change programs shows that isolation from the parent organization and integration with the parent organization can co-exist, and that isolation can even help integration when the right moment arrives. They identified diverse boundary activities, including information scouting, ambassadorial activities, boundary shaping, and

isolative activities that were instrumental to transforming the way the two organizations operated. Johansson, Löfström and Ohlsson, (2007) stress the difficulty of balancing isolation and integration and that achieving both is difficult. In their study of four change projects conducted by social welfare organizations, the authors investigated how the relationship between projects and parent organizations influences the implementation of project outcomes. They found a clear distinction between organizing for innovation and organizing for successful implementation. They found that projects that are less detached from the parent organization during development are easier to implement but, at the same time, are limited in their capacity to realize radical change. This challenge of integrating change projects is also patently clear in a study by Willems et al. (2020). The authors show how the relative autonomy of projects unfolded dynamically over time and how practices of isolation both facilitated the development of innovations, but also prevented implementation in the parent organizations. For example, they report on spatial practices of isolation, such as working in a different location—in one of their cases the cellars of one of the organization's headquarters—which allowed actors to innovate without being held back by the parent organization. The project teams in this study clearly benefited from staying under the parent organizations' radar to materialize and mature innovative ways of organizing and collaborating, but regrettably failed to convince the parent organizations to adopt the new ways of (inter-)organizing, which hindered their transformation as a result.

2.2. Competing demands of contexts

Transformation and change programs necessarily take place within diverse contexts (including organizations, interorganizational structures, and industry systems), which may both facilitate and constrain transformation activities (Manning, 2008). As different scholars have emphasized, it is important to consider such existing contexts to understand how projects and programs evolve (e.g., Martinsuo & Lehtonen 2009, Söderlund & Sydow 2019). Contexts not only shape a transformation program's temporary organization, they also constitute the very structures in which actors need to integrate the envisioned changes.

System transformation programs cannot easily be integrated into any particular context as the contexts of such programs—including the participating organizations, their interorganizational relations, different subunits of these organizations, and industry systems—are heterogeneous, which can lead programs into opposing directions. For example, Stjerne et al. (2019) show that actors from different organizations have to navigate a number of temporal tensions when executing a transformation program and integrating it into multiple existing contexts. Their study focused on a nation-wide Danish change program aimed at transforming the way that organizations collaborated along supply chains. The authors show how the multiple contexts that this program was introduced into produced divergent time horizons, disparate timing norms, and continuity tensions that had to be addressed in collaboration. They report how actors navigated such tensions by engaging in temporal boundary-spanning practices. For example, by celebrating change via 'hyping' the change, actors were able to inspire commitment among organizational members and transform their ways of operating to pursue benefits in the long term, without jeopardizing ongoing production and short-term results.

Beyond temporal concerns, the contexts of system transformation programs involve various, often competing goals and interests that must be addressed for these programs to become integrated with multiple parent organizations. Research on interorganizational projects highlights how joint goal setting helps participants from different organizations align the diverse and potentially competing interests of parent organizations with the aims and directions of a collaborative project (e. g., Bos-de Vos, Volker & Wamelink 2019, Matinheikki, Artto, Peltokorpi & Rajala 2016). Joint goals help actors from multiple heterogeneous organizations to initiate and progress collaboration, especially during

the early, fuzzy stages of a project (Aaltonen, Ahola & Artto, 2017). Kadefors (2004) argues that trust can be developed among collaborating organizations when participants' own goals and the development of relational goals—such as treating each other with respect—are included in processes of joint goal setting. By aligning the joint project goals with those of the parent organizations, actors are better able to elicit their support. This may allow them, for example, to leverage the parents' core capabilities, which supports the successful completion of interorganizational projects and programs and the implementation of outcomes.

As Aaltonen et al. (2017) show in the context of an urban renewal project, common goals and directions typically evolve and are influenced by a changing network of stakeholders. Similarly, organizational goals may change over time. As such, it is unlikely that goals can be fully aligned at the start of a project. To understand the integration of system transformation programs in multiple organizations it is therefore important to not only take multiple contexts into account, but also the evolution of the program and those contexts over time.

3. Research methodology

Following our aim to increase the understanding of how actors in interorganizational transformation programs navigate the complexities that multiple contexts imply, we adopted a qualitative process approach (Langley, 1999; Langley et al., 2013). We collected data from various qualitative sources to capture the unfolding of a system transformation program in which multiple organizations collaborate in real time and triangulate insights to ensure internal validity.

3.1. Case selection & empirical setting

Our study focuses on an interorganizational program in the context of healthcare, aiming to contribute to changes in the current care system. The current system is based on efficiency of treatment, while the goal is value-based care that is patient and outcome driven, often enabled by new digital technologies.

Value-based care will change how, when and by whom people receive healthcare. This has implications for patients, care providers, and society at large. The transformation towards value-based healthcare is widely regarded as an essential step to addressing the wicked challenge of reorganizing healthcare to keep the system feasible, manageable, and accessible for all citizens. Although healthcare industry partners generally agree about the necessity of system transformation, the array of concrete changes traditional and new healthcare actors (public policy organizations, care organizations, healthcare professionals, insurers, technology companies, and so on) are to implement is not clear. What is needed is a combination of connected technological and social innovations, including the development and implementation of new ways of working. The efforts of many collaborating organizations are required to realize the desired system level transformation.

Following definitions by Engwall (2003) and Manning (2008), our case represents an extreme example of complex program embeddedness as the program involves multiple heterogeneous organizations, subunits, interorganizational networks and industry contexts, all with different interests, structures, and ways of working. This program is thus particularly suited to theory elaboration (Gerring, 2008).

The program was initiated by three organizations: HealthTech (a healthcare technology firm), Hospital A, and University A. The ongoing strategic research partnership shared by these three organizations and two other hospitals proved to be a key enabler to getting the program started. For example, the ongoing partnership included agreements for confidentiality and intellectual property. As a result, instead of having to establish ground rules and frameworks for these issues, the innovation process and search for novel ways of organizing could get started right away. The program grew substantially over time in terms of projects and organizations involved. To achieve contribution to the system-level transformation, the interorganizational program focused on the design

Table 1
Overview of individuals and organizations involved in the program.

Type of participant	Job description	Role in / in relation to the program
Program participants of HealthTech	Director	Head of system transformation program; supervising master's students from University B
	Middle manager	Coordinating strategy document development
	Middle manager	Manager of program; hired September 2019
	Executive secretary	Secretary of program
	Director	Responsible for Project A
	Director	Creative lead for Project A
	Designer	Leading research for Project A, coaching students from University A
	Designer	Researcher in Project A
Managers of HealthTech	Vice president	In close contact with program and project manager
	Director	Head of healthcare design team (not involved in program)
	Designer	Expertise in co-creating healthcare innovations (not involved in program)
	Director	Developing new ways of working within HealthTech (not involved in program)
Program participant of Hospital A	Director	Coordinating business development at Hospital A & involved in program
Manager of Hospital A	Facility manager	Coordinating and supporting hosting of the program on site
Program participants of University A	Professor	Involved in Project A & supervising students from University A
	Professor	Researcher in other health domain, aiming to set up additional projects
	3 Bachelor's students	Executing sub projects within Project A
Manager of University A	Dean	Overall commitment to program and Project A
Program participants of University B	Researcher	Present in Co-create Lab and interest in studying the program, coaching master's students from University B
	2 Master's students	Working on overarching challenges of program: project selection & collaboration in healthcare innovation labs
Manager of University B	Professor	Commitment to overall program; supervising master's students from University B

and implementation of concrete social and technical innovations. The program consisted of academic research into new means of care provision, clinical implementation, and business development dedicated to testing innovations and implementation in the care practice within Hospital A and in other healthcare contexts by HealthTech. University A would focus on the development of methodologies to support the diverse activities. Actors considered the integration of program outcomes by their respective organizations important, as it would play a critical part in the system-level transformation towards value-based healthcare. Only by integrating the newly developed innovations and ways of working can the outcomes for patients, hospital staff, and the wider healthcare system be improved.

Within the program, actors planned to execute multiple projects in parallel (Martinsuo & Hoverfält, 2018; Martinsuo et al., 2020). First, they started with what we call 'Project A', which focused on improving care outcomes for vulnerable patient groups: being excluded from treatment influences health outcomes and leads to inequalities. Given the way the healthcare system is currently organized, with its emphasis on standardization and fee-for-service reimbursement structure, vulnerable patient groups are not effectively reached. Moreover, they may hold diverging attitudes towards healthcare.

This particular program was initiated to develop and test new ways of organizing and technological innovations. This would be done in the

Table 2
Overview of data collected.

Data source	Number of interviews/observations/documents	Number of participants
Observations of:		
Program strategy meetings	2	6-8
Program meetings about health transformation aim, project selection, etc.	6	4-8
Meeting for Project A	1	9
Days working at location (incl. informal conversations)	18	1-13
Semi-structured interviews with:		
HealthTech Program participants	8	3
HealthTech Managers	5	4
Hospital A Program participants	2	1
Hospital A Manager	1	1
University A Program participants	1	1
University A Managers	2	2
Documents:		
Meeting notes, slide decks, strategy documents	12	NA
Organizational websites	4	NA
Newsletters and media coverage of related projects and programs	>30	NA

context of a newly created, joint physical working space, the "Co-create Lab" on site at Hospital A Table 1 provides information about the individuals and organizations involved in the program.

3.2. Data collection

We focused our data collection efforts on capturing the unfolding interorganizational program. Between August 2018 and January 2020, we followed how the actors pursued a contribution to the transformation of the healthcare system in real-time through their program. Our data were produced during part of the program's timeline, which had been initiated two months prior to the start of data collection, and is, at the moment of writing, still ongoing.[1] We triangulated data in the form of observations, interviews, and documents, which is a recommended strategy for rigorous qualitative research, particularly to enhance internal validity (Gibbert & Ruigrok, 2010). In line with what is suggested by Sydow and Braun (2018), we studied the dynamics *across* levels of analysis by collecting data at program, organizational, interorganizational, and systems levels.

First, the first author spent 18 days (on average twice a month) at the location where the program was running to observe first-hand how the interorganizational collaboration was unfolding. She followed an open observation approach (Berthod, Grothe-Hammer & Sydow, 2017), which is recommended for interorganizational settings. Specifically, she observed nine meetings (see Table 2 for further details) and participated in informal events such as lunches. Meetings provided us with insight into actions taken within the program, as well as participants' envisioning of future plans. The first author took notes of what was discussed during meetings and described the daily activities and interactions of individuals working at the program's physical location. At the end of the day, she elaborated her notes into extensive field notes (Emerson, Fretz

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[1] While the COVID-19 crisis significantly impacted the further deployment of the Co-create Lab and new way of working, organizations remain committed to the program and its ambition in 2022. The context of the strategic research partnership supported actors to build trust and develop a good working relationship. During COVID-19, when face-to-face meeting was not allowed, the organizations involved could still continue the collaboration, because of the trust and relationship established.

& Shaw, 1995).

Second, we performed semi-structured interviews with individuals involved in and closely related to the interorganizational program to obtain deep insights of individuals with firsthand experience in the program and the embedding of changes in the respective parent organizations. The interviews also aimed at developing an understanding of the set-up of the program and the events that occurred prior to our involvement as researchers. The first author followed an interview guide to inquire about the unfolding program, people's goals, how people were trying to reach these goals, and the challenges they encountered. She prompted participants to provide concrete examples of their interactions, actions, and decisions related to the program and the specific projects within it to ensure that the information about the concrete events in the program was rich in detail. This amounted to 19 interviews lasting between 45 and 120 min, each audio-recorded and transcribed verbatim. As shown in Table 2, we interviewed individuals from the different organizations involved to mitigate biases (Ravitch & Carl, 2015) and to incorporate their complementary insights regarding which contexts influenced the collaboration. Furthermore, we had many informal conservations during field visits (e.g., before and after observations), and in relation to the work of our students who participated in the program. This was also documented in extensive field notes (Emerson et al., 1995). The informal conversations enabled us to clarify observations and emerging insights from the interviews. Our conversations with participants continued after our period of real-time data collection, until the final revision of this paper. That contact allowed us to garner insights into how the program was continuing to develop.

Finally, we collected documents (e.g., internal strategy documents, and public documents such as media articles and webpages) to triangulate and complement the insights we gained from observations and interviews (Jick, 1979). Table 2 provides an overview of the data collected.

3.3. Data analysis

Our iterative data analysis consisted of three steps and is rooted in the process research tradition (Berends & Deken, 2021; Langley, 1999). In the first step, we created a chronological event list (Van de Ven & Poole, 1989) and composed a case narrative (Langley, 1999) based on our close reading of the interview transcripts and field notes. In the case narrative, we made sure to voice the different perspectives of individuals and organizations, including their verbatim quotes. We also created visual maps (Langley, 1999) to schematically capture the unfolding interorganizational program and key events (consisting of activities, decisions, and/or influences outside participants' control) affecting the program's progress.

In our second step, we followed a temporal bracketing strategy (Langley, 1999). We identified *episodes* in the event list and case narrative where the various contexts were shaping the program and its integration, or shaped by it. We systematically captured relationships between these events and the different embedded levels of analysis: *individual* (e.g., personal decisions to stop working in the physical program space), *organizational* (e.g., organizations' unilateral decisions to engage in or retract from certain activities; hiring new staff), *interorganizational program* (e.g., joint goal setting, establishment of physical workspace, search for projects), and *healthcare industry and system* (e.g., (international) conferences on transforming healthcare). While identifying these episodes, we heavily drew on actors' accounts of key events in the semi-structured interviews, informal talks, and from our observations. The integral analysis of these multiple data sources, with their respective strengths, enhances the comprehensiveness and internal validity of our interpretations (Gibbert & Ruigrok, 2010). We carefully voiced the perspectives of the various actors involved, and how they perceived future, ongoing, and past events, to create in-depth descriptions of the dynamics at the different levels of analysis for each episode.
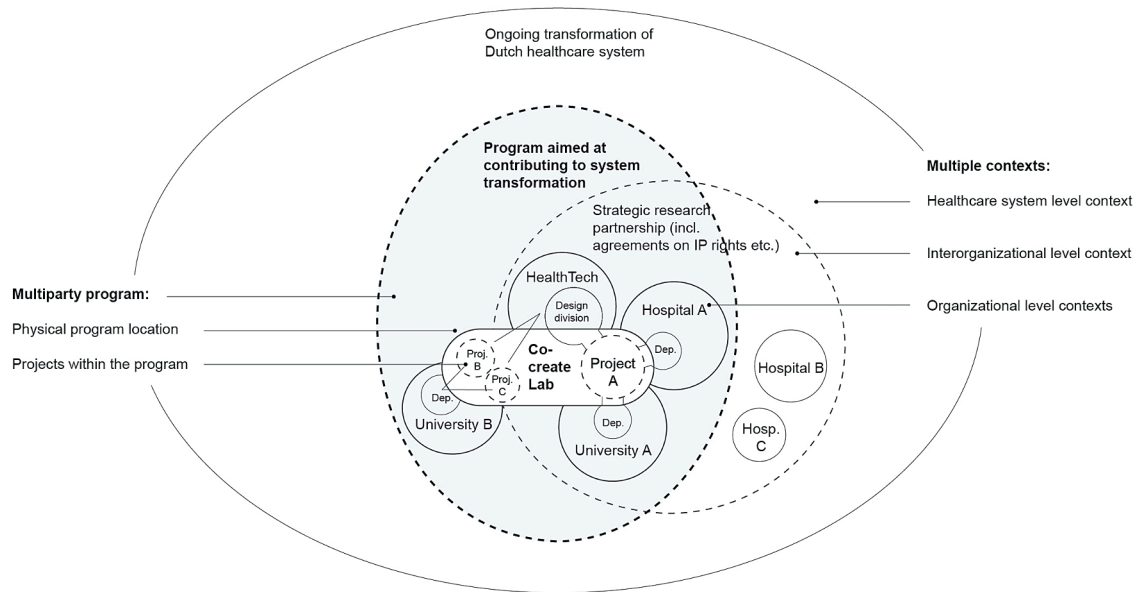
Fig. 1. Contexts of the program at its initiation.

In the third step, we systematically contrasted episodes to identify where and how various contexts related to the integration of the inter-organizational program and how actors addressed the circumstances related to those multiplicities. Through constant comparison, we observed three types of practice, each of which captures a mode of navigating through these multiple existing contexts as they integrated the program in their respective parent organizations. We focused on instances where actors encountered tensions and opportunities born of the multiplicity of contexts, capturing these using inductive labels (e.g., sharing resources, conflicting values). We also labelled the actors' various responses to the consequences of such complex embeddedness (e.g., spatial splitting, prioritizing values). We synthesized this in our descriptions of the episodes. We noticed how mismatches between contexts surfaced in various episodes and led to breakdowns in actors' collaborative paths. We identified the overarching, recurring pattern where participants engaged in three core practices that each enabled them to navigate the multiple contexts involved in their program: (1) aligning contexts to progressively integrate into multiple organizations, (2) prioritizing contexts to integrate into specific contexts, and (3) adding previously uninvolved, "new" contexts to help progress develop. Using these practices, participants actively shaped the embeddedness of the program while responding to the dependencies that the different contexts brought.

Throughout each stage of this analysis, we took measures to reduce researcher bias and increase our findings' internal validity. First, we discussed interpretations among ourselves. The authors less involved in data collection took an outsider perspective to challenge emerging interpretations (Evered & Louis, 1981). We also discussed our emerging findings with key informants and researchers involved in other system transformation projects and programs. Additionally, throughout 2021 and 2022 (up to February 2022), the findings of multiple versions of the paper were checked for accuracy by four program participants who had been involved for the duration of our research project.

4. Findings

4.1. The multiple contexts involved in the system transformation program

With multiple organizations involved in the program, participants' actions took place within multiple, nested contexts, including those associated with the three organizations plus the ones associated with the

Dutch healthcare system. In addition, the program involved a number of more "temporary", less institutionalized contexts, including an ongoing strategic research partnership among the three organizations and two other hospitals; a joint physical space, the Co-create Lab, established by the participants as part of the transformation program; and the projects that were part of the program. Fig. 1 provides an overview of the landscape of contexts the program involved at its initiation.

What was specifically interesting about the program was that contributing to the ongoing transformation of the Dutch healthcare system was directly confronting participants with vast amounts of complexity, uncertainty, and emergence. These conditions are inextricably linked with exploratory innovation trajectories, which the participants were used to working in. They anticipated the conditions and took them as opportunities to learn how to develop and integrate new ways of working. There were countless factors that might influence how the different contexts could enable or constrain their work, and evolve over time, including what happened in the field, in organizations and their subunits, and in the program itself. The uncertain and emergent context allowed participants to explore how to find synergy between contexts and collaborate among and within their respective organizations.

4.2. Navigating practices to integrate into multiple organizations

We present and interpret three practices actors used to navigate among multiple contexts to progressively integrate the transformation program across multiple organizations: *aligning contexts, prioritizing contexts,* and *adding contexts.* Table 3 outlines these practices. To present them in depth, we use three empirical vignettes that treat exemplary episodes in chronological order, as is recommended for process research (Jarzabkowski, Bednarek & Le, 2014; Berends & Deken, 2021). In most episodes, *several* contexts came into play simultaneously. Table 4 provides a chronological overview of all 13 episodes of context navigation, including supplementary quotes.

4.2.1. Aligning contexts

The plan to initiate the interorganizational transformation program emerged out of an ongoing research collaboration between HealthTech, University A, and three hospitals (Hospital A, B and C). From June 2018 onwards, in Episode 1, members of HealthTech, University A, and Hospital A began to define a program aimed at contributing to the

Table 3
Practices for navigating multiple contexts.

Practice	Explanation of practice	Collaborative paths	Episodes from data
Aligning contexts	Aligning the program with the existing conditions of multiple organizational contexts by discussing and taking into account the needs and interests of the different organizations and their subunits' contexts. The practice facilitates integration into multiple organizations.	Initiating interorganizational collaboration; launching pilot projects. Progressively integrating the transformation program over time across multiple organizations.	E1-E3: Initiating interorganizational program; Establishing physical workspace; Collaborating in physical workspace. E5-E9: Interacting with the commercial division of HealthTech; Exploring alternative hospital collaboration partners; Developing strategy documents for program; Setting up collaboration with Hospital B; Allocating additional resources to program. E11-E13: Setting up collaboration with Hospital D; Exploring collaboration with other hospitals; Setting up collaborations with other hospitals.
Prioritizing contexts	Addressing emerging incongruencies among contexts: accepting and prioritizing the unforeseen needs of particular contexts while backgrounding others. Facilitates integrating (emerging) program outcomes into a specific context.	Safeguarding program integration within a specific organization. Growing separation of project paths and the program.	E4: Continuing Project A and initiating new projects with other partners. E6: Exploring alternative hospital collaboration partners. E10: Exploring collaboration with Hospital D. E12: Exploring collaboration with other hospitals.
Adding contexts	Exploring collaboration with new organizations by evaluating whether their associated contexts and resources are congruent with specific program goals; facilitates progress of the program and integration into multiple organizations by discussing and incorporating the needs of new (previously uninvolved) organizational contexts.	Foregrounding specific transformation goals with novel collaboration partners to facilitate progress of the program. Fanning out of the program into multiple parallel (collaborative) paths.	E4: Continuing Project A and initiating new projects with other partners. E8: Setting up collaboration with Hospital B. E11: Setting up collaboration with Hospital D. E13: Setting up collaborations with other hospitals.

ongoing transformation of Dutch healthcare delivery towards value-based care. All actors aspired to develop innovations that promoted new ways of working and that could be integrated in their respective organizations.

> "Our aim is that our organizations will [jointly explore] selected topics, which will lead to innovations. And these innovative results will be shared [among the collaborating organizations]. It is a pretty unique concept [in the healthcare field]. As far as we know, it does not exist yet in the Netherlands."
> Director of Hospital A

Based on HealthTech's past experiences with system-level transformation programs in other contexts, the participants agreed that a preliminary, small-scale pilot project was called for. The goal would be to learn about system transformation in the Dutch healthcare context and make a first step towards the pursued contribution to transforming the Dutch healthcare system. They planned to progressively expand the program into a portfolio of projects to increase its impact over time.

The specific focus of the pilot project had yet to be determined—potential options were abundant. Based on an existing collaboration with one of the departments at Hospital A, the participants explored regional healthcare problems in that department's domain to focus their pilot on, including existing challenges within the national healthcare system relative to payment incentives and policy, for example. Participants' personal assumptions, analyses of health databases, and interactions with primary care providers and the municipality pointed to a significant ongoing healthcare challenge in the region: the substantial health issues associated with vulnerable patient populations (individuals unfamiliar with the Dutch healthcare system or those with low-socio economic status, for example). Addressing this challenge not only aligned with the hospital's regional objectives but also appealed to HealthTech, as they had determined that these problems also occurred in other regions, and were related to several of their ongoing innovation activities, and thus could be scaled to (inter)national markets. Based on the challenge, participants formulated the first program goal—to provide better access to care for vulnerable patient groups—and initiated their first project, which we call "Project A".

Episode 1 showed how actors were *aligning various contexts* as they defined the program, the program's first goal, and the specific focus for the first pilot project. They aligned with system-level contexts by

connecting program and project goals to important *regional* and *national* healthcare challenges. Moreover, they attuned their goals to the strategies of three respective organizations, aligning the program with the organizational contexts of HealthTech, University A and Hospital A. For example, University A's strategy was to create societal impact by developing innovative tools and methodologies for system transformation; Hospital A's goal was to become the most innovative hospital in the region; and HealthTech's strategic plan for business development involved co-creating solutions with healthcare practitioners. In the excerpt below, the Vice President (VP) of HealthTech's design division explains their aspiration to develop healthcare innovations at the site where healthcare is delivered, because they believe that co-creation with patients and hospital staff is needed to change the healthcare system. To continue to generate business opportunities they need to explore the roles they might play. The excerpt that follows shows how the overall aim of the program (to contribute to transforming the healthcare system) aligned well with HealthTech's organizational goals.

> "The idea is that if you want to change healthcare, you have to do it in a systematic way. [In our innovation strategy] we said, 'We have to work in the healthcare field, closer to where it happens'. In the past, we used experience flows and personas to create an abstract representation of end users, but that does not suffice anymore. So we want to move into the field [....], and that is what we attempt to do here [in the program]."
> VP of design division HealthTech

The partners saw the program as a vehicle for changing their ways of working and thereby achieving organizational goals and strategic benefit. HealthTech participants even considered the program a first stepping stone towards business development. Aligning the system-level contexts (i.e. the regional and national healthcare system), and organizational level contexts (i.e. HealthTech, University A, Hospital A) would, so these participants anticipated, enable program outcomes to be integrated over time not only inside their respective organizations, but also within the contexts of other key healthcare actors, such as regulators and insurers.

However, as these examples also illustrate, the strategies and goals of the organizations involved were only weakly related. Each actor imbued the interorganizational program with meanings that resonated with their organizations' respective strategies. For example, HealthTech

participants emphasized the business development potential, members of Hospital A emphasized how collaboration could help realize their innovation ambitions, while University A participants focused on the development of knowledge and methods.

Over time, the aligning efforts enabled integration of the program with HealthTech, the university, and hospital as evidenced by the growing number of people from the parent organizations supporting the transformation program. For example, the VP of one of HealthTech's divisions, a university dean, and Hospital A's business development director participated in an agenda setting meeting in December 2018. Significant resources were allocated to the program (i.e., people, time, budgets; see Table 4) by the three collaborating organizations. In one particularly concrete move, they jointly established a shared physical innovation space (the Co-create Lab) on site at Hospital A (see Episode 2, Table 4):

"What we do. . . we say, "Okay, we have HealthTech, University A, and Hospital A who all contribute equally. We invest hours, we invest some money. Our ambition is to eventually develop a business model that allows us to become self-supporting."
Director of Hospital A

The organizations also established a steering group for the program with representatives from HealthTech, University A, and Hospital A. The group decided on important program-related issues.

These efforts are all examples of how aligning practices in Episodes 1, 2 and 3 helped *integrate* the program at the respective parent organizations. Aligning their goals made it possible for the stakeholders within organizational contexts to free up the resources (e.g., staff, physical space) they could use to initiate the transformation program and launch Project A, and also propel integration of the program within their respective parent organizations. The inaugural Project A provided the participants a strategic focus even though the system-level problems they aimed to address were wicked.

4.2.2. Prioritizing contexts

The second navigating practice involves prioritizing contexts. In Episodes 2 and 3 (see Table 4), incongruencies between the different contexts surfaced resulting in breakdowns—a significant disruption in actors' collaborative path. These breakdowns put the continuation of the program at risk and triggered participants to *prioritize contexts*. In Episodes 2 and 3, participants temporarily separated the innovation activities related to Project A from the collective exploration of new ways of working within the program, which facilitated progress towards integration of project outcomes inside the parent organizations associated with Project A.

In Episode 2, various contexts posed conflicting demands. The activities associated with exploring new ways of working (in the context of the overarching program) were incongruous with important legal constraints relative to Project A, for example (Episode 2, see Table 4). As part of their joint innovation process, Project A participants had to protect its intellectual property (IP). To ensure that patents could be filed legally and IP protected, the participants created a closed office space in the Co-Create Lab. By prioritizing their respective contexts (i.e., focusing on the objectives of the three organizations to protect IP and the long-term needs at the systems level) and spatially separating the team of Project A from other program participants, Project A continued at full speed. Project A members were able to make progress towards the program's system-level aim while also respecting organizational demands to protect potential IP. Table 4 shows how various project outcomes were realized as a result of this prioritization.

In Episode 3, when the abstract goals of the program were turned into concrete program activities, additional incongruencies between contexts emerged. For example, participants of HealthTech and Hospital A discussed showcasing examples of existing innovations to raise interest and develop an innovation spirit among organizational members

and other stakeholders. They believed that to explore and implement new ways of working, the program not only needed projects with a focus on innovations that could contribute to the transition of the healthcare system in the long-term, such as those developed within Project A—it also needed short-term engagement-directed projects to inspire a growing commitment and readiness to change work practices among the employees of their organizations and other stakeholders.

"I see the lab as a combination of different activities. [Project A], for me, is a long term project. I can imagine that we need to have one or maybe two of these long term projects within the lab and that these need to be combined with shorter trajectories."
Director of HealthTech (Head of the program)

Participants from HealthTech and Hospital A started a collaboration with University B to develop an approach they could use to select and combine short and longer term projects within the program. These program activities were aimed at integrating the program into the existing organizational contexts of HealthTech and Hospital A, and aligning the future-oriented transformation program with the current practices and goals of the organizations. During a program update meeting in March of 2019 (Episode 3), it became clear that short term alignment was at odds with Project A's goal to pursue system transformation.

"We are talking to [specific departments] to really understand workflow, efficiency, intake—very specific challenges on the floor. And if you talk about addressing these challenges on the floor just to create cost-efficiency, for me that is not in the system innovation at all."
Snippet from program meeting (12 March 2019)

The snippet shows that certain focus areas of the program, such as the focus on only creating cost-efficiency in the short-term, did not qualify as system innovation. Although this focus area was considered crucial by certain participants (in this case to garner support for the program from important stakeholders inside the organizations), others feared that aligning with that short-term organizational goal would introduce the concerns of other contexts which could potentially endanger the progress and outcomes of Project A.

Participants responded to these emerging incongruencies between contexts by *prioritizing contexts*. For example, in Episode 4, HealthTech continued its work on the program with University B and the involvement of Hospital A, but chose to embed program activities in the organizational contexts of University B instead of University A (the latter was closely involved in Project A). Two university projects were set up for two concrete focus areas of the program: an exploration of how to collaborate with multiple organizations in a healthcare innovation lab, and the development of an approach for selecting projects for a healthcare innovation lab. These projects contributed to further integration of the program with HealthTech, as HealthTech planned to use them for the selection of new projects for the program.

In Project A, contexts were also prioritized. The project team composed of members working for HealthTech, University A and Hospital A continued their co-creation activities with relevant stakeholders in the Lab and had minimal contact with the organization of HealthTech and the team who worked on the overarching program. In doing so, they prioritized the contexts that were considered relevant to Project A . The activities and emerging outcomes of Project A were kept confidential and were only shared within the project team. In this way, participants of Project A secured IP and kept their focus on integrating into relevant contexts, such as HealthTech, University A, Hospital A, and other care parties—while trying to minimize the influence of other contexts, such as University B.
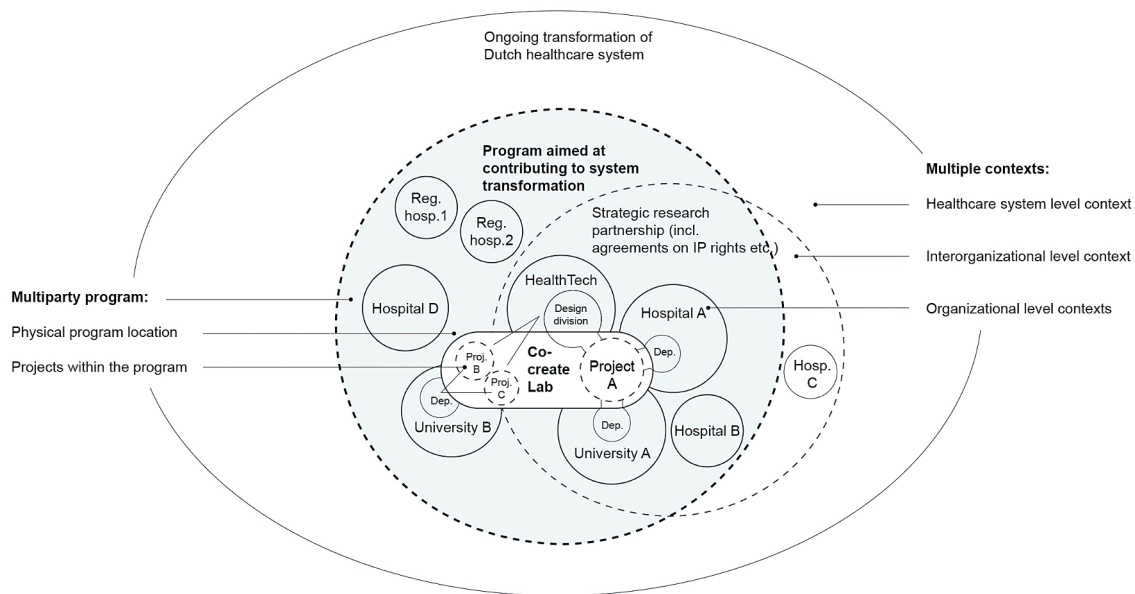
Fig. 2. Contexts of the program in 2022.

4.2.3. Adding contexts

When participants were confronted with emerging incongruencies between the multiple contexts, they also *added contexts* by involving new organizations. Through this practice, the system transformation program effectively fanned out into multiple collaborative paths.

For example, in Episode 5, an incongruency between the organizational contexts of Hospital A and HealthTech emerged during the exploration of new project collaborations with different departments at Hospital A, which would contribute to the program and increased integration in Hospital A. The program participants of HealthTech knew they were depending on the efforts of their commercial division to further diffuse the new ways of organizing. Because Hospital A was not an existing strategic business partner of their commercial division, the participants realized that they had to reconsider their focus on Hospital A as a pilot hospital and further explore potential synergies with the interests of their commercial division. In the short term, further integration of the program in both HealthTech and Hospital A was hindered, which led to a breakdown in the collaborative path.

In Episode 6, participants responded to this breakdown by exploring whether a new partner, Hospital B, could help explore and develop new ways of working and attain program level goals (contributing to the transformation of Dutch healthcare delivery; optimizing value for patients; reducing healthcare inequality). The HealthTech participants, seasoned innovators that they were, had anticipated that changes would be needed to integrate their novel ideas and thus accepted the constraints that had emerged from their own organizational contexts. The head of the program considered Hospital B an attractive partner to collaborate with, as they were part of the strategic research partnership with established legal agreements between organizations, and part of a hospital group that was a strong proponent of and frontrunner in changing the Dutch healthcare system. By collaborating with Hospital B, integration of the program at HealthTech could be continued, as could its ongoing alignment with inter-organizational relations and the system level contexts. Collaboration with University A and Hospital A could also still continue within Project A regardless of the potential initiation of a new collaborative path.

HealthTech started to explore opportunities for setting up a Co-create Lab with Hospital B. With a series of meetings within Health-Tech and meetings with representatives of Hospital B, participants again engaged in the practice of aligning contexts at the abstract, goal level. At the same time, joint program actions with Hospital A were temporarily

ceased, except for Project A, which was continued. The further development of the Co-create Lab in Hospital A was put on hold in April 2019.[2] Participants from HealthTech, University A and Hospital A also ceased their joint search for additional projects to work on within the Lab. This again illustrates the practice of prioritizing contexts as a result of the explorative, collaborative search for new ways of working. HealthTech focused on aligning with the new contexts of Hospital B for the program, while the existing organizational contexts of Hospital A and University A continued to play a major role in Project A.

Over time, HealthTech initiated a new collaboration with Hospital B focused on their system transformation goals (Episode 8; see Table 4). This fanned the collaborative path out from Hospital A to Hospital B. By spreading out the collaborative path at the program level, HealthTech participants were able to continue the transformation program and its integration at HealthTech with a different partner (Hospital B), effectively immersing themselves and the program in an additional context. Adding this new context, over time, also triggered emerging incongruencies between contexts. In brief, Hospital B had committed to the system transformation goal, but eventually did not want to initiate new projects on top of the projects they were already working on with HealthTech. Since the HealthTech participants did not think it feasible to support transformation of the healthcare system with only these existing projects, they initiated another collaboration with Hospital D and the collaborative path of the program fanned out again (Episodes 10 and 11; see Table 4). The recurring pattern of *aligning contexts, prioritizing contexts* and *adding contexts* illustrates how these participants actively switched between the multiple contexts they operated within. Prioritizing existing contexts and adding new contexts proved especially beneficial to the search for synergies among partners that could support the further development and progress of the program. Incongruencies among contexts did not need to be resolved—they were accepted and co-evolved with the program. This allowed the program to progress despite its embeddedness in various contexts with competing demands, and move towards integration of the program in multiple parent organizations. Fig. 2 provides an overview of the multiple contexts of the program in 2022. It illustrates that an increasing number of organizations became involved in the program, who all brought in new contexts.

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[2] The Co-create Lab eventually closed in 2021, as COVID-19 prevented participants from working on site.
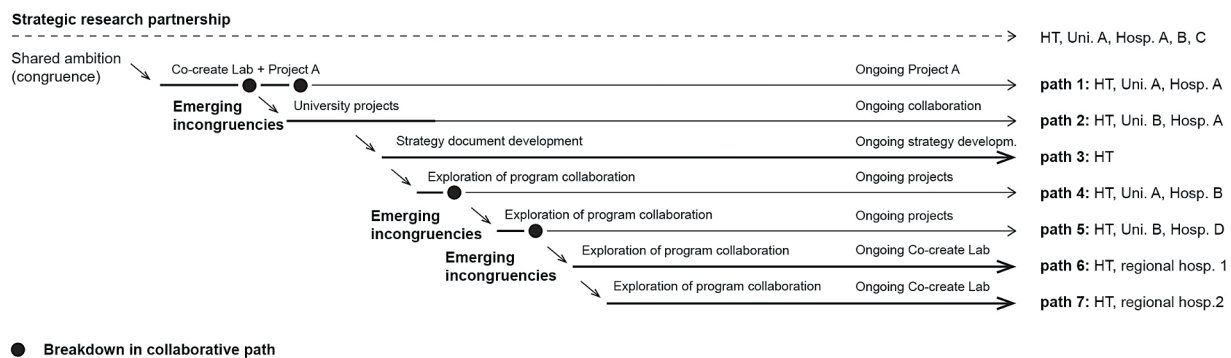
Fig. 3. A fanning out of parallel collaborative paths.

5. Progressing program–parent integration via multiple parallel paths

Our findings provide a processual perspective on how system-level transformation programs become integrated with multiple parent organizations. Actors navigated through several contexts by iteratively engaging in three practices: (i) *aligning contexts* to implement the collaborative path in multiple parent organizations, (ii) *prioritizing* specific contexts to safeguard the collaborative path and integrate into a specific organization; and (iii) *adding* new collaborators, and hence their existing contexts, to foreground and pursue specific transformation goals with different partners.

The episodes described earlier and in Table 4 illustrate how the initial collaborative path fanned out into a growing number of parallel paths involving new organizations (see Fig. 3 for a visual overview). Breakdowns drove these new explorations. We observed multiple breakdowns during the episodes: these were significant disruptions to the collaborative path at stake. We researchers, in addition to various program participants, initially felt that the breakdowns and the subsequent emergence of new program collaborations implied a lack of progress in the system transformation program. However, by tracing the developments across subsequent episodes over time, we found that even though breakdowns disrupted collaborative paths, temporarily impeding the program's overall progress, they also triggered the emergence of *parallel collaborative paths,* which contributed to the further development of the program and increased program integration inside certain parent organizations. Our findings therefore suggest that breakdowns need to be understood as important and instrumental when integrating system transformation programs with multiple parent organizations.

Breakdowns provided actors with critical insight into *which* contexts mattered for progressing transformation objectives and how such contexts affected their program. For example, the breakdown in Episode 5 with HealthTech's commercial division (see Table 4) alerted HealthTech participants to the incongruency between their "new way of organizing" and its integration at Hospital A. That clarity was consequential for furthering the transformation program and its integration with the parent organizations.

The challenges associated with coordinating multiple contexts were seldom addressed effectively once and for all. The head of the system transformation program mentioned how the breakdown in Episode 3 (see Table 4) taught them that setting up multiple projects with different stakeholders within a wider program meant reassessing how to collectively deal with IP-related issues each time a new collaboration was formed. In fact, IP-related issues kept cropping up at later stages of the program, for example once they had successfully developed and tested new ways of working with Hospital D in Episode 11 (see Table 4).

Breakdowns oriented actors towards aligning with the contexts that were most congruent with their goals for integration. For example, after the breakdown in Episode 5, HealthTech participants explored collaboration with a new organization, Hospital B. They also started new collaborative paths with other hospitals after they understood how integration with their commercial division could work—a move that demonstrated their ongoing intention to continue integrating program objectives and outcomes into their organization instead of isolating the program from their organization and developing it with only their current partners. Breakdowns not only emerged as a result of incongruencies among contexts. They also arose from the actions and decisions taken by program participants, which sometimes served to trigger further breakdowns over time. This endogenous dynamic makes interorganizational transformation programs extremely volatile and complex to manage.

Next, we show how progress towards program–parent integration was made at the project level and via the development of a governance structure for the program, despite the dispersal of efforts among contexts. Over time, the abstract program goals informed parallel paths with projects focusing on specific aspects of the system-level transformation program. As Episode 1 showed, the wicked, system-level problems that the program aimed to address had a profusion of starting points. By nature, wicked problems are multifaceted and cannot be decomposed (Rittel & Webber, 1973). Reaching agreement on a specific course of action to tackle such problems when multiple organizations are at the table is highly challenging. In our case, partners reached agreement about specific projects by *aligning contexts* and pragmatically connecting to ongoing initiatives and organizational-level strategies. The projects were mostly defined and executed co-creatively, which helped actors develop connections with their parent organizations. Because of their limited scope and focus on concrete outcomes, such projects provided a means of creating and maintaining alignment between the abstract goals of the program and specific aspects relative to contexts. Because projects were executed by different partners across multiple collaborative paths, the program became increasingly integrated with a growing number of organizations (see Fig. 3 for an overview).

Despite many setbacks, a slow pace, and a changing involvement of organizations and associated contexts, actors also managed to progress program–parent integration by developing a governance structure for the program. Insights gained from the multiple collaborative paths were, over time, incorporated into strategy documents for the respective organizations that supported further development and implementation of new ways of organizing to support system transformation. For example, HealthTech documented a governance structure for transformation programs based on the lessons learned (see Episode 7, Table 4). Those strategy documents, in turn, helped participants integrate the program at the organizational level (specifically HealthTech and the hospitals). For example, HealthTech participants used the documents to further win the support of their commercial division. In Episode 9 (see Table 4), the organizations involved established a new organizational role so that there would be a person dedicated to further developing and coordinating governance in line with organizational strategies. This also fueled further collaboration with new hospitals (e.g,. Hospitals B-F, see

Table 4).

6. Implications & conclusions

Our in-depth case study of an interorganizational transformation program in healthcare revealed an iterative pattern of three navigating practices: aligning contexts, prioritizing contexts, and adding contexts. Collaborative paths were initiated when actors from different organizations aligned with multiple contexts. Emerging incongruencies between contexts led to breakdowns in the organizations' collaborative paths. By prioritizing the contexts to integrate the program into, novel partners became involved that successfully executed program activities along new collaborative paths. Along with these novel partners, previously uninvolved contexts also became associated with the program. This required actors to engage in further aligning practices when new incongruencies between contexts and breakdowns emerged. The growing number of parallel collaborative paths that resulted from the iterative pattern allowed the program to progress and become integrated with multiple parent organizations. While breakdowns and new paths enabled actors to prioritize and progress integration with specific contexts, such prioritization also separated the various paths within the program. By adding contexts, actors sought to select congruent contexts for focusing on specific goals. As such, the breakdowns in the collaborative paths played a crucial role in navigating multiple contexts and progressing program–parent integration in multiple organizations.

6.1. Theoretical implications

Our study contributes to the literature on program management in three significant ways. First, our identification of the three practices for navigating embeddedness across multiple organizational contexts adds novel insight to earlier studies that have demonstrated the challenges and strategies for integrating transformation projects and programs with single parent organizations (e.g., Johansson et al. 2007, Lehtonen & Martinsuo 2008, 2009, Willems et al. 2020). We observed an iterative pattern of practices of context navigation that fostered progress towards integration with parent organizations via a fanning out of multiple parallel collaborative paths, thereby extending prior work on project isolation (Lehtonen & Martinsuo, 2009; Willems et al., 2020) and integration (Lehtonen & Martinsuo, 2009) vis-a-vis a single parent. The fanning out pattern shows that incongruencies between contexts were, in contrast to earlier findings reported in the interorganizational project literature, not resolved by increased collaborative efforts to establish common program goals (e.g., Matinheikki, Aaltonen and Walker, 2019), nor by isolating the program from its contexts, as has happened in many interorganizational innovation projects (e.g., Willems et al., 2020). Instead, the collaboration took place in an increasingly decoupled way. Actors accepted and circumvented the emerging incongruencies by prioritizing contexts and pursuing integration with certain contexts while backgrounding others. Because the program we studied aimed to contribute to a system level transformation, the program aims were well-beyond the direct sphere of influence of the program participants. There was ample opportunity for program participants to prioritize specific goals in specific collaborative paths, and to establish new paths with new collaborators to focus on other aspects of the transformation aim.

Second, we find that breakdowns are instrumental to the progress of integration with multiple parent organizations. They allowed the concerned organizations, despite emerging incongruencies among their contexts, to continue a collaborative path by triggering a focus on specific transformation goals. They also invoked new parallel collaborative paths to further explore the goals that were backgrounded in a previous collaborative path. Breakdowns yielded essential insights on how to navigate competing demands for integration in interorganizational settings. Our findings suggest that breakdowns are inextricably linked to the multiple contexts associated with system transformation programs.

We show that breakdowns emerge out of the interplay of different contexts that often feature competing demands due to temporal tensions (Stjerne et al., 2019) or conflicting goals and interests (Aaltonen et al., 2017; Bos-de Vos et al., 2019). Any initial alignment between contexts that is realized in system transformation programs at the level of abstract common goals cannot persist as concrete program activities inevitably reveal incongruencies between contexts. In addition to previous work in the context of interorganizational projects, such as the studies of Aaltonen et al. (2017) and Bos-de Vos et al. (2019) our findings show that such competing demands do not need to be resolved by collaborating actors to reach successful outcomes but can also co-exist within a program that continues to evolve and fan out. Our study suggests that breakdowns also contribute to shaping the multifarious embeddedness of system transformation programs. In our case, breakdowns triggered actors to initiate new collaborative paths which enabled progress of the program and its integration in multiple organizations via additional contexts that became involved. This contributes new understanding of how temporary and more permanent forms of organizing interact, which Söderlund and Sydow (2019) and Sydow and Braun (2018) called for to better understand the complexities of contemporary project and program management.

Third, along with other recent studies, our findings demonstrate that multiple contexts are not simply a general condition actors have to operate within (Martinsuo & Hoverfält, 2018; Martinsuo & Geraldi, 2020). For example, Näsänen and Vanharanta (2016) showed that participants shape the contexts in which they operate through discursive patterns. Building on research on project and program embeddedness (e. g., Engwall 2003, Manning 2008, Dille & Söderlund 2011), our study adds that contexts are also *made* more or less relevant, e.g., through participants' efforts to get the collaboration going and by prioritizing contexts' to integrate with. Moreover, contexts continue to shape an unfolding transformation program in unexpected ways when the consequences of embeddedness in multiple contexts surface over time. This provides new insight to the evolution of complex transformation programs over time, pointing to the role of evolving program embeddedness as another source of dynamics. It only becomes clear over time which contexts actors need to pursue integration with and how to do that. Therefore, processes such as joint goal setting need to be seen as ongoing efforts involving different organizations over time. Actors' own agency involved in shaping collaborative paths and navigating multiple embeddedness makes it particularly challenging to oversee and anticipate which possibilities and constraints they may have to respond to over time.

6.2. Practical implications

Our study has several implications for setting up and collaborating in interorganizational system transformation programs. First, the pivotal role of breakdowns in the process of integrating with multiple parent organizations highlights that breakdowns, even though disruptive and possibly experienced as highly inconvenient, provide valuable knowledge about contexts, which helps to progress the program and pursue integration with parent organizations. We therefore argue that breakdowns must not be seen as failures. They are necessary for discovering and managing the boundaries between the transformation program and the organizational, inter-organizational and system-level contexts. Thus, we suggest that they need to be embraced rather than avoided. While the multiplicity of contexts complicated integration, it also introduced leeway for actors to seek more receptive environments. Second, we suggest that system transformation programs can benefit from having abstract common goals and a flexible collaboration structure that fosters ambiguity and allows for the exploration of different directions. Third, we recommend participants of interorganizational transformation programs to engage in the collaboration with the expectation that goals, tasks, directions, structures, and stakeholders will inevitably change, as many of the participants in our study did.

Table 4
Episodes of context navigation in chronological order.

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
E1: Q2 **2018** - Q4 **2018** Initiating an interorganizational healthcare transformation program.	**Path 1: HealthTech, University A and Hospital A** Building upon their shared ambition to contribute to the ongoing transformation of the Dutch healthcare system, HealthTech, University A, and Hospital A initiated a program in which they would join forces to explore new ways of working for enhancing value for patients. Through multiple meetings, actors worked on defining a first joint overarching program goal (i.e. improving access to care for vulnerable patient groups), based on challenges in the regional and national healthcare system and the strategic interests of the three organizations they represented. They also defined a first concrete project (Project A), which aimed to contribute to reaching the overarching goal of the program, as well as their own organizations' goals. They agreed to look for additional projects in the near future. With the program, actors aimed to collaborate in a novel way—rather unlike how they would interact traditionally. They expected that this novel way of collaborating would enable them to achieve strategic benefits for their organizations: it would allow University A to develop tools and methodologies for system transformation, Hospital A to provide better care because of the collaboration, and HealthTech to develop new business opportunities. For HealthTech it was also about strategic renewal of their organization: they could explore how to move their innovation activities to the healthcare setting they were innovating for, which they considered crucial to remain a relevant party. By formulating a joint program goal and defining a first concrete project in alignment with the strategic goals of their organizations, actors initiated a system transformation program that was set up to be integrated into their respective organizations.	**Aligning contexts** By aligning the joint goal for the program with challenges in the regional and national healthcare system, the strategic interests of the collaborating organizations, and by starting a first project (Project A) that would contribute to reaching the overarching program goal as well as organizational goals, actors were aligning multiple contexts: the project, the program, the organizational contexts of HealthTech, University A, and Hospital A, and the regional and national healthcare system. The practice of aligning contexts was used in several meetings, such as an agenda setting meeting in December 2018, and was focused on creating alignment on the level of abstract goals.	NA	● Establishment of a joint goal for the healthcare transformation program. ● Agreement to start a first pilot project (Project A) based on an existing collaboration between HealthTech, a research group at University A, and a department at Hospital A. ● Agreement to search for additional projects to involve also other departments of Hospital A. ● Agenda setting meeting in December 2018 with program participants and representatives from HealthTech, University A and Hospital A. ● Dedication of resources (people, time, financial investments) to the program by HealthTech, University A and Hospital A.	NA
E2: Q4 **2018** - Q1 **2019** Establishing a physical workspace at Hospital A's site.	**Path 1: HealthTech, University A and Hospital A** The three collaborating organizations created a shared physical workspace at Hospital A's site: the so-called 'Co-create Lab'. The exact location for this	**Aligning contexts** In Episode 2, the alignment of multiple contexts (i.e., program, project, HealthTech, University A, Hospital A) was continued and further concretized with the	Due to the aligning efforts an incongruency between system-level demands (need to co-create innovations with diverse stakeholders) and organizational demands (need to protect IP) emerged. In	● Establishment of a physical workspace (Co-create Lab) at the site of Hospital A. ● Spatial separation in the physical workspace: an open, communal room on the ground floor with an open connection	E1

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
	Lab was chosen in December 2018. The three organizations jointly invested in infrastructure and people. Hospital A provided an on-site location, which HealthTech leased. HealthTech and University A committed a team to work on the program and Project A. Hospital A made staff available on demand. The Co-create Lab physically separated the program from the three organizations' daily affairs. Combined with the dedication of resources and people to the program this illustrates how actors jointly realized program autonomy that was supported by their organizations. Besides creating autonomy, actors kept the program connected to their organizations, for example, by involving people in the program that were also working for the parent organizations, and by establishing a steering group with members of the three organizations. The decision to locate the lab at Hospital A's site indicates that actors emphasized integration at Hospital A. But integration in the other organizations was sought as well, as both HealthTech and University A pursued working at the healthcare site where their innovations were aimed at.	establishment of a shared workspace at Hospital A's site and a steering group for the program.	response, actors decided to create two types of workspaces in the lab: a closed space to co-create and protect IP within Project A and an open, communal space to co-create with stakeholders not involved in Project A.	to the hospital and separate rooms on the first floor to protect IP. ● Establishment of a steering group with representatives from HealthTech, University A and Hospital A.	
E3: Q1 2019 Collaborating in the physical workspace.	**Path 1: HealthTech, University A and Hospital A** From January 2019 onwards, the workspace was fully functional and inhabited. The Co-create Lab enabled actors to work together at the same location and be in close contact with each other and hospital staff. This facilitated sharing and discussing ideas and planning joint meetings, especially within Project A. As agreed in December 2018, participants started working in the Lab every Monday and Tuesday. The space where the team of Project A worked was often overcrowded. Since the room lacked space to accommodate everyone, program participants worked on the ground floor. However, people did not always show up as they were busy with tasks for their parent organizations outside of the program, or did not see the benefits of working in the Co-create Lab, as illustrated by a Professor of University A: '*And then, at some point, [the HealthTech participants] said: 'look, we actually have to do it up here*	**Aligning contexts** The interorganizational project team of Project A collaborated closely in co-create sessions to align the goals of the project with challenges at the system level and the (future) needs and interests of HealthTech, University A, Hospital A, and a growing number of stakeholders. On the program level, alignment with the organizational contexts of HealthTech and Hospital A was sought by incorporating short-term objectives of HealthTech and Hospital A into the program.	The aligning practices at project and program level had conflicting foci: In Project A alignment was sought with future needs of the system level contexts and the organizational contexts of care providers. For the program, alignment was sought with the existing needs and short-term objectives of HealthTech and Hospital A. As this was considered likely to endanger the realization of Project A's longer-term goals, a breakdown occurred.	● Continued spatial separation in the Lab: project team works on the closed first floor; program participants in the open space on the ground floor. ● Co-create sessions with diverse stakeholders in Project A. ● Absence of program participants in the Co-create Lab. ● Program update meeting in March 2019 with members of Project A and program participants.	E2

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
	because then we are in context'. Which I fully support. But I have a different relationship to the [physical workspace], in the sense that I am not sitting here. I will by the way sit here more often in the future. […] But for now, I have no clue about what it is or is not. This also means that I don't have a relationship with it. I just see tables and a pretty okay environment. Which is quite far away from the city centre for me.' As a result, the ground floor with open work spaces was often empty or almost empty. Over time, it became apparent that certain program goals for integrating with the parent organizations of HealthTech and Hospital A (e.g., creating involvement of organizational members in the short-term) conflicted with the longer-term goals of Project A. Realizing goals of Project A to address the complex, wicked challenges in system level contexts (and the envisioned integration of project outcomes in multiple parent organizations in due time) was at odds with realizing short-term organizational goals such as creating only cost-efficiency. This led to a breakdown in path 1.

BREAKDOWN IN PATH 1: The project team and program team decided to execute their work in two separate collaborative paths. Information about project and program related activities were shared between the two teams to a limited extent. | | | | |
| **E4:** Q1 2019 - Q2 2019 Continuing Project A and initiating new projects with other partners. | **Path 1: HealthTech, University A, Hospital A** The collaborative path of Healthtech, University A and Hospital A was split into a path focusing on Project A and a path focusing on the overarching program due to the breakdown in Episode 3. The team of Project A continued working on innovations that solved system level challenges and could be integrated in the work practices of care providers. To reach their goals, they kept collaborating closely with relevant stakeholders. Information about Project A was shared within the project team only, to accommodate organizations' interest in IP and to avoid that certain short-term goals of the program would affect Project A's progress or outcomes. The participants from HealthTech, University A and Hospital A | **Prioritizing contexts** As a response to the incongruencies between the program and Project A in Episode 3, participants prioritized certain contexts for integration in Episode 4. For example, the team of Project A focused on future needs within the system level contexts and the organizational contexts of the organizations they collaborated with. Participants working on the overarching program focused on seeking alignment with the existing organizations of HealthTech and Hospital A.

Adding contexts Following upon the prioritization of contexts, previously uninvolved "new" contexts were added in Episode 4. In Project A, a growing number of external | | • Limited exchange of information about Project A with other program participants and vice versa. • Collaboration with University B on two new projects within the program. • An approach for selecting suitable projects for the healthcare transformation program, co-developed by University B and HealthTech, which HealthTech planned to use within the program. • A toolkit to support the transformation to value-based care in interorganizational innovation labs, co-developed by University B and HealthTech. | E3 |

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
	who worked on the overarching program also continued their work even though they received little updates about Project A. For example, they explored directions for new pilot projects with other departments of Hospital A to incorporate into the program.

Path 2: HealthTech, University B, Hospital A
Together with University B, which became involved in the program from Episode 2 onwards, two new projects were initiated as part of the program by HealthTech and Hospital A. This made a second collaborative path concrete. One project focused on developing an approach for selecting new pilot projects as part of the program, so that the program could become increasingly integrated with HealthTech and Hospital A via these projects and the organizational members who would be connected to the projects. Another project aimed to develop insights into how to support healthcare transformations with interorganizational innovation labs. The intensive involvement of the head of the program in co-defining the goals for the two projects, and interviews with members of HealthTech, University A and Hospital A, all contributed to anticipating integration of the outcomes of these projects into the program and associated organizational contexts. Since the collaboration with University B was not part of the strategic research agreement, separate agreements were needed. The two master's students of University B who worked on the projects signed a graduation agreement with HealthTech, which led to a strong focus on integration into HealthTech. For example, sessions where emerging project outcomes were discussed, involved representatives from different HealthTech divisions. | stakeholders and associated contexts became involved. University B became more involved in the overarching program. With the initiation of two university projects as part of the program, two projects and the organizational contexts of University B were added to the program. Actors again started aligning these contexts by co-defining the projects' goals, providing input for the projects, and jointly monitoring project outcomes. | | | |
| **E5:** Q2 2019
Interacting with the commercial division of HealthTech. | **Path 1: HealthTech, University A, Hospital A**
To allow for integration of the program into their organizations, program participants of HealthTech, University A and Hospital A organized regular meetings and informal catch-up moments with key stakeholders inside their organizations. Early April 2019, the head of the program | **Aligning contexts**
The diverse meetings that program participants had with other stakeholders in their organizations to discuss goals and emerging outcomes of the program, illustrate a continuation of the practice of aligning contexts. Episode 5 particularly shows the alignment that was sought with | Alignment with the commercial division of HealthTech led to the surfacing of incongruencies between the interests of HealthTech's commercial division and the chosen collaboration partner for the program (Hospital A). This eventually resulted in a breakdown. | ● Meetings between project participants of HealthTech and HealthTech's commercial division.
● Planned meeting between management of HealthTech and Hospital A to decide on continuation of collaboration in the program. | E4 |

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
	and a representative from the commercial division of HealthTech had a meeting. During this meeting, the representative from the commercial division stressed the importance of collaborating in the program with a hospital that was a strategic business partner (which Hospital A was not). Even though the sales representative and program participants from HealthTech had also spoken in January 2019, the collaboration with Hospital A emerged as a problem in the program now that the program became more concrete and interwoven with the organization of Hospital A through the establishment of the Co-create Lab. A meeting between Hospital A's board and HealthTech management was planned to collectively discuss the issue. The program participants from HealthTech and Hospital A left it up to higher management to decide how to proceed, which shows that they found it important to involve their organizations in key decisions for the program. It took considerable time before the meeting eventually took place in June 2019. In the meantime, a second breakdown had occurred in path 1. **BREAKDOWN IN PATH 1: Participants of HealthTech and Hospital A put their collaboration in the program, including the search for additional projects on hold and waited for higher management to decide how to proceed.**	the commercial division of HealthTech.			
E6: Q2 2019 - Q3 2019 Exploring alternative hospital collaboration partners.	**Path 1: HealthTech, University A, Hospital A** While the program collaboration with Hospital A (except for Project A) was on hold, HealthTech participants started to consider alternative hospital partners to collaborate with, thereby (specifically for the program, not Project A) moving towards increased alignment with HealthTech's commercial interests for partner selection. The head of the program considered Hospital B, despite the fact that the commercial division preferred other partners: '*Well, I can really understand that our commercial division tries to connect [the selection of a new hospital partner] to a potential commercial deal. Hospital B is commercially very interesting for us, but especially in [mentions a*	**Aligning contexts** Via meetings with their commercial division in which they discussed alternative hospital partners to collaborate with, HealthTech participants sought increased alignment of the program with the existing contexts within HealthTech (such as their commercial division and the ongoing strategic research partnership with multiple hospitals, including Hospital B). **Prioritizing contexts** While seeking increased alignment with HealthTech contexts, the contexts of Hospital A and any potential follow-up projects with this hospital were backgrounded. This illustrates how HealthTech participants prioritized integration of the program with	The collaboration partners proposed by HealthTech's commercial division were not the easiest partners to collaborate with in the program (location-wise etc.)	● Project A was continued with Hospital A. Decision not to initiate any new pilot projects within collaborative path 1. ● Meetings between HealthTech participants and the commercial division of HealthTech to discuss potential hospital collaboration partners. ● Aim of HealthTech to start a collaboration in the program with Hospital B.	E5

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
	specific care area], less in other areas. So I have to consider it carefully. But that will be alright. I have a talk with our commercial division tomorrow and then I'm also going to talk to the people involved in the [strategic research partnership, which Hospital B is also part of]. So I carefully follow-up on what happens in that agreement.' The quote illustrates how the head of the program put forward Hospital B as a commercially interesting partner for HealthTech. As this Hospital is close by, he considered it easier to collaborate with Hospital B than the preferred partners of the commercial division. He used Hospital B's involvement in the strategic research partnership as an additional reason for collaborating with this organization. After several meetings, the head of the program successfully convinced the vice president of the design division as well as representatives from the commercial division to aim for a collaboration in the program with Hospital B. Episode 6 shows how HealthTech participants pursued integration of the program in their organization by taking into account the interests of their commercial division and existing interorganizational relations. **BREAKDOWN IN PATH 1: The program collaboration between HealthTech, University A and Hospital A became focused on Project A and no further pilot projects were started.**	their own organization over collaboration in the program with only Hospital A.			
E7: Q2 **2019 - ongoing** Developing strategy documents for healthcare transformation programs.	**Path 3: HealthTech** From May 2019 onwards, participants from HealthTech started working on internal strategy documents that outlined the new way of organizing for healthcare transformation programs. With this, they aimed to realize increased integration of the program with their organization. They saw the interorganizational collaboration in the program as a new practice that they could replicate with other parties, and which could, over time, generate strategic benefits for their organization. The documents outlined the process of collaborating with various healthcare actors, such as hospitals and universities as well as the envisioned	**Aligning contexts** Episode 7 shows how program participants from HealthTech continued aligning the program with the contexts of the HealthTech organization. By using the strategy documents in conversations with University B and Hospital B, alignment was also sought with other contexts.		● Concrete strategy documents HealthTech. ● Draft versions of the strategy documents presented during intra- and interorganizational meetings. ● Foundations for a program governance structure.	E3 and E6

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
	transformation itself. They incorporated the learnings from the ongoing Project A and program with University A and Hospital A (path 1). The university projects that were executed in the collaboration between HealthTech and University B (path 2) provided additional input for the strategy documents. With the document development, HealthTech participants explored and laid the foundations for a governance structure for the program. The episode is currently still ongoing and had several intermediate results when draft versions of the strategy documents were presented during intra- and interorganizational meetings, such as in conversations with Hospital B, where they facilitated the intended collaboration on the program.				
E8: Q3 **2019** - Q1 2020 Setting up a system transformation collaboration with Hospital B.	**Path 4: HealthTech, University A, Hospital B** Following the proposal by the head of the program in Episode 6, HealthTech and Hospital B started setting up a collaboration within the program. Multiple meetings were organized to discuss the aims and practical execution of this collaboration. The strategy documents that were developed by HealthTech (see Episode 7) played an important role in the negotiations between HealthTech and Hospital B. The fact that Hospital B is part of the already existing strategic research partnership enabled participants in setting up their collaboration, because the important legal agreements (IP etc.) between organizations were already in place. Moreover, there were already ongoing project-based collaborations between members of HealthTech, University A and Hospital B that could be connected to the program. Even though these projects did not fully align with the overarching program goal, because they were, for instance, more focused on workfloor efficiency than moving towards system transformation, integrating these existing projects with the program was crucial for Hospital B. Hospital B first wanted to further develop and use the outcomes of existing projects before starting any new projects. **BREAKDOWN IN PATH 4: Hospital B eventually did not**	**Adding contexts** By initiating a collaboration with Hospital B, new organizational contexts were added to the program. Also several ongoing projects between HealthTech, University A and Hospital B were explored as potential additional contexts to be added to the program, because this was a requirement to engage in the collaboration for Hospital B. **Aligning contexts** The negotiations between HealthTech and Hospital B around the initiation of the program collaboration focused on aligning the existing contexts of the program (HealthTech, commercial division HealthTech, strategic research partnership) with new contexts (Hospital B, ongoing projects within Hospital B). This alignment eventually caused a breakdown in path 4 where Hospital B prioritized the collaboration in existing projects over a broader program collaboration.	Alignment between the program, HealthTech contexts and contexts of Hospital B led to an emerging incongruency: the goals and directions of the existing projects that Hospital B wanted to add to the program did not align well with the system challenges and associated system-level transformation goals of the program.	● Meetings between program participants, HealthTech representatives and representatives from Hospital B. ● Decision of Hospital B to keep the focus on existing projects and not start a program collaboration.	E5, E6 and E7

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
	want to extend the collaboration beyond the ongoing projects of HealthTech, University A and Hospital B. Hospital B had, at that time, no resources for additional projects and did not have the physical space to house a Co-create Lab, which HealthTech considered crucial to enable successful collaboration in the transformation program.				
E9: Q3 2019 - ongoing Allocating additional resources to the transformation program.	**Path 3: HealthTech** HealthTech allocated additional resources to the program development, so that it could further grow and be coordinated in line with HealthTech's strategic goals. In September 2019, HealthTech hired a program coordinator with extensive experience in interorganizational collaboration in healthcare. This program coordinator took over the coordination of the strategy development for the program (see Episode 6), while simultaneously being tasked with coordinating the development of one of HealthTech's strategic directions, which was closely related to the program. The episode shows how on the one hand, the autonomy of the program was emphasized by the allocation of additional resources, while on the other hand integration with HealthTech was further developed by embedding the program coordinator within the HealthTech organization and by steering on HealthTech's strategic objectives.	**Aligning contexts** By embedding the new program coordinator in HealthTech, further alignment between the program and HealthTech was realized over time.	The program coordinator had dual tasks: coordinating the interorganizational program and coordinating strategy for HealthTech.	● Hiring of program coordinator, who was embedded in HealthTech. ● New input (from coordinator's previous experience) for strategy document development.	E7 and E8
E10: Q4 2019 Exploring a system transformation collaboration with Hospital D.	**Path 4: HealthTech, University A, Hospital B** The breakdown of Episode E8, made clear that Hospital B was, at least at that moment, not enabling further progress of the program. The collaboration in path 4 focused on further developing the existing projects as part of the strategic research partnership with Hospital A and Hospital C. **Path 5: HealthTech, University B, Hospital D** Following on a growing belief in the business opportunities that the new ways of working could yield for HealthTech (see E7, E9), HealthTech participants pursued continuation of the program and kept moving towards integration of the program in their organization. HealthTech	**Prioritizing contexts** By shifting focus from collaborating with Hospital B to exploring a potential collaboration with Hospital D, thereby pursuing continuation of the program in a new path (path 5), HealthTech participants prioritized system-level contexts and their respective organizational contexts over the organizational contexts of Hospital B (i.e. projects, departments, organization).		● The program and the existing projects of HealthTech, University A, and Hospital B continued in separate paths. ● Successful continuation of collaboration with Hospital B (path 4) within the strategic research partnership.	E5, E7, E8 and E9

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
	started to explore opportunities to collaborate with Hospital D in the program. As Hospital D is a leading hospital in the Netherlands, and of commercial interest to HealthTech, HealthTech participants considered this hospital a suitable partner to collaborate with in the program.				
E11: Q1 **2020** - Q3 **2020** Setting up a system transformation collaboration with Hospital D.	**Path 5: HealthTech, University B, Hospital D** Pursuing integration of the program at the site and with the organization of Hospital D through a Co-create Lab in Hospital D, led to the establishment of a master research agreement between HealthTech, Hospital D and University B in December 2019. The three organizations were able to initiate relevant healthcare innovation projects together as part of their research agreement. However, they did not set up a Co-create Lab at the site of Hospital D and did not intend to collaborate on an overarching transformation program. This resulted in a breakdown in collaborative path 5. **BREAKDOWN IN PATH 5: HealthTech and Hospital D did not find each other in the establishment of a Co-create Lab at the site of Hospital D, which for HealthTech was a crucial part of the program and its value for their organization.**	**Adding contexts** By initiating a collaboration with Hospital D, previously uninvolved, new organizational contexts were added to the program (e.g., organization, departments, research groups from Hospital D). **Aligning contexts** Through the process of aligning system level contexts and diverse organizational contexts, participants of HealthTech, Hospital D and University B jointly defined new healthcare innovation projects.	Alignment of the system-level contexts, HealthTech contexts and organizational contexts of Hospital D led to the surfacing of an incongruency: the establishment of a Co-create Lab at the site of Hospital D, which HealthTech considered important to develop innovation activities and facilitate co-creation of diverse stakeholders on system-level challenges on site was not possible.	● Establishment of a master research agreement between HealthTech and Hospital D. ● Initiation of healthcare innovation projects between HealthTech, Hospital D and University B.	E10
E12: Q3 **2020** - Q1 **2021** Exploring system transformation collaborations with other hospitals.	**Path 6 & 7: HealthTech, two regional hospitals** In response to the breakdown in Episode 11, HealthTech participants explored collaborations to establish Co-create Labs at the sites of smaller, regional hospitals. This resulted from the decision to have their commercial division not just involved, but actively in the lead of partner selection for the program. Episode 12 represents a key milestone in the path towards integration into HealthTech, as HealthTech's commercial division was now making decisions for the program instead of only being consulted by the program team. Program participants from HealthTech were pleased with the decision of their commercial division, as it aligned well with what they aimed for with the program. The head of the program argued that working together with	**Aligning contexts** In Episode 12, participants continued aligning the program with the HealthTech contexts and system-level contexts, by exploring collaborations with partners that matched with the present commercial interests of HealthTech and the program goals for addressing system-level healthcare challenges. **Prioritizing contexts** Similar to Episode 10, HealthTech's program participants backgrounded the contexts of Hospital D and the jointly initiated innovation projects (which were succesfully continued by HealthTech, University B and Hospital D in path 5), to focus on partners that could bring the program further and aid in maintaining alignment with the interests of HealthTech's commercial division.		● The program and the projects of HealthTech, University B, and Hospital D continued in separate paths. ● Successful continuation of healthcare innovation projects by HealthTech, Hospital D and University B (path 5).	E5, E7, E8, and E11

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
	smaller hospitals, fitted well with the aim to transform the Dutch healthcare system, because it allowed reaching the 'critical mass' of patients and care providers.				
E13 - Q2 2021 - ongoing Setting up system transformation collaborations with other hospitals.	**Path 6 & 7: HealthTech, two regional hospitals** HealthTech started setting up collaborations around Co-create Labs with the two regional hospitals. At the moment of writing this paper, this episode is still ongoing. Two concrete collaborations are in development, of which one is almost certain. The intention is to establish a joint Co-create Lab at the site of the hospitals, which would allow physical integration of the program in the hospital, but also involvement in and easy adoption of system innovations by hospital, clinicians, patients and other stakeholders.	**Adding contexts** With the new collaborations with regional hospitals, again, new contexts were added to the program. **Aligning contexts** Negotiations between actors focused on aligning the interests of the different organizations with the aims and direction of the program.		● Establishment of Co-create Labs at the sites of two regional hospitals	E5, E7, and E12
Continuing of the program	**Path 1: HealthTech, University A, Hospital A and other stakeholders** Continuation of Project A in co-creation with multiple stakeholders. **Path 2: HealthTech, University B, Hospital A** Continuation of program related activities.			● Successful ongoing Project A. ● Patent created via Project A. ●● Succesful continuation of strategic research partnership, including new PhD positions. ● Use of project selection approach by HealthTech. ● University project on collaboration in healthcare innovation labs, led by University B with involvement of HealthTech, published in a conference paper. ● Journal publication led by University B with involvement of HealthTech.	
	Path 3: HealthTech Continuation of strategy development.			● Strategy documents with guidelines for content and governance of system transformation programs. ● New organizational role was established at HealthTech.	
	Path 4: HealthTech, University A, Hospital B Continuation of innovation projects.			● Successful innovation projects that were implemented in Hospital B.	
	Path 5: HealthTech, University B, Hospital D Continuation of innovationprojects.			● Successful innovation projects that are used by Hospital D. ● Implementation of the developed 'new ways of working' in multiple regional care facilities around Hospital D. ● Doctoral thesis.	
	Path 6 & 7: HealthTech, two regional hospitals Establishment of Co-create Labs at two regional hospitals.			● Establishment of Co-create Labs at the sites of two regional hospitals.Collaboration in Co-create Lab integrated into commercial partnership agreements between HealthTech and the two	

Table 4 (*continued*)

Episode number & constructed timeline[a]	Collaborative path	Practice of navigation	Emerging incongruencies between contexts	Examples of emerging outcomes	Builds upon
				hospitals.	

[a] Some of these timestamps are indicative as there was not always a clearly defined beginning or end of the described activities.

6.3. Boundary conditions and suggestions for further research

The insights of our study open up avenues for further deepening the understanding of how temporary programs relate to the various, more permanent contexts in which they are embedded. We see particular value in further research on the practices of navigating multiple embeddedness. For example, it could be of interest to investigate how practices of navigating relate to the paradoxical nature of multiple embeddedness. The pattern of aligning contexts, prioritizing contexts, and adding contexts shows that actors of different organizations were able to work with paradoxes. Instead of resolving tensions due to competing demands of contexts, they engaged in a number of parallel collaborative paths that allowed them to work with different time horizons and pacing, as well as different goals and interests. In this way, the actors accepted and dealt with the paradoxes they were confronted with, rather than attempting to resolve them (Jarzabkowski et al., 2019; Smith & Lewis, 2011; Jarzabkowski et al., 2013). A more developed understanding of the practices of context navigation through seeing them as responses to paradox may flesh out not only the complexity of managing system transformation programs, but also ways for addressing that complexity, which is of benefit to both academia and practice.

Our findings have various boundary conditions. First, our empirical case focused on the developments in a system transformation program over time from the initiation to the first implementation of the new ways of organizing. The insights from our focus on a relatively early stage program could be further strengthened, complemented and contrasted by studies of more developed system transformation programs. Over time, we expect that programs might involve fewer practices of *prioritizing* contexts and *adding* contexts. Breakdowns in the collaborative path(s) may become less disruptive as actors are more familiar with the interdependencies of the program and the contexts in which their program is embedded. This could facilitate actors to continue their collaborative path for the program, without jeopardizing integration of the program with their respective parent organizations.

Another boundary condition (Whetten, 1989) for the process of navigating multiple contexts is the wickedness of the program's transformation objectives. For interorganizational programs that are less wicked, that is, with concrete objectives, unexpected dependencies and deflecting collaborative paths are less likely to occur, as the relevant contexts are apparent upfront. We therefore encourage research to focus on different types of interorganizational programs (Artto, Martinsuo, Gemünden and Murtoaro, 2009). Future research could also investigate to what extent project and program capabilities, such as present in project-based industries like infrastructure, construction, or the creative industries, influence how system transformation programs progress and become integrated. Organizations in such industries have more established ways of inter-organizing, for example through role-based structures (Bechky, 2006), which could not only benefit but also challenge the navigation of multiple contexts (Jones & Lichtenstein, 2008).

Finally, the iterative addressing of breakdowns over time and the emergence of the fanning out pattern was likely supported by the concerned actors' extensive experience with complex innovation and change projects. Both the scientific researchers and HealthTech members were used to working on projects that are highly uncertain, such as scientific research and high-tech innovation. Individuals working on the program reflected that they expected revising, sharpening, and changing focus over time. Such expectations may aid collaborating organizations in progressing their program. Future research could focus on studying transformation programs in contexts where actors are less accustomed to working on innovation and transformation projects.

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