



# INTSHAYELELO

## IShwankathelo soBukho beAI kwiiNtlobo zoNxibelelwano ezaHlukahlukeneyo

**Ubukho beAI kwiiNtlobo zoxibelelwano ezahlukahlukeneyo kuthetha usetyenziso lobuchule bobuxhakaxhaka bale mihla (AI) ukudala, ukuphucula, nokugqwesisa iintlobo zoxibelelwano ezahlukahlukeneyo, ezifana nemifanekiso, iividiyo, noko kuthethwayo. Le tekhnoloji ikhule ngokukhawuleza, yaba nefuthe elibonakalayo ekudalweni kwemixholo, umzekelo, ukwezniwa kwemifanekiso ekumgangatho ophezulu ngenkcazelo nje elula eyitekisi nto leyo ivumela ukudalwa kwemixholo okukhawulezileyo.**

## INjongo yolu Xwebhu

Olu xwebhu **lubonelela ngesikhokelo sokusebenzisa izixhobo neeaplikheyishini zobuchule bobuxhakaxhaka bale Mihla obaKhayao (GenAI) ukuphucula ukudalwa kwemixholo yezemfundo.** Injongo yalo kukukunceda ekubeni uqonde kwaye usebenzise ngokusebenzayo izixhobo zeGenAI ukuxhobisa iimathiriyeli zokufundisa ezisebenziseka ngaxesha linye nezingasebenziseki ngaxesha linye, nto leyo ibangela ukuba abafundi babe nako ukuzibandakanya nangakumbi kwizifundo ozihlohlayo. Nangona **eyona nto iphambili kugxilwe kuyo ikukwakhiwa kwemifanekiso ngetekisi kusetyenziswa iAI,** olu xwebhu lukwaquka neengcebiso zeewebhusayithi ezibonelela ngokwakhiwa kweeodiyo neevidiyo, nangona ke ezo kunganyathelwa kuzo ngokuneenkukacha ezithe vetshe.

Ufikelelo **kwizixhobo zokusebenza zeGenAI luba simahla ngokwesiqhelo, kodwa ke ezo ntlobo kufikeleleka simahla kuzo zinokuba nezithintelo ekuzidawunlowudeni nasekuzisebenziseni.** Ezi zixhobo neeaplikheyishini zilungiselelwe ukuvavanywa nokuphononongwa ngimsebenzisi wazo ngamnye.

“Umntu ozibandakanya kwincoko engokusebenzisa umfanekisongqondweni kunye nencoko ekwi-intanethi, kuquka neovaleyi edijithali.”



IUmfanekiso owakhiwe ngeAI yiAdobe Firefly/[firefly.adobe.com](https://firefly.adobe.com)



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## Isibhengezo: UKwakhiwa kweMifanekiso ngeAI

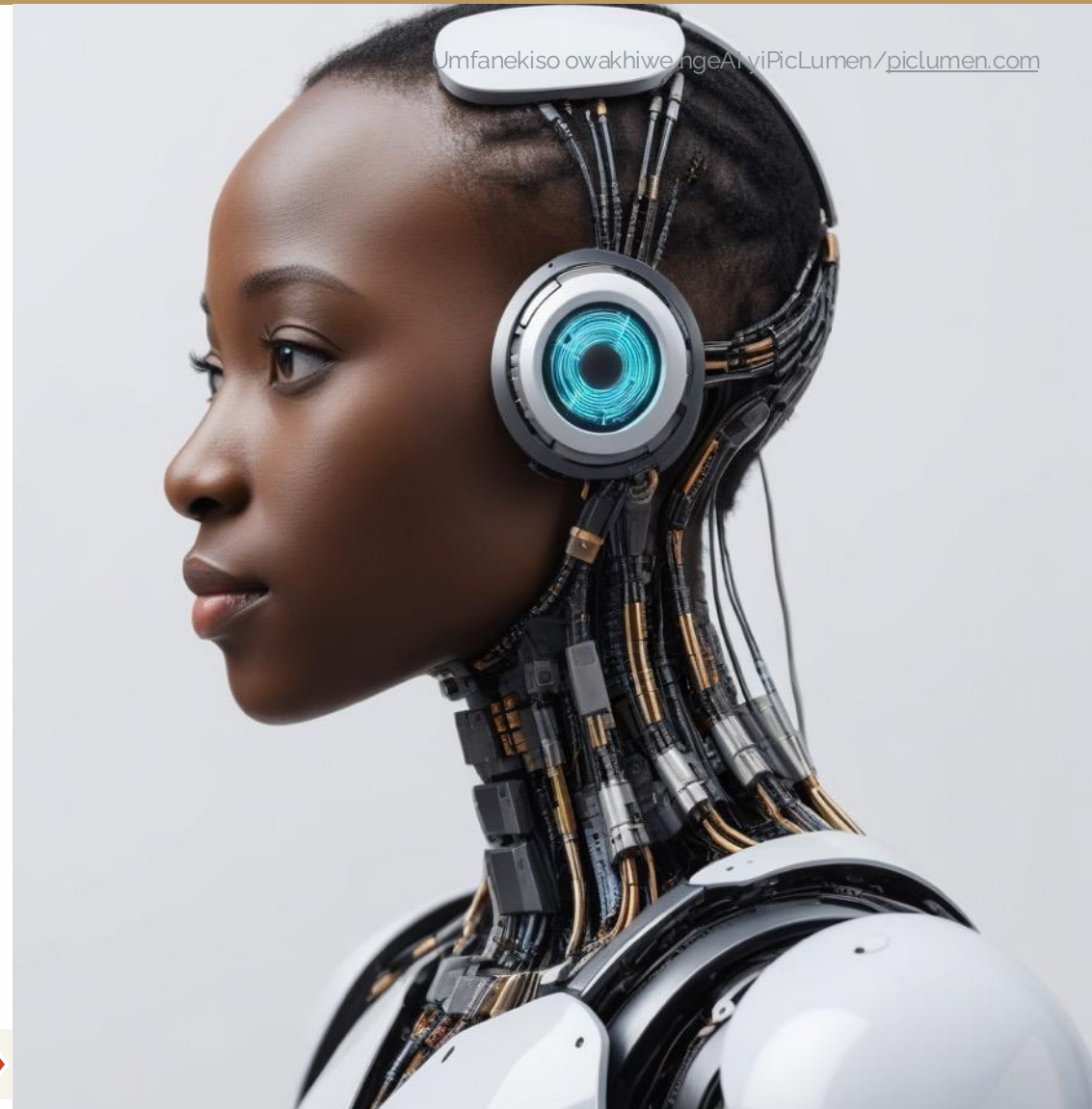
Nceda uphawule ukuba **ukwakhiwa kwemifanekiso kusetyenziswa iAI kungaba yinkqubo echitha ixesha elininzi**. Ukuntsokotha kwesicelo somfanekiso, amandla aloo modeli yeAI, neqondo lokucaca komfanekiso lowo okufunwayo, zizonke ezo zinto zingaba nefuthe elibonakalayo kwixesha lokwakha umfanekiso lowo. Ukuba ufuna imifanekiso ekhawulezileyo, sicebisa ukuba iphengulule iiwebhusayithi zakwastock image, nezibonelela ngemifanekiso eyahlukahlukeneyo esele yakhiwe kwangaphambili nekunokufikelelwa kuyo ngoko nangoko.

## IiWebhusayithi zakwaStock Image

Nazi iiwebhusayithi ezimbalwa ezithembakeleyo ezibonelela ngemifanekiso engafuni malungelo eekopi:

- > **Pixabay**: Yaziswa ngengqokelela ebanzi yemifanekiso, iividiyo nomculo okumgangatho ophezulu.
- > **Pexels**: Ibonelela ngengqokelela ekhethwe ngononophelo yemifanekiso yasimahla, elungele iiprojekthi ezahlukahlukeneyo.
- > **Unsplash**: Ibonelela ngemifanekiso nemizobo ekumgangatho ophezulu.
- > **Freepik**: Ibonelela ngemifanekiso, ngeevakha, nemizobo yasimahla eyahlukahlukeneyo ngokubanzi.

"Incoko ekwi-intanethi enenkangeleko yobuAfrika, eze ngecala, esondele ngokungephi."



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# IZIQULATHO

## 1. EmakuThathelwe iNgqalelo xa kusaKhiwa iiNtlobo zoNxibelelwano ezaHlukahlukeneyo ngeAI [Iphepha 1](#)

- > 1.1. IMbonakalo eTshintshayo yeMfundo
- > 1.2. IiNzuzo zeeNtlobo zoNxibelelwano ezaHlukahlukeneyo ezaKhiwe ngeAI
- > 1.3. IMingeni neeNdlela zokuziPhatha emaziThathelwe iNgqalelo

## 2. IiNdlela zokuDala iiNtlobo zoNxibelelwano ezaHlukahlukeneyo ngeAI [Iphepha 2](#)

- > 2.1. UkuQonda nokuChonga iZixhobo zeGenAI eziFanelekileyo
- > 2.2. Ukwakhiwa kweeNgcamango
- > 2.3. UkuSebenza ngouGqwesileyo
- > 2.4. UFikeleleko

## 3. IiNdlela zokuBhala iMiyalezo eFanelekileyo yoKwakha iMifanekiso ibe ziiTekisi [Iphepha 4](#)

- > 3.1. IiNdlela eziSebenza ngayo iZakhi zeMifanekiso ngeAI
- > 3.2. Ukwakha uMyalezo oSulungekileyo
- > 3.3. UkuBaluleka kweMiyalezo eFanelekileyo
- > 3.4. IiNgxaki eziQhelekileyo
- > 3.5. IMizekelo yeeTekisi emaziSetyenziswe

- > 3.6. UKwakha uMyalezo oSebenzayo woKwakha iMiyalezo ngeTekisi

## 4. IiNdawo zokuFumana iiWebhusayithi neziXhobo zoKwakha iiNtlobo zoNxibelelwano ezaHlukahlukeneyo [Iphepha 12](#)

- > 4.1. IZakhi zoKwakha iMifanekiso ibe ziiTekisi
- > 4.2. IZixhobo zoYilo eziSebenza ngeGenAI
- > 4.3. UkuDalwa kweeVidiyo nokuQanjwa koMculo

## 5. Iindlela zokuChonga uBunini boMsebenzi [Iphepha 15](#)

- > 5.1. UkuBaluleka kokuChongwa kobuNini boMsebenzi
- > 5.2. Eyona Misebenzi iHamba Phambili yokuChongwa koBunini beMisebenzi

## 6. IMigaqo neZikhokelo zeMifanekiso eyaKhiwe ngeAI [Iphepha 16](#)

- > 6.1. AmaLungelo eeKopi nePropati yeNgqondo
- > 6.2. UbuMfihlo beDatha noKhuseleko
- > 6.3. UMkhethe onokubaKho
- > 6.4. UQinisekiso
- > 6.5. IZikhokelo zeeNdlela zokuziPhatha
- > 6.6. IMigaqonkqubo yaseSU

"Umntu ohleli esitulweni ephethe itablet, ejikelezwe yimifanekiso"



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# 1. EmakuThathelwe iNgqalelo xa kusaKhiwa iiNtlobo zoNxibelelwano ezaHlukahlukeneyo ngeAI

Umfanekiso owakhiwe ngeAI yiMicrosoft Designer/ [designer.microsoft.com](https://designer.microsoft.com)

"Incwadi evulekileyo enamagama abhabha ephuma kuyo"



## 1.1. IMbonakalo eTshintshayo yeMfundo

I**GenAI** iyitshintsha ngokusisiseko indlela edalwa ngayo imixholo yezemfundo, indlela elungiselelwa ngayo, nendlela ehanjiswa ngayo. Ngokwenza imisebenzi ephindaphindayo ibe nokuzenzekela nangokubonelela ngeendlela ezintsha zokuzibandakanya nabafundi, izixhobo ezisebenzisa iAI zivumela abahlohi ukuba bagxile kumgangatho nokuba nentsebenziswano kweemathiriyeli zabo zokufundisa.

"Ikhompyutha enerobhothi embindini."



## 1.2. IiNzuzo zeeNtlobo zoNxibelelwano ezaHlukahlukeneyo ezaKhiwe ngeAI

I**GenAI** izisa ukusebenza kakuhle ngokuthi yenze ukudalwa kwemixholo kuzenzekele kwaye ikhulisa ubuchule ngokusebenzisa iintlobo zemixholo eziguquguqukayo nezingobuchule. Ezi nkqubela phambili azipheleli nje ekuphuculeni amava okufunda kodwa zingathi kananjalo zibe nako ukongela abahlohi ixesha.

"Irobhothi ethetha isebenzisa umboko ingqongwe ngabantu."



## 1.3. IMingeni neeNdlela zokuziPhatha emaziThathelwe iNgqalelo

I**GenAI** ibonelela ngeenzuzo ezibonakalayo, kodwa ithi kananjalo **ibangele iinkxalabo malunga namalungelo eekopi nepropati yengqondo, ubungasese bedatha nokhuseleko, nomkhethe onokuthi ubekho**, nokuxhomekeka ngokugqithisileyo kwizixhobo ezisebenza ngokuzenzekelayo. Abahlohi kufuneka bayisenenzise ngenkathalo i**GenAI**, baqinisekise ukuba usetyenziso lwayo lungqamene neenqobo zezemfundo nemigangatho yeendlela zokuziphatha ngokufanelekileyo. Siza kubuyela kwesi sihloko phantsi konombolo 6. Imigaqo neZikhokelo zeMifanekiso eyaKhiwe ngeAI.

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## 2. Iindlela zokuDala iiNtlobo zoNxibelelwano ezaHlukahlukene ngeAI

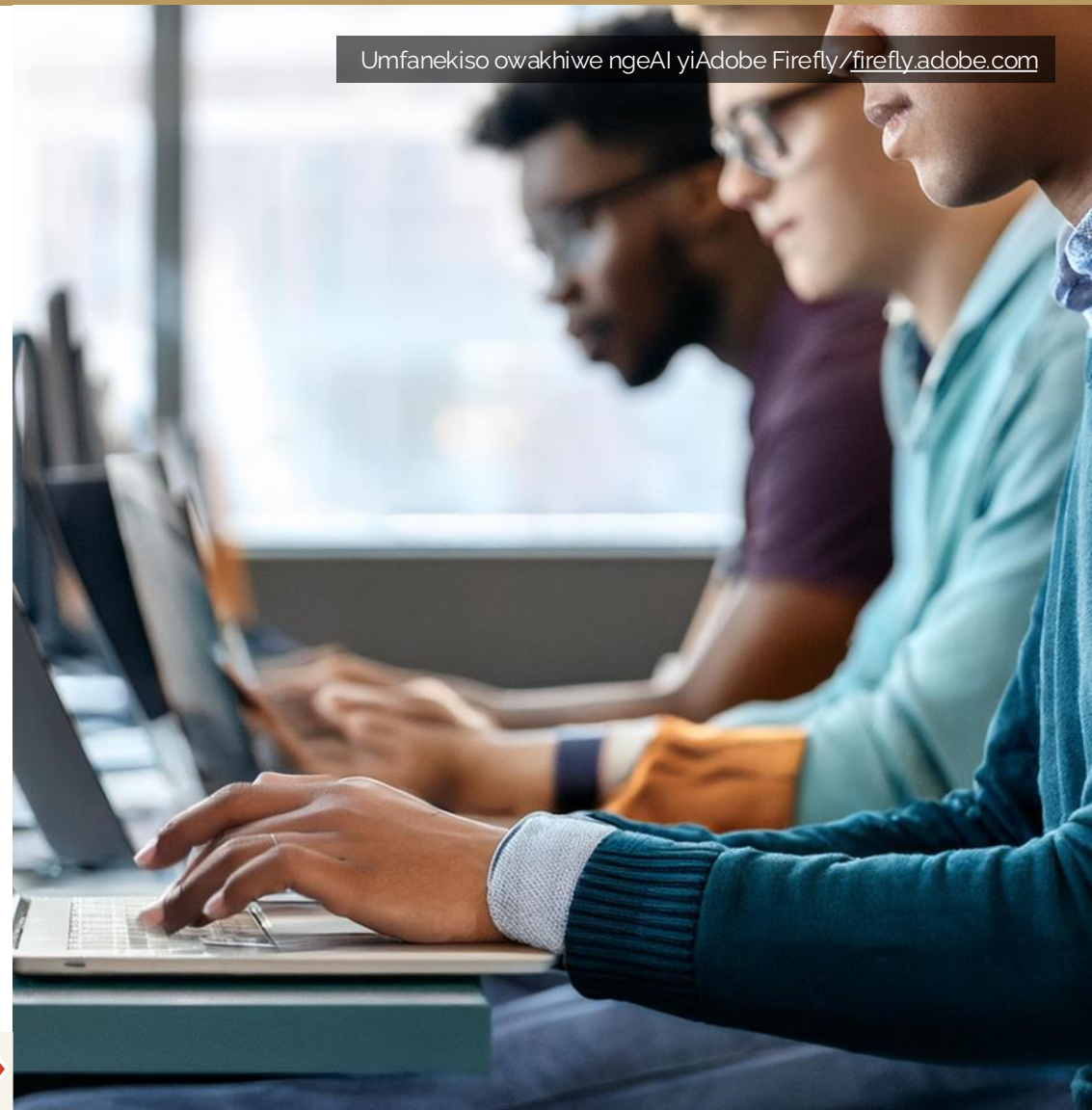
### 2.1. UkuQonda nokuChonga iZixhobo zeGenAI eziFanelekileyo

Kukho izixhobo zeGenAI ezahlukahlukeneyo ezifumanekayo ukuze zincele ekudalweni kweentlobo zoxibelelwano ezahlukahlukeneyo, kuquka nokuguqula imifanekiso ibe ziitekisi, amaqonga okwakha iividiyo, nezixhobo zekhomputha zokwakha okuthi ibe ngamazwi.

### 2.2. UkwaKhiwa kweNgcamango

Qala ngokucacisa iinjongo zomxholo wakho nokukhetha izixhobo zeGenAI ezifanelekileyo. Qinisekisa ukuba uyazi malunga nofikeleleko lwezixhobo ozithathela ingqalelo.

Umfanekiso owakhiwe ngeAI yiAdobe Firefly/[firefly.adobe.com](https://firefly.adobe.com)



"Abafundi basebenza kwiilephophu kwimekobume yale mihla, bafotwe beze ngecala "



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## 2. Iindlela zokuDala iiNtlobo zoNxibelelwano ezaHlukahlukene ngeAI

### 2.3. UkuSebenza ngokuGqwesileyo

Xa ubandakanya imixholo eyakhiwe ngeAI kwikharithulam yakho, **qinisekisa ukuba iyahambelana neenjongo zakho zokufundisa, zokufunda nezovavanyo** ngelixa ugcine **intsulungeko yezifundo**. Phengululisa ngobunono iziphumo zeentlobo zonxibelelwano ezahluahlukeneyo ezakhiwe ngeAI ukuze uhlole ukuchaneka nokufaneleka.

### 2.4. UFikeleleko

IKubalulekile **ukuyila iintlobo zonxibelelwano ezahluahlukeneyo ezakhiwe ngeAI ezifikelekayo kubo bonke abafundi**, kuquka nabo baphila nokhubazeko. Oku kuquka nokubonelela ngeetekisi ezizezinye kwimifanekiso, iikhapshini kwiiividiyo nenkcazelo zeeodiyo ukuqinisekisa ukuba bonke abafundi banako ukuzibandakanya nomxholo lowo ngokupheleleyo. Jonga **Digital Accessibility Guide** ukuze ufumane ingcaciso ethe vetshe.

Umfanekiso owakhiwe ngeAI yiAdobe Firefly/[firefly.adobe.com](https://firefly.adobe.com)



“Umntu ohleli kwisitulo esinamavili ephethe ithabhlethi.”



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## 3. Iindlela zokuBhala iMiyalezo eFanelekileyo yoKwakha iMifanekiso ibe ziiTekisi

Umfanekiso owakhiwe ngeAI yiFreepik/[freepik.com/pikaso](https://freepik.com/pikaso)

"Iqela labafundi befunda kwithala leencwadi elikhanya ilanga bengqongwe ziishelufu zeencwadi ezinde. Ikhamera ibafotele entla kwamagxa"

### 3.1. Iindlela eziSebenza ngayo iZakhi zeMifanekiso ngeAI

Zonke iimodeli zifunda kwiingqokelela zeedatha ezinkulu zemifanekiso neetekisi, zisebenzisa iimodeli zolwimi ezinkulu ezifana noChatGPT ukuze **zakhe imifanekiso ngokusekelwe kwimiyalezo eziitekisi.**

### 3.2. UKwakha uMyalezo oSulungekileyo

**Umyalezo owakhiwe kakuhle ucacile, uneenkukacha, kwaye ubonelela ngemakobume eyaneleyo** ukuba ingakhokela isixhobo seGenAI okanye iaplikheyishini eyakha umfanekiso lowo ufunekayo.

**Imiyalezo esebenzayo iyazicacisa izinto eziphambili ezifana nezinto emazibekho kumfanekiso lowo, abalunganiswa, imekobume, izitayili, ngelixa ikuphepha ukungavakali kakuhle ukuqinisekisa ukuba iAI ivelisa iziphumo ezichanekileyo.**

### 3.3. UkuBaluleka kweMiyalezo eFanelekileyo

**Ibalulekile ukulungiselela ukwakhiwa kwemifanekiso yeAI ngokusebenzayo,** nto leyo ifuna isakhono sokubhala ukuze kufezekiseke iziphumo ezifunekayo.

### 3.4. IiNgxaki eziQhelekileyo

**Iimpazamo eziqhelekileyo ziquka iinkcazelo ezingavakali kakuhle, ukuphosa iinkcukacha eziphambili, nokusebenzisa ulwimi oluntsokotho ngokugqithisileyo.** Ukuze uziphephe ezi ngxaki, **gxila ekungabini mde,** luphephe ulwimi olunganyanzelekanga, uze uyitshintshe imibono entsokothileyo ukuze ibe lula. Oku kunokuqinisekisa ukuba iGenAI iziqoda lula iinjongo zakho.

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#### 3.5. IMizekelo yeeTekisi emaziSetyenziswe

Fumana inkuthazo uze uphucule imiyalezo yokwakha imifanekiso ngetekisi ngokuthi uphengulule iiwebhusayithi eziluncedo. Ngena ku [PromptHero](#) ukuze ufumane imizekelo eyahlukahlukeneyo nemibono enobuchule, ku [Hugging Face's Promptist](#) ukuze ufumane isikhokelo esilungele wena buqu sokwakha imiyalezo engcono, okanye ku [LLM Prompting](#) fukuze ufumane iingcebiso jikelele malunga nokwakha imiyalezo.

- > IMizekelo yeMiyalezo eSebenzayo  
Umzekelo, umyalezo ofana nalo

"Ubuni boMntu nokuziGocagoca koMntu Buqu: Umntu owakheke ngeephatheni ezidlamkileyo, ezimele imixholo yokuzazi buqu, ubuni bomntu, neendlela esiziqonda ngayo thina nabanye abantu. Umzobo wepeyinti odijithali, osondele ngokungephi."

bucacisa ngokucacileyo imekobume, nto leyo ikhokelela kumfanekiso okhangeleka ngokuhlangeneyo. Imizekelo enje ibonakalisa indlela **ukungqala ngqo nokucaca gca ekuthi kukhokelele ngayo kwiziphumo ezingcono.**



Iphepha elandlaliweyo

Umfanekiso wakwelinye ihlabathi

I-Cubism



Layered paper x



Otherworldly depiction x



Cubism x

### 3. Iindlela zokuBhala iMiyalezo eFanelekileyo yoKwakha iMifanekiso ibe ziiTekisi

#### 3.6. UKwakha uMyalezo oSebenzayo woKwakha iMiyalezo ngeTekisi

##### A. Sebenzisa uLwimi oluChazayo

Sebenzisa izichazibizo, izichazizenzi, izifaniso, izikweko, ukuphucula ukutyeba komyalezo lowo, nto leyo yenza inkcazelo icace nangakumbi kwaye ibe neenkukacha ukulungiselela isixhobo okanye iaplikheyishini yeGenAI . **Noko kunjalo, yiphephe imiyalezo eziitekisi entsokotho kakhulu.**

Cofa eli khonkco lilandelayo ukuze ufumane isikhokelo seAdobe Firefly sokubhala imiyalezo esebenzayo: <https://helpx.adobe.com/firefly/using/tips-and-tricks.html>

##### B. Quka iiMeko noBudlelwane

**Buchaze ubudlelwane ngokwemityhi phakathi kwezinto okanye abantu obafuna kuloo mfanekiso uze ugqamise iintsebenziswano ofuna zibonakale ukuze unike umfanekisongqondweni ocacileyo wendlela izinto nabantu abakuloo mfanekiso emabavele ngayo neendawo emababe kuzo.**

"Injingalwazi ixoxa ngengcamango nabafundi abahlukahlukeneyo behleli kwitafle esisangqa, nalapho abanye abafundi bebhala iinowuthi."



Umfanekiso owakhiwe ngeAI yiMicrosoft Designer/ [designer.microsoft.com](https://designer.microsoft.com)

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### 3. IiNdlela zokuBhala iMiyalezo eFanelekileyo yoKwakha iMifanekiso ibe ziiTekisi

**UMzekelo oSebenzayo: UKwakha uMyalezo oSebenzayo woKwakha uMfanekiso ube yiTekisi**

#### IiEngile zeKhamera noKwenziwa kweZakhelo

Yicacise iengile yekhamera nokwenziwa kwefreyimu, ukufota ngokumbaxa, okanye iimbonakalo ezisuka phezulu ukuya ezantsi, ukuze ugqamise izinto eziphambili kwaye ulawule ukugxila komfanekiso lowo. Nantsi eminye imizekelo:

#### C. IiEngile zeKhamera

- > **KwiNqanaba laMehlo:** Imbonakalo engakhethe cala kwinqanaba lamehlo omfotwa
- > **IEngile ePhezulu:** Ukujonga ezantsi, ukuze umfotwa abonakale emncinci kunoko kunjalo
- > **IEngile eseZantsi:** Ukujonga phezulu, ukuze umfotwa abonakale emkhulu kunoko kunjalo
- > **IMbonakalo ngaMehlo eNtaka:** Ukubona ngaphezu kwentloko ngqo, ukusuka phezulu ukuya ezantsi
- > **IMbonakalo ngaMehlo oMbungu:** Phantsi emhlabeni, ukujonga phezulu
- > **IEngile yamaDatshi:** Ikekele, nto leyo yenza umphezulu okekeleyo
- > **Ngaphezu kwaMagxa:** Emva komlinganiswa, ugxilwe koko kubonwa nguye
- > **IMbonakalo ngeCala:** Umfotwa/into efotwayo ibonwa ize ngecala

"Umntu ohleli edesikeni esebenzisa ikhomyutha."



Umfanekiso owakhiwe nge-AI yiFreepik/[freepik.com/pikaso](https://freepik.com/pikaso)



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### 3. Iindlela zokuBhala iMiyalezo eFanelekileyo yoKwakha iMifanekiso ibe ziiTekisi

**UMzekelo oSebenzayo: UKwakha uMyalezo oSebenzayo woKwakha iMifanekiso ibe ziiTekisi**

**IiEngile zeKhamera noKwenziwa kweZakhelo (iyaqhubekeka)**

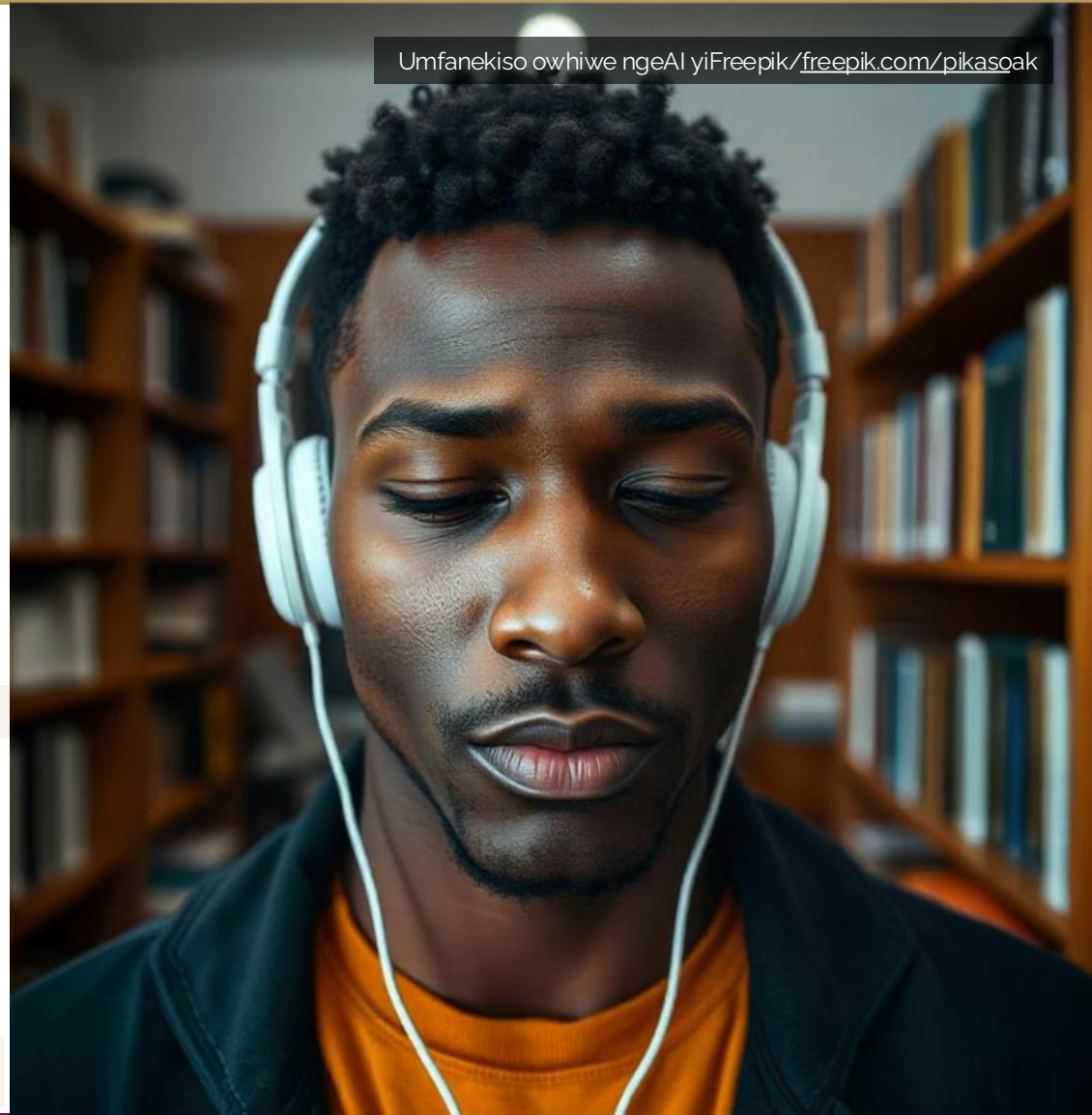
#### D. UKwenziwa kweZakhelo

- > **UkuFota ngokuMbaxa:** Ukufota umfotwa ephelele kunye nemekobume yendawo akuyo
- > **UkuFota ngokuPhakathi:** Ukufota ukuqala esingeni, wenze kubekho uzinzo phakathi komfotwa noko kusemva kwakhe
- > **UkuFota ngokuSondeleyo:** Ukugxila ngokusondeleyo kumfotwa, ugqamise iinkcukacha
- > **UkuFota ngokuSondele Kakhulu:** Ukusondeza iinkcukacha ezithile ezingqalileyo
- > **UkuFotela Kude:** Imbonakalo yomzimba wonke nemeko esemva komfotwa
- > **UkuFotela kuFuphi:** Ukufaka abafotwa ababini kwifreyimu enye
- > **UkuBona koMfotwa (POV):** Kubonakalisa indawo leyo ndendlela ebonwa ngayo ngumlinganiswa ngokusekelwe kumyalezo lowo
- > **UkuFota ngaPhezu** Ngaphezulu ngqo, nto leyo igqamisa imbonakalo nobudlelwane phakathi kwezinto nabantu abafotiweyo

"Ukufotwa ngokusondele kakhulu kwendoda eNtsundu enxibe ihedifowuni ikwithala leencwadi."



Umfanekiso owhiwe ngeAI yiFreepik/[freepik.com/pikasoak](https://freepik.com/pikasoak)



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### 3. Iindlela zokuBhala iMiyalezo eFanelekileyo yoKwakha iMifanekiso ibe ziiTekisi

Umfanekiso owakhiwe ngeAI yiAdobe Firefly/[firefly.adobe.com](https://firefly.adobe.com)

#### UMzekelo oSebenzayo: UKwakha uMyalezo oSebenzayo woKwakha iMifanekiso ibe ziiTekisi

##### Chaza iSitayili noMphezulu

Khetha isitayili esingqalileyo (umz., ngokwenyani/ngokuyinyani, ibukhathuni, ngokungacacanga) ukuze **ucacise indlela emawubonakale ngayo umfanekiso wakho**. Ungathi kananjalo ucele iGenAI ukuba idale imifanekiso ngesitayili segcisa elithile, njengoVan Gogh okanye uPicasso. Qaphela ukuba iza kuphinda nje isitayili kuphela, hayi umsebenzi wobugcisa ngqo.

##### E. ISitayili sobuGcisa

- > **Ngokuyinyani:** Injengobomi bamanyani, inokubonakalisa okuneenkukacha
- > **I-impressionism:** Inemizila yebhrashi ethambileyo, edlamkileyo; kugxilwa ekukhanyeni nakwiintshukumo
- > **Ayikholeleki/ngokungakholeleki:** Injengephupha, kudityaniswa ubomi bokwenyani nobasentsomini
- > **Ayicacanga ngokupheleleyo:** Ayinabunyani, kugxilwa kwizimo nemibala
- > **Ibukhathuni:** Ibaxiwe, inemigca engqindilili, imibala eggamileyo
- > **Ngokobuncinci:** Imigca elula, imibala embalwa, kugxilwa koko kubalulekileyo

"Umzobo womntu wasetyhini oneenwele ezinde ezimile okwamaza ocinga nzulu ephethe ipeni nencwadi yokubhala iinowuthi.."



**ISikhokelo soBukho beAI kwiiNtlobo zoNxibelelwano ezaHlukahlukeneyo** | UKwenziwa kweeNguqu ekuDalweni kweMixhoo

### 3. IiNdlela zokuBhala iMiyalezo eFanelekileyo yoKwakha iMifanekiso ibe ziiTekisi

**UMzekelo oSebenzayo: UKwakha uMyalezo oSebenzayo woKwakha iMifanekiso ibe ziiTekisi**

Chaza iSitayili noMphezulu (iyaqhubekeka)

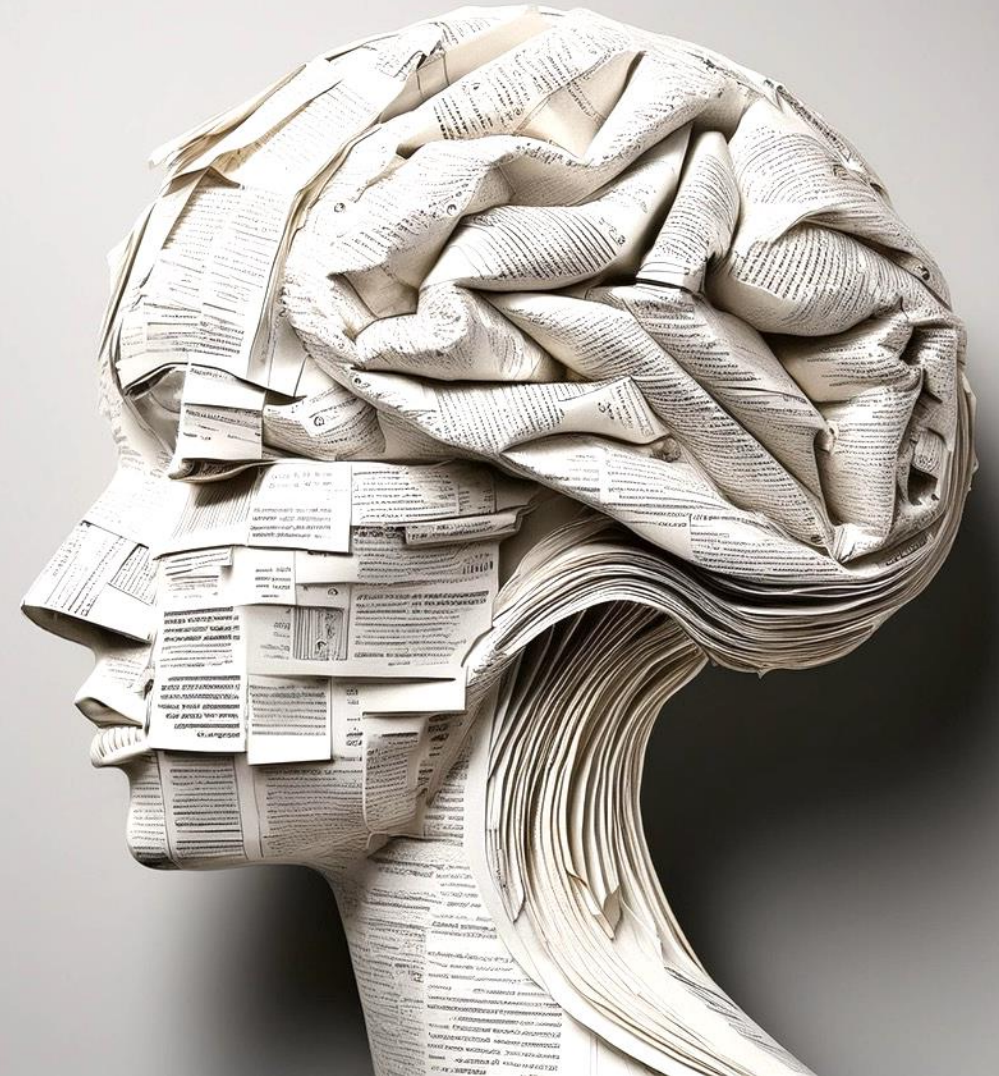
#### F. IiMathiriyeli/uMphezulu

- > **IPhepha/iPhephandaba:** Iqhelekile, inemvakalo enabileyo ukulungiselela ukuzoba nokuprinta
- > **UDongwe:** , Yimathiriyeli eyi3D, elungiselelwe ukwakhiwa kobugcisa obuqingqiweyo
- > **UKhuni:** Inomphezulu wendalo, olukhuni nolungele ukugcogca okanye imiphezulu epeyintiweyo
- > **IGlasi:** Inophezulu ompuluswa, obonakalisa ngaphakathi nangaphandle ukulungiselela ukukhanya okanye imibala
- > **ILaphu:** Inomphezulu othambileyo, onemvakalo, ngokwesiqhelo isetyenziselwa ubugcisa beempahla okanye iingqokelela zemifanekiso
- > **INTsimbi:** Inomphezulu omenyezelayo, obonakalisayo kwaye ilungele uyilo lwakwezoshishino okanye lweemodemu

"Intloko eyenziwe ngamaphepha ephephandaba."



Umfanekiso owakhiwe ngeAI yiAdobe Firefly/[firefly.adobe.com](https://firefly.adobe.com)



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### 3. Iindlela zokuBhala iMiyalezo eFanelekileyo yoKwakha iMifanekiso ube ziiTekisi

**UMzekelo oSebenzayo: UKwakha uMyalezo oSebenzayo woKwakha iMifanekiso ube ziiTekisi**

#### G. ISimo seNgqondo neMekobume beNdawo

**Sebenzisa amagama achazayo** tukuveza isimo sengqondo nemekobume yendawo efunekayo, nto leyo iza kumisela ithoni yomfanekiso lowo.

- > **IGqamile kwaye iDlamkile:** "Iseshoni yokufunda edlamkileyo kwigumbi elikhanya ilanga."
- > **IZolile kwaye iZikisile:** "Ithala leencwadi elizolileyo, eikhanya ngokungagqamanga nelinabafundi abazikise iingqondo zabo emisebenzini yabo." >>

#### H. Phindaphinda kwaye uCokise

UMyalezo wokuQala

**Qala ngenguqulelo engaqinanga kuya phi** yalo myalezo ukuze umisele isiseko.

Phengulula uze uLungelelanise

**Wucokise umyalezo lowo** ngokusekelwe kwiziphumo ezakhiweyo ukuze zingqamane nombono wakho ze ke ngoko kuphucuke ukuchaneka kwesiphumo eso.



Umfanekiso owakhiwe ngeAI yiAdobe Express/[new.express.adobe.com](https://new.express.adobe.com)

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## 4. IiNdawo zokuFumana iiWebhusayithi neziXhobo zoKwakha iiNtlobo zoNxibelelwano ezaHlukahlukene

### 4.1. IZakhi zoKwakha iMifanekiso ibe ziiTekisi

Injini nganye yokwakha imifanekiso ngetekisi ivelisa iziphumo ezifana zodwa, nto leyo yenza ukuba zifaneleke kwizidingo ezingobuchule ezahlukahlukeneyo. Qaphela ukuba **ezinye zezi zixhobo zeGenAI zibonelela ngobhaliso lwasimahla nosetyenziso olunesithintelo**. Ukuze uzisebenzise ngokupheleleyo izakhono zazo, thathela ingqalelo ukuthenga isicwangciso sokubhalisa. Nazi iziphakamiso ezimbalwa, nangona [many more options](#) zininzi kakhulu ezinye ezifumanekayo.

» Ukufumaneka kokwakhiwa kwemifanekiso kwisicwangciso sasimahla – qaphela: oku kusengatshintsha.



#### PicLumen

Iguqula itekisi ukuze ibe yimifanekiso ekumgangatho ophezulu netshintshatshintshekayo ukulungiselela ukudalwa kwemixholo ngobuchule.

Isimahla ayinasithintelo

[IMimiselo yoSetyenziso](#)



#### Microsoft Bing

Ivelisa imifanekiso ethatha zombini izitayili zobugcisa esamaxesha amandulo nesamaxesha angoku, nto leyo ibonelela ngoguquguquko kuyo yonke imixholo ebonakayo eyahlukahlukeneyo jikelele.

[Ukubekwa kwamaxabiso](#)

[IMimiselo yoSetyenziso](#)



#### Adobe Firefly

Iyingcali yokwakha amaqhinga ezobugcisa, iigrafiki nokubonakalayo okusekelwe kwitekisi. Ifanele iiprojekthi ezidinga imifanekiso ecokisiweyo neneenkukacha.

[Ukubekwa kwamaxabiso](#)

[IMimiselo yoSetyenziso](#)



#### Midjourney

Iyaziwa kakhulu ngokudala imifanekiso enobugcisa nenezitayili ngokusemgangathweni ophezulu, ifanele kakhulu imiboniso enobuchule nedura nangakumbi.

[Ukubekwa kwamaxabiso](#)

[IMimiselo yoSetyenziso](#)



#### Stable Diffusion

Yakha imifanekiso ngokucokisa ingxolo nje engacwangciswa ukuze ibe yimiboniso eneenkukacha, nto leyo ibonelela ngozinzo lobuchule nokuchaneka ngqo.

[Ukubekwa kwamaxabiso](#)

[IMimiselo yoSetyenziso](#)

## 4. IiNdawo zokuFumana iiWebhusayithi neziXhobo zoKwakha iiNtlobo zoNxibelelwano ezaHlukahlukeneyo

### 4.2. IZixhobo zoYilo eziSebenza ngeGenAI

Ezi zixhobo ziyilelwe ukuncedisa abasebenzisi bazo ekudaleni imixholo ebonakalayo, enjengeegrafiki, iiprezenteyishini, neepowusti zakumaqonga ezonxibelelwano. Zibonelela ngeziphakamiso zoyilo neembonakaliso ngokusekelwe kwigalelo, nto leyo yenza inqkubo yobuchule ibe lula. Kugcine engqondweni yakho ukuba **ezinye zezi zixhobo zeGenAI zibonelela ngobhaliso lwasimahla nosetyenziso olunesithintelo ngendlela yeehredithi zamihla le okanye zarhoqo ngenyanga**. Ukubhalisa kwisicwangciso esihlawulwayo kunganceda ekuboneleleni ngokusebenza lula kakhulu ekwakheni iintlobo zonxibelelwano ezahlukahlukeneyo.

» Ukufumaneka kokwakhiwa kwemifanekiso kwisicwangciso sasimahla – qaphela: oku kusengatshintsha.



#### Microsoft Designer

Isebenzisa iAI ukwakha iziphakamiso neembonakalo zoyilo olukumgangatho ophezulu ukulungiselela iintlobo zemixholo ezahlukahlukeneyo, kuquka iiprezenteyishini neepowusti zakumaqonga ezonxibelelwano.

[Ukubekwa kwamaxabiso](#)

[IMimiselo yoSetyenziso](#)



#### Adobe Express

Inikezela ngezixhobo zoyilo ekulula ukuzisebenzisa nezineempawu eziphuculwe ngeAI ukulungiselela ukudala iigrafiki, iividiyo neewebhusayithi ezinomtsalane ngokukhawuleza.

[Ukubekwa kwamaxabiso](#)

[IMimiselo yoSetyenziso](#)



#### Freepik

Ibonelela ngeqonga lokuba abasebenzisi bafikelele kwaye badawunlowude kwimithombo yeegrafiki ekumgangatho ophezulu nesimahla, kuquka iivektha, imifanekiso, imizobo neefayili zePSD.

[Ukubekwa kwamaxabiso](#)

[IMimiselo yoSetyenziso](#)



#### Canva

Inikezela ngeqonga ekufikelelekayo kulo lokuyila iigrafiki, iiprezenteyishini, nemixholo yakumaqonga ezonxibelelwano, kuquka neethempleyiti neziphakamiso ezisebenza ngeAI.

[Ukubekwa kwamaxabiso](#)

[IMimiselo yoSetyenziso](#)

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## 4. IiNdawo zokuFumana iiWebhusayithi neziXhobo zoKwakha iiNtlobo zoNxibelelwano ezaHlukahlukeneyo

### 4.3. UkuDalwa kweeVidiyo nokuQanjwa koMculo

Ziliqela izixhobo ze-AI ezifumanekayo zokwakha iividiyo nokuqamba umculo. **Uninzi lwezi zixhobo ziyakuvumela ukuba ubhalise kuzo uze uzivulele iakhawunti simahla, nto leyo ikunika ithuba lokuba ufunisele kwaye udale iziphumo zeentlobo zonxibelelwano ezahluahlukeneyo ezithahndwa nguwe. Noko kunjalo, yazi ukuba kunokubakho intlawulo xa udawunlowuda iividiyo kunye/okanye umculo wakho wokugqibela. Ukuze uphephe ukufumana naziphi na izinto ubungakhange uzilindele, hlolaimimiselo nemiqathango yesoftiwee leyo kwangaphambili ukuze ubona ukuba zikhona kusini na iintlawulo ezikhoyo.**

### Izisombulilo zeeNtlobo zoNxibelelwano ezaHlukahlukeneyo ze-GenAI



#### Easy with AI

Le sayithi ibonelela ngengqokelela yezakhi zemifanekiso, zeevidiyo nezomculo ezisebenza ngeAI ukulungiselela ukwakhiwa kweentlobo zonxibelelwano ezahluahlukeneyo ngokukhawuleza kwaye lula.



#### Future Tools

Eli qonga libonelela ngoluflu olubanzi lwezixhobo zeAI ezikwiikhathegori ezahluahlukeneyo jikelele, nto leyo inceda abasebenzisi ukuba bafumane ze basebenzise iitekhnoloji ezikudidi oluphambili.



Iklephubhodi, yesitayili seBauhaus



Ii-iyefowuni ezimhlophe, zesitayili seBauhaus

Umfanekiso owakhiwe ngeAI yiPicLumen/[piclumen.com](https://piclumen.com)

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## 5. Iindlela zokuChonga uBunini boMsebenzi

### 5.1. UkuBaluleka kokuChongwa koBunini boMsebenzi

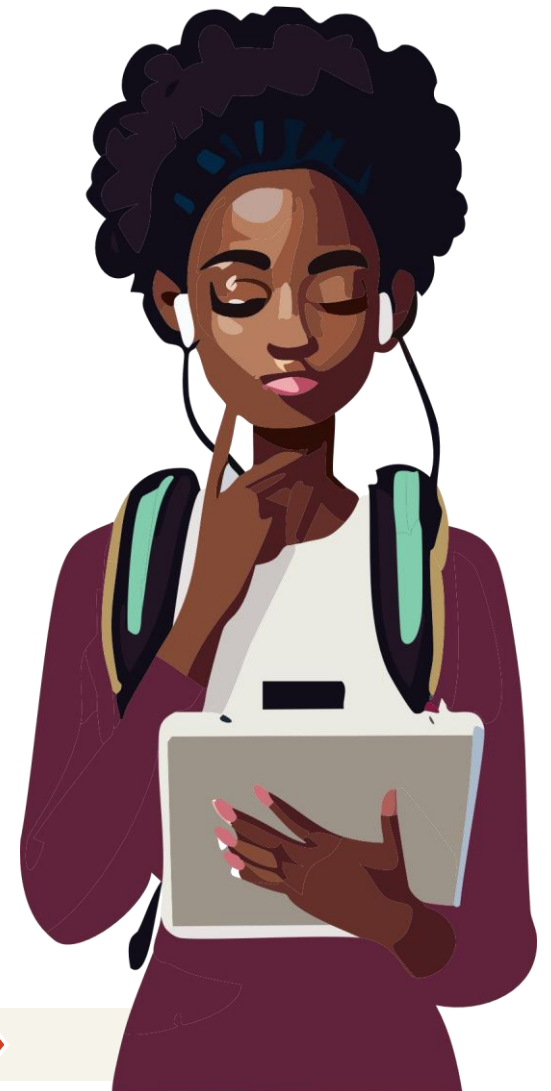
Ukuchongwa kobunini bomsebenzi ngokufanelekileyo kubalulekile nanjengoko kuqaphela imisebenzi yangaphambili yomdali wokuqala womsebenzi lowo, kuthintela ukusetyenziswa kwemisebenzi yabanye abantu ngabanye abantu njengeyabo ngaphandle kwemvume yabanini, kwaye kugcina ukungafihli nto, nto leyo inceda ekuphakamisweni kwemigangatho yeenqobo neendlela zokuziphatha ngokufanelekileyo nokuthotyelwa komthetho ngeemfuno zolawulo ezisebenzayo kwimeko leyo.

### 5.2. Eyona Misebenzi iHamba Phambili yokuChongwa koBunini beMisebenzi

Xa uchonga ubunini bomxholo owakhiwe ngeAI, hlala uwakhankanya amagama eGenAI ngokwemimiselo nemiqathango yayo. Ukuba kuyasebenza, bonelela ngekhonkco engqale ngqo okanye ngesalathiso esiya kundoqo womthombo ukuqinisekisa ukucaca nentlonipho ngamagalelo enziweyo.

umfanekiso owakhiwe ngeAI yiAdobe Firefly/ [firefly.adobe.com](https://firefly.adobe.com)

"Umfundi onenkangeleko yobuAfrika ophethe ithabhlethi kwesinye isandla, ngelixa esinye isandla sihleli ngokohlobo lomntu ocingayo phantsi kwesilevu sakhe."



I Sikhokelo soBukho beAI kwiiNtlobo zoNxibelelwano ezaHlukahlukeneyo | UKwenziwa kweeNguqu ekuDalweni kweMixhoo

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## 6. IMigaqo neZikhokelo zeMifanekiso eyaKhiwe ngeAI

### 6.1. AmaLungelo eeKopi nePropati yeNgqondo

Yimisebenzi edalwe ngegalelo labantu kuphela efanele ukhuselo lwamalungelo eekopi. Ngoko ke, imifanekiso edalwe ngaphandle kobandakanyeko lwabantu nalapho iAI iyiyo yodwa umdali waloo mifanekiso ayilufanelanga ukhuselo lobunini phantsi kwemithetho yamalungelo eekopi. Noko kunjalo, oku kunokutshintsha kwixesha elizayo xa kukho imithombo yezomthetho ehlaziyiweyo.

Imifanekiso eyakhiwe ngeAI idalwa ngoqeqesho olungeemathiriyeli ezininzi ezinamalungelo eekopi, ngaphandle kwemvume yabanini, Ngaphezu koko, imifanekiso eyakhiwe ngeAI inokuyelelana kakhulu neminye imisebenzi engoondoqo. Ezi meko zinokukhokelela kulwaphulo lwemithetho ethile, kwaye ubulumko obumandla kufuneka busetyenzisiwe xa kusetyenziswa ezi zixhobo zeAI nemifanekiso eyakhiweyo.

Umfanekiso owakhiwe ngeAI yiAdobe Express/[new.express.adobe.com](https://new.express.adobe.com)



"Igaveli nezikali zobulungisa."



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## 6. IMigaqo neZikhokelo zeMifanekiso eyaKhiwe ngeAI

### 6.2. UbuMfihlo beDatha noKhuseleko

Xa besebenzisa izixhobo zeAI ukudala iintlobo zonxibelelwano ezahlukahlukeneyo, abasebenzisi basivuma isixhobo ngokusebenzisa imiyalezo eziitekisi okanye ngokufaka imifanekiso ukuqeqesha imodeli yayo ukulungiselela ukwakha iziphumo ezitsha. Kubalulekile ukwazi ukuba umxholo owakhiwe kutsha nje kunokufikelelwa kuwo kwihlabathi jikelele kwaye ungasetyenziswa ngabanye abantu ukudala iziphumo ezitsha ngesixhobo eso. Ukongeza, umyalezo oyitekisi ungabonakala kwabanye abantu uze uqukwe kumagama abanini bomxholo lowo ngenjongo yokungafihlo nto.

Funda banzi malunga noku apha:

> <https://helpx.adobe.com/firefly/using/content-credentials.html>

### 6.3. UMkhethe onokubaKho

Iimodeli zeGenAI zingavelisa imixholo enomkhethe esilelayo ukubonakalisa ukwahlukahluka noquko. Izixhobo zeGenAI ezininzi ziye zaqeqeshwa ngedatha enomkhethe, nalapho zithi zibe zinokukhetha abantu bamabala athile, iinkcubeko ezithile, okanye izini ezithile kunezinye. Abahlohli kufuneka babe bayazi ngale mikhethe kwaye bathathe amanyathelo okuyinciphisa ngokwakha imiyalezo esebenzayo. Umzekelo, xa ubhala imiyalezo yokwakha imifanekiso ngetekisi, kubalulekile ukucacisa oko kufuneka kube kuqukiwe kumfanekiso wokugqibela

Umfanekiso owakhiwe ngeAI yiAdobe Express/[new.express.adobe.com](https://new.express.adobe.com)



"Iqhaga elimbala wegolide eliquka umngxuma wesitshixo, elibekwe phambi kwemigca edijithali."



I Sikhokelo soBukho beAI kwiiNtlobo zoNxibelelwano ezaHlukahlukeneyo | UKwenziwa kweeNguqu ekuDalweni kweMixhoo

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## 6. IMigaqo neZikhokelo zeMifanekiso eyaKhiwe ngeAI

### 6.4. Uqinisekiso

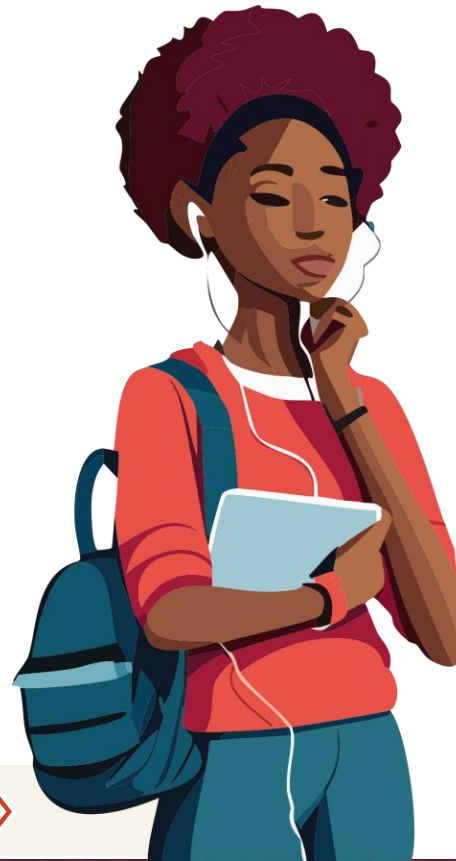
Isixhobo esiyi **Content Credentials Verify** sivumela abasebenzisi ukuba baqinisekise ubunyani nemvelaphi yemixholo edijithali, enje ngemifanekiso, iividiyo nomculo. Ngokufaka ifayili abasebenzisi bangaba nako ukufikelela kwingcaciso emalunga nemvelaphi, ukuhlelwa nazo naziphi na iimethadatha ezinxulumene nalo mxholo. Oku kuyanceda ekuqinisekiseni ukuthembakala kweentlobo zonxibelelwano ezahluahlukeneyo ezidijithali ngokubonelela ngokungafihli nto malunga nembali yazo nolungelelaniso lwazo.



Funda banzi malunga noku apha:

> <https://contentcredentials.org>

"Umfundi onenkangeleko yobuAfrika obambe ithabhlethi esandleni esinye, ngelixa esinye isandla sihleli ngokohlobo lomntu ocingayo phantsi kwesilevu sakhe."



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## 6. IMigaqo neZikhokelo zeMifanekiso eyaKhiwe ngeAI

### 6.5. IZikhokelo zeeNdlela zokuziPhatha

**Xa usebenzisa imifanekiso eyakhiwe ngeAI, thathela ingqalelo umkhethe onokubakho okanye ukungachaneki okuthile kwimifanekiso, umngcipheko wokuhambisa ingcaciso engeyiyo,** nokubaluleka kokungafihli nto malunga nosetyenziso lweGenAI ekudaleni le mifanekiso ukuze kugcinwe ingqibelelo nokuthembana.

#### Umzekelo

Yiba nomfanekisongqondweni wakho udala umfanekiso ukuze uyimele ngokubonakalayo ingcamango yokwahlukahluka ukulungiselela uhloho lwesifundo saseyunivesithi esingenzululwazi zezentlalo. Usebenzisa isixhobo seAI ukwakha lo mfanekiso. Isiphumo yingqokelela yemifanekiso edlamkileyo engoquko nequka abantu bamabala ahlukahlukeneyo, iminyaka yobudala eyahlukahlukeneyo, izini ezahlukahlukeneyo nezakhono ezahlukahlukeneyo bezibandakanye kwimisebenzi eyahlukahlukeneyo.

#### Intetho yokuNgafihli Nto:

Kwiprezenteyishini yakho, quka le nowuthi ilandelayo:

*"Lo mfanekiso wakhiwe kusetyenziswa isixhobo seAI ukuzoba ingcamango yokwahlukahluka. Nangona iAI ibonelela ngeprezenteyishini embaxa, kubalulekile ukuqaphela ukuba akukho mfanekiso unokuthi ukubambe ngokugcweleyo ukutyeba nokuntsokotha kokwahlukahluka kwabantu. Siye sawuphengulula umfanekiso owakhiweyo ukuze siqinisekise ukuba ungqamene nomyalezo obufuneka kwaye uyimele ngokuchanekileyo ingcamango yokwahlukahluka ngaphandle kokukhulisa ucalucalulo okanye umkhethe."*

Ukuze ufuane ingcaciso ethe vetshe ngena ku:

> [Microsoft AI / Responsible AI | Tools and practices](#)

"Umfundi onenkangeleko yobuAfrika obambe ithabhlethi esandleni esinye, ngelixa esinye isandla sihleli ngokohlobo lomntu ocingayo phantsi kwesilevu sakhe."



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## 6. IMigaqo neZikhokelo zeMifanekiso eyaKhiwe ngeAI

### 6.6. IMigaqonkqubo yaseSU

#### Ingaba udinga ingcaciso ethe vetshe?

Hlola [izikhokelo okanye imigaqonkqubo yeSU](#) ngokuphathelene nosetyenziso lwemifanekiso eyakhiwe ngeAI, nenokuthi ibalule iimfuno zokuchonga ubunini, iimeko zosetyenziso ezamkelekileyo, nazo naziphi na izithintelo. Ukulandela ezi zikhokelo okanye le migaqonkqubo ngamaxesha onke kubalulekile ekuqinisekiseni ukuthotyelwa kwemigangatho yeziko nokugcinwa kwengqibelelo yezemfundo.

Ukuze ufumane ingcaciso ethe vetshe, funda apha:

> [Research and TLA position paper for the use of AI \(for staff and student use\)](#)

#### Ingaba udinga ukunxibelelana?

Nceda uthumele i-imeyile kuLucille Muller ku[Lm2@sun.ac.za](mailto:Lm2@sun.ac.za)

Ubunini bamalungelo eekopi kule mathiriyeli nengcaciso enxulumene nayo bukwiYunivesithi yaseStellenbosch. Nakuphi na ukuveliswa ngokutsha, ulungelelaniso, upapasho, uboniso, usasazo, uhanjiso olulonye, okanye urhwebo lwalo naluphi na uhlobo okanye indlela ngale mathiriyeli okanye le ngcaciso, ngaphandle kwemvume evakaliswe ngumnini, kuthintelwa ngokungqongqo.

"Ikhompyutha ebonakalisa umaleko odijithali onemizobo yeegrafu ezikuhlobo lwe3D emva kwawo."



Umfanekiso owakhiwe ngeAI yiMicrosoft Designer/[designer.microsoft.com](https://designer.microsoft.com)



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