

SHARP

Be Original.

BP-70M75

Digital Multifunctional System



The smart way to get more done



smart business partner

High Productivity

The MFP delivers a fast output of 75 ppm^{*1}. And if toner runs out during a print job, the MFP continues printing your documents while you change the toner cartridge. Your productivity won't miss a beat.

All the Needed Finishing Options

Finishing options are available for all your common needs—there's an inserter, a folding unit, two types of saddle stitch finisher, and a trimming module. These let you easily create professional-looking direct mail, handouts, booklets, brochures, and more.

Unified Cloud Connection^{*2}

You only need to sign in once to connect to multiple cloud services, such as Microsoft Teams, from the MFP. Applications can also be easily downloaded from the cloud. Updates are clearly displayed, so you're always using the latest version of services.

Solid Security

The MFP has multiple levels of security to keep the device—and your precious data—secure. When booting up, the MFP checks for any anomalies in the BIOS firmware. If it finds a problem, it aborts the startup. If there are other firmware-related issues, the MFP will attempt recovery to protect the system. You can also install optional software to prevent attacks on devices connected to the MFP.

Link Mobile Devices

Mobile devices installed with the Sharpdesk Mobile application^{*3} can connect directly to the MFP for printing or downloading scanned data. The MFP can also be equipped with AirPrint and the Sharp Print Service Plugin. It's a smoother way to get the job done.

10.1-Inch Full-Flat Touchscreen

With a variety of functions accessible via simple, intuitive icons, MFP operation is smooth and easy.

On-Screen System Information

The control panel shows the state of your MFP, displaying current operation and notifications for things like paper, toner, and maintenance.

High-Performance DSPF

The DSPF (duplex single pass feeder) scans both pages of two-sided documents in one pass—in batches of up to 300 sheets. With scanning speeds of up to 280 opm^{*4} (two-sided), the MFP is quick to finish even large jobs. A dedicated business card feeder on the DSPF scans batches of up to 150 cards.

Smart Scanning

Simply tap the Auto Set button and the MFP will automatically determine the optimal resolution, gradation, and compression rate for your scan jobs. It also automatically reorients pages right side up and corrects any skewed sheets.

Eco-Friendly Design

Despite its many functions, this MFP achieves superb energy efficiency. For example, the use of low-temperature-fusing toner results in vastly reduced energy consumption for the MFP.

Remote Firmware Updates

The MFP's firmware can be remotely updated—without the need for service operation—via a firmware update service. That way you're always using the latest system for your MFP.

^{*1}: A4 (8 1/2" x 11"), long-edge feeding. ^{*2}: In some countries/regions, optional equipment is required. ^{*3}: Availability varies by country/region. ^{*4}: Originals per minute; when feeding A4 (8 1/2" x 11") sheets.

PROFESSIONAL-QUALITY IN-LINE FINISHING OPTIONS

A range of finishing options work to automate time-consuming finishing tasks. Options are available to suit a variety of workplaces and applications.

	MX-FN34 Finisher	MX-FN35 Saddle Stitch Finisher	MX-FN21 Finisher	MX-FN21 Finisher	MX-FN22 Saddle Stitch Finisher	MX-FN22 Saddle Stitch Finisher
				+		+
				MX-FD10 Folding Unit		MX-FD10 Folding Unit
Features	Stapling	✓	✓	✓	✓	✓
	Stapleless stapling	✓	✓			
	Manual stapling	✓	✓			
	Punching*1	✓	✓	✓	✓	✓
	Saddle folding		✓		✓	✓
	Saddle stitching		✓		✓	✓
	Half-folding			✓		✓
	Z-folding			✓		✓
	C-folding			✓		✓
	Accordion folding			✓		✓
	Double folding			✓		✓
	Trimming*2				✓	✓
Paper capacity*3	Finisher trays*4	3,250 sheets	3,250 sheets	4,250 sheets	4,250 sheets	4,250 sheets

*1: Requires optional punch module. *2: Requires optional trimming module. *3: A4 (8 1/2" x 11"), 80 g/m². *4: Max. paper capacity of the finisher including the top tray.

Stapling

Rear corner Front corner 2-point side

Punching

2-hole punching 3-hole punching 4-hole punching 4-hole wide punching

Stapleless Stapling

Saddle Folding/Stitching

Saddle fold Saddle stitch

Trimming

Folding

Half-fold Z-fold C-fold Accordion fold Double fold

Insertion

Cover Inner page

SYSTEM CONFIGURATION

MX-FN34*1
Finisher

MX-FN35*1
Saddle Stitch Finisher

MX-FN21*2
Finisher

MX-FN22*2
Saddle Stitch Finisher

MX-TU15*3
Exit Tray Cabinet

MX-RB26
Paper Pass Unit

MX-RB13
Relay Unit

MX-CF11
Inserter

MX-FD10
Folding Unit

MX-RB27
Curl Correction Unit

BASE UNIT

MX-TR21
Exit Tray Unit

MX-LT10
Long Paper Feeding Tray

BP-LC11
Large Capacity Tray (A4)

BP-LC19
Large Capacity Tray (A3)

MX-PN16B/C/D
Punch Module (for MX-FN34/FN35)

MX-PN13A/B/C/D
Punch Module (for MX-FN21/FN22)

MX-TM10
Trimming Module (for MX-FN22)

MX-PF10
Barcode Font Kit

AR-SU1
Stamp Unit

BP-FX11
Fax Expansion Kit

MX-FWX1
Internet Fax Expansion Kit

BP-DD10
Double Feed Detection Kit

MX-AMX1
Application Integration Module

BP-AM10*4
Application Communication Module

BP-AM11*4
External Account Module

BP-EB10*4
Wireless Connection Adaptor

BP-SD10
High Capacity SSD

BP-FR12U
Data Security Kit

BP-VD10
Virus Detection Kit

*1: 65-sheet stapling; 80 g/m² A4 paper

*2: 100-sheet stapling; 80 g/m² A4 paper

*3: Minimum required equipment

*4: In some countries/regions, certain features/functions are standard-equipped, not optional, on the base unit.

Certain optional equipment may not be available in some areas.

SPECIFICATIONS FOR OPTIONAL EQUIPMENT

MX-TR21 Exit Tray Unit

Paper size	A3W to A6*1 (12" x 18" to 5 1/2" x 8 1/2"*)
Paper weight	55 to 256 g/m ² (13 lbs bond to 140 lbs index)
Paper capacity	100 sheets

MX-FN34 Finisher

Paper size	Non offset	A3W to A5*3 (12" x 18" to 5 1/2" x 8 1/2"*)
	Offset/staple	A3 to B5** (11" x 17" to 8 1/2" x 11")
	Stapleless staple	A3, A4** (11" x 17", 8 1/2" x 11"*)
Paper weight	Non offset/offset/staple	55 to 300 g/m ² (13 lbs bond to 110 lbs cover)
	Stapleless staple	55 to 105 g/m ² (13 lbs bond to 28 lbs bond)
Paper capacity	Finisher tray (Non offset)	3,000 sheets (A4**, B5**)
		1,500 sheets (A3W, A3, B4, A4*, B5*, A5*)
	(Offset)	3,000 sheets (A4**, B5**)
		1,500 sheets (A3, B4, A4*)
	(Staple)	200 sets or 3,000 sheets (A4**, B5**)
	(Stapleless staple)	100 sets or 1,500 sheets (A3, B4, A4*)
Top tray		200 sets (A4**), 100 sets (A3)
		250 sheets (A4**, B5**, A5*)
Stapling capacity*5	Staple	125 sheets (A3W, A3, B4, A4*, B5*)
	Stapleless staple	65 sheets (A4**, B5**), 30 sheets (A3, B4, A4*)
Manual staple		5 sheets*6 (A3, A4*)
		Total paper thickness 9 mm or less (65 sheets)
Staple position	Staple mode	3 locations (front, rear, or 2-point stapling)
	Stapleless staple mode	1 location (rear)
	Manual staple mode	1 location
Power requirements		
Supplied by main unit		
Dimensions	With tray stored	533 x 653 x 1,103 mm (W x D x H)
	With tray extended	635 x 653 x 1,167 mm (W x D x H)
Weight (approx.)		33 kg

MX-FN35 Saddle Stitch Finisher

Paper size	Non offset	A3W to A5*3 (12" x 18" to 5 1/2" x 8 1/2"*)
	Offset/staple	A3 to B5** (11" x 17" to 8 1/2" x 11")
	Stapleless staple	A3, A4** (11" x 17", 8 1/2" x 11"*)
Paper weight	Non offset/offset/staple	55 to 300 g/m ² (13 lbs bond to 110 lbs cover)
	Stapleless staple	55 to 105 g/m ² (13 lbs bond to 28 lbs bond)
	Saddle stitch	60 to 256 g/m ² (16 lbs bond to 140 lbs index)
	Folding	55 to 256 g/m ² (13 lbs bond to 140 lbs index)
Paper capacity	Finisher tray (Non offset)	3,000 sheets (A4**, B5**)
		1,500 sheets (A3W, A3, B4, A4*, B5*, A5*)
	(Offset)	3,000 sheets (A4**, B5**)
		1,500 sheets (A3, B4, A4*)
	(Staple)	200 sets or 3,000 sheets (A4**, B5**)
	(Stapleless staple)	100 sets or 1,500 sheets (A3, B4, A4*)
Top tray		200 sets (A4**), 100 sets (A3)
		250 sheets (A4**, B5**, A5*)
Saddle stitch tray		125 sheets (A3W, A3, B4, A4*, B5*)
		10 sets of 11–20 sheets, 15 sets of 6–10 sheets, 25 sets of 1–5 sheets
Stapling capacity*5	Staple	65 sheets (A4**, B5**), 30 sheets (A3, B4, A4*)
	Stapleless staple	5 sheets*6 (A3, A4*)
	Manual staple	Total paper thickness 9 mm or less (65 sheets)
Staple position	Staple mode	3 locations (front, rear, or 2-point stapling)
	Stapleless staple mode	1 location (rear)
	Manual staple mode	1 location
Power requirements		
Supplied by main unit		
Dimensions	With tray stored	533 x 653 x 1,103 mm (W x D x H)
	With tray extended	635 x 653 x 1,167 mm (W x D x H)
Weight (approx.)		57 kg

MX-FN21 Finisher

Paper size	Non offset	A3W to A5*3 (12" x 18" to 5 1/2" x 8 1/2"*)
	Offset/staple	A3 to B5** (11" x 17" to 8 1/2" x 11")
Paper weight	Non offset/offset	55 to 300 g/m ² (13 lbs bond to 110 lbs cover)
	Staple	60 to 300 g/m ² (16 lbs bond to 110 lbs cover)
Paper capacity	Upper tray (Non offset)	1,500 sheets (A4**, B5**, A5*)
		750 sheets (A3W, A3, B4, A4*, B5*)
	(Staple)	100 sets or 1,500 sheets (A4**, B5**)
		50 sets or 750 sheets (A3, B4, A4*)
	Lower tray (Non offset)	2,500 sheets (A4**, B5**), 1,500 sheets (A5*)
	(Offset)	750 sheets (A3W, A3, B4, A4*, B5*)
Middle tray (Non offset)		1,500 sheets (A4**, B5**)
		750 sheets (A3, B4, A4*)
(Staple)		100 sets (A4**, B5**), 50 sets (A3, B4, A4*)
		250 sheets (A4**, B5**, A5*)
Stapling capacity*5		125 sheets (A3W, A3, B4, A4*, B5*)
		100 sheets (A4**, B5**), 50 sheets (A3, B4, A4*)
Staple position		
3 locations (front, rear, or 2-point stapling)		
Power consumption (max.)		
200 W, 350 W with MX-FD10		
Power requirements		
AC 230 V, 10 A		
Dimensions	With tray stored	654 x 765 x 1,040 mm (W x D x H)
	With tray extended	782 x 765 x 1,040 mm (W x D x H)
Weight (approx.)		61 kg

Note: All specifications relating to paper capacity refer to 80 g/m² paper.

*1: Short-edge feeding for A5 and A6 paper. *2: Short-edge feeding for 7 1/4" x 10 1/2" and 5 1/2" x 8 1/2" paper. *3: Short-edge feeding. *4: Long-edge feeding. *5: Using 80 g/m² paper, can include back and front covers (total of 2 sheets) of heaviest paper that can be stapled. *6: Guaranteed stapleable weight is up to 64 g/m² (4 sheets up to 81.4 g/m² and 3 sheets up to 105 g/m²). *7: Can include a single cover sheet of 300 g/m² or less. *8: Accepts North American paper sizes. *9: Accepts ISO-standard paper sizes. *10: Z-fold and half-fold pages are ejected from the finisher (MX-FN21/FN22).

MX-FN22 Saddle Stitch Finisher

Paper size	Non offset	A3W to A5*3 (12" x 18" to 5 1/2" x 8 1/2"*)
	Offset/staple	A3 to B5** (11" x 17" to 8 1/2" x 11")
Paper weight	Non offset/offset	55 to 300 g/m ² (13 lbs bond to 110 lbs cover)
	Staple/saddle stitch/folding	60 to 300 g/m ² (16 lbs bond to 110 lbs cover)
Paper capacity	Upper tray (Non offset)	1,500 sheets (A4**, B5**, A5*)
		750 sheets (A3W, A3, B4, A4*, B5*)
	(Staple)	100 sets or 1,500 sheets (A4**, B5**)
		50 sets or 750 sheets (A3, B4, A4*)
	Lower tray (Non offset)	2,500 sheets (A4**, B5**), 1,500 sheets (A5*)
	(Offset)	750 sheets (A3W, A3, B4, A4*, B5*)
Middle tray (Non offset)		1,500 sheets (A4**, B5**)
		750 sheets (A3, B4, A4*)
(Staple)		100 sets (A4**, B5**), 50 sets (A3, B4, A4*)
		250 sheets (A4**, B5**, A5*)
Saddle stitch tray		125 sheets (A3W, A3, B4, A4*, B5*)
		5 sets of 16–20 sheets, 10 sets of 11–15 sheets, 15 sets of 6–10 sheets, 25 sets of 1–5 sheets
Stapling capacity*5		
100 sheets (A4**, B5**), 50 sheets (A3, B4, A4*)		
Staple position		
3 locations (front, rear, or 2-point stapling)		
Power consumption (max.)		
200 W, 350 W with MX-FD10		
Power requirements		
AC 230 V, 10 A		
Dimensions	With tray stored	767 x 765 x 1,040 mm (W x D x H)
	With tray extended	896 x 765 x 1,040 mm (W x D x H)
Weight (approx.)		108 kg

MX-TM10 Trimming Module (for MX-FN22)

Paper size	A3W to A4*3 (12" x 18" to 8 1/2" x 11"*)
Paper weight	60 to 300 g/m ² (16 lbs bond to 110 lbs cover)
Acceptable number of sheets*7	2 to 20 sheets (60 to 81.4 g/m ²)
	2 to 10 sheets (81.4 to 105 g/m ²)
	2 to 3 sheets (105 to 220 g/m ²)
Trim width	2 to 20 mm in 0.1 mm increments
Power requirements	Supplied by MX-FN22
Weight (approx.)	32 kg

Punch Modules

Model name	For MX-FN21/FN22	MX-PN13A	MX-PN13B*8	MX-PN13C*9	MX-PN13D
	For MX-FN34/FN35	-	MX-PN16B*8	MX-PN16C*9	MX-PN16D
Number of holes		2	3/2	4/2	4 (wide)
Paper weight	MX-PN13A/B/C/D	55 to 256 g/m ²			
	MX-PN16B/C/D	55 to 300 g/m ²			
Power requirements	Supplied by MX-FN21/FN22/FN34/FN35				
Weight (approx.)	MX-PN13A/B/C/D	3.7 kg			
	MX-PN16B/C/D	2.5 kg			

MX-FD10 Folding Unit

Folding mode	Z-fold, C-fold, Accordion-fold, Double-fold, Half-fold	
Paper size	Z-fold	A3 to A4*3 (11" x 17" to 8 1/2" x 11"*)
	Half-/C-/Accordion-/Double-fold	A4*3 (8 1/2" x 11"*)
Paper weight	55 to 105 g/m ² (13 lbs bond to 28 lbs bond)	
Paper capacity	Z-fold*10	30 sheets (A3, B4), 10 sheets (A4*)
	Half-fold*10	10 sheets (A4*)
	C-/Accordion-fold	40 sheets (A4*)
	Double-fold	25 sheets (A4*)
Power requirements		
Supplied by MX-FN21/FN22		
Dimensions	336 x 793 x 1,050 mm (W x D x H)	
Weight (approx.)	66 kg	

MX-RB27 Curl Correction Unit

Paper size	A3W to A5*3 (12" x 18" to 5 1/2" x 8 1/2"*)
Paper weight	55 to 300 g/m ² (13 lbs bond to 110 lbs cover)
Power requirements	Supplied by main unit
Dimensions	214 x 762 x 986 mm (W x D x H)
Weight (approx.)	19 kg

MX-CF11 Inserter

Paper size	A3W to A5*3 (12" x 18" to 5 1/2" x 8 1/2"*)	
Paper weight	60 to 220 g/m ² (16 lbs bond to 80 lbs cover)	
Paper capacity	Upper/lower tray	
	200 sheets/each	
Power requirements		
Supplied by main unit		
Dimensions	With tray stored	540 x 760 x 1,276 mm (W x D x H)
	With tray extended	690 x 760 x 1,276 mm (W x D x H)
Weight (approx.)		45 kg

BP-LC11 Large Capacity Tray (A4)

Paper size	A4*4, 8 1/2" x 11"*)
Paper weight	60 to 220 g/m ² (16 lbs bond to 80 lbs cover)
Paper capacity	3,500 sheets
Power requirements	
Supplied by main unit	
Dimensions	371 x 575 x 525 mm (W x D x H)
Weight (approx.)	28 kg

MX-LC19 Large Capacity Tray (A3)

Paper size	A3W to B5** (12" x 18" to 8 1/2" x 11")
Paper weight	60 to 220 g/m ² (16 lbs bond to 80 lbs cover)
Paper capacity	3,000 sheets
Power requirements	
Supplied by main unit	
Dimensions	694 x 589 x 519 mm (W x D x H)
Weight (approx.)	50 kg

MX-LT10 Long Paper Feeding Tray

Paper size	Width	90 to 305 mm
	Length	458 to 1,300 mm
Paper capacity		1 sheet
Dimensions	With tray stored	338 x 195 x 107 mm (W x D x H)
	With tray extended	581 x 195 x 130 mm (W x D x H)
Weight (approx.)		0.8 kg

SPECIFICATIONS

General

Type	Console
Engine speed	A4 (8 1/2" x 11")*1: Max. 75 ppm A3 (11" x 17")*: Max. 37 ppm A3W (12" x 18")*: Max. 34 ppm
Control panel display	10.1-inch colour LCD touchscreen
Paper size	Max. A3W (12" x 18"), min. A6 (5 1/2" x 8 1/2")*2
Paper capacity (80 g/m ²)	Standard: 3,200 sheets (1,250-sheet tray, 850-sheet tray, 500-sheet tray x 2, and 100-sheet bypass tray) Maximum: 6,700 sheets (3,200 sheets & optional 3,500-sheet tray)
Paper weight	Tray 1&2: 60 g/m ² to 105 g/m ² (16 lbs bond to 28 lbs bond) Tray 3&4: 60 g/m ² to 220 g/m ² (16 lbs bond to 80 lbs cover) Bypass tray: 55 g/m ² to 300 g/m ² (13 lbs bond to 110 lbs cover)
Warm-up time*3	25 sec.*4
Memory	Standard: 5 GB (copy/print shared) 256 GB SSD*5 Option: 512 GB*5*6
Power requirements	Rated local AC voltage ±10%, 50/60 Hz
Power consumption	Max. 2.07 kW (220 V to 240 V)
Dimensions (W x D x H)*7	663 x 763 x 1,240 mm (26 7/64" x 30 3/64" x 48 53/64")
Weight (approx.)	163 kg (359.4 lbs)

Copier

Original paper size	Max. A3 (11" x 17")
First copy time*8	3.5 sec.
Continuous copy	Max. 9,999 copies
Resolution	Scan: 600 x 600 dpi, 600 x 400 dpi, 600 x 300 dpi*9 Print: 1,200 x 1,200 dpi, 600 x 600 dpi, 9,600 (equivalent) x 600 dpi (depending on copy mode) Equivalent to 256 levels
Gradation	Equivalent to 256 levels
Zoom range	25% to 400% (25% to 200% using DSPF) in 1% increments
Preset copy ratios	Metric: 10 ratios (5R/5E), inch: 8 ratios (4R/4E)

Scanner

Scan method	Push scan (via control panel) Pull scan (TWAIN-compliant application)
Scan speed*10 (colour & B/W)	One-sided: Max. 140 originals/min. Two-sided: Max. 280 originals/min.
Resolution	Push scan: 100, 150, 200, 300, 400, 600 dpi Pull scan: 75, 100, 150, 200, 300, 400, 600 dpi 50 dpi to 9,600 dpi via user setting*11
File formats	TIFF, PDF, PDF/A-1a, PDF/A-1b, encrypted PDF, XPS, compact PDF*12, JPEG*12, searchable PDF, OOXML (pptx, xlsx, docx), text (TXT [UTF-8]), rich text (RTF)
Scan destinations	Email/desktop*13/FTP server/network folder (SMB)/USB drive/local drive

*1: Long-edge feeding.
*2: Only short-edge feeding can be used with A6 and 5 1/2" x 8 1/2" paper. A6-size paper output requires optional MX-TR21.
*3: In a standard measurement environment. May vary depending on operating conditions and environment.
*4: When starting the MFP via the power button. 38 seconds when starting via the main power switch.
*5: Storage capacity depends on procurement and sourcing status.
*6: Replacing the standard-equipped SSD with the optional BP-SD10 increases storage capacity to 512 GB.
*7: Including protuberances.
*8: Long-edge feeding of A4 (8 1/2" x 11") sheets from 1st paper tray, using document glass, MFP in fully ready condition. May vary depending on operating conditions and environment.
*9: Not available when using document glass.
*10: Based on Sharp's A4 standard chart, using document feeder, long-edge feeding, and factory default settings. Scan speed will vary depending on the type of document and the scan settings.
*11: Resolution will vary depending on the size of the scanned area.
*12: Colour/greyscale only.
*13: Requires Network Scanner Tool Lite.
*14: Storage capacity will vary depending on the type of document and the scan settings.
*15: Some features require optional equipment.
*16: In some countries/regions, the optional BP-EB10 is required. Availability of this option varies by country/region.
*17: Based on Sharp's standard chart with approx. 700 characters (A4 or 8 1/2" x 11" long-edge feeding) at standard resolution in Super G3 mode, 33,600 bps, JBIG compression.

Document Filing

Document filing capacity*14	Main and custom folders: 20,000 pages or 3,000 files Quick file folder: 10,000 pages or 1,000 files
Stored jobs*15	Copy, print, scan, fax
Storage folders	Quick file folder, main folder, custom folder (max. 1,000 folders)

Printer

Resolution	1,200 x 1,200 dpi, 600 x 600 dpi, 9,600 (equivalent) x 600 dpi
Interface	USB 2.0 (host, high-speed), USB 3.0 (host, super speed), 10Base-T/100Base-TX/1000Base-T, wireless LAN (IEEE 802.11 a/b/g/n/ac)*16
Supported OS	Windows Server 2012, Windows Server 2012 R2, Windows Server 2016, Windows Server 2019, Windows Server 2022, Windows 8.1, Windows 10, Windows 11, Mac OS 10.10, 10.11, 10.12, 10.13, 10.14, 10.15, 11, 12
Network protocols	TCP/IP
Printing protocols	LPR, Raw TCP (port 9100), POP3 (email printing), HTTP, FTP for downloading print files, IPP, IPP Everywhere, SMB, WSD
PDL	PCL 6 emulation, Adobe PostScript 3
Available fonts	80 fonts for PCL, 139 fonts for Adobe PostScript 3

Facsimile (requires optional BP-FX11)

Compression method	MH/MR/MMR/JBIG
Communication protocol	Super G3/G3
Transmission time	Less than 3 seconds*17
Modem speed	33,600 bps to 2,400 bps with automatic fallback
Transmission resolution	From Standard (203.2 x 97.8 dpi) to Ultra Fine (406.4 x 391 dpi)
Recording size	A3 to A5 (11" x 17" to 5 1/2" x 8 1/2")
Memory	4 GB (built-in)
Greyscale levels	Equivalent to 256 levels

• Design and specifications are subject to change without prior notice.
• Microsoft Teams, Windows, and Windows Server are trademarks of the Microsoft group of companies. AirPrint and Mac are trademarks of Apple Inc., registered in the US and other countries. PCL is a registered trademark of Hewlett-Packard Company. Adobe and PostScript are either registered trademarks or trademarks of Adobe in the US and/or other countries. All other brand names and product names may be trademarks or registered trademarks of their respective owners.

