

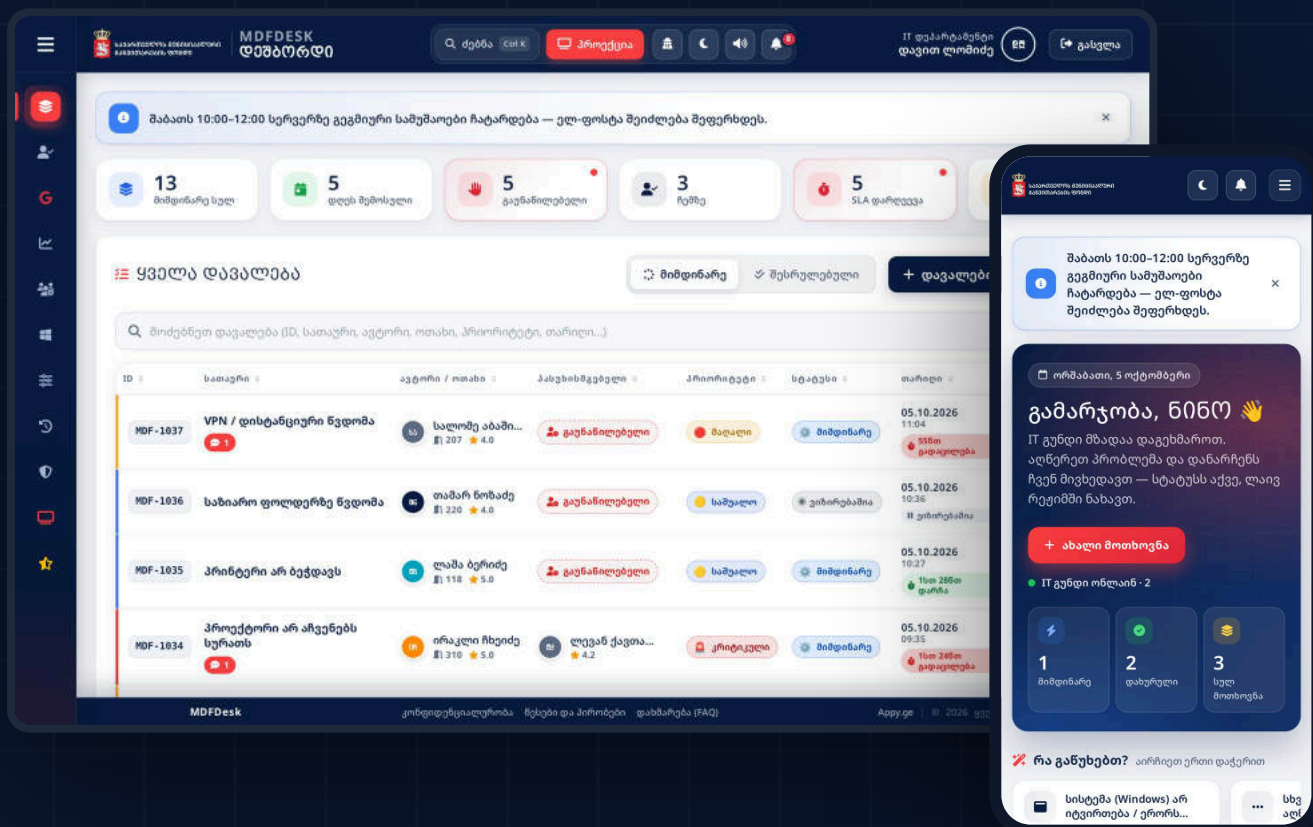


საქართველოს ადმინისტრაციის
და მუნიციპალიტეტების დეპარტამენტი

Project overview · Delivered work

MDFDesk

A complete IT Service Desk platform for organizations — from request registration to rating, in one place.



PLATFORM

Web application +
mobile (PWA)

ROLES

Employee · Approver ·
IT admin · Super admin

INTEGRATIONS

Google SSO · Gmail ·
Active Directory · SMTP

STATUS

In production · 2026

Contents

01	Executive summary	2
02	Roles and how it works	3
03	Employee experience	4
04	Approval workflow	9
05	IT team workspace	10
06	Analytics and control	15
07	Users and Active Directory	18
08	Settings — white-label configuration	21
09	Mobile and PWA	23
10	Security and reliability	27
11	Technology and architecture	28

 All names, e-mail addresses, IP addresses, computer names and data shown in the screenshots are fictitious and used for demonstration only.

Executive summary

MDFDesk is an internal IT support system (Service Desk / Help Desk). Employees register an issue in under a minute, follow its status in real time and talk to the IT specialist directly in the ticket chat. The IT team gets a single workspace with priorities, SLA timers, analytics, Active Directory management and notifications.

The system is deployed and used daily at the Municipal Development Fund of Georgia (MDF). It is built as a **white-label** product: logo, colours, texts, categories, statuses and e-mail templates are managed from the admin panel — no code changes required.

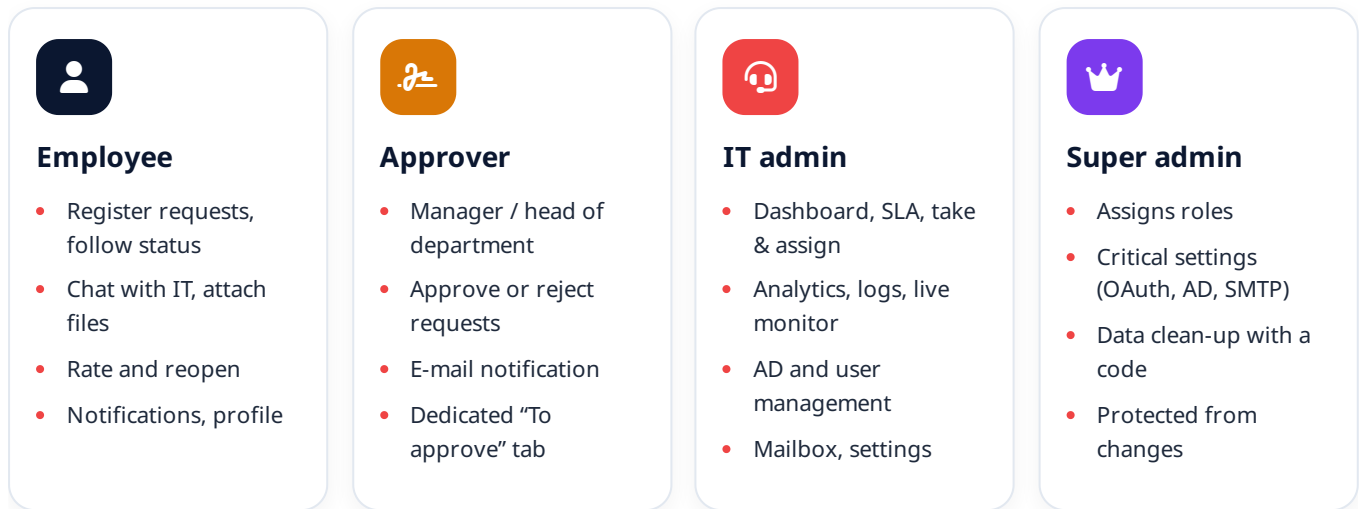
■ Problems it solves

- **Chaos of phone calls and messengers** — every request lives in one place, numbered, with history and an owner.
- **"Where is my request?"** — employees see the stages (registered → accepted → in progress → done) and get notified.
- **Uncontrolled deadlines** — SLA per priority, counted in business hours, with visual breach indicators.
- **Manager approval** — hardware purchases or access requests automatically go through approval steps.
- **Transparency** — full audit log, sign-in log, ratings and statistics.

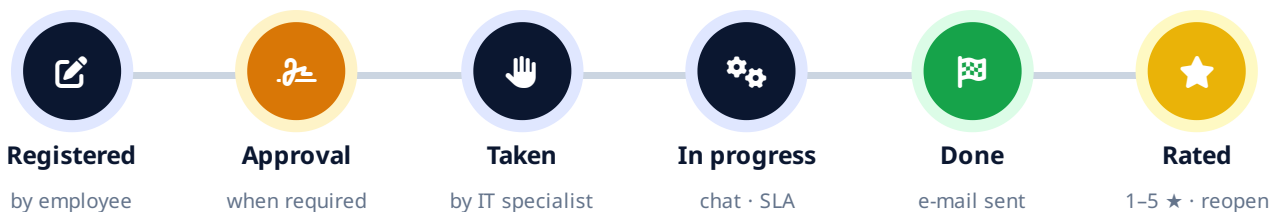
❗ All people, e-mail addresses, IP addresses and data in the screenshots are fictitious (demo database).

Roles and how it works

Users sign in with their organization Google account (Single Sign-On). Only the corporate domain is allowed and no passwords are stored in the system. The role defines what each user sees:



Request lifecycle



- **Registration** — the employee picks the issue type, room (auto-filled), priority, adds a description and a screenshot. The system records the IP address and computer name automatically.
- **Approval** (when required) — if the request type needs consent, it first goes to the manager(s) in sequential steps; on rejection the author is notified.
- **Assignment** — an IT specialist takes the ticket with one click ("Take") or the lead assigns it. Collaborators can be added.
- **Work** — chat with files, one-click AnyDesk connection, checklist, internal (private) notes, status changes / pause.
- **Completion and rating** — the author receives an e-mail, rates the IT specialist (1-5 ★) and can reopen the request within 7 days.

The employee interface needs no training: sending a request from the home page takes 3–4 fields, and common issues are selected with a single click.

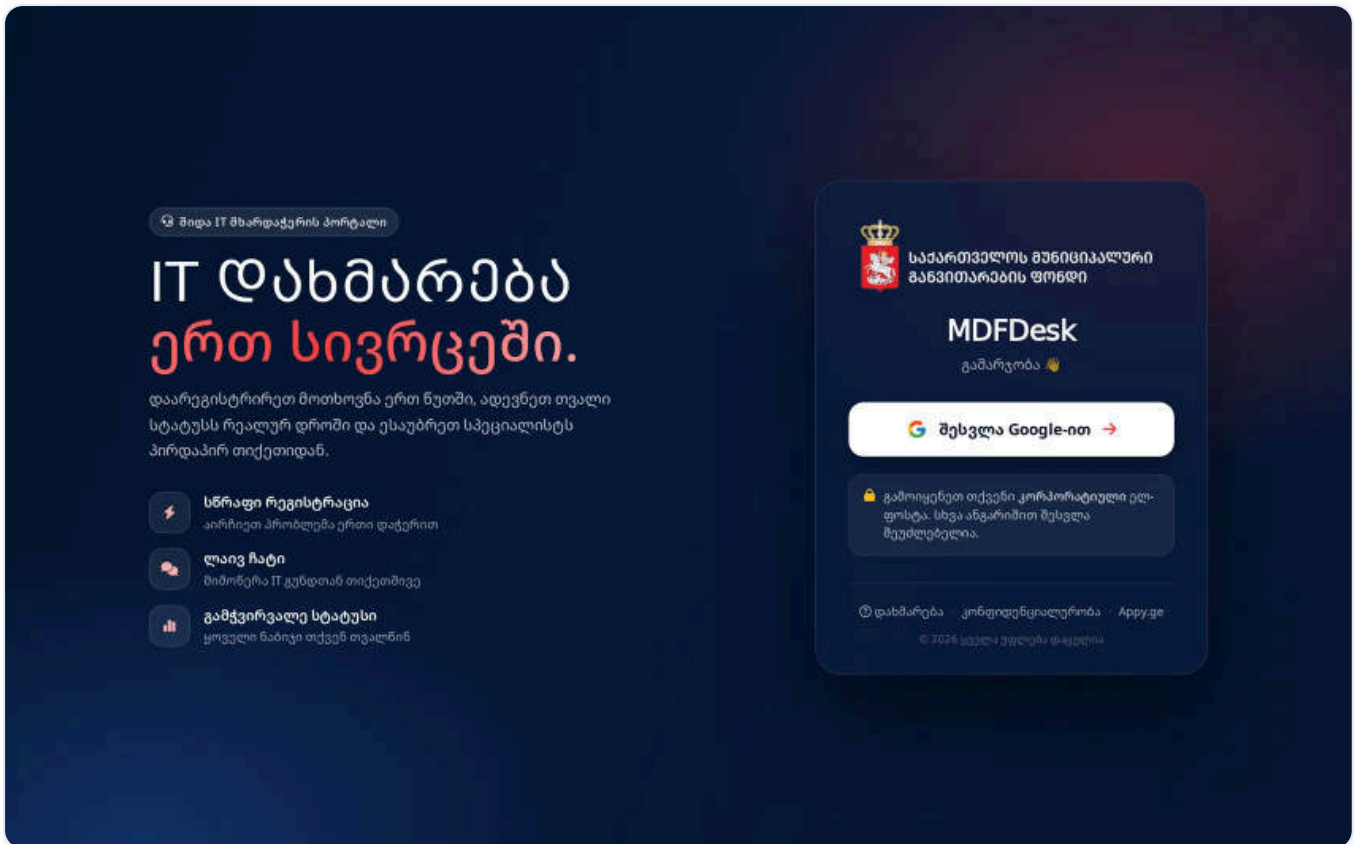


Fig. 1. Sign-in page — corporate Google account (SSO)

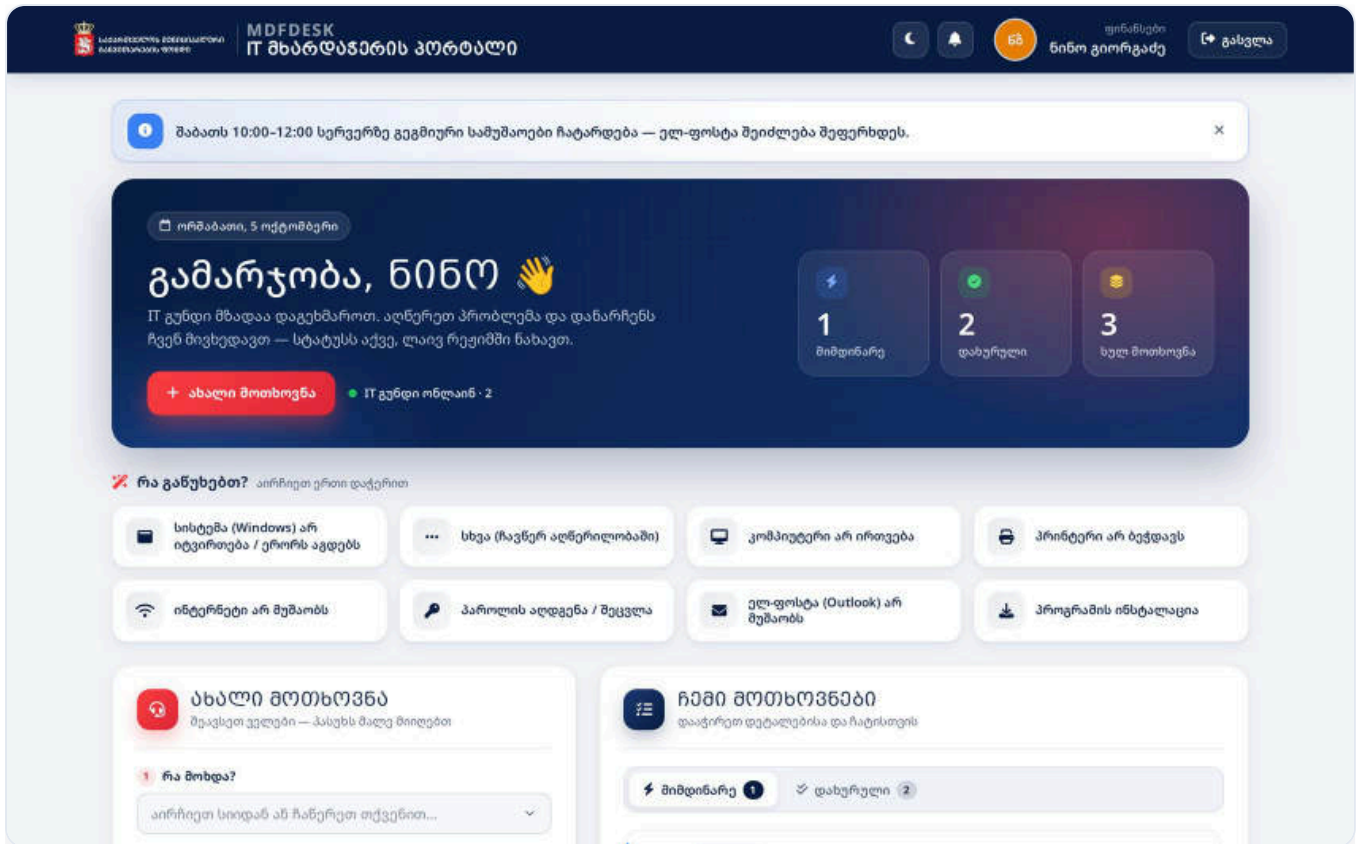


Fig. 2. Home page: greeting, personal statistics, IT team online status and quick picks

■ New request

- “What is bothering you?” — cards with frequent issues fill the form in one click.
- The room is auto-filled from the profile or the previous request.
- Screenshot / file attachment: paste with Ctrl+V, drag & drop, or the phone camera.
- The form keeps typed text on errors — nothing gets lost.
- Outside business hours the system warns in advance when the IT team will be back.

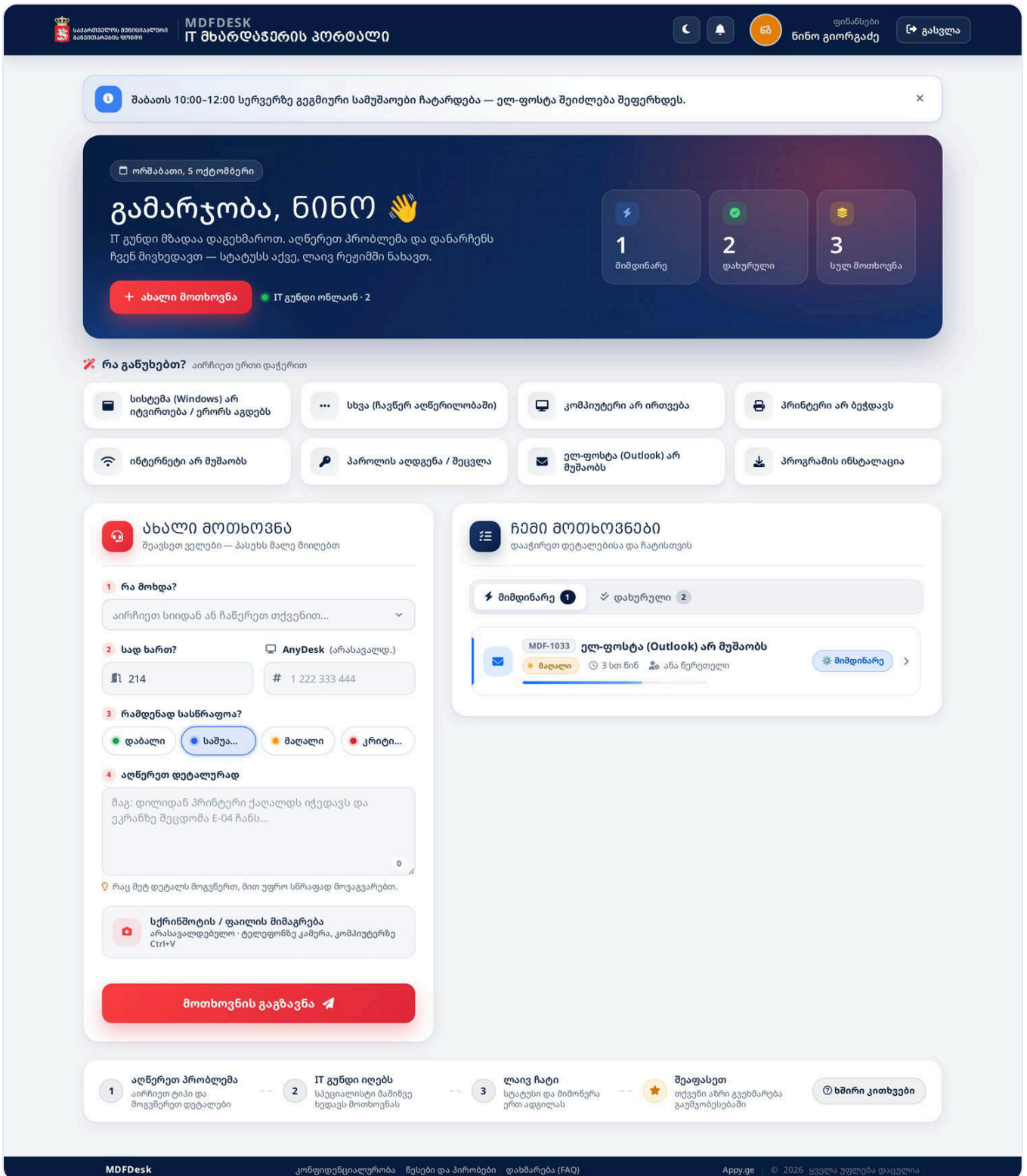


Fig. 3. Full home page: new request form and “My requests”

■ Ticket page and chat

Every request has its own page: status stages, description, details and a live chat with the IT specialist. The chat supports images, PDF, Word and Excel files, a “typing...” indicator and message reactions.

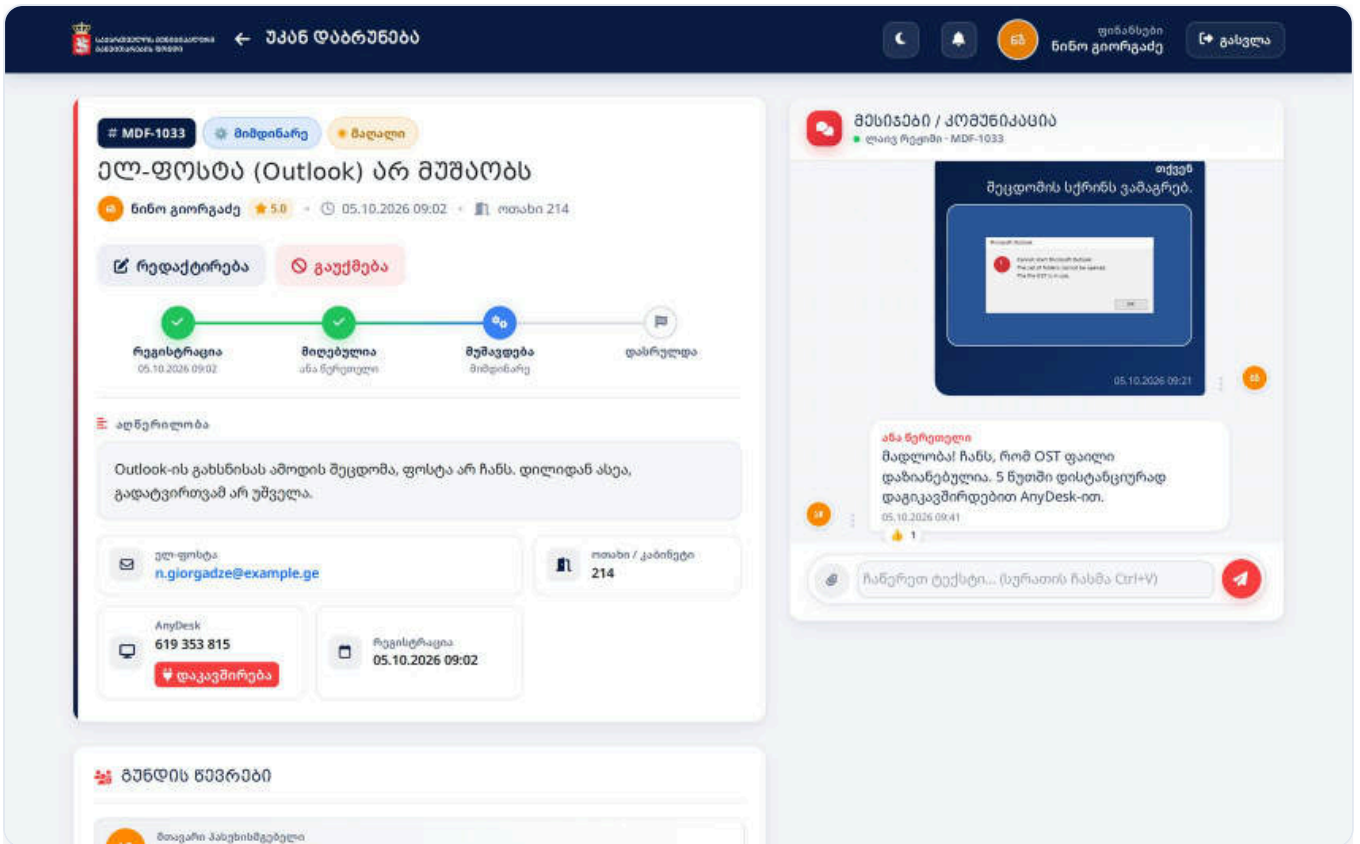


Fig. 4. A ticket from the employee's view: stages, details and chat with an attached screenshot

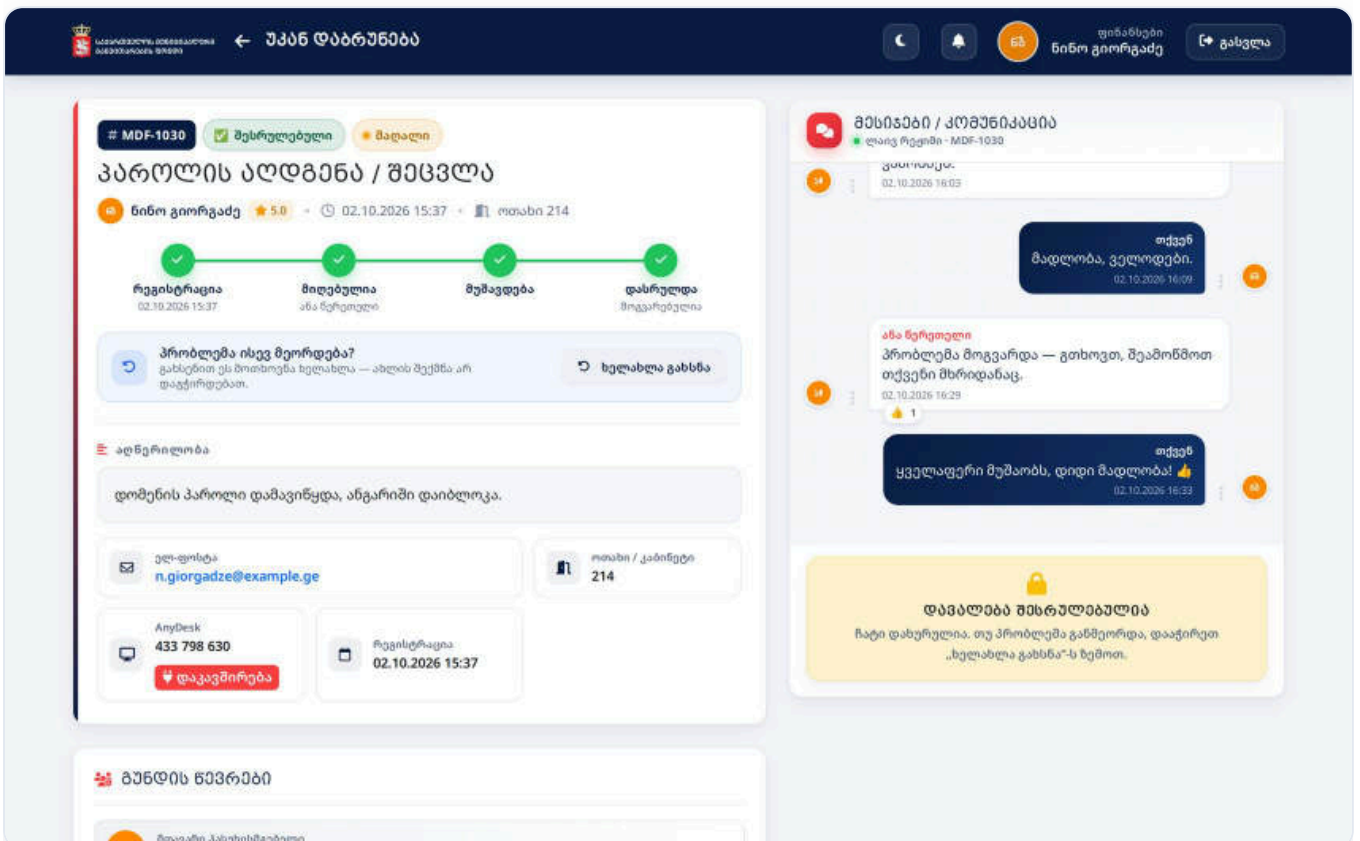


Fig. 5. Completed request: "Reopen" is available for 7 days

■ Notifications, profile and help

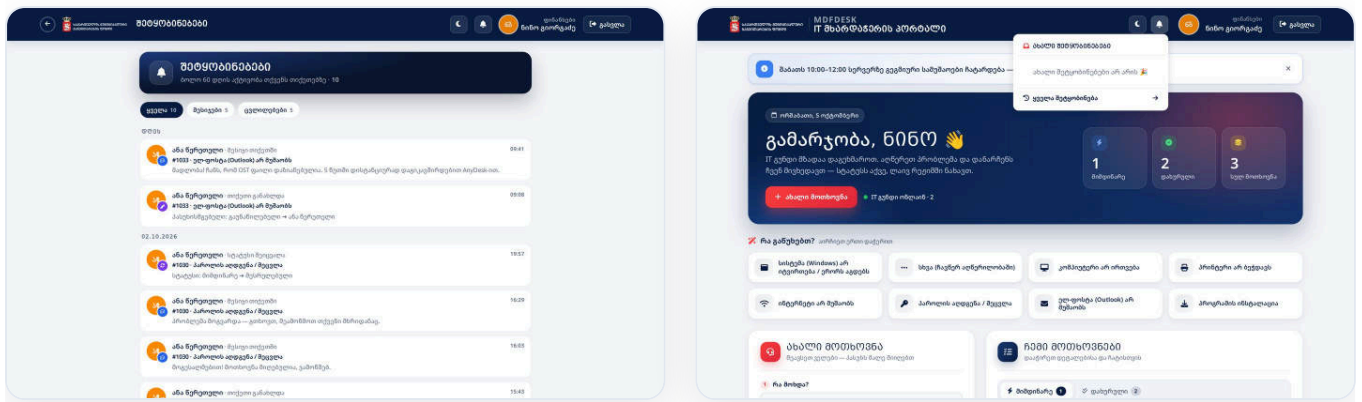


Fig. 6. Notification history with filters and the bell quick list

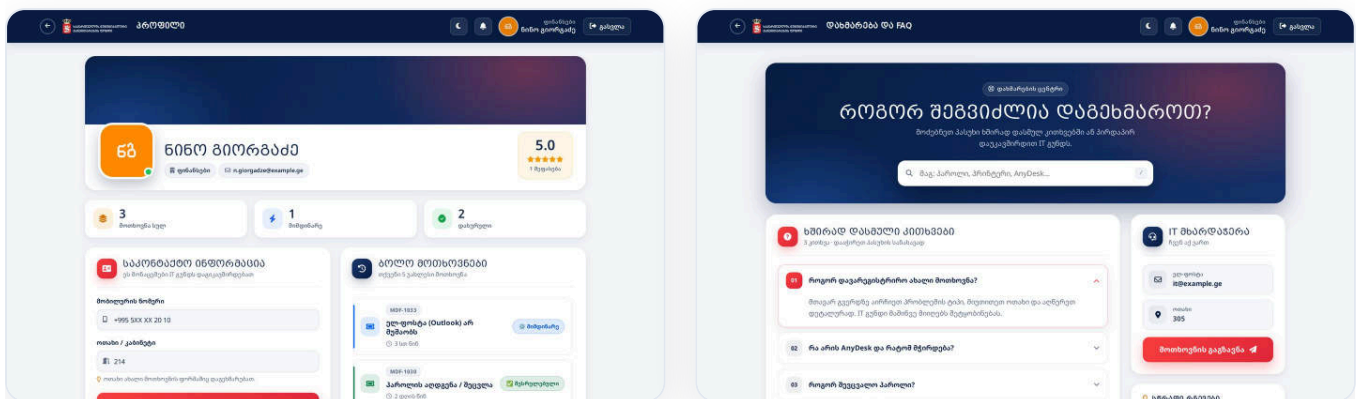


Fig. 7. Profile (contact info, room) and the help centre with FAQ

The administrator defines which request types need consent (e.g. “New hardware”, “Shared folder access”). For such requests the author selects the approver(s); each step is processed in order. Approvers receive an e-mail and see a dedicated “To approve” tab on their home page.

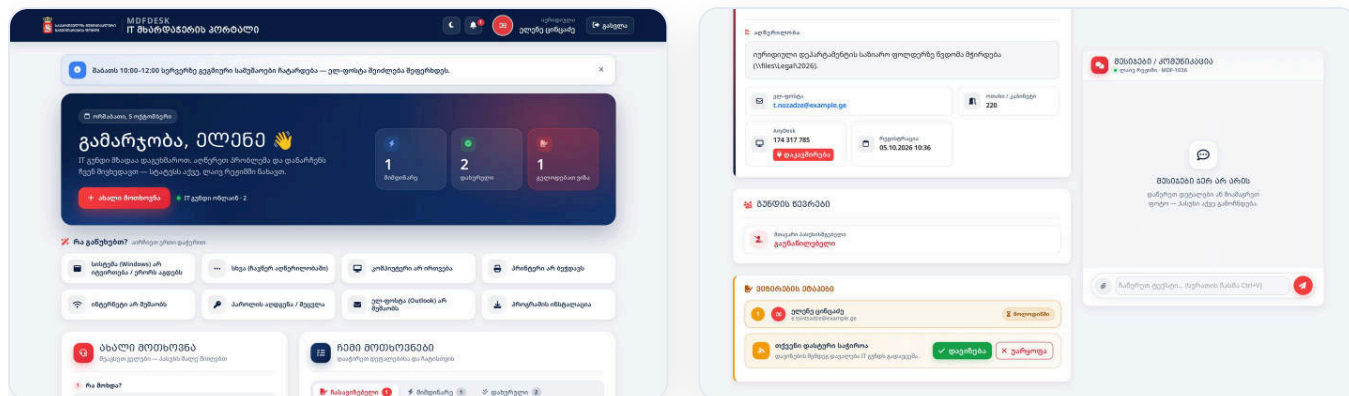


Fig. 8. Approver's home page and the approve / reject block in the ticket

05 IT team workspace

The IT dashboard is a single screen showing everything that needs attention right now. The list refreshes automatically (live polling) and plays a sound on new requests.

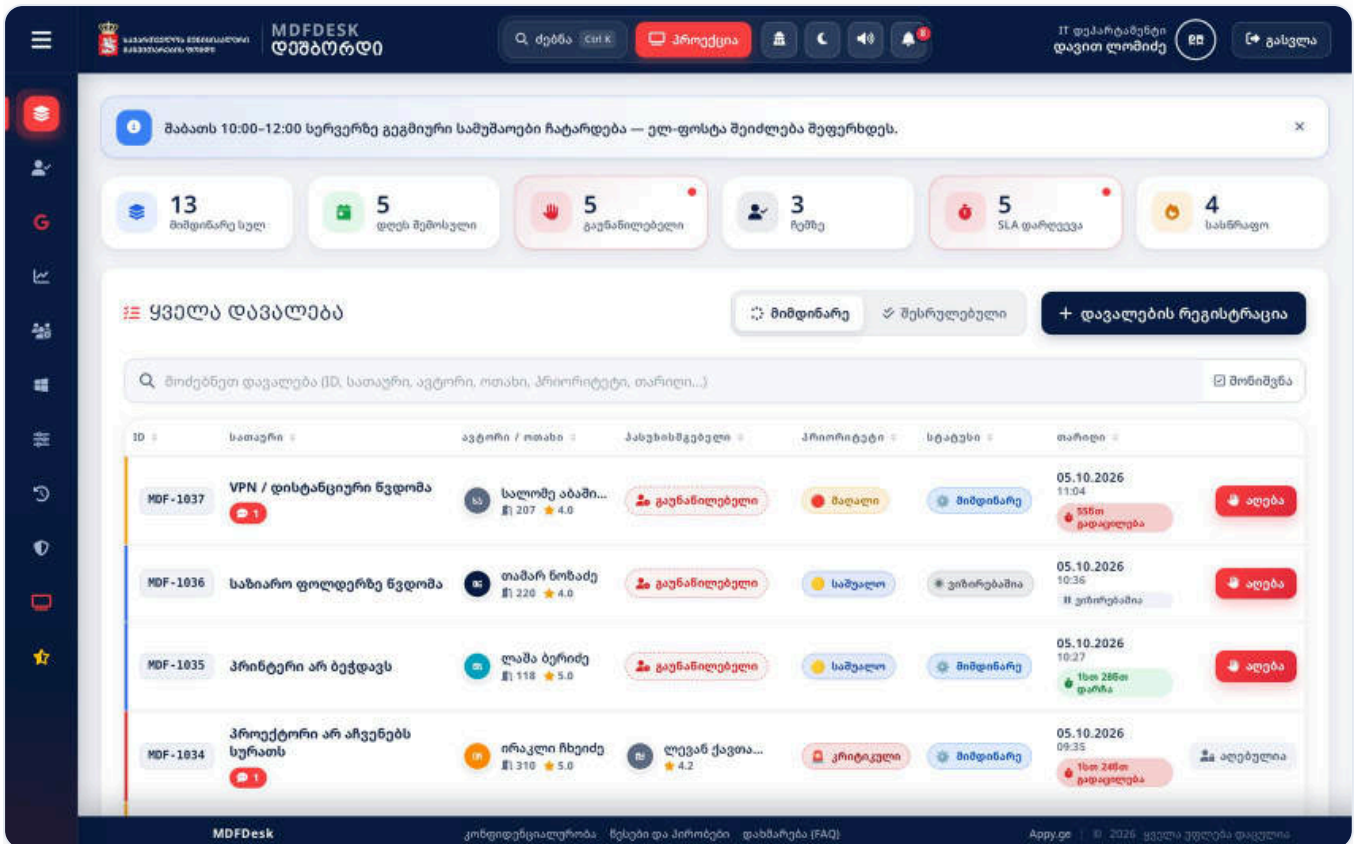


Fig. 9. Dashboard: KPI cards, SLA indicators, one-click "Take"

- **KPI cards are filters:** open, received today, unassigned, mine, SLA breach, urgent.
- **SLA:** response and resolution targets per priority, counted in business hours only.
- **Search and sorting** by any field; "Load more" for long lists.
- **Bulk actions:** select several tickets → take them or change the status.
- **Ctrl+K quick search:** ticket by number, employee, any page.
- **Register on behalf of an employee** — for requests received by phone.

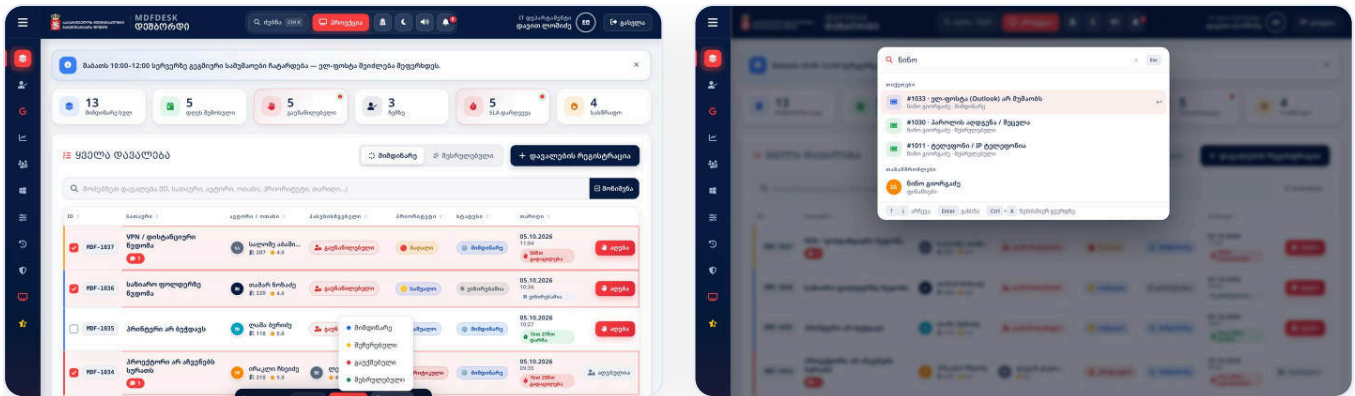


Fig. 10. Bulk actions and Ctrl+K quick search

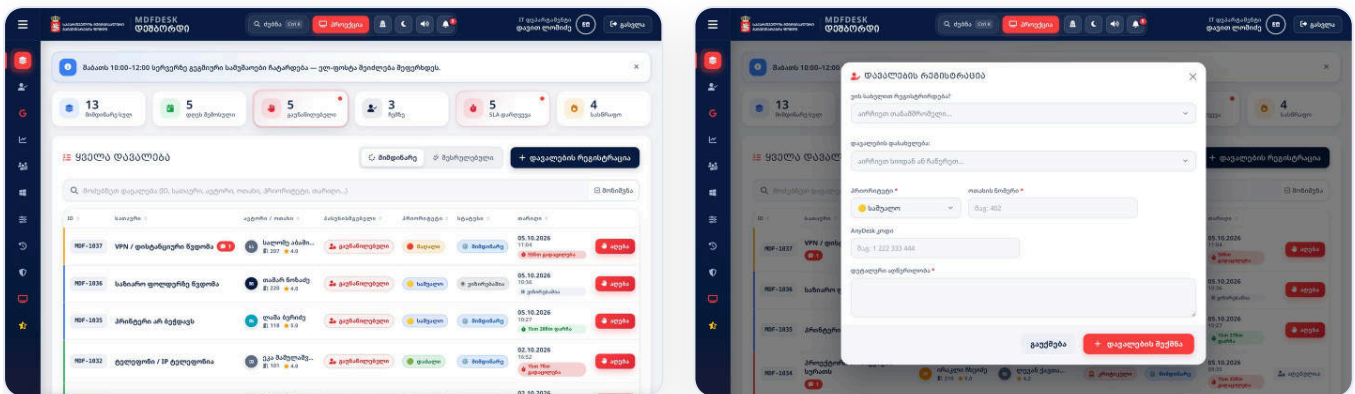


Fig. 11. KPI filter “Unassigned” and registering a request on behalf of an employee

■ Ticket from the IT perspective

Inside a ticket, IT sees extra information: computer name, IP address, one-click AnyDesk connection, approval history, checklist, collaborators and the full change history. The chat offers quick replies and **internal notes** that the employee cannot see.

საგარეო სამსახურის მართვა

← უკან დაბრუნება

IT დეპარტამენტი
დავით ლომიძე

გასვლა

MDF-1019

მიმდინარე

საშუალო

ახალი თანამშრომლის მოთხოვნა

რედაქტირება

ირაკლი ჩხეიძე ★ 5.0

30.09.2026 10:03

ოთახი 310

რეგისტრაცია 30.09.2026 10:03

გადასვლა დაფიქსირდა

მიღებულია დაკითხვა

მუშავდება მიმდინარე

დასრულებულია

აღწერილობა

ახალი თანამშრომლისთვის ლეპტოპი (16GB RAM) და ჩანთა.

ელ-ფოსტა i.chkheidze@example.ge

ოთახი / კაბინეტი 310

AnyDesk 590 768 452

კომპიუტერი WS-PRJ-20

IP მისამართი 10.20.3.58

რეგისტრაცია 30.09.2026 10:03

გადასვლა

მესამე / კომპანიის

ლაივ რეაქტივი - MDF-1019

ლეპტოპი მოვიდა, გაყენება პროგრამებს. ხვალ დილით მზად იქნება.

30.09.2026 13:16

ირაკლი ჩხეიძე

ძალიან კარგი, მადლობა!

30.09.2026 13:22

მიღებულია

ახალი თანამშრომლისთვის ლეპტოპი (16GB RAM) და ჩანთა.

30.09.2026 12:03

მოგესალმებით! თქვენი მ...

გთხოვთ, გადავიტოვოთ კო...

პაროლი

ჩაწერეთ ტექსტი... (სურათის ჩასმა Ctrl+V)

ისტორია და ცვლილებები

დავით ლომიძე

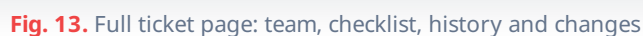
30.09.2026 13:03

MDFDesk

კონფიდენციალურობა | წესები და პირობები | დახმარება (FAQ)

Appy.ge | © 2026 ყველა უფლება დაცულია

Fig. 12. Ticket in IT view: technical details, approval, internal note



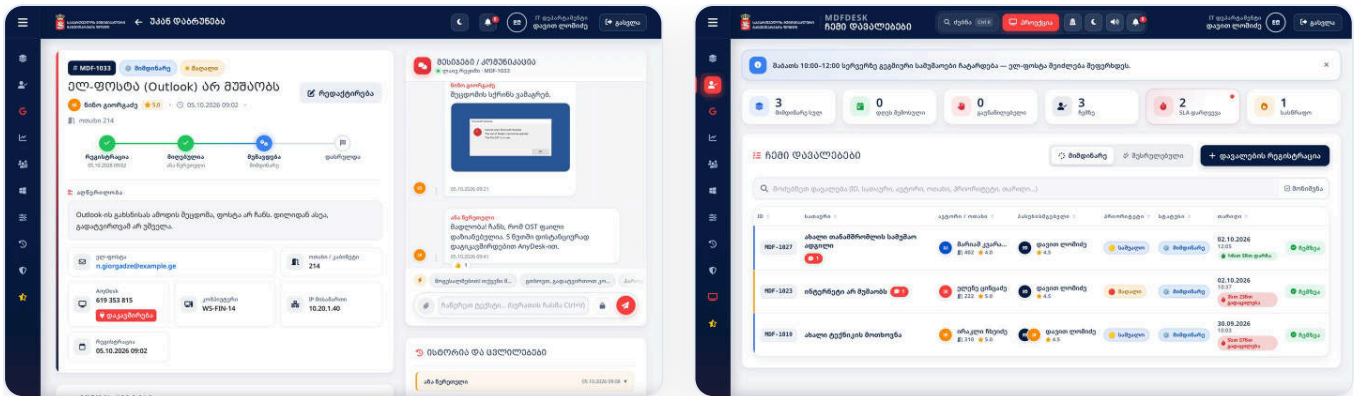


Fig. 14. Chat with an attachment and "My tasks"

For management, the system shows how the IT team performs: request trends, statuses, a workload heat-map (weekday × hour), most frequent issues, IT ranking, average resolution time and SLA compliance — for 7/30/90-day periods.

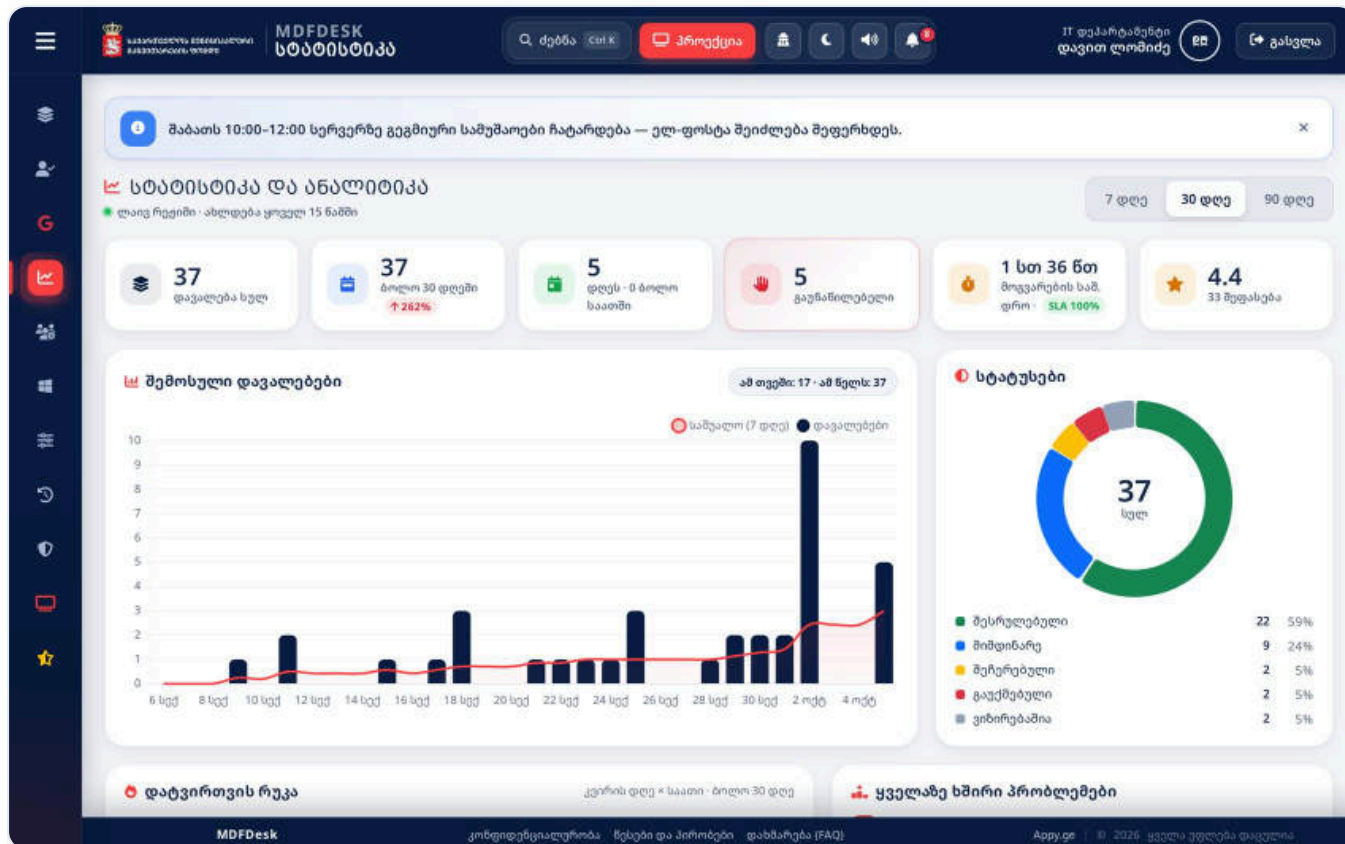


Fig. 15. Statistics and analytics

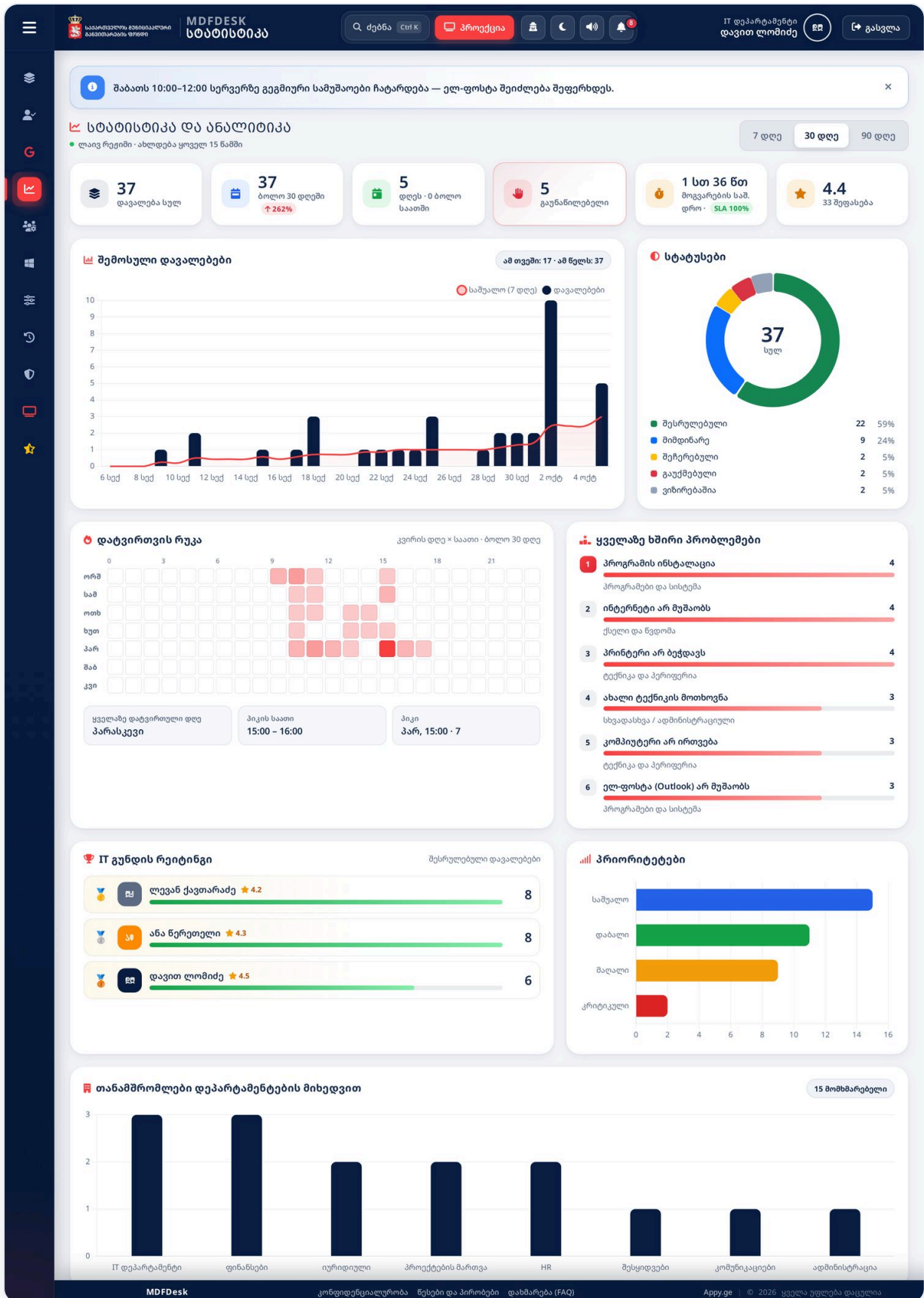


Fig. 16. Full statistics page

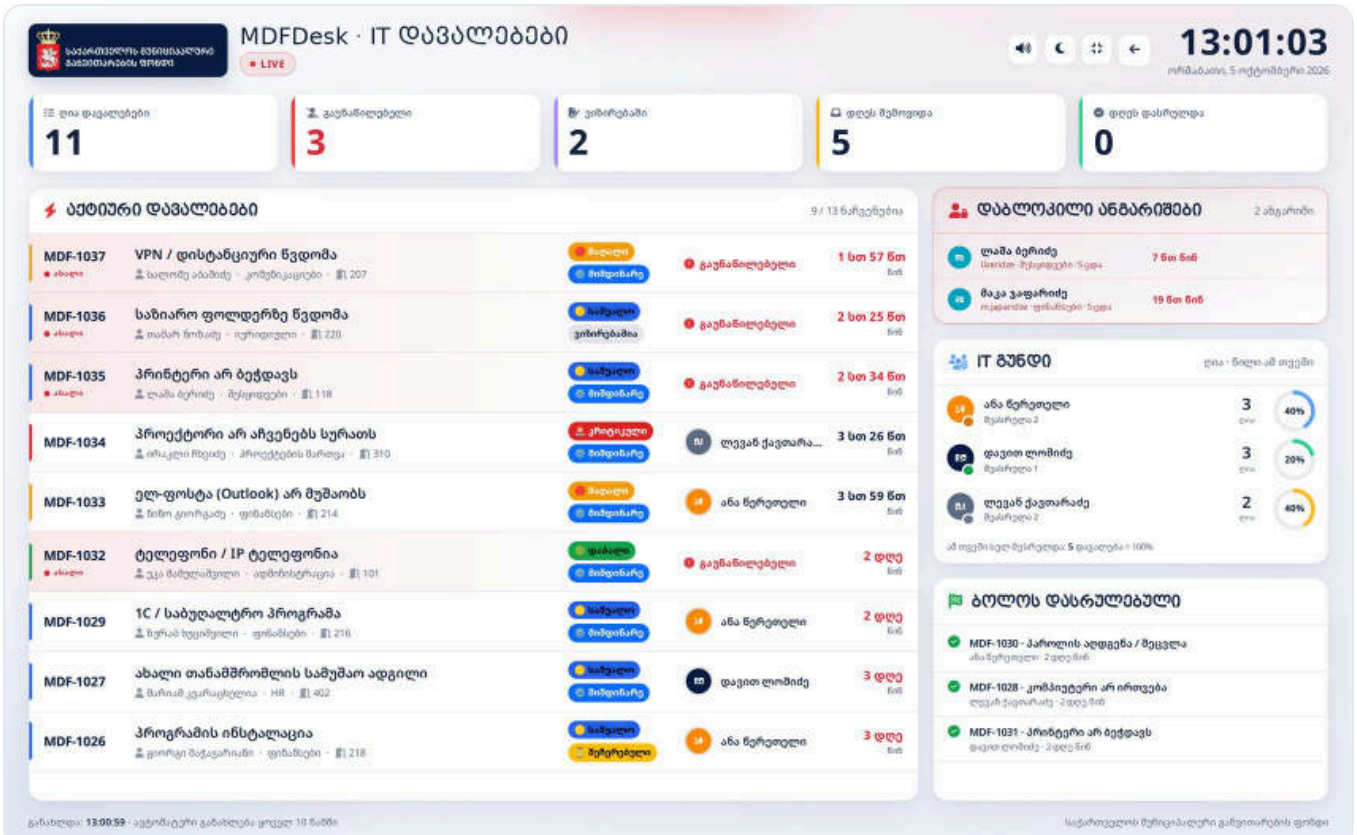


Fig. 17. Live monitor for a wall screen / projector (new tickets, locked accounts)

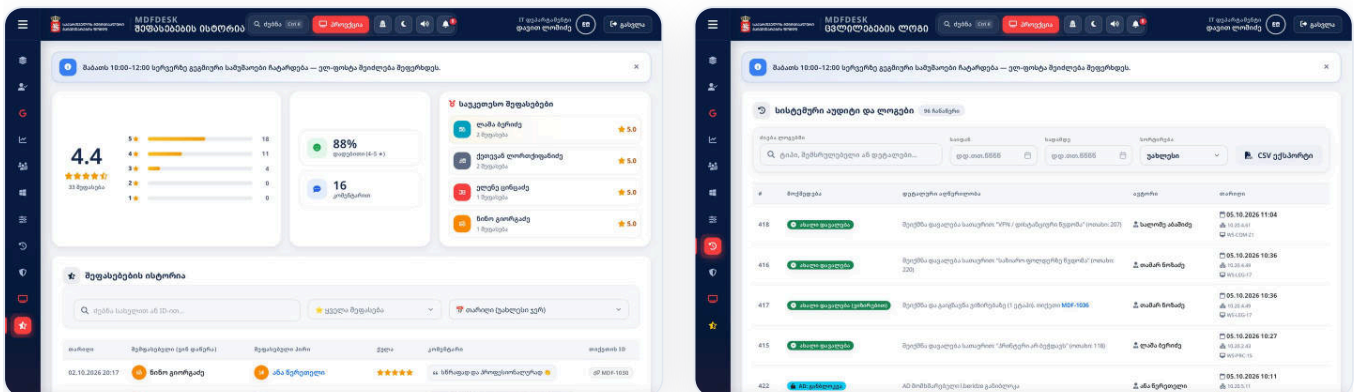


Fig. 18. Rating history and the system audit log (CSV export)

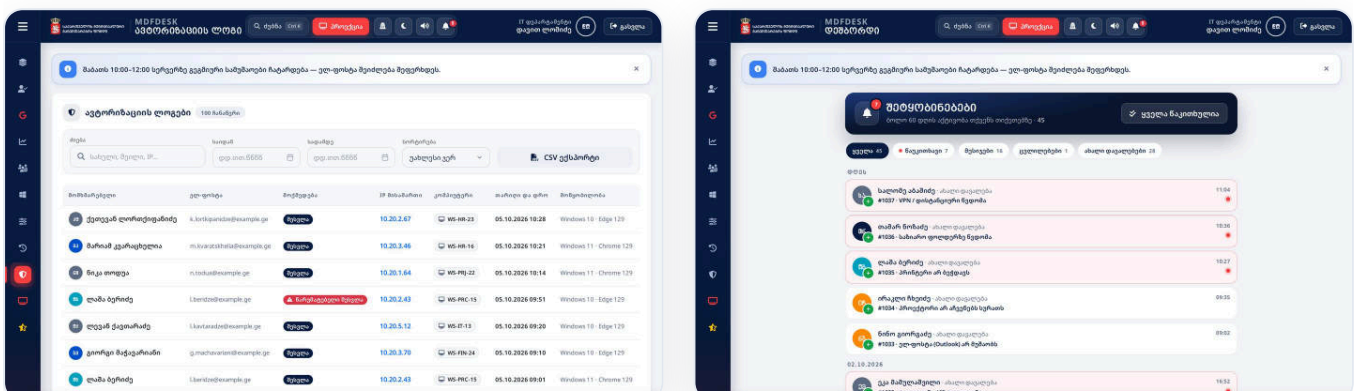


Fig. 19. Sign-in log and IT notification history

The “Users & roles” page lists every employee: department, role, online status, rating and computer (reported by a lightweight workstation agent). The Active Directory module lets IT create, edit, disable and unlock accounts and reset passwords right from the portal. Privileged accounts are protected from changes.

მომხმარებელი	დეპარტამენტი	როლი	რეიტინგი	კომპიუტერი	მოქმედება
ელენე ცინცაძე e.tsintsadze@example.ge ონლაინ	იურიდიული	User	5.0 (1)	WS-LEG-25 10.20.4.73	[Icon] [Icon] [Icon]
ნინო გიორგაძე n.giorgadze@example.ge ონლაინ	ფინანსები	User	5.0 (1)	WS-FIN-14 10.20.1.40	[Icon] [Icon] [Icon]
დავით ლომიძე d.lomidze@example.ge ონლაინ	IT დეპარტამენტი	Super Admin	4.5 (6)	WS-IT-11 10.20.5.10	[Icon] [Icon] [Icon]
ანა ნერეთელი a.nereteli@example.ge Idle - მოდოს: 05.10.2026 12:49	IT დეპარტამენტი	Admin	4.3 (7)	WS-IT-12 10.20.5.11	[Icon] [Icon] [Icon]
თამარ ნოზაძე t.nozadze@example.ge Idle - მოდოს: 05.10.2026 12:01	იურიდიული	User	4.0 (1)	WS-LEG-17 10.20.4.49	[Icon] [Icon] [Icon]
ქეთევან ლორთქიფანიძე k.lortkipanidze@example.ge მოდოს: 05.10.2026 11:51	HR	User	5.0 (2)	WS-HR-23 10.20.2.67	[Icon] [Icon] [Icon]

Fig. 20. Users and roles

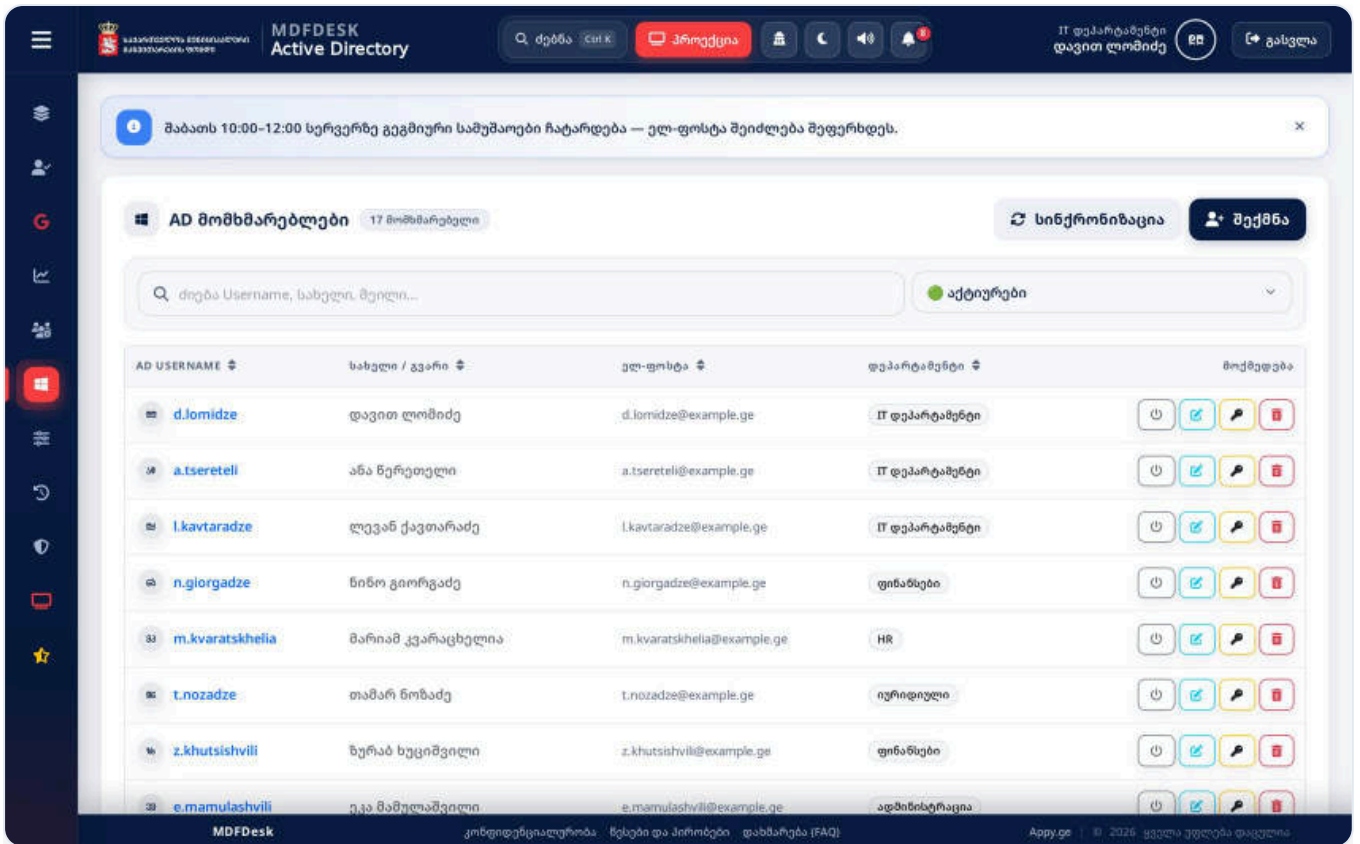


Fig. 21. Active Directory: account management, locked accounts highlighted

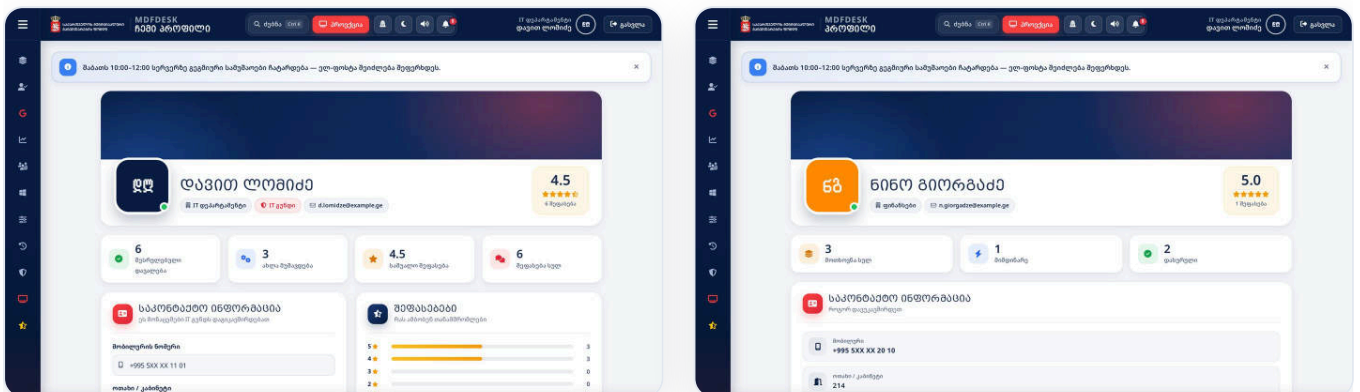


Fig. 22. IT specialist profile and employee card

■ E-mail

The IT team can use Gmail directly from the panel (read, reply, forward). The system sends branded e-mails on 7 events: new request (to the author and to IT), approval needed, approved, rejected and completed.

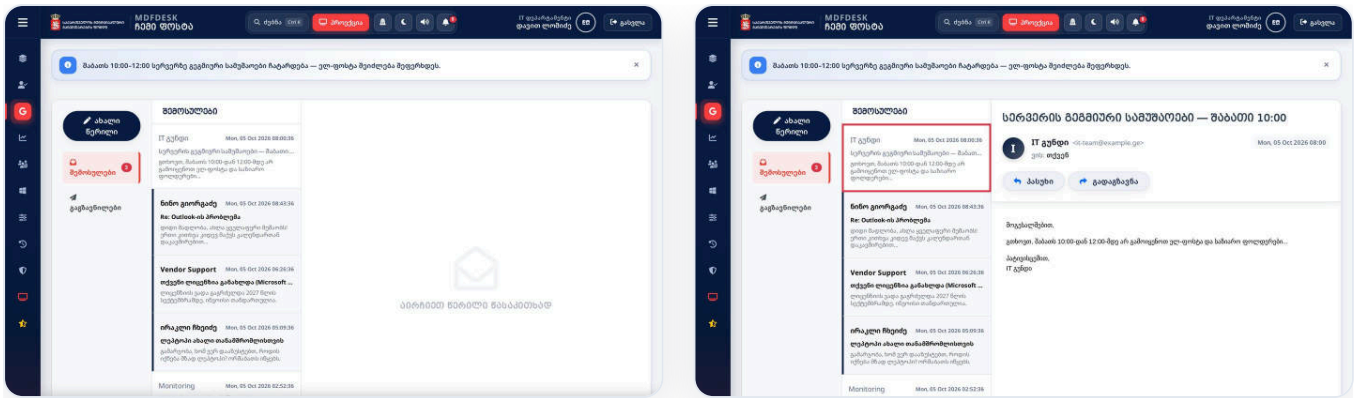


Fig. 23. Built-in mailbox (Gmail API)

Settings — white-label configuration

The settings panel gives the organization full control of the system without a developer. Every change applies instantly.

Branding	name, logo, colours, login video background
Employee page	titles, hints, frequent-issue cards
Texts	interface and system message texts with search
Documents	privacy policy, terms, FAQ
Classifiers	categories, types (with approval), priorities, statuses, departments — drag & drop
SLA & business hours	targets per priority, working days/hours, out-of-hours message
Behaviour	session timeouts, reopen window, ratings, live refresh rate
Files	maximum size, allowed formats
Announcements	site-wide banner with type and expiry
Mail & templates	SMTP, HTML templates with live preview
Active Directory	LDAPS connection, test, lockout alerts
Backup	settings export / import as JSON
Clean-up	data deletion only with a one-time e-mailed code

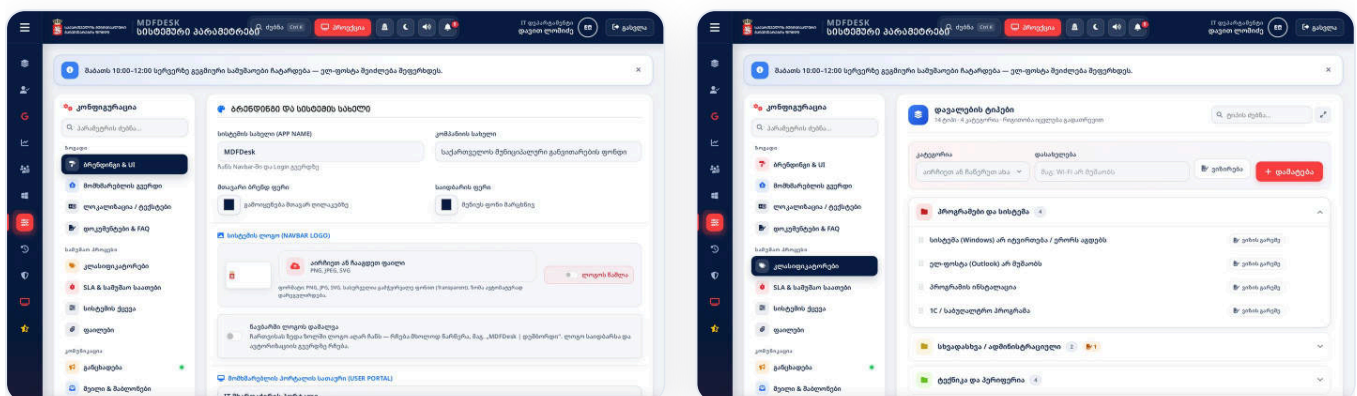


Fig. 24. Branding and classifiers

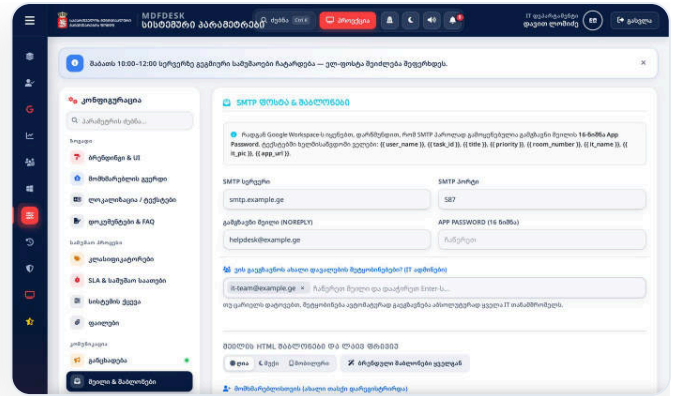
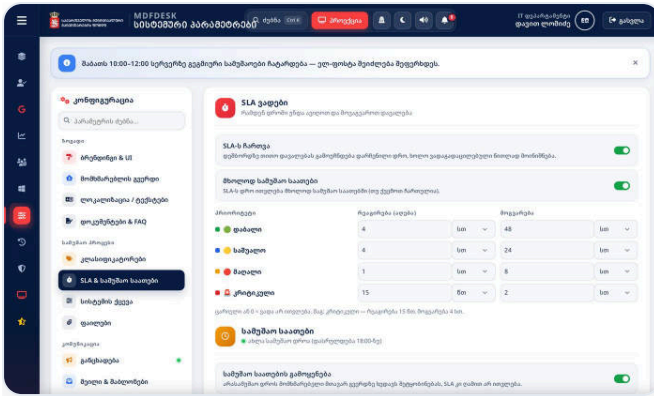


Fig. 25. SLA targets and e-mail templates

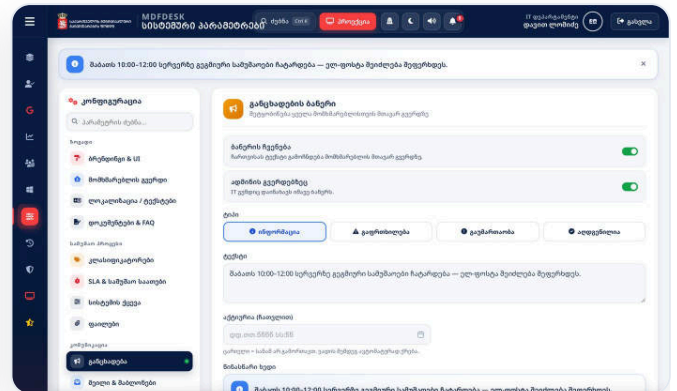
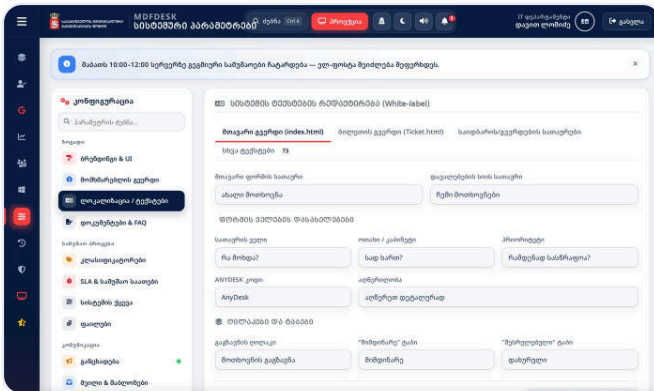


Fig. 26. Text editor and announcements

Every page is fully responsive: tables turn into cards, admins get a bottom navigation bar and employees a bottom-sheet menu. The system is a **PWA** — it can be added to the phone home screen as an app with its own icon. Touch gestures: pull-to-refresh, swipe a card left to “Take” it.

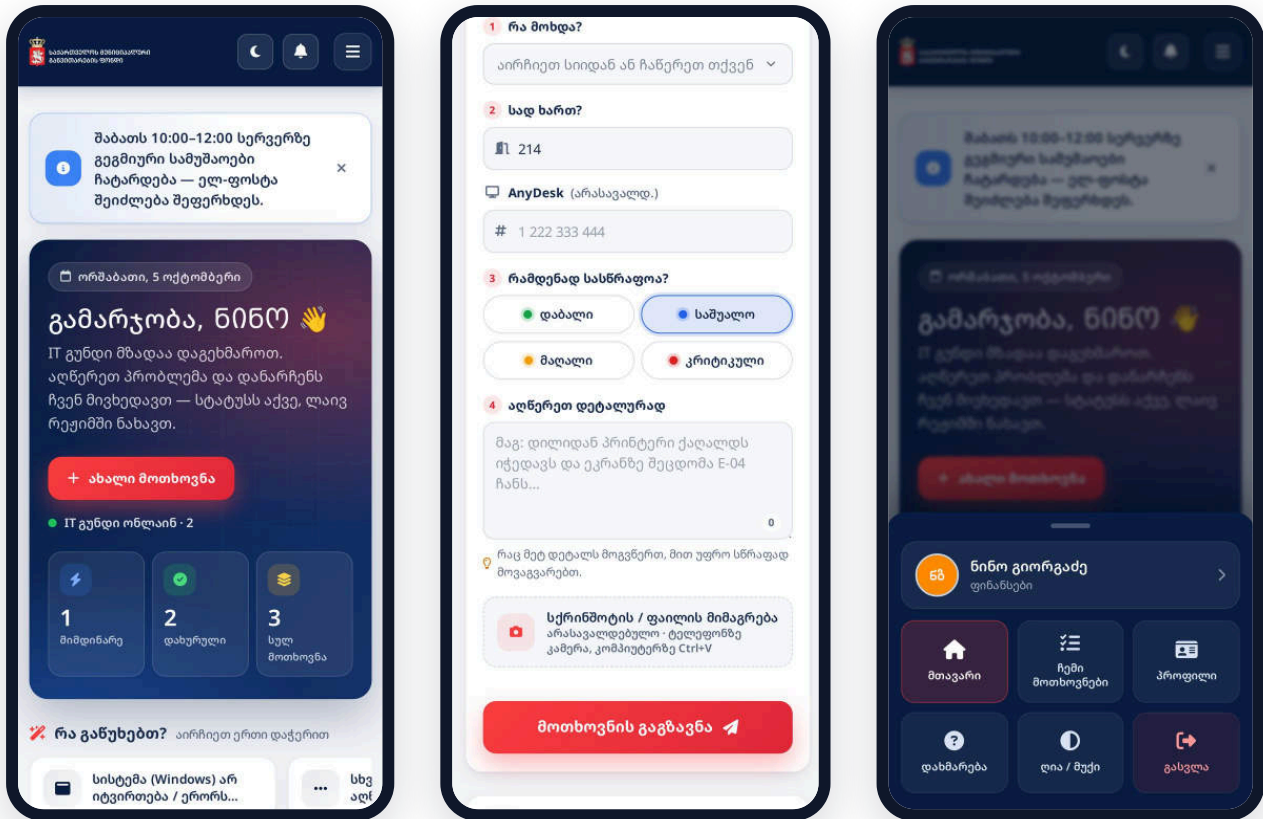


Fig. 27. Employee: home, new request, menu

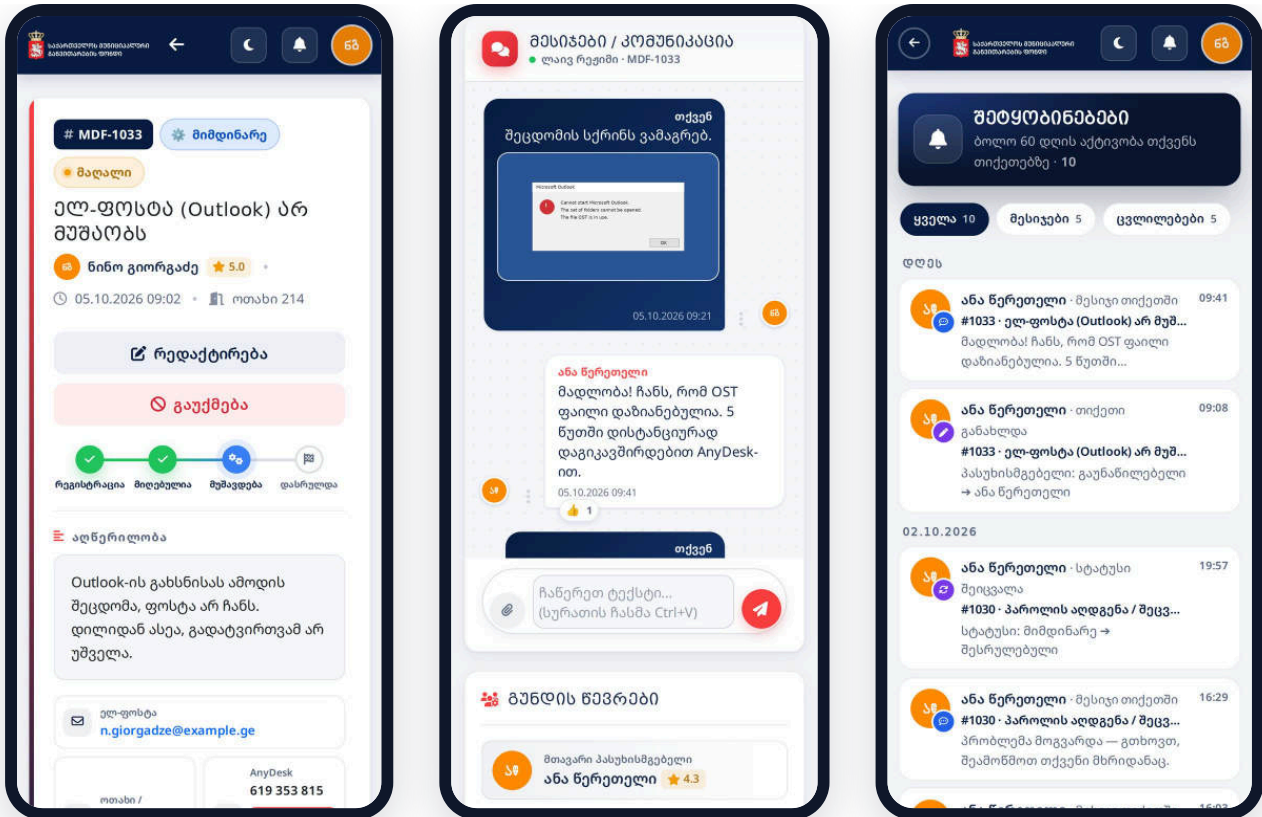


Fig. 28. Employee: ticket, chat, notifications

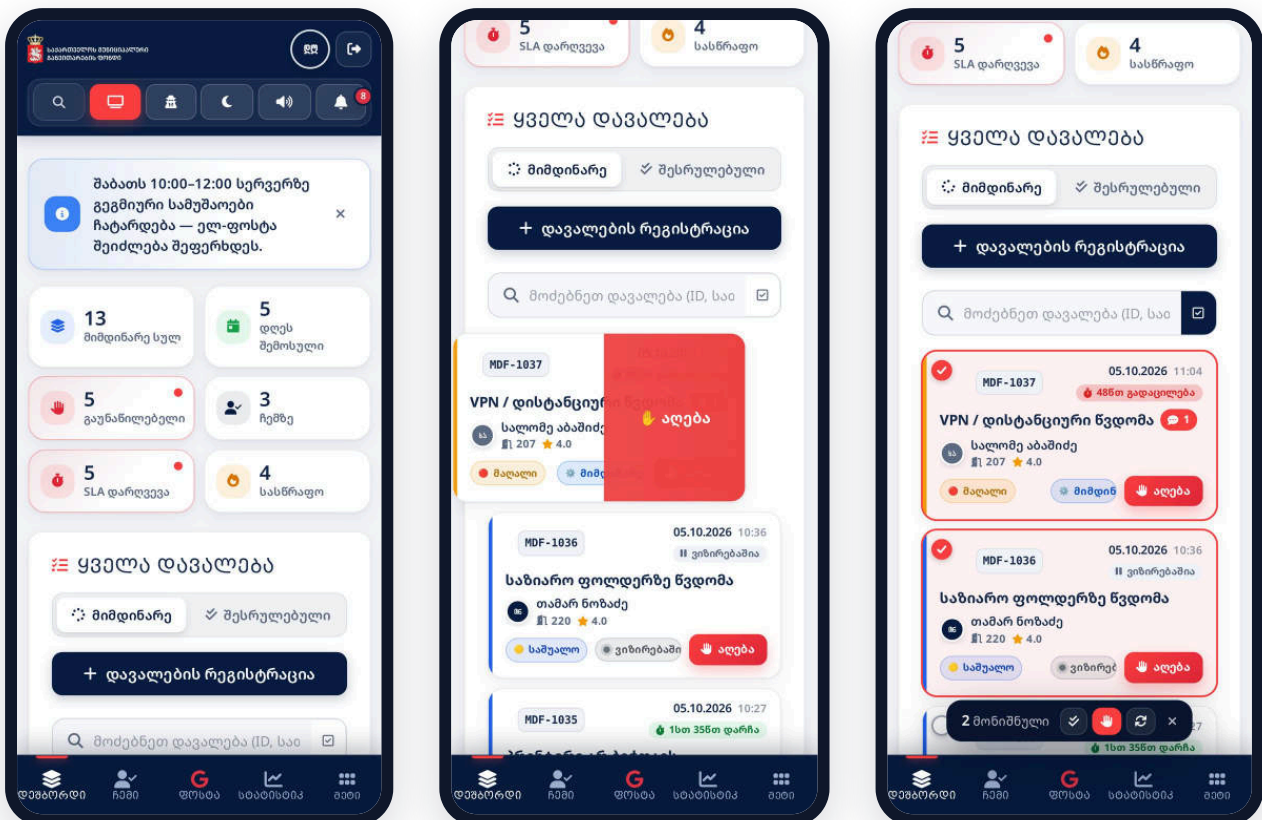


Fig. 29. IT: dashboard, swipe to take, bulk selection

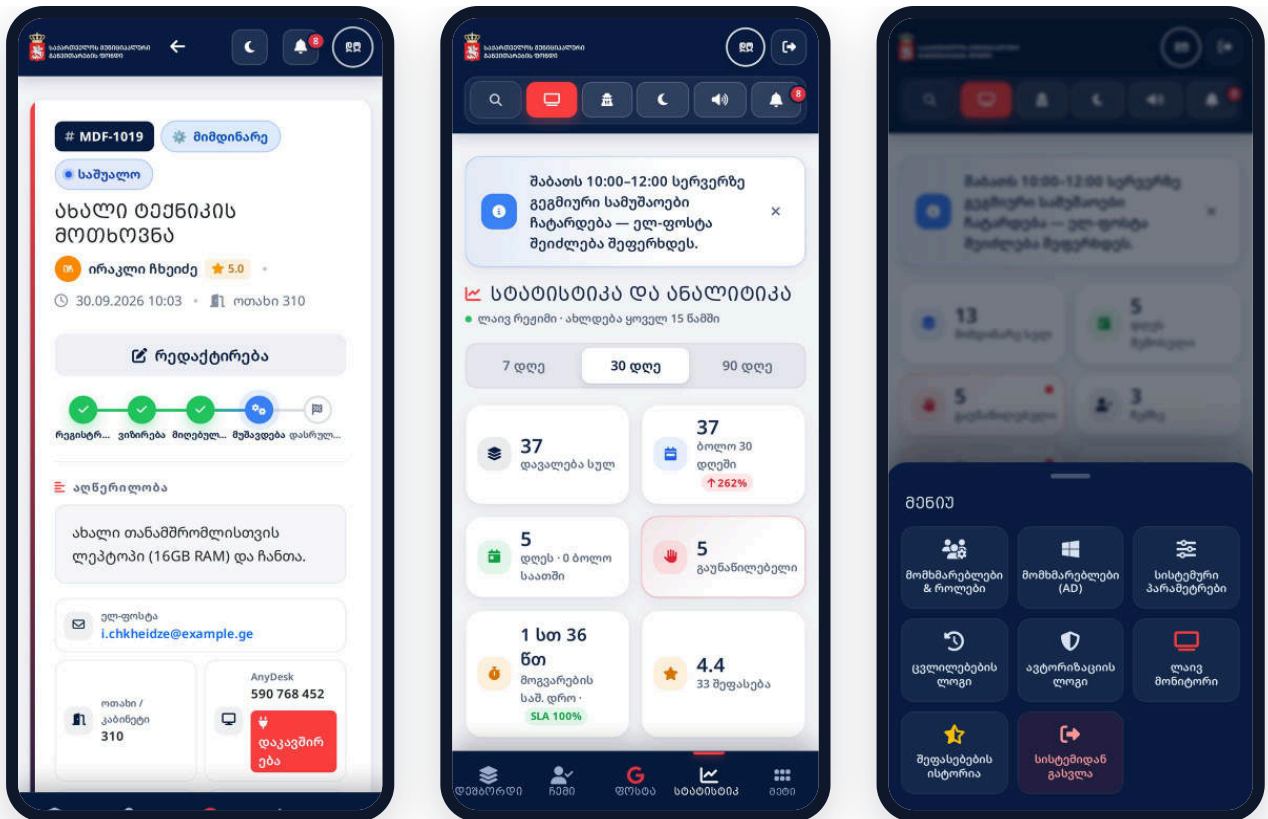


Fig. 30. IT: ticket, statistics, menu

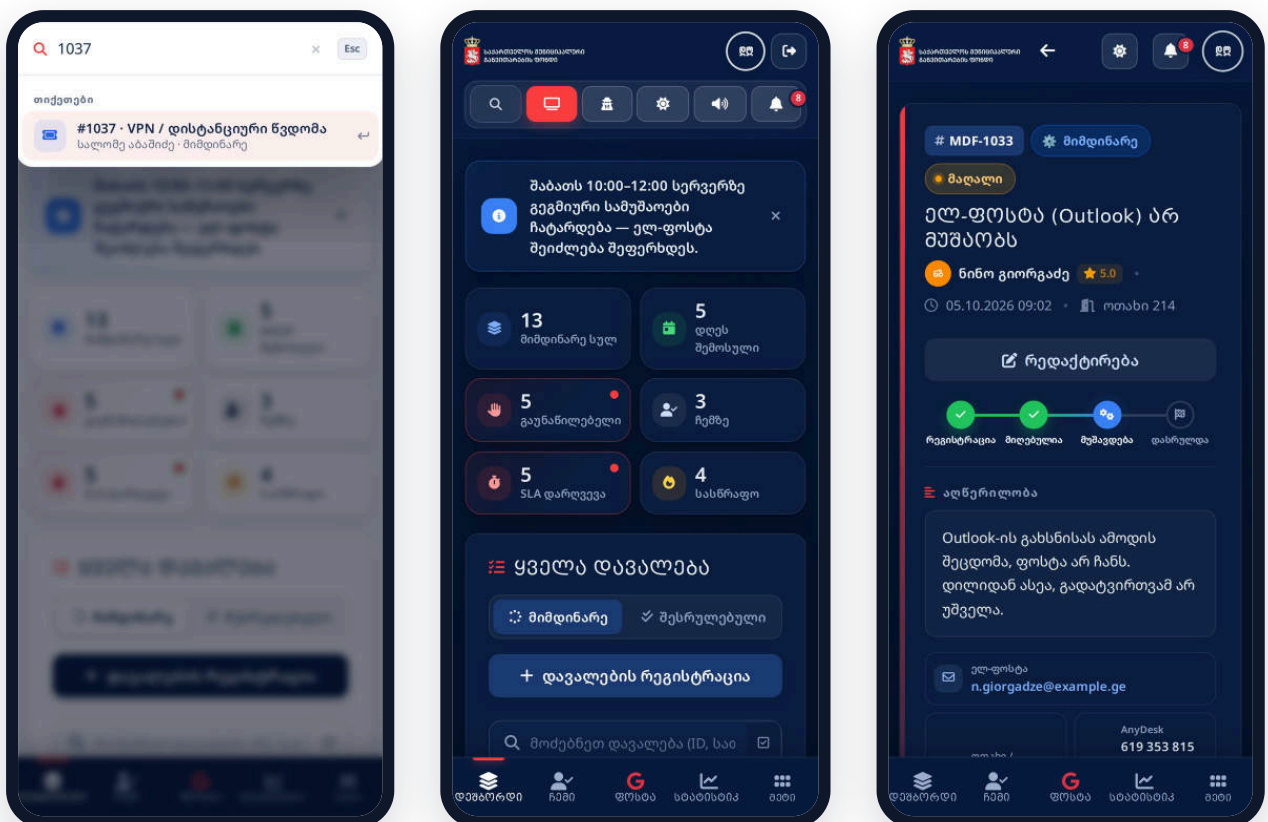


Fig. 31. Quick search and dark theme

Dark theme

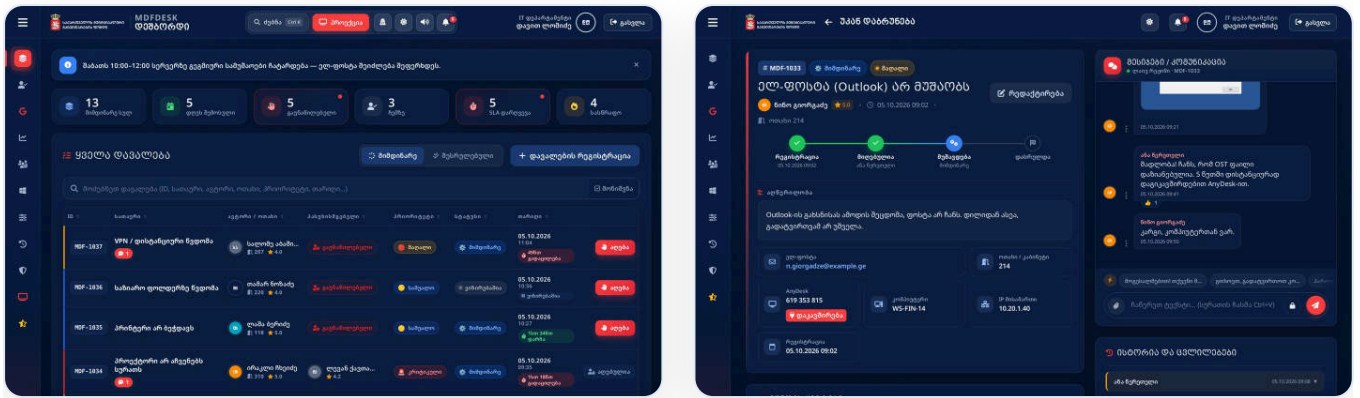


Fig. 32. Dark theme — one click, on every page

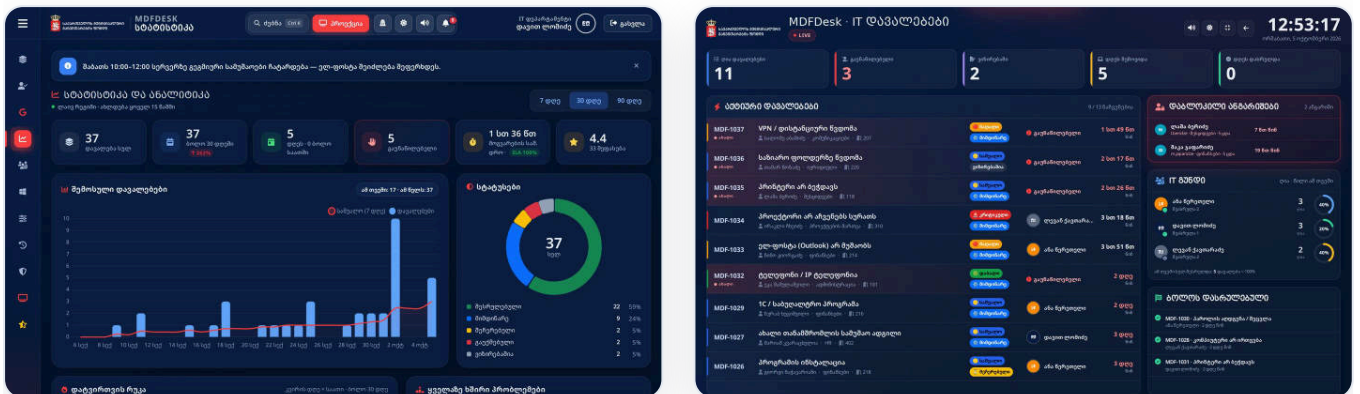


Fig. 33. Statistics and live monitor in the dark theme

- **Authentication:** Google OAuth 2.0 (SSO), corporate domain only; server-side sessions (PostgreSQL), the cookie holds only a random ID.
- **Session control:** idle and absolute timeouts, automatic sign-out.
- **CSRF protection** on every form and AJAX request; history and chat protected against XSS.
- **Private attachments:** files are never public — served only after an access check; executable formats are blocked.
- **Role-based access:** employees see only their own requests; IT internal notes are hidden from them.
- **Sensitive actions** (data clean-up) require a one-time code sent by e-mail; the super-admin role is protected.
- **Audit:** every important action is logged with IP address and computer name.
- **Backups:** nightly automatic copies of the database and files, shipped off-site to Google Drive.
- **Quality:** 84 automated tests (security, access control, ticket flow, attachments, sessions).



Backend	Python 3 · Flask (modular routes) · Gunicorn
Database	PostgreSQL (sessions, live versions, indexes)
Frontend	Bootstrap 5 · custom design system (light/dark) · Chart.js · SweetAlert2 · Tom Select · SortableJS
Real time	lightweight polling with version counters (PostgreSQL triggers) — no WebSocket server needed
Integrations	Google OAuth · Gmail API · Google People API · Active Directory (LDAPS) · SMTP
Agent	automatic reporting of workstation name and IP
Infrastructure	Linux · Nginx (HTTPS) · systemd · nightly backup + Google Drive
Mobile	Responsive UI · PWA (manifest, service worker, offline page)

■ Why MDFDesk



Fast roll-out

Google sign-in and AD sync — employees start on day one.



Fully configurable

Texts, categories, SLA, templates — all from the panel.



Mobile first

The same functionality on the phone, as a PWA app.



Measurable results

SLA, ratings and analytics for management.