



STRATEGY 2021

DEPARTMENT OF OPERATIONS MANAGEMENT

BOLD IN IDEAS, STRONG IN PRACTICE



DEPARTMENT OF
OPERATIONS MANAGEMENT
COPENHAGEN BUSINESS SCHOOL

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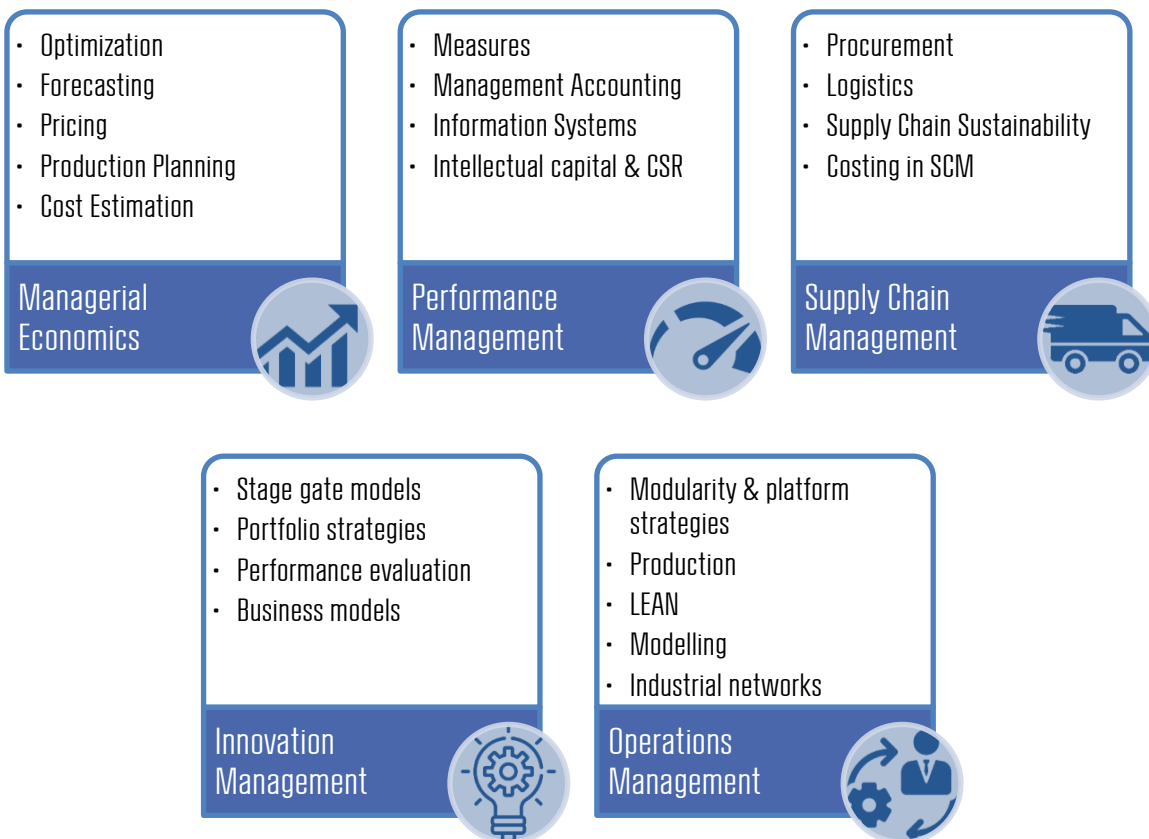
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4 1 PROFILE & FOCUS AREAS

The Department of Operations Management is a broad business studies department that researches and teaches managerial, operational challenges of decision-making and economics.

Our vision is to be **bold in ideas** and **strong in practice!** It is our ambition to question and debate the boundaries of our disciplines. Our plurality allows for an unparalleled level of cross-disciplinary exchange of research and teaching ideas and in this interaction, we foster a strong, visionary intellectual environment.

The general question we seek to answer is what makes management possible in a company or organization? This typically involves attention to the tools of managing (management technologies) that are used in companies and organizations when making managerial decisions within our five focus areas:



The English title of the department - Department of Operations Management – differs a bit from its Danish title – Department for Production and Managerial Economics.¹ Operations Management directs attention to managerial practices concerned with firms’ production and technology, including sourcing. Managerial Economics directs attention to a decision-oriented type of economics. While Operations Management supplies a series of topics of interest in the management of firms, Managerial Economics provides a perspective from

¹ Institut for Produktion og Erhvervsøkonomi

which managerial topics can be evaluated. Operations Management and Managerial Economics together provide a framing of the interests of the firm.

The department contributes to research and teaching in Operations Management and in Managerial Economics. Primarily it contributes to understanding decision making by including in addition to the rules of classical, economic decision theory, rules that are formulated strategically, psychologically, organizationally, and sociologically. In effect the concern of the department is in appreciating economic effects of organizational decision making in situations where classical economics only provides some, sometimes only a small, part of the solution to the issue at stake. This is why, typically, the department's research and teaching in addition to mobilizing economic theory also forcefully mobilizes sociological, strategic and organizational theory to understand empirical phenomena.



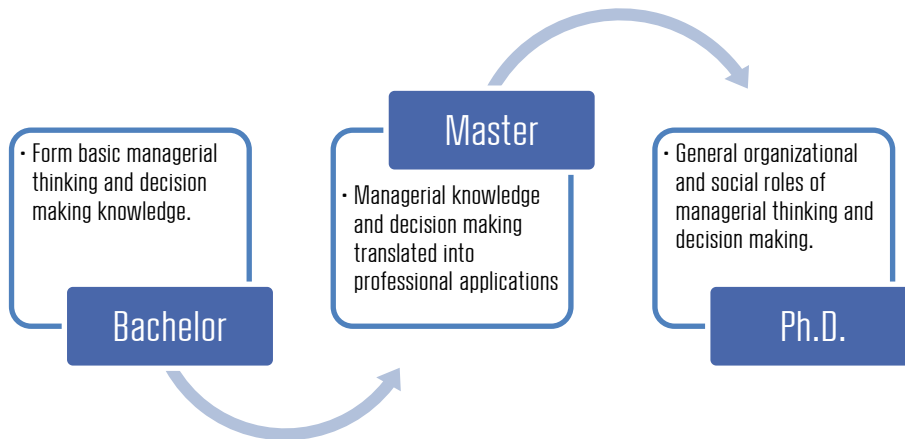
Examples of OM research initiatives, our [COVID Seminar](#) and our [maritime energy efficiency research project](#).

The department's research and teaching activities aim to develop ideas about organizational decision making: The decision dilemma here typically concerns how much to invest in e.g. developing supply chains, investing in innovation and knowledge, making factory organization and production methods efficient, developing managerial information, establishing organizational responsibilities and incentive systems, overseeing the performance of large projects or implementing accounting and information systems.

The department has research and teaching which parallels typical Operations Management and Managerial Economics, but it also offers research and teaching of quite a different kind because we integrate different disciplines into everyday teaching and research. The department has developed this integration along a series of disciplinary insights which generally seek to add empirical detail and complexity, theoretical innovation, and broad dissemination ambitions around key business issues. Supply chain management develops an account of the firm's external relations; innovation management concerns the firm's future; operations management engages the firm's lateral flows; and performance management analyses calculations for planning, delegation and coordination.

6 2 TEACHING PORTFOLIO

The courses and programmes that PEØ faculty take responsibility for at the bachelor-, master and PhD level represent in combination a progression of thoughts.



First, courses on managerial economics at the bachelor programmes form basics and generalized thinking of economic calculation and managerial decision-making. These ideas are progressed and translated into more specific significances and roles for management of key business processes involving innovation management, performance management and supply chain management, public sector governance. The specific applications are then again transformed at the PhD level dealing with more general aspects of the organizational and social roles of economic calculations and managerial decision making in practice. Thus, the basic introduction forms their stylistic and general expression (at bachelor course) which ramifies into their professional affiliation (at master studies) and further on to their more social and organizational abstractions (at PhD courses).

Teaching for PEØ faculty is formed either as the role of *coordinator* of teaching programmes for which PEØ has programme responsibility (e.g. cand.merc. SCM, or HD ØP) or as *supplier* of courses to programmes that PEØ does not have the responsibility for organizing and developing (e.g., Managerial Economics at HA almen).



Coordinator: Call for an understanding and development of progression among courses in a longer sequence of thinking.



Supplier: Broaden the scale of courses by understanding how core elements can be used to fulfil requirements for courses at other programmes.

A role as supplier is often a matter of broadening the scale of courses understanding how core elements of existing courses can be used in combination to fulfil requirements for courses at other programmes whereas the role as coordinator calls for an understanding and development of progression among courses in a longer sequence of thinking.

This is a question of developing and creating links among courses within the programme and avoiding overlaps. Furthermore, the supplier role requires less integration among faculty (because the faculty – in principle – can

teach the same things at different programs) whereas the latter requires more integration among faculty because faculty teaches different courses linked in a progressive manner. With the explicit ambition of being interdisciplinary the role as coordinator is therefore very important for our department.

Department of Operations Management experiences high demand of its teaching capacities. Knowledge of economic calculations and their role in managerial decision making are essential in both general and specialized courses and programmes at CBS.

| Bachelor programmes | HD programmes | Programmes | Other |
|---|--|---|--|
| <ul style="list-style-type: none"> • HA Almen • HA IT • HA IBP • HA SerMan • BA IMK • BA BLC • HA Psyk • HA Fil | <ul style="list-style-type: none"> • HD EØ • HD Service • HD Afsluttende • SCM Specialization • Process Management Specialization | <ul style="list-style-type: none"> • International Shipping & Trade • Global Supply Chain & Logistics • Cand.merc.ASC • Cand.merc.SCM | <ul style="list-style-type: none"> • Cand. Merc. • HRM • IMM • MPG • FTMBA • EMBA • MPA |

The variety of teaching arrangements introduces the strategic dilemma that because OM is demand driven, it is also in many respects loosely coupled in the portfolio of teaching arrangements. This may implode the department and hinder cooperation. To address this issue The OM department aims to contribute to CBS' develop and maintain the high level of quality by developing PEØ's capacity as a supplier as well as coordinator of teaching.

The past two years we have made a thorough check-up on the courses "Managerial Economics" and "Organizational Economics" that have provided both courses with a major quality boost when it comes to content as well as format.

As an example, we now deliver one coherent version of Managerial Economics to more than 2.200 students across eight different study boards and programmes (incl. HD1). The two courses contain standardised modules, which are delivered across CBS' programmes. Here, the content and topics are delivered under different course headings depending on the programme, e.g. "Managerial Economics", "Erhvervsøkonomi og Forretningsforståelse" eller "Virksomhedens økonomiske organisering".

We intend do more in terms of modularizing core elements in teaching areas, which are applicable for more than one programme but also ensure the quality and improve the student's learning processes by developing the progression at the teaching programmes for which PEØ holds the course responsibility.

A [Teaching Coordination Committee](#) (TCC) has been created in the department in order to ensure coordination, stipulate the individual teaching objectives for PEØ faculty and to create an analytic insight into what areas are of importance when recruiting new faculty or DVIPs in order to cope with the growing demand of PEØs teaching activities.

2.1. SPEARHEADING INTERDISCIPLINARY AND TRANSFORMATIVE TEACHING

PEØ's teaching concerns how economic calculations, analytical diagrams and other types of visualizations inform and affect managerial decision making in key business processes within and across the firm.

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Based on fundamental business knowledge, PEØ's teaching centers on decision making when calculability is a challenge: (i) how to make calculation an advantage, (ii) how to substitute calculation by other mechanisms of visualization and representation, and (iii) how to complement organizational activity with calculation and visualization/representation.

As an example, Department of Operations Management has introduced business simulation games to the students that teach them to make decisions across disciplines and under high uncertainty. In groups of four or five, they take on different roles within the virtual business. For example, they can be the CFO, run sales, manage the supply chain or be the head of purchasing. Read more about our simulation games initiative [here](#).



TEACHING: BUSINESS SIMULATION GAMES ALLOW STUDENTS TO LOSE €50,000 WHILE EARNING LEARNING

One of the strengths of these games is that there are multiple decisions to be made, and all the decisions are linked, which is what we want to teach them. Usually, focus is on one area at a time – pricing, finance, accounting, or marketing, but supply chain management taught by OM is different, as you need to engage all the areas.

Through the games, students get that message under their skin and experience that decisions have consequences. The games are played in rounds that present students with new and progressively tougher decisions to be made.

The game sessions run mainly online with a few classes on campus, but it is the experience that the simulation game encourages even more interaction and online dialog than on campus. As an example, the group chats work better for

“It all starts with faculty who have the courage to develop the ways we teach across disciplines and formats. Our department has invested a lot of time in testing new teaching formats and now we can harvest the fruit of all the time we’ve put into this. And that’s what we want to teach the students too: To be courageous and explore new paths”

- Carsten Ørts Hansen, Head of Department.

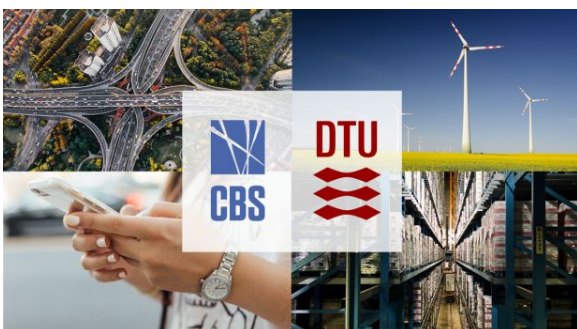
some students who do not feel comfortable about speaking up or asking questions in front of 100 students.

Department of Operations Management are working on scaling up the use of the business simulation games to offer more students the experience, and it is well in line with CBS' new strategy of transforming our students and working interdisciplinary.

As part of developing our teaching strategy as department, it is our ambition to continuously share thoughts and learnings on what works and what doesn't work when it comes to teaching. As an example, we all face new challenges when teaching online and trying to find ways of interacting with our students as we are used to do on-campus. This includes rethinking formats for how we can deliver our teaching online. What are the opportunities for us as department to explore new ways of working with presence, interaction and engagement in online teaching activities? What are the best formats to use and under which conditions is the best online teaching unlocked? And how do we ensure happier students and teachers going forward? These questions are discussed in a series of seminars we'll have during 2021. As part of this effort, we'll also continue our close collaboration with Teaching and Learning at CBS.



[Seminar example of how to unfold our teaching ambition.](#)



Department of Operations management has a strong record in initiating and developing new interdisciplinary courses and programmes. The bachelor in Shipping and International Trade was developed in close collaboration with the maritime industry and the foundation for the new Msc. in Strategic Design Entrepreneurship was developed in close collaboration with the Royal Danish Academy of Fine Arts Schools of Architecture, Design and Conservation. (KADK).

The Department of Operations Management therefore also welcome [the new partnership with our colleagues at DTU](#) with excitement. We see a lot of potential for synergy in our research such as decarbonization and the green transition. We also look forward to share insights and techniques for interdisciplinary online teaching such as what we have done with simulation games in the supply chain.

10 3 RESEARCH AND DISSEMINATION

The department's research activities are defined in relation to core business and management processes such as supply chains, operations, performance, and innovation. However, these are not themselves theories but practices. There is no theory of SCM, of OM, of IM, of PM. They are empirical objects that can be explained by many different theoretical lenses.

The department's research strategy is to pursue two obligations; one to practice fields, and one to academic markets such as conferences and journals. This means that the department's research is detailed particularly around the tools, methods and technologies that are part of practice, but also that theorization is done to add an understanding of the same practice.

Publications are important for a department. The department's field poses the dilemma between specificity and generality; if too general it is not possible to recognize the field in research, and if it is too specific it is of interest only for very few. The dilemma is therefore connected to the choice of allegiance: to the field(s), or to management and business studies in general.



[Department of Operations Management equip the European Commission with maritime knowledge.](#)

The dilemma is to decide which audiences to address specialized business and management scholars or general business and management scholars, local and global audience and academics and practitioners. The department publishes much of its research in specialized international journals, and 10%-20% of its papers locally (some years more, some years less) and a few even more practitioner-oriented magazines. This is an important aspect of the department's identity.

Likewise, as mentioned, the department has proven that it can publish in general management and economics journals such as the ones listed in CBS's preferred lists but over the years, the OM department has also had a significant orientation to specialized journals and practitioners.

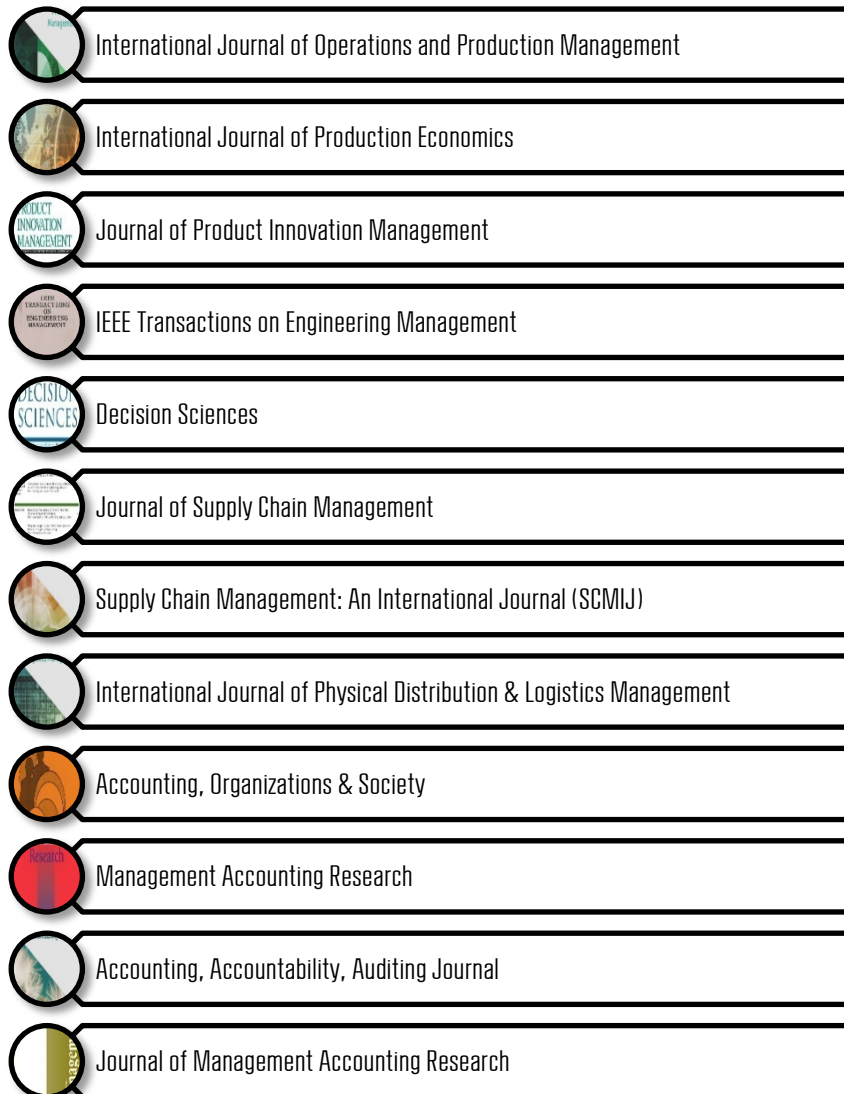
3.1. DEPARTMENT PUBLICATION LIST

The publication list communicates key characteristics of the department's publication activities and specify a list of important research outlets for the department.

The journals on the list are included because they exemplify the type of research that we do as a department. They are journals that are topical for us because they specialize in the phenomena that we study (management of production and service processes, supply chains, technology and innovation and management accounting). Our research as well as the journals demonstrate the strong interlinkages between these phenomena in organizational practices.

The journals on the list also represent research communities that we are involved in and the journals affiliated with the research conferences and associations that we participate in and are part of. Furthermore, faculty members of the department serve in their editorial boards. The journals are listed in a 'topic-order' so the numbering of the journals give no indication of their relative importance for the department.

3.1.1. PUBLICATION LIST FOR DEPARTMENT OF OPERATIONS MANAGEMENT:



Department of Operations Management has established a [Research Committee](#) that supports publication activities in line with the department's identity and ambition.

The committee assist with facilitating feedback on pre-submissions, inviting editors from the OM12 list, guide junior faculty towards attractive publication options, developing departmental collaborations on apt special issues and reviewing the publication efforts on an annual level. Such activities are essential to maintain a distinct identity in the type and nature of the research carried out by the department as exemplified in the [department's publication strategy](#). The committee members are appointed by the Head of Department and provide support and guidance regarding academic synergy and knowledge sharing in the department e.g., helping faculty in maturing their ideas for internal seminars, workshops, discussions online and offline and other vehicles for dialogue and knowledge sharing across the department.

Another role for the committee is to make sure that the [department's external funding strategy](#) is adhered to. The department has a strong network of business and other societal associates that provides the department with valuable access to data, opportunities for dissemination and sources of external funding. This network should be nurtured, and the committee plays a role in strengthening the ethical and administrative salience of external funding effort.

3.2. RESEARCH STRATEGY AND EXTERNAL FUNDING

Historically the Department of Operations Management has gained an extensive experience and understanding of the nature of university-business collaboration. Several research projects have direct involvement of private and public organizations as dialogue partners or cases and there is a tradition of including stakeholders in research as well as teaching activities. For more information, check out this sample of OM projects:

- [The Blue INNOShip project: Creating the Market by Understanding Price, Cost, Contracts, and Financing](#)
- [Servitization](#)
- [Reflow](#)
- [Last Mile Logistics](#)

Department of Operation Management generates substantial external funds. Much is from EU grants and private funding. OM receives only little funding from research councils. One important purpose of getting external funding is to build up research capacity in specific domains to support teaching activity.



[How to build a strong consortium with external partners.](#)

However, external funding is not necessary a clear advantage for the individual researcher and there are some strategic dilemmas: Obviously, they generate resources, and they can help develop research management skills. They can provide new partners. They can provide opportunities for people who wish to become PhD. But they are also short term money that doesn't ensure a stable research and teaching capacity and often require a lot of administration that takes attention and effort away from research and teaching. Individual researchers do not necessarily see the upside that the department and CBS see.

For the department it is therefore important to develop the case for external funding at the department and its advantages to individuals have to be specified clearly. In addition, to attract funds and good partners, the department will develop its visibility of its competences and resources.

Visibility is, however, not created by communication alone. In addition, successful participation in collaborative projects creates visibility for potential future partners and new applications. External funding will be an active and visible part of the department's research organization. Attraction of funds that involves research colleagues at the department is especially desirable as internal collaboration *ceteris paribus* creates better and more successful research.

For the department, the size of projects and research themes are important vehicles for creating research collaboration between researchers on a specific theme and for creating a collective research direction and critical research mass.

For the period 2021 to 2023 the department currently focuses on five research areas:

- Decarbonization in the Maritime industry
- Sustainable Procurement
- Circular Economy
- Pricing
- Performance Management

The more specific initiatives will be developed this coming spring and autumn with participation of relevant staff from the department and we will also involve other departments and researchers. In the process there is also a strong ambition to identify new potential research so the effort is not limited to the above areas.

14 4. STAFF

The key challenge facing PEØ is the complexity of finding candidates for positions that fit the ambitions of the department, i.e., ability both to publish in relevant places, quite precise knowledge of the techniques of management (of calculative arrangements) and teaching ability. Such profiles are in demand partly because the competition from jobs in private and public sectors is tough. PEØ has therefore an ongoing focus on bringing in and bringing up talent within the key areas of the department. The department aims at creating successful PhD candidates who can find interesting employment both/either in academic jobs and in practice.



This happens by facilitating a lively PhD environment including allocation of a space (rooms) in the department dedicated to emerging PhD scholars, to develop activities in the department and outside the department (seminars and residential stays), and relevant PhD courses delivered by the department; PhD students are encouraged to seek PhD courses elsewhere depending on the specific needs of the project. For assistant professor it is the ambition relatively early to determine a career path either in academic jobs and/or in practice.



The Department Administration serves as an important liaison between research projects, teaching and faculty at the Department and an efficient group of study administrators handles especially the contact with more than 80 DVIPs in the Department. Read more about the role and work of the Department administration here: [OM Administrative staff brought the department safely through the first months of the pandemic in their usual competent style.](#)



For many years, we have had several academic and pedagogical workshops to raise the level of our DVIPs professional knowledge and skills. These workshops will start again in 2021 and will mostly be “hands on”, where technical as well as forthcoming theoretical developments are presented. The workshops have their core purpose to show and develop on the interaction between teaching and research activities in the department and how DVIP as well as students can be involved in more our research activities.



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